

rmi

RAY MURRAY, INC.

PROPANE EQUIPMENT & COMPRESSED GAS PRODUCT CATALOG

Edition 12



-  Propane Installation Equipment
-  Plant, Fill Station, Transport, & Bobtail Equipment
-  Residential & Commercial Heating Products
-  Compressed Gas Equipment



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T-204 & T-203 SERIES: THE MOST CSA & UL CERTIFICATIONS IN THE INDUSTRY



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INTEGRATED DIELECTRIC UNION ENDS



1/8" SIDE TAP CONFIGURATIONS



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IMPORTANT RMI CONTACTS

- **Customer Service**

For product info, to place orders, check order status, file warranty claims and other general inquires

- Hours: 7am - 5pm EST, M-F
- 1-800-628-5044
- Orders: orders@raymurray.com
- Warranty: warranty@raymurray.com

- **Technical Support**

- Hours: 8am - 5pm EST, M-F
- 1-800-628-5044, ask for Tech Support
- technical@raymurray.com
- *Note: RMI's Technical Support is for our customers and not available for consumer direct interaction.*

- **Credit Department / Accounts Receivable**

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- 1-800-628-5044, ask for Credit Department
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- **Online access**

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- Check inventory, place orders 24/7
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RMI LOCATIONS



THE RMI FAMILY OF COMPANIES



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Lee, MA

Flint, MI

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TECH NOTE: See back inside cover for additional technical information.

First Stage Regulators

FISHER™

FISHER COMPACT FIRST STAGE REGULATORS

Designed for use as a first-stage regulator for domestic applications, the R122H's size makes it perfect for tight installations. Stainless steel internal parts and corrosion resistant coatings provide a Recommended Replacement Life of 20 years. Its non-adjustable set point makes the unit virtually tamper proof. Inlet and outlet gauge taps allow easy system testing. Large inlet and outlet wrench flats provide for easy installation, even in underground tanks. The design's superior relief performance exceeds UL requirements and provides double failure overpressure protection when used with a Fisher R600 second-stage regulator. The vent is threaded with 3/8 NPT for easy installation of vent piping. The large orifice assists in minimizing freeze problems.



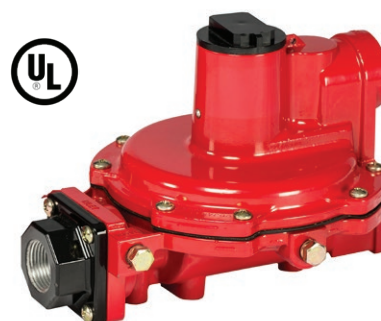
R122H-AAJ

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R122H-AAJ	1/4" FNPT	1/2" FNPT	Non-Adjustable	10	Straight	1,100,000 BTU	Yes
R122H-AAJXB	1/4" FNPT	1/2" FNPT	Non-Adjustable	10	90 Degrees	1,100,000 BTU	Yes
R222H-BGK	1/2" FNPT	1/2" FNPT	4-6 PSIG	5	Straight	1,700,000 BTU	Yes
R222H-BGJ	1/2" FNPT	1/2" FNPT	8-12 PSIG	10	Straight	1,800,000 BTU	Yes
R222H-HGK	FPOL	1/2" FNPT	4-6 PSIG	5	Straight	1,700,000 BTU	Yes
R222H-HGJ	FPOL	1/2" FNPT	8-12 PSIG	10	Straight	1,800,000 BTU	Yes
R222H-JGK	FPOL	3/4" FNPT	4-6 PSIG	5	Straight	1,875,000 BTU	Yes
R222H-JGJ	FPOL	3/4" FNPT	8-12 PSIG	10	Straight	1,875,000 BTU	Yes
R222H-DGK	3/4" FNPT	3/4" FNPT	4-6 PSIG	5	Straight	2,000,000 BTU	Yes
R222H-DGJ	3/4" FNPT	3/4" FNPT	8-12 PSIG	10	Straight	2,000,000 BTU	Yes

*Capacities based on 30PSI inlet with 20% droop

FISHER FULL SIZE FIRST STAGE REGULATORS

Time proven design constructed of corrosion-resistant and wear-resistant materials, the R622H is designed to provide a Recommended Replacement Life of 20 years. Built-in 1/8" FNPT gauge taps on both the inlet and outlet pressure sides allow for easy system checks. A large 3/4" FNPT drip-lip vent reduces the chance of blockage by freezing rain or sleet when properly installed with the vent pointing down. Each R622H is equipped for overpressure protection with a corrosion-resistant internal relief valve that provides high capacity relief and a travel stop on the closing cap.



R622H-DGJ

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R622H-HGK	FPOL	1/2" FNPT	4-6 PSIG	5	Straight	2,000,000 BTU	Yes
R622H-JGK	FPOL	3/4" FNPT	4-6 PSIG	5	Straight	2,250,000 BTU	Yes
R622H-BGK	1/2" FNPT	1/2" FNPT	4-6 PSIG	5	Straight	2,000,000 BTU	Yes
R622H-HGJ	FPOL	1/2" FNPT	8-12 PSIG	10	Straight	2,100,000 BTU	Yes
R622H-JGJ	FPOL	3/4" FNPT	8-12 PSIG	10	Straight	2,250,000 BTU	Yes
R622H-BGJ	1/2" FNPT	1/2" FNPT	8-12 PSIG	10	Straight	2,100,000 BTU	Yes
R622H-DGJ	3/4" FNPT	3/4" FNPT	8-12 PSIG	10	Straight	2,400,000 BTU	Yes

*Capacities based on 30PSI inlet with 20% droop



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Second Stage Regulators



FISHER COMPACT SECOND STAGE REGULATOR

The R222 Second-Stage regulator is a UL listed regulator designed to reduce the outlet pressure from a First-Stage regulator, to 11 inches WC in domestic installations. Vents are screened with standard orientation over the inlet. Fisher Second-Stage regulators are painted palm green for easy identification. The Fisher Type R222 is equipped with a stainless steel inlet screen to reduce the amount of debris entering the regulator.

The R222 is designed for small domestic applications up to 650,000 BTU/HR.



R222-BAF

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R222-BAF	1/2" FNPT	1/2" FNPT	9.5" - 13" WC	11" WC	Straight	650,000 BTU	Yes

* Capacity based on 10 PSI inlet with 20% droop

** Full capacity relief limits delivery pressure to 2PSI with a 20 PSI inlet pressure

FISHER FULL SIZE SECOND STAGE REGULATORS

The time-proven design, constructed from corrosion-resistant materials, provides a Recommended Replacement Life of 20 years.

- Type R600 Series contains an oversized relief valve and a large 3/4" screened vent to limit downstream pressure to less than 2 PSIG (0.14 bar) even in an overpressure situation as required by NFPA 58. The relief valve design exceeds the industry standard by limiting the downstream pressure to 2 PSIG (0.14 bar) even in double failure situation when used with a Fisher Type R622H or R122H First-Stage regulator.
- For easy system checks, the Type R600 has 1/8" built-in NPT gauge taps, orificed to a No. 54 drill size, on both the upstream and downstream sides.



R622-DFE

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R622-BCF	1/2" FNPT	1/2" FNPT	9" - 13" WC	11" WC	Straight	875,000 BTU	Yes
R622-CFF	1/2" FNPT	3/4" FNPT	9" - 13" WC	11" WC	Straight	1,400,000 BTU	Yes
R622-DFE	3/4" FNPT	3/4" FNPT	9" - 13" WC	11" WC	Straight	1,400,000 BTU	Yes
R622-CFFXA	1/2" FNPT	3/4" FNPT	9" - 13" WC	11" WC	Outlet	1,400,000 BTU	Yes
R622-CFFXB	1/2" FNPT	3/4" FNPT	9" - 13" WC	11" WC	90 Degree Side	1,400,000 BTU	Yes
R642-DFE	3/4" FNPT	3/4" 90 Degree Side	9" - 13" WC	11" WC	Straight	920,000 BTU	Yes
R652-CFF	1/2" FNPT	3/4" FNPT Backmount	9" - 13" WC	11" WC	Straight	1,000,000 BTU	Yes
R652-DFE	3/4" FNPT	3/4" FNPT Backmount	9" - 13" WC	11" WC	Straight	1,000,000 BTU	Yes

* Capacity based on 10 PSI inlet with 20% droop

** Full capacity relief limits delivery pressure to 2PSI with a 20 PSI inlet pressure



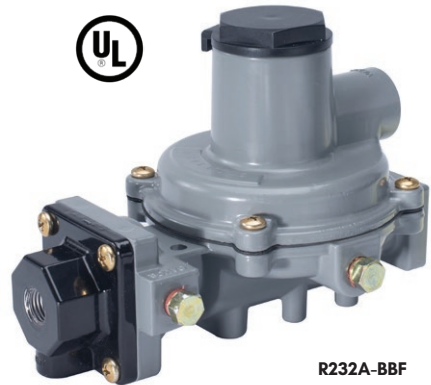
Integral Two Stage Regulators

FISHER™

FISHER COMPACT INTEGRAL TWO STAGE REGULATORS

Compact two-stage regulator provides excellent performance for small domestic installations. Features include:

- Two 1/8" NPT taps for pressure checks
- Inlet screen reduces debris entering the regulator
- High capacity relief valve
- 1/2" outlet provides high BTU capacity for a compact regulator
- 5 year warranty
- 20 year recommended replacement life



R232A-BBF

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Vent Location	Capacity	Internal Relief	Outlet Pressure
R232A-BBF	1/4" FNPT	1/2" FNPT	10.2" - 13" WC	Straight	550,000 BTU	Yes	11" WC
R232A-BBFXA	1/4" FNPT	1/2" FNPT	10.2" - 13" WC	90 Degree	550,000 BTU	Yes	11" WC
R232A-HBF	FPOL	1/2" FNPT	10.2" - 13" WC	Straight	550,000 BTU	Yes	11" WC
R232A-HBFXA	FPOL	1/2" FNPT	10.2" - 13" WC	90 Degree	550,000 BTU	Yes	11" WC

* Capacity based on 30 PSI inlet with 2" WC droop

** Full capacity relief limits delivery pressure to 2 PSI with 20 PSI inlet

FISHER FULL SIZE INTEGRAL TWO STAGE REGULATORS

Integral two-stage units combine a first stage and second stage regulator into one compact unit. Recommended for installations where piping distance is short.

- Reduced freezing problems
- R632A typical uses: on-site cylinder, mobile homes, average domestic service
- High capacity relief valve
- First and second stage 1/8" pressure taps
- 5 year warranty
- 20 year recommended replacement life



R632A-CFF

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Vent Location	Capacity	Internal Relief	Outlet Pressure
R632A-BCF	1/4" FNPT	1/2" FNPT	9" - 13" WC	Straight	850,000 BTU	Yes	11" WC
R632A-BCFXA	1/4" FNPT	1/2" FNPT	9" - 13" WC	90 Degree	850,000 BTU	Yes	11" WC
R632A-CFF	1/4" FNPT	3/4" FNPT	9" - 13" WC	Straight	950,000 BTU	Yes	11" WC
R632A-CFFXA	1/4" FNPT	3/4" FNPT	9" - 13" WC	90 Degree	950,000 BTU	Yes	11" WC
R632A-HCF	FPOL	1/2" FNPT	9" - 13" WC	Straight	850,000 BTU	Yes	11" WC
R632A-HCFXA	FPOL	1/2" FNPT	9" - 13" WC	90 Degree	850,000 BTU	Yes	11" WC
R632A-JFF	FPOL	3/4" FNPT	9" - 13" WC	Straight	850,000 BTU	Yes	11" WC
R632A-JFFXA	FPOL	3/4" FNPT	9" - 13" WC	90 Degree	850,000 BTU	Yes	11" WC

* Capacity based on 30 PSI inlet with 20% droop

** Full capacity relief limits delivery pressure to 2 PSI with 20 PSI inlet



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Shop online at www.raymurray.com or call **800-628-5044**

2 PSI Regulators

FISHER™

FISHER SECOND STAGE 2 PSI REGULATORS

2 PSI regulators are designed for 2-PSI LPG Regulator Systems and listed by UL. These units are installed downstream from a First-Stage regulator and reduces an inlet pressure of 10 PSIG to a nominal 2 PSIG. 2-PSI service regulators are designed for residential applications that supply 2 PSIG LPG to a line regulator located inside the building.

- Painted Green with a White Cap for easy identification
- Two 1/8" NPT taps for pressure checks
- Inlet screen reduces debris entering the regulator
- High capacity relief valve
- 5 year warranty
- 20 year recommended replacement life



R622E-DCH

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R622E-BCH	1/2" FNPT	1/2" FNPT	1 - 2.2 PSI	2	Straight	1,460,000 BTU	Yes
R622E-DCH	3/4" FNPT	3/4" FNPT	1 - 2.2 PSI	2	Straight	1,680,000 BTU	Yes
R652E-DFH	3/4" FNPT Backmount	3/4" Back	1 - 2.2 PSI	2	Straight	1,500,000 BTU	Yes

*Capacities based on 10 PSI inlet with 20% droop

FISHER INTEGRAL 2 PSI REGULATORS

2 PSI regulators are designed for 2-PSI LPG Regulator Systems and listed by UL. These units are installed at the tank and reduce tank pressure to a nominal 2 PSIG. 2-PSI service regulators are designed for residential applications that supply 2 PSIG LPG to a line regulator located inside the building.

- Painted Gray with a White Cap for easy identification
- Two 1/8" NPT taps for pressure checks
- Inlet screen reduces debris entering the regulator
- High capacity relief valve
- 5 year warranty
- 20 year recommended replacement life

TECH NOTE: Line regulators must be installed downstream of the 2 PSI regulators, inside the home or building. Please see pages 34-36 for available line regulators.

COMPACT

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R232E-BBH	1/4" FNPT	1/2" FNPT	1 - 2.2 PSI	2	Straight	500,000 BTU	Yes
R232E-HBH	FPOL	1/2" FNPT	1 - 2.2 PSI	2	Straight	500,000 BTU	Yes

*Capacities based on 10 PSI inlet with 20% droop

FULL SIZE

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity	Internal Relief
R632E-BCH	1/4" FNPT	1/2" FNPT	1 - 2.2 PSI	2	Straight	850,000 BTU	Yes
R632E-CFH	1/4" FNPT	3/4" FNPT	1 - 2.2 PSI	2	Straight	850,000 BTU	Yes
R632E-HCH	FPOL	1/2" FNPT	1 - 2.2 PSI	2	Straight	900,000 BTU	Yes
R632E-JFH	FPOL	3/4" FNPT	1 - 2.2 PSI	2	Straight	850,000 BTU	Yes



R232E-BBH



R632E-BCH



High Pressure Adjustable Regulators

FISHER™

FISHER 67C SERIES HIGH PRESSURE REGULATORS

Suitable for liquid or vapor service, the 67C Series high-pressure (pounds-to-pounds) regulators are used on a variety of applications. All types within the series have a 1/4" FNPT side outlet in which a pressure gauge (J500 Series) can be installed. The compact size of the 67C Series regulators make them particularly useful on installations where space is limited. The regulator design utilizes precise guiding of the valve plug to provide close regulation of high performance. The LPG 67C Series has a temperature rating of -20 to 180°F/ -29 to 82°C.

TECH NOTE: 67C Series regulators do not have internal relief and should be installed with additional external over pressure protection. These units should not be installed in fixed piping serving 14" WC appliance systems. Please contact RMI Tech Services for more details.

RMI Part#	Adjustment	Inlet Connection	Pressure Setting	Adjustment Range	Capacity
67CW-683	Wrench	1/4" FNPT	15 PSI	3 - 20 PSI	675,000 BTU
67CW-684	Wrench	1/4" FNPT	20 PSI	3 - 35 PSI	750,000 BTU
67CW-685	Wrench	1/4" FNPT	40 PSI	30 - 60 PSI	1,200,000 BTU
67CW-701	Wrench	1/4" FNPT	50 PSI	50 - 120 PSI	1,000,000 BTU
67CH-751	Handwheel	1/4" FNPT	15 PSI	3 - 20 PSI	675,000 BTU
67CH-743	Handwheel	1/4" FNPT	20 PSI	3 - 35 PSI	750,000 BTU
67CH-742	Handwheel	1/4" FNPT	40 PSI	30 - 60 PSI	1,200,000 BTU
67CH-741	Handwheel	1/4" FNPT	50 PSI	50 - 120 PSI	1,000,000 BTU
67CD-101	Dial Cap	1/4" FNPT	15 PSI	5 - 20 PSI	675,000 BTU
67CD-102	Dial Cap	1/4" FNPT	40 PSI	20 - 50 PSI	1,200,000 BTU
67CD-103	Dial Cap	1/4" FNPT	50 PSI	40 - 100 PSI	1,000,000 BTU
67CN-106	Non-Adjustable	1/4" FNPT	10 PSI	N/A	400,000 BTU
67CN-104	Non-Adjustable	1/4" FNPT	15 PSI	N/A	600,000 BTU
67CN-105	Non-Adjustable	1/4" FNPT	20 PSI	N/A	750,000 BTU



* Capacity based on inlet pressure of 20 PSI greater than outlet with 20% droop
** Liquid capacity = 3 to 5 GPH

**FISHER 67C SERIES
ADJUSTABLE
REGULATOR KITS**

Adjustable regulators kits include preinstalled MPOL inlet adapters and J500 Series pressure gauge. 67CH-150 kit also includes a 9/16" outlet adapter.



RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Capacity
67CH-90	MPOL	1/4" FNPT	3 - 35 PSI	750,000 BTU
67CH-150	MPOL	1/4" FNPT	30 - 60 PSI	1,200,000 BTU
67CW-62	MPOL	1/4" FNPT	50 - 135 PSI	950,000 BTU

**CONSTRUCTION HEATER 25#
REGULATOR ASSEMBLY**

Wrench Adjustable 67C Series regulator with preinstalled MPOL inlet fitting and 9/16" - 18LH outlet connection. For use with construction heaters.

RMI Part#	Inlet Connection	Outlet Connection	Pressure Setting	Capacity
67CW-120	POL	9/16" - 18 LH	25 PSI	750,000 BTU



High Pressure Commercial Regulators

FISHER™

FISHER 64 SERIES REGULATORS

The type 64 high pressure adjustable regulator is typically used on distribution systems, high pressure burners, crop dryers, and industrial burners. Suitable for liquid under 150° F. Does not have internal relief valve. Separate relief valve may be required by NFPA-58.

Type 64SR High pressure adjustable regulator with a built-in relief valve. Applications include high pressure burners in crop dryers and tobacco curers. Not suitable for liquid. May also be used as a first stage regulator when set at 10 PSIG or less.



Standard Configuration	W/ Relief	Inlet & Outlet	Pressure Setting	Adjustment Range	Capacity
64-33	64SR-21	1/2" FNPT	10 PSI	3 - 15 PSI	2,625,000 BTU
-	64SR-22	1/2" FNPT	15 PSI	5 - 20 PSI	3,000,000 BTU
64-35	64SR-23	1/2" FNPT	20 PSI	5 - 35 PSI	3,600,000 BTU
64-36	-	1/2" FNPT	40 PSI	30 - 60 PSI	4,150,000 BTU
64-222	-	1/2" FNPT	50 PSI	35 - 100 PSI	5,250,000 BTU

* Capacity based on inlet pressure 20 PSI over outlet pressure with 20% droop

Crafting Reliable Solutions with Fisher™ LPG Equipment

Emerson/Fisher™ LPG Equipment, a global company with its headquarters in McKinney, Texas, has a long and established legacy of providing the LPG industry with highly dependable products and services. With over 125 years in pressure regulator design and more than 80 years of experience catering to the LPG market, the company is renowned for its broad range of Fisher™ residential, commercial, and bulk storage transportation equipment.

We take pride in demonstrating how we create high-quality solutions through our meticulous design process, the careful selection of materials, and our stringent environmental testing capabilities.

The Flow of Quality: Building Products that Outlast and Outperform

Our regulators and valves are engineered to withstand the most extreme conditions, ensuring optimal performance, efficiency, reliability, and safety. Through our robust supply chain and global manufacturing capabilities, we drive uninterrupted customer satisfaction and are known for delivering tailor-made solutions suited to dynamic industry demands.

Developing Expertise: Sharing Knowledge and Empowering the Industry

Whether you need an urgent replacement or expert advice on long-term growth strategies our local sales offices stand steadfast to provide crucial support promptly and efficiently. We believe in developing our people and are continually raising the bar in our quest to design advanced systems that operate safely and reliably while contributing to a sustainable and prosperous future.



High Pressure Commercial Regulators

FISHER™

FISHER 627 SERIES

A popular regulator for many commercial and industrial loads. Field-proven over the years, reliable performance within their capacity range.

627 SERIES



FISHER 630 SERIES

A high capacity regulator which offers reliable performance for large load commercial and industrial applications.

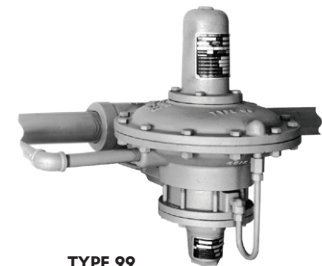
630 SERIES



FISHER TYPE 99

A pilot-operated regulator, keeps constant outlet pressure with varying inlet pressure and flows, used as first, second or single stage service.

TECH NOTE: Additional external relief is typically required. Additional spring ranges, orifice sizes, and trim materials are available - contact RMI customer service for more details.



TYPE 99

Part #	Inlet & Outlet	Orifice Size	Adjustment Range	Pressure Setting	Internal Relief	Capacity
627-5810**	3/4" FNPT	3/8"	5 - 20 PSI	10 PSI	No	6,080,000 BTU
627-6210**	3/4" FNPT	1/2"	5 - 20 PSI	10 PSI	No	10,755,000 BTU
627R-117	3/4" FNPT	1/2"	5 - 20 PSI	10 PSI	Yes	10,755,000 BTU
627-7710**	1" FNPT	1/2"	5 - 20 PSI	10 PSI	No	10,773,000 BTU
627R-197	1" FNPT	1/2"	5 - 20 PSI	10 PSI	Yes	10,773,000 BTU
627-576	2" FNPT	1/2"	5 - 20 PSI	10 PSI	No	10,142,000 BTU
630-104-78	2" FNPT	1/2"	8 - 20 PSI	10 PSI	No	14,000,000 BTU
99-513P	2" FNPT	7/8"	2 - 10 PSI	10 PSI	No	36,368,000 BTU
99-512P	2" FNPT	7/8"	5 - 15 PSI	15 PSI	No	37,950,000 BTU
99-515P	2" FNPT	7/8"	10 - 20 PSI	20 PSI	No	41,112,000 BTU
99-903P	2" FNPT	7/8"	10 - 65 PSI	30 PSI	No	44,275,000 BTU
99-505PH	2" FNPT	1-1/8"	10 - 20 PSI	20 PSI	No	67,993,000 BTU
99-504PH	2" FNPT	1-1/8"	5 - 15 PSI	15 PSI	No	63,250,000 BTU
99-901PH	2" FNPT	1-1/8"	10 - 65 PSI	30 PSI	No	74,318,000 BTU

Capacity based on 30 PSI inlet pressure and 20% droop

** UL Listed Construction

Commercial Low Pressure Regulators

FISHER™

FISHER HSRL SERIES

Type HSRL is an UL listed regulator designed for light commercial applications up to 2,600,000 BTU/HR. It utilizes a high strength cast iron body and a 3/4" NPT drip lip vent design with high capacity internal relief valve.



HSRL SERIES

Part#	Inlet & Outlet	Pressure Setting	Vent Location	Adjustment Range	Orifice Size	Vent Location	Capacity
HSRL-BFC	3/4" FNPT	11" WC	Straight	9" - 13" WC	3/8"	Inlet	2,300,000 BTU
HSRL-PFC	3/4" FNPT	11" WC	90 Degree	9" - 13" WC	3/8"	Inlet	2,300,000 BTU
HSRL-CFC	1" FNPT	11" WC	Straight	9" - 13" WC	3/8"	Inlet	2,600,000 BTU
HSRL-SFC	1" FNPT	11" WC	90 Degree	9" - 13" WC	3/8"	Inlet	2,600,000 BTU

* Capacity based on 10 PSI inlet with 2" WC droop

FISHER COMMERCIAL LOW PRESSURE REGULATORS

These direct-fired, spring-loaded regulators have been engineered to fit a multitude of pressure-reducing applications including commercial and industrial installations.

CS200 offers a full 360-degree of rotation of the actuator via the union ring connection between the body and casing, for ease of maintenance and installation.

CS400 and CS800 provides flexibility with numerous body sizes, end connections, outlet pressure settings, orifice sizes, as well as the option for internal and external pressure regulation. In addition these models offer multiple overpressure protection options to meet the demands on many application requirements.



CS400

TECH NOTE: Additional combinations of body sizes, spring ranges, and orifice sizes are available. Contact RMI tech support for regulator sizing assistance.

Part#	Inlet & Outlet	Pressure Setting	Adjustment Range	Orifice Size	Maximum Operating Inlet Pressure	Capacity
CS200IR-6EC1	3/4" FNPT	11" WC	10" - 14" WC	1/2"	40 PSI	2,500,000 BTU
CS200IR-6EC3	1" FNPT	11" WC	10" - 14" WC	1/2"	40 PSI	3,800,000 BTU
CS200IR-6EC6	1-1/4" FNPT	11" WC	10" - 14" WC	1/2"	40 PSI	3,900,000 BTU
CS400IR-8EC6	1-1/4" FNPT	11" WC	10" - 14" WC	3/4"	20 PSI	6,800,000 BTU
CS400IR-8EC7	1-1/2" FNPT	11" WC	10" - 14" WC	3/4"	20 PSI	7,600,000 BTU
CS400IR-8EC8	2" FNPT	11" WC	10" - 14" WC	3/4"	20 PSI	7,600,000 BTU
CS800IR-8CC7	1-1/2" FNPT	11" WC	8" - 12" WC	1"	30 PSI	10,460,000 BTU
CS800IR-8CC8	2" FNPT	11" WC	8" - 12" WC	1"	30 PSI	21,809,000 BTU
CS200IR-6HC1	3/4" FNPT	2 PSI	1 - 2 PSI	1/2"	40 PSI	3,760,000 BTU
CS200IR-6HC3	1" FNPT	2 PSI	1 - 2 PSI	1/2"	40 PSI	4,780,000 BTU
CS200IR-6HC6	1-1/4" FNPT	2 PSI	1 - 2 PSI	1/2"	40 PSI	5,327,000 BTU
CS400IR-8HC6	1-1/4" FNPT	2 PSI	1 - 2 PSI	3/4"	20 PSI	9,715,000 BTU
CS400IR-8HC7	1-1/2" FNPT	2 PSI	1 - 2 PSI	3/4"	20 PSI	10,500,000 BTU
CS400IR-8HC8	2" FNPT	2 PSI	1 - 2 PSI	3/4"	20 PSI	8,775,000 BTU
CS820IR-8FC7	1-1/2" FNPT	2 PSI	1 - 2.5 PSI	1"	30 PSI	15,011,000 BTU
CS820IR-8FC8	2" FNPT	2 PSI	1 - 2.5 PSI	1"	30 PSI	21,436,000 BTU
CS400IR-8IC6	1-1/4" FNPT	5 PSI	2 - 5.5 PSI	3/4"	20 PSI	7,365,000 BTU
CS400IR-8IC7	1-1/2" FNPT	5 PSI	2 - 5.5 PSI	3/4"	20 PSI	6,895,000 BTU
CS400IR-8IC8	2" FNPT	5 PSI	2 - 5.5 PSI	3/4"	20 PSI	7,365,000 BTU
CS820IR-8HC7	1-1/2" FNPT	5 PSI	2.5 - 5.5 PSI	1"	30 PSI	15,262,000 BTU
CS820IR-8HC8	2" FNPT	5 PSI	2.5 - 5.5 PSI	1"	30 PSI	16,532,000 BTU

* Capacity based on 10 PSI inlet with 20% droop



Non-stock/special order items are not cancellable or returnable

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Industrial Service Low Pressure Regulators

FISHER™

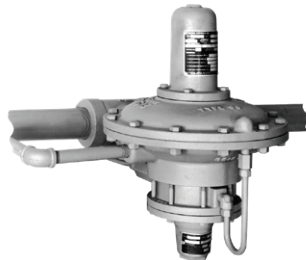
FISHER INDUSTRIAL LOW-PRESSURE REGULATORS



TYPE 299

TYPE 299

This pilot-operated unit keeps outlet pressure constant despite varying flow rates and inlet pressures. A lightweight (21 lbs.), yet dependable regulator for applications from large commercial sites to smaller multi-dwelling establishments. Has a capacity of up to 38 MMBTU per hour. Maximum inlet pressure 150 PSI.



TYPE 99

TYPE 99

This pilot-operated unit keeps constant outlet pressure with varying inlet pressure and flows, used as first, second, and single stage service. Designed to handle loads of up to 63 MMBTU per hour, the type 99 is ideal for multiple customer installations and large industrial boiler applications.



TYPE 133

TYPE 133

This is a self-operated 2nd stage regulator for either low pressure or pounds to pounds service. With a capacity of up to 70 MMBTU per hour, this unit is ideal for large industrial applications. Maximum inlet pressure is 60 PSIG, and a downstream control line is required.

Part #	Inlet & Outlet	Pressure Setting	Adjustment Range	Orifice Size	Maximum Operating Inlet Pressure	Capacity
299H-101	1-1/2" FNPT	11" WC	9" - 20" WC	3/4"	150 PSI	13,100,000 BTU
299H-102	2" FNPT	11" WC	9" - 20" WC	3/4"	150 PSI	19,700,000 BTU
299H-103	1-1/2" FNPT	10 PSI	6 - 16 PSI	3/4"	150 PSI	23,300,000 BTU
299H-104	2" FNPT	10 PSI	6 - 16 PSI	3/4"	150 PSI	38,000,000 BTU
299H-105	1-1/2" FNPT	11" WC	9" - 20" WC	3/4"	150 PSI	20,400,000 BTU
299H-106	2" FNPT	11" WC	9" - 20" WC	3/4"	150 PSI	20,400,000 BTU
299H-107	1-1/2" FNPT	10 PSI	6 - 16 PSI	3/4"	150 PSI	38,000,000 BTU
299H-108	2" FNPT	10 PSI	6 - 16 PSI	3/4"	150 PSI	38,000,000 BTU
99-501P	2" FNPT	1 PSI	7" WC - 2 PSI	1-1/8"	150 PSI	49,000,000 BTU
99-502P	2" FNPT	5 PSI	1 - 5 PSI	1-1/8"	150 PSI	50,600,000 BTU
99-503P	2" FNPT	10 PSI	2 - 10 PSI	1-1/8"	150 PSI	61,650,000 BTU
99-504P	2" FNPT	15 PSI	5 - 15 PSI	1-1/8"	150 PSI	63,250,000 BTU
133L-4	2" FNPT	14" WC	8.5" - 18" WC	2"	60 PSI	70,875,000 BTU
133H-1	2" FNPT	3 PSI	1.5 - 3 PSI	2"	60 PSI	66,150,000 BTU
133H-3	2" FNPT	10 PSI	5 - 10 PSI	2"	60 PSI	115,958,000 BTU



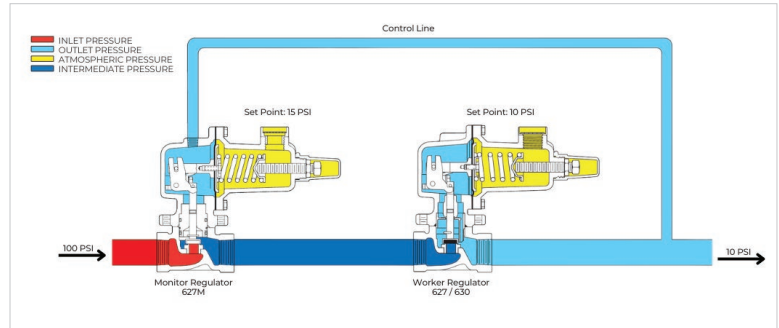
Commercial Monitor Systems



TYPICAL WIDE OPEN UPSTREAM MONITOR INSTALLATION

Monitor regulator systems provide overpressure protection for jurisdictional accounts with no release of gas like a relief valve would.

A monitor system consists of two regulators in a series. The “worker” regulator controls downstream pressure during normal operating conditions. If the “worker” allows the pressure to build up downstream, the “monitor” regulator takes control by sensing the higher pressure through the pilot control line and keeping the downstream pressure to a safe maximum pressure.



Typically, the “worker” regulator is set at 8-10 psi and the “monitor” regulator is set at 13-15 psi. Because the monitor regulator is sensing the 8-10 psi setting of the operating regulator, it remains wide open due to its 15 psi set pressure. The “monitor” regulator will remain wide open unless the operating regulator loses pressure control and its outlet pressure climbs to 15 psi. The “monitor” regulator will start to function and limit the downstream pressure to 15 psi.

TECH NOTE: RMI’s Technical Team is here to help you calculate your load and size your system correctly. Give RMI a call today!

MONITOR REGULATORS

Part #	Inlet Connection	Orifice Size	Adjustment Range	Pressure Setting	Internal Relief
627M-421	3/4" NPT	1/2"	5 - 20 PSI	15 PSI	No
627M-471	1" NPT	1/2"	5 - 20 PSI	15 PSI	No
627M-267	2" NPT	1/2"	5 - 20 PSI	15 PSI	No
99-504PHM	2" NPT	1-1/8"	5 - 15 PSI	15 PSI	No
1098H-L22	2" NPT	2-3/8"	3 - 40 PSI	15 PSI	No

TYPICAL MONITOR SYSTEM

Worker Regulator	Inlet Connection	Orifice Size	Monitor Regulator	Inlet Connection	Orifice Size	Capacity
627-5810	3/4" NPT	3/8"	627M-421	3/4" NPT	1/2"	5,750,000 BTU
627-6210	3/4" NPT	1/2"	627M-421	3/4" NPT	1/2"	7,050,000 BTU
627-7710	1" NPT	1/2"	627M-471	1" NPT	1/2"	7,050,000 BTU
630-104-78	2" NPT	1/2"	627M-267	2" NPT	1/2"	8,400,000 BTU
630-104-78	2" NPT	1/2"	99-504PHM	2" NPT	1-1/8"	13,500,000 BTU
99-504PH	2" NPT	1-1/8"	99-504PHM	2" NPT	1-1/8"	42,650,000 BTU
99-504PH	2" NPT	1-1/8"	1098H-L22	2" NPT	2-3/8"	54,500,000 BTU
1098-L22	2" NPT	2-3/8"	1098H-L22	2" NPT	2-3/8"	215,300,000 BTU

* Capacity calculated at 30 PSI in and 8 PSI out

TYPE 1098 SERIES PILOT-OPERATED REGULATORS

The Type 1098 regulator provides large capacities for use in large commercial applications and large distributed community systems. Designed to handle loads from 170,000,000 BTU to 1,000,000,000 BTU and rated up to 75 psig. The Type 1098’s pilot-operated two-path system is designed to quickly respond to sudden changes in the downstream demand, making this regulator ideal for fuel gas supply to industrial boilers, furnaces, ovens and mixers.

1098
REGULATOR



Relief Valves

FISHER™

FISHER RELIEF VALVES FOR LIQUID OR VAPOR SERVICE

MR98H SERIES

This is a direct-operated relief valve for use on relief and backpressure applications involving large LPG pumping systems and vaporizers. Internal pressure registration eliminates the need for a control line.



MR98H

Part #	Body Size	Relief Pressure Setting	Relief Pressure Range
MR98H-13	1/2" FNPT	50 PSI	25 - 75 PSI
MR98H-22	3/4" FNPT	100 PSI	70 - 140 PSI
MR98H-30	1" FNPT	100 PSI	70 - 140 PSI
MR98H-31	1" FNPT	175 PSI	130 - 200 PSI
MR98HH-19	1" FNPT	250 PSI	150 - 375 PSI

FISHER VAPOR RELIEF VALVES

TYPE 1805

This relief valve is designed for installation between the first and second stage regulators, or in the downstream line from a high pressure regulator used for a final stage service where high line pressures are allowed.

TYPE 289H

This relief valve is designed for installation downstream of larger high pressure or low pressure regulators in most all relief applications. The larger diaphragm in this relief valve provides extremely sensitive operation.

TYPE 1808

This pilot operated relief valve is designed to protect large high pressure regulators by offering extremely high relief capacities compared to the Type 289H.

TECH NOTE: Some regulators require more than one relief valve. Contact the RMI technical team for assistance sizing relief valves.

Part #	Body Size	Relief Pressure Setting	Relief Pressure Range
1805-18P	1" FNPT	15 PSI	5 - 35 PSI
1805-19P	1" FNPT	40 PSI	10 - 60 PSI
1805-51P	2" FNPT	15 PSI	5 - 20 PSI
1805-52P	2" FNPT	40 PSI	10 - 50 PSI
1808A-61	2" FNPT, Angle	20 PSI	15 - 40 PSI
289H-42	1" FNPT	15 PSI	4 - 15 PSI
289H-2	2" FNPT	24" WC	0.5 - 2.25 PSI



1805



289H



First Stage Regulators



MEC COMPACT FIRST STAGE REGULATORS

MEC First Stage regulators are used to reduce LP gas tank pressures for second stage regulators (normally 10 PSIG). All MEC first stage regulators are red indicating high outlet pressure. Compact first stage regulator vents have 3/8" FNPT tapped ports and E-Z grip screens located over the outlet. The MEGR-1222H series offers optimal relief performance that well exceeds UL test requirements providing double failure overpressure protection when used with MEC second stage regulators. All MEC Excelsior regulators feature a 25 year recommended replacement life and our exclusive 3 part tear away leak check adhesive sticker.



MEGR-1122H-AAJ

TECH NOTE: FPOL versions feature anti-freezing heat transfer fins.

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity
MEGR-1122H-AAJ	1/4" FNPT	1/2" FNPT	8-12 PSIG	10	Straight	1,000,000 BTU
MEGR-1122H-AAJXA	1/4" FNPT	1/2" FNPT	8-12 PSIG	10	90°	1,000,000 BTU
MEGR-1222H-BGF	FPOL	1/2" FNPT	9-12 PSIG	10	Straight	1,000,000 BTU
MEGR-1222H-BGFXA	FPOL	1/2" FNPT	9-12 PSIG	10	90°	1,000,000 BTU
MEGR-1222H-BGFXB	FPOL	1/2" FNPT	9-12 PSIG	10	270°	1,000,000 BTU
MEGR-1222H-BGJ	FPOL	3/4" FNPT	9-12 PSIG	10	Straight	1,700,000 BTU



1ST STG ANTI-FREEZE HEAT TRANSFER FINS

* Capacities based on 30PSI inlet pressure and 20% droop

MEC COMPACT BACKMOUNT FIRST STAGE REGULATORS

The MEGR-1252H Series offers a compact first stage regulator design perfect for tight applications such as underground tank domes. They feature stainless steel internal components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms and large aluminum precision machined orifice to minimize freeze ups while providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas. With the outlet located 90 degrees from the inlet this configuration is perfectly oriented to exit the protective shroud of both above and below ground tanks without additional elbow fittings or connections.



MEGR-1252H-BGF

TECH NOTE: FPOL versions feature anti-freezing heat transfer fins.

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity
MEGR-1252H-BGF	FPOL	1/2" FNPT	9-12 PSIG	10	Straight	1,400,000 BTU
MEGR-1252H-BGFXA	FPOL	1/2" FNPT	9-12 PSIG	10	90°	1,400,000 BTU
MEGR-1252H-BGJ	FPOL	3/4" FNPT	9-12 PSIG	10	Straight	1,500,000 BTU
MEGR-1252H-BGJXA	FPOL	3/4" FNPT	9-12 PSIG	10	90°	1,500,000 BTU

* Capacities based on 30PSI inlet pressure and 20% droop

First Stage Regulators



MEC FULL-SIZE FIRST STAGE REGULATORS

The MEGR-1622H Series offers all of the same features as the compact MEGR-1122H Series in a full-size version. The full size MEGR-1622H Series has a large fabric reinforced diaphragm for superior downstream regulation, heavy duty wrench flats, and a large 3/4" FNPT tapped drip lip vent to help prevent relief vent blockage. All MEC Excelsior domestic regulators feature a 25 year recommended replacement life and the MEC exclusive tear away leak check adhesive sticker.



MEGR-1622H-JGJ

RMI Part#	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Capacity
MEGR-1622H-BGJ	1/2" FNPT	1/2" FNPT	8-12 PSIG	10	Straight	2,200,000 BTU
MEGR-1622H-BGK	1/2" FNPT	1/2" FNPT	4-6 PSIG	5	Straight	2,100,000 BTU
MEGR-1622H-DGJ	3/4" FNPT	3/4" FNPT	8-12 PSIG	10	Straight	2,500,000 BTU
MEGR-1622H-HGJ	FPOL	1/2" FNPT	8-12 PSIG	10	Straight	2,300,000 BTU
MEGR-1622H-HGK	FPOL	1/2" FNPT	4-6 PSIG	5	Straight	2,200,000 BTU
MEGR-1622H-JGJ	FPOL	3/4" FNPT	8-12 PSIG	10	Straight	2,750,000 BTU
MEGR-1622H-JGK	FPOL	3/4" FNPT	4-6 PSIG	5	Straight	2,650,000 BTU

* Capacities based on 30PSI inlet pressure and 20% droop

MEC FIRST STAGE POL-TEE REGULATORS

These first stage F. POL tee inlet regulators are used to reduce LP gas tank pressures for a second stage regulator (normally 10 PSIG) in a multiple tank manifold installation without adapters or tees. All MEC first stage regulators are red indicating high outlet pressure. Compact First stage regulator vents have 3/8" FNPT tapped ports and E-Z Grip screens located over the outlet. The MEGR-1222HT series offers optimal relief performance that well exceeds UL test requirements providing double failure overpressure protection when used with MEC MEGR-1622, MEGR-1642 & MEGR-1652 Series Second Stage regulators. All MEC Excelsior domestic regulators feature a 25 year recommended replacement life and an exclusive tear away leak check adhesive sticker.



MEGR-1622HT-HGJ

TECH NOTE: Reduces labor, fittings, and potential leak points when manifolding tanks together.

RMI Part#	Body Type	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Capacity
MEGR-1222HT-BGF	Compact	FPOL Tee	1/2" FNPT	8-12 PSIG	10	1,000,000 BTU
MEGR-1622HT-HGJ	Full Size	FPOL Tee	1/2" FNPT	8-12 PSIG	10	2,300,000 BTU
MEGR-1622HT-JGJ	Full Size	FPOL Tee	3/4" FNPT	8-12 PSIG	10	2,750,000 BTU

* Capacities based on 30PSI inlet pressure and 20% droop



Second Stage Regulators



SENTINEL DIELECTRIC SECOND STAGE REGULATORS

SENTINEL™ Series Second Stage Dielectric Regulators feature an integral dielectric inlet connection designed to isolate upstream metallic piping from electrical current prior to piping entering a building in compliance with NFPA 58 - 2020 section 6.11.3.17. Since the FNPT inlet serves as the dielectric separation media, any standard MNPT threaded connector or valve can be installed without a separate dielectric union. Both compact and full-size models feature the same basic footprint measurement from inlet to outlet, as all standard Excelsa-Flo second stage regulators, making it ideal for regulator change-outs.

TECH NOTE: NFPA 58 2020 Edition; 6.11.3.17: Underground metallic piping, tubing, or both that convey LP-Gas from a gas storage container shall be provided with dielectric fittings installed above ground and outdoors at the building to electrically isolate it from the aboveground portion of the fixed piping system that enters a building.



Part No.	Body Type	Inlet	Outlet	Adjustment Range	"Pressure Setting"	Capacity
MEGR-1222D-BAF	Compact	1/2" FNPT	1/2" FNPT	9.5 - 13" WC	11" WC	500,000 BTU
MEGR-1222D-CFF	Compact	1/2" FNPT	3/4" FNPT	9.5 - 13" WC	11" WC	800,000 BTU
MEGR-1222D-DFF	Compact	3/4" FNPT	3/4" FNPT	9.5 - 13" WC	11" WC	800,000 BTU
MEGR-1252D-BAF	Compact Back Mount	1/2" FNPT	1/2" FNPT	9.5 - 13" WC	11" WC	450,000 BTU
MEGR-1252D-CFF	Compact Back Mount	1/2" FNPT	3/4" FNPT	9.5 - 13" WC	11" WC	650,000 BTU
MEGR-1252D-DFF	Compact Back Mount	3/4" FNPT	3/4" FNPT	9.5 - 13" WC	11" WC	700,000 BTU
MEGR-1622D-BCF	Full-Size	1/2" FNPT	1/2" FNPT	9 - 13" WC	11" WC	710,000 BTU
MEGR-1622D-CFF	Full-Size	1/2" FNPT	3/4" FNPT	9 - 13" WC	11" WC	1,300,000 BTU
MEGR-1622D-DFF	Full-Size	3/4" FNPT	3/4" FNPT	9 - 13" WC	11" WC	1,300,000 BTU
MEGR-1642D-DFF	Right Angle	3/4" FNPT	3/4" FNPT	9 - 13" WC	11" WC	900,000 BTU
MEGR-1652D-CFF	Full-Size Back Mount	1/2" FNPT	3/4" FNPT	9 - 13" WC	11" WC	1,000,000 BTU
MEGR-1652D-DFF	Full-Size Back Mount	3/4" FNPT	3/4" FNPT	9 - 13" WC	11" WC	1,000,000 BTU

*Capacity based on 10 PSI inlet with 20% droop

**Full capacity relief limits delivery pressure to 2 PSI with a 20 PSI inlet pressure



Second Stage Regulators



MEC COMPACT SECOND STAGE REGULATORS

The MEGR-1222 & MEGR-1252 Series offer a compact second stage regulator design perfect for lower to intermediate BTU applications. They feature an adjustable range from 9.5-13" WC (factory set @ 11" WC), stainless steel internal components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms and large aluminum precision machined orifices providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas. The MEGR-1222 Series have both the inlet and outlet in line where the MEGR-1252 series have a rear discharge back mount outlet for convenient wall mount applications.



MEGR-1222-BAF

TECH NOTE: These regulators feature anti-freezing heat transfer fins.

Part No.	Body Type	Inlet	Outlet	Adjustment Range	Pressure Setting	Capacity
MEGR-1222-BAF	Top Mount	1/2" FNPT	1/2" FNPT	9.5 - 13" WC	11"WC	500,000 BTU
MEGR-1222-CFF	Top Mount	1/2" FNPT	3/4" FNPT	9.5 - 13" WC	11"WC	800,000 BTU
MEGR-1222-DFF	Top Mount	3/4" FNPT	3/4" FNPT	9.5 - 13" WC	11"WC	800,000 BTU
MEGR-1252-BAF	Back Mount	1/2" FNPT	1/2" FNPT	9.5 - 13" WC	11"WC	450,000 BTU
MEGR-1252-CFF	Back Mount	1/2" FNPT	3/4" FNPT	9.5 - 13" WC	11"WC	650,000 BTU
MEGR-1252-DFF	Back Mount	3/4" FNPT	3/4" FNPT	9.5 - 13" WC	11"WC	700,000 BTU

*Capacity based on 10 PSI inlet with 20% droop

MEC FULL-SIZE SECOND STAGE REGULATORS

MEC Full-size regulators offer all the same features as the compact MEGR-1122 Series but in a full size, high-capacity version. These full-size second stage regulators have a large fabric reinforced diaphragm for superior downstream regulation, heavy duty wrench flats, and a large 3/4" FNPT tapped drip lip vent to help prevent relief valve blockage. The MEGR-1622 Series have both the inlet and outlet in line where the MEGR-1652 series have a rear discharge back mount outlet for convenient wall mount applications.



MEGR-1622-BCF

Part No.	Body Type	Inlet	Outlet	Adjustment Range	Pressure Setting	Capacity
MEGR-1622-BCF	Top Mount	1/2" FNPT	1/2" FNPT	9 - 13" WC	11"WC	710,000 BTU
MEGR-1622-CFF	Top Mount	1/2" FNPT	3/4" FNPT	9 - 13" WC	11"WC	1,300,000 BTU
MEGR-1622-DFF	Top Mount	3/4" FNPT	3/4" FNPT	9 - 13" WC	11"WC	1,300,000 BTU
MEGR-1622-DFFXO	Vent Over Outlet	3/4" FNPT	3/4" FNPT	9 - 13" WC	11"WC	1,300,000 BTU
MEGR-1642-DFF	Right Angle	3/4" FNPT	3/4" FNPT	9 - 13" WC	11"WC	900,000 BTU
MEGR-1652-CFF	Back Mount	1/2" FNPT	3/4" FNPT	9 - 13" WC	11"WC	1,000,000 BTU
MEGR-1652-DFF	Back Mount	3/4" FNPT	3/4" FNPT	9 - 13" WC	11"WC	1,000,000 BTU

*Capacity based on 10 PSI inlet with 20% droop



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2 PSI Regulators



MEC 2 PSI SECOND STAGE REGULATORS

These 2 PSI service regulators are used to reduce outlet pressures from first stage regulators (normally 10 PSI) to a nominal 2 PSI. 2 PSI service regulators are used in conjunction with an LPG line regulator either at the indoor appliance or a remote manifold distribution header inlet. All MEC 2 PSI service regulators are white with black adjustment caps. The full size 2 PSI service regulators have 3/4" FNPT tapped vents and MEC's exclusive E-Z grip screens located over the inlet. All MEC 2 PSI service regulators feature a stainless-steel inlet filter screen to reduce debris from passing through the regulator. Both the MEGR-1622E and MEGR-1652E series offer optimal relief performance that exceeds UL test requirements. All MEC Excelsa-Flo domestic regulators feature a 25-year recommended replacement life and an exclusive tear away leak check adhesive sticker.



MEGR-1652E-DFH

TECH NOTE: Line regulators must be installed downstream of the 2 PSI regulator, inside the home or building. Please see pages 34-36 for available line regulators.

Part No.	Body Type	Inlet	Outlet	Adjustment Range	Pressure Setting	Capacity
MEGR-1622E-BCH	Top Mount	1/2" FNPT	1/2" FNPT	1 - 2.2 PSIG	2	1,100,000 BTU
MEGR-1622E-DCH	Top Mount	3/4" FNPT	3/4" FNPT	1 - 2.2 PSIG	2	1,400,000 BTU
MEGR-1652E-DFH	Back Mount	3/4" FNPT	3/4" FNPT	1 - 2.2 PSIG	2	1,300,000 BTU

*Capacities are based on 10 PSI inlet pressure and 20% droop

MEC 2 PSI INTEGRAL TWO-STAGE REGULATORS

MEC Excelsa-Flo Integral Two-Stage regulators combine the first and second stage regulator set-up into one convenient unit converting tank pressure to 2 PSI. All MEC integral two-stage 2 PSI regulators are white indicating 2 PSI outlet pressure. These regulators are recommended for installations with short piping distances, but provide the same advantages of two-stage regulation with a single unit. 2 PSI service regulators are used in conjunction with an LPG line regulator either at the indoor appliance or a remote manifold distribution header inlet. All MEC integral two-stage regulator vents have tapped ports and exclusive E-Z Grip screens located over the outlet. Both the MEGR-1232E and MEGR-1632E series offer optimal relief performance that well exceeds UL test requirements providing over pressure protection of no more than 4 PSI downstream pressure.



MEGR-1232E-HBH

Part No.	Body Type	Inlet	Outlet	Adjustment Range	Pressure Setting	Capacity
MEGR-1232E-BBH	Compact	1/4" FNPT	1/2" FNPT	1 - 2.2 PSIG	2	500,000 BTU
MEGR-1232E-HBH	Compact	FPOL	1/2" FNPT	1 - 2.2 PSIG	2	500,000 BTU
MEGR-1632E-BCH	Full-Size	1/4" FNPT	1/2" FNPT	1 - 2.2 PSIG	2	850,000 BTU
MEGR-1632E-CFH	Full-Size	1/4" FNPT	3/4" FNPT	1 - 2.2 PSIG	2	850,000 BTU
MEGR-1632E-HCH	Full-Size	FPOL	1/2" FNPT	1 - 2.2 PSIG	2	900,000 BTU
MEGR-1632E-JFH	Full-Size	FPOL	3/4" FNPT	1 - 2.2 PSIG	2	850,000 BTU

*Capacities are based on 30 PSI inlet pressure and 20% droop



Integral Two Stage Regulators



MEC COMPACT INTEGRAL TWO-STAGE REGULATORS

MEGR-1232 Compact Series offers a compact integral two-stage regulator design perfect for lower BTU applications and confined spaces. They feature an adjustment range from 9-13" WC (factory set @ 11" WC). Stainless steel integral components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms, and large precision machined aluminum orifices providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.



MEGR-1232-BBF

Part No.	Inlet	Outlet	Adjustment Range	Pressure Setting	Vent Location	Capacity
MEGR-1232-BBF	1/4" FNPT	1/2" FNPT	9" - 13" WC	11" WC	Straight	450,000 BTU
MEGR-1232-HBF	FPOL	1/2" FNPT	9" - 13" WC	11" WC	Straight	450,000 BTU
MEGR-1232-HFF	FPOL	3/4" FNPT	9" - 13" WC	11" WC	Straight	625,000 BTU

*Capacities are based on 30 PSI inlet pressure and 20% droop

MEC FULL-SIZE INTEGRAL TWO-STAGE REGULATORS

MEGR-1632 Series offers all the same features as the compact MEGR-1232 series in a full-size high-capacity version. The full-size MEGR-1632 diaphragm provides superior downstream regulation, has heavy duty wrench flats and a large 3/4" tapped drip lip vent to help prevent relief vent blockage.



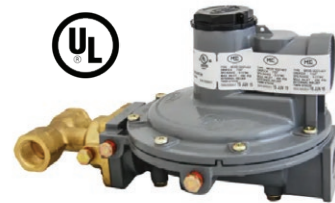
MEGR-1632-HCF

Part No.	Inlet	Outlet	Adjustment Range	Pressure Setting	Vent Location	Capacity
MEGR-1632-BCF	1/4" FNPT	1/2" FNPT	9 - 13" WC	11" WC	Straight	700,000 BTU
MEGR-1632-CFF	1/4" FNPT	3/4" FNPT	9 - 13" WC	11" WC	Straight	950,000 BTU
MEGR-1632-HCF	FPOL	1/2" FNPT	9 - 13" WC	11" WC	Straight	700,000 BTU
MEGR-1632-JFF	FPOL	3/4" FNPT	9 - 13" WC	11" WC	Straight	900,000 BTU

*Capacities are based on 30 PSI inlet pressure and 20% droop

MEC INTEGRAL TWO-STAGE TEE REGULATORS

These Integral Two-Stage regulators combine the first and second stage regulator setup into one convenient unit converting tank pressure to 11" WC with the convenience of a F. POL Tee inlet for multiple tank applications. All MEC Integral Two-Stage domestic regulators are gray indicating low outlet pressure. All MEC Integral Two-Stage regulator vent have tapped ports (7/16-24 - First Stage) (3/4" FNPT - Second Stage) and our exclusive E-Z Grip screens located over the outlet. Both the MEGR-1232T and MEGR-1632T series offer optimal relief performance that well exceeds UL test requirements providing over pressure protection of no more than 2 PSI downstream pressure. MEC Excelsa-Flo integral two-stage domestic regulators feature a 25-year recommended replacement life, our exclusive Tri-Tap (tank, 10 PSI, 11" WC) pressure port system and tear away leak check adhesive sticker.



MEGR-1632T-JFF



MEP1632

ME2130

Part No.	Inlet	Outlet	Adjustment Range	Pressure Setting	Vent Location	Capacity
MEGR-1232T-HBF	Compact	FPOL Tee	1/2" FNPT	9.5 - 13" WC	11" WC	450,000 BTU
MEGR-1232T-HFF	Compact	FPOL Tee	3/4" FNPT	9.5 - 13" WC	11" WC	625,000 BTU
MEGR-1632T-HCF	Full-Size	FPOL Tee	1/2" FNPT	9 - 13" WC	11" WC	700,000 BTU
MEGR-1632T-JFF	Full-Size	FPOL Tee	3/4" FNPT	9 - 13" WC	11" WC	900,000 BTU

*Capacities are based on 30 PSI inlet pressure and 20% droop

Part No.	Description
MEP1632	MEC Excelsa-Flo Integral Twin Stage - First Stage Vent Guard
ME2130	First Stage Pipe Away Elbow 1/4" M. Inv. Fl. X 1/4" F. Inv. Fl.



Non-stock/special order items are not cancellable or returnable

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MEC Automatic Changeover Regulators



MEC DOMESTIC AUTOMATIC CHANGEOVER REGULATORS

These Two Stage Automatic Changeover regulators combine the first and second stage regulator into one unit converting full tank pressure to 11" WC. MEC Excelsior Automatic Changeover regulators prevent gas outages by switching supply cylinders over to the reserve cylinder automatically when the primary cylinder is near empty. When the primary cylinder is depleted, causing the changeover to occur, a red indicator will appear signifying the reserve cylinder is now in use and the primary cylinder can be refilled without loss of service.



MEGR-175CS61622-BCF

Part No.	Body Style	Inlet	Outlet	Adjustment Range	Pressure Setting	Primary Cylinder Capacity	Auxiliary Cylinder Capacity
MEGR-175CS61222-BAF	Compact	1/4" IF	1/2" FNPT	9.5 - 13" WC	11" WC	400,000 BTU	340,000 BTU
MEGR-175CS61622-BCF	Full-Size	1/4" IF	1/2" FNPT	9 - 13" WC	11" WC	650,000 BTU	570,000 BTU
MEGR-175CS6122E-BCH	Full-Size	1/4" IF	1/2" FNPT	1 - 2.2 PSIG	2 PSIG	625,000 BTU	525,000 BTU

*Capacity based on 30 PSI inlet with 20% droop

MEC LOW-CAPACITY AUTOMATIC CHANGEOVER REGULATORS

The MEGR-253 Series Automatic Changeover Regulators automatically redirect LP gas vapor flow from an empty service cylinder to a reserve cylinder, without interruption of service. It features an easy-to-read green indicator which changes to red when the service cylinder needs to be refilled. The MEGR-253L are ideally suited for RV, manufactured homes, cabins, or other applications with a single appliance or low BTU multiple appliance applications while still permitting maximum range of output pressure adjustment.



MEGR-253

Part No.	Inlet	Outlet	Pressure Setting	Primary Cylinder Capacity	Auxiliary Cylinder Capacity	Cover	Mounting Bracket
MEGR-253**	1/4 F. Inv. FL.	3/8" FNPT	11" WC	225,000 BTU	150,000 BTU	MEGR-862	MEGR-900 or MEGR-RVB
MEGR-253H**	1/4 F. Inv. FL.	3/8" FNPT	11" WC	350,000 BTU	200,000 BTU		
MEGR-253L	1/4 F. Inv. FL.	3/8" FNPT	11" WC	150,000 BTU	100,000 BTU		

*Capacity based on 100 PSI inlet with 20% droop

**UL Listed Construction



High Pressure Regulators



MEGR-130 SERIES SINGLE STAGE FIXED HIGH PRESSURE REGULATORS

The MEGR-130 series fixed high pressure single stage regulators are designed to provide an economical solution for pounds to pounds service applications. The MEGR-130 can be used to regulate air as well as LP gas. Regulators must be installed in compliance with federal, state or local codes or laws in accordance with NFPA 58.

Part No.	Inlet	Outlet	Setting	Capacity
MEGR-130-05	1/4" NPT	1/4" NPT	5 PSI	1,200,000 BTU
MEGR-130-10	1/4" NPT	1/4" NPT	10 PSI	1,200,000 BTU
MEGR-130-20	1/4" NPT	1/4" NPT	20 PSI	1,200,000 BTU
MEGR-130-30	1/4" NPT	1/4" NPT	30 PSI	1,200,000 BTU
MEGR-130-50	1/4" NPT	1/4" NPT	50 PSI	1,200,000 BTU
MEGR-130-80	1/4" NPT	1/4" NPT	80 PSI	1,200,000 BTU

*Capacity based on 40 PSI inlet pressure



MEGR-130-30

MEGR-164 SERIES HIGH PRESSURE ADJUSTABLE REGULATORS

The MEGR-164 Series adjustable high-pressure regulators offer a wide selection of available pressure ranges. High pressure regulators are typically used to reduce tank pressure to an intermediate pressure for use by another regulator. They may be used as high pressure regulators on distribution systems when used in conjunction with first-stage downstream regulators.

When equipped with an integral relief valve (MEGR-164SR Series), the regulator may be used as a final-stage regulator on high pressure systems. It may also be used as a first-stage regulator when set at 10 PSIG or less. The 1/4"-inch FNPT tapped side outlet can be used to install a pressure gauge or a hydrostatic relief valve. This series contains brass materials that are not compatible with anhydrous ammonia service.



MEGR-164-35

TECH TIP: It is recommended to use these with an external pressure relief device such as the MEGR-1290 Series.

Part No.	Inlet/Outlet	Internal Relief	Setting	Range	Capacity @ 60 PSI Inlet	Capacity @ 100 PSI Inlet
MEGR-164/33	1/2" FNPT	N	10 PSI	0-30 PSI	6,098,000	6,800,000
MEGR-164/35	1/2" FNPT	N	20 PSI	0-30 PSI	6,400,000	8,335,000
MEGR-164/36	1/2" FNPT	N	40 PSI	0-60 PSI	6,100,000	9,145,000
MEGR-164/222	1/2" FNPT	N	50 PSI	0-125 PSI	4,900,000	7,225,000
MEGR-164SR/21	1/2" FNPT	Y	10 PSI	0-15 PSI	4,675,000	7,825,000
MEGR-164SR/22	1/2" FNPT	Y	15 PSI	0-30 PSI	3,050,000	4,125,000
MEGR-164SR/23	1/2" FNPT	Y	20 PSI	0-30 PSI	3,405,000	4,755,000
MEGR-164-6/33	3/4" FNPT	N	10 PSI	0-30 PSI	9,150,000	10,875,000
MEGR-164-6/35	3/4" FNPT	N	20 PSI	0-30 PSI	10,105,000	12,400,000
MEGR-164-6/36	3/4" FNPT	N	40 PSI	0-60 PSI	9,960,000	13,415,000
MEGR-164-6/222	3/4" FNPT	N	50 PSI	35-100 PSI	4,575,000	11,890,000

*Capacity based on 20% droop



Non-stock/special order items are not cancellable or returnable

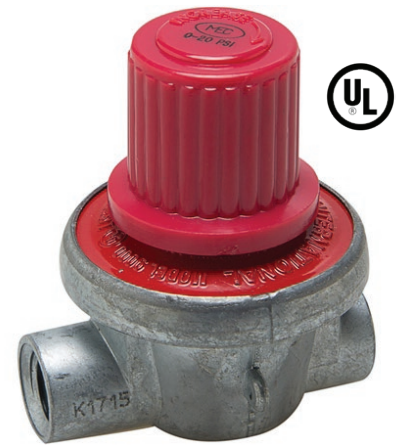
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High Pressure Regulators



MEGR-350/360 SERIES SINGLE STAGE ADJUSTABLE HIGH PRESSURE REGULATORS

The MEGR-350 Series single stage, adjustable high pressure regulator features a precisely machined body and bonnet along with a crimped design and fabric reinforced rubber diaphragm creating a positive seal for leak-free performance. The MEGR-360 Series regulator with the Type 1 (QCC) connection is designed specifically for appliances that require pounds to pounds pressure instead of inches of water column.



MEGR-350-20

Part No.	Inlet	Outlet	Range	Capacity
MEGR-350	1/4" FNPT	1/4" FNPT	0-10 PSI	1,200,000 BTU
MEGR-350-20	1/4" FNPT	1/4" FNPT	0-20 PSI	1,200,000 BTU
MEGR-350-30	1/4" FNPT	1/4" FNPT	0-30 PSI	1,200,000 BTU
MEGR-351	MPOL	1/4" FNPT	0-10 PSI	1,200,000 BTU
MEGR-360	QCC	1/4" FNPT	0-10 PSI	1,200,000 BTU

*Capacity based on 40 PSI inlet pressure

MEGR-1627/1630 SERIES FIRST STAGE COMMERCIAL & INDUSTRIAL REGULATORS

The MEGR-1627 and MEGR-1630 Series commercial/industrial regulators are large capacity, high pressure units for use in conjunction with MEGR-CS1200 or MEGR-S1202 Series regulators. They can also be used on final-stage (PSI to PSI) service. The diaphragm case and/or regulator body on the MEGR-1627 Series can be rotated in any of four positions to allow installation in locations with limited space. Available with a monitor or integral relief valve, the MEGR-1627 Series is perfectly suited for jurisdictional systems, grain dryers, direct fired vaporizers or other high capacity service applications. The MEGR-1630 Series is best used in industrial applications where high flow capacity is required.



MEGR-1627-6210

MEGR-1630-104-78

Part No.	Body Type	Inlet/Outlet	Orifice	Set Point	Range	Capacity @ 100 PSI Inlet	Capacity @ 20 PSI Inlet
MEGR-1627/497	Standard	1" FNPT	1/2"	20 PSI	15-40 PSI	36,600,000 BTU	6,050,000 BTU
MEGR-1627/576	Standard	2" FNPT	1/2"	10 PSI	5-20 PSI	45,000,000 BTU	6,003,000 BTU
MEGR-1627/5810*	Standard	3/4" FNPT	3/8"	10 PSI	5-20 PSI	11,700,000 BTU	4,700,000 BTU
MEGR-1627/6210*	Standard	3/4" FNPT	1/2"	10 PSI	5-20 PSI	12,400,000 BTU	6,700,000 BTU
MEGR-1627/7710*	Standard	1" FNPT	1/2"	10 PSI	5-20 PSI	25,100,000 BTU	6,900,000 BTU
MEGR-1627B/7710	Perpendicular Body	1" FNPT	1/2"	10 PSI	5-20 PSI	25,100,000 BTU	6,900,000 BTU
MEGR-1627M/267	w/ Monitor	2" FNPT	1/2"	10 PSI	5-20 PSI	36,100,000 BTU	6,003,000 BTU
MEGR-1627M/471	w/ Monitor	1" FNPT	1/2"	10 PSI	5-20 PSI	25,100,000 BTU	6,900,000 BTU
MEGR-1627R/113	W/ Relief	3/4" FNPT	3/8"	10 PSI	5-20 PSI	9,800,000 BTU	4,200,000 BTU
MEGR-1627V/5810	FKM Construction	3/4" FNPT	3/8"	10 PSI	5-20 PSI	11,700,000 BTU	4,700,000 BTU
MEGR-1627V/7710	FKM Construction	1" FNPT	1/2"	10 PSI	5-20 PSI	25,100,000 BTU	4,700,000 BTU
MEGR-1630-104/78	Standard	2" FNPT	1/2"	10 PSI	8-20 PSI	47,000,000 BTU	7,700,000 BTU

*UL Listed Construction



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High Pressure Regulators



TECH TIP: The regulators on these pages are designed with no overpressure protection because they are intended for specialty gas applications. The use would include, but not limited to regulated grain drying burners, tar torches, high pressure construction heaters, kiln burners and various other flame processing industrial applications.

MEGR-2104/2106 SERIES HIGH PRESSURE & HIGH TEMPERATURE ADJUSTABLE REGULATORS

The MEGR-2104/MEGR-2106 Series is a highly reliable and accurate adjustable high-pressure regulator designed to offer a wide selection of available pressure ranges for LPG applications. With models designed to reduce container pressure to between 3 PSI-125 PSI coupled with the high BTU delivery capacity, this regulator series is perfect for a wide range of high demand industrial/commercial LPG applications such as temporary heat, grain drying, asphalt heaters, agriculture and manufacturing process applications. Multiple trims available including Nitrile for standard LPG service (-40°F - 170°F) and FKM for high temperature LPG service (-40°F - 300°F).



MEGR-2104

Part No.	Service	Inlet/Outlet	Range	Setting	Capacity
MEGR-2104NL/4	LP-Gas	1/2" FNPT	3-30 PSI	20	7,000,000 BTU
MEGR-2104NM/4	LP-Gas	1/2" FNPT	25-50 PSI	30	10,000,000 BTU
MEGR-2104NH/4	LP-Gas	1/2" FNPT	45-125 PSI	60	10,000,000 BTU
MEGR-2104VL/4	High Temp LP	1/2" FNPT	3-30 PSI	20	7,000,000 BTU
MEGR-2104VM/4	High Temp LP	1/2" FNPT	25-30 PSI	30	10,000,000 BTU
MEGR-2106NL/6	LP-Gas	3/4" FNPT	3-30 PSI	20	7,500,000 BTU
MEGR-2106NM/6	LP-Gas	3/4" FNPT	25-50 PSI	30	14,000,000 BTU
MEGR-2106NH/6	LP-Gas	3/4" FNPT	45-125 PSI	60	14,000,000 BTU
MEGR-2106VL/6	High Temp LP	3/4" FNPT	3-30 PSI	20	7,500,000 BTU
MEGR-2106VM/6	High Temp LP	3/4" FNPT	25-50 PSI	30	14,000,000 BTU
MEGR-2106NL/8	LP-Gas	1" FNPT	3-30 PSI	20	7,500,000 BTU
MEGR-2106NM/8	LP-Gas	1" FNPT	25-50 PSI	30	14,000,000 BTU
MEGR-2106NH/8	LP-Gas	1" FNPT	45-125 PSI	60	14,000,000 BTU
MEGR-2106VL/8	High Temp LP	1" FNPT	3-30 PSI	20	7,500,000 BTU
MEGR-2106VM/8	High Temp LP	1" FNPT	25-50 PSI	30	14,000,000 BTU

*Capacity based on 100 PSI inlet, 20% droop

MEGR-11301F SERIES MULTIPLE OUTLET ADJUSTABLE HIGH PRESSURE REGULATOR

The MEGR-11301F is a reliable and accurate regulator making it ideal for numerous high pressure applications. This multi-purpose regulator can be used as a pilot supply or pressure-loading regulator where high pressure operating medium must be reduced for use by gas regulator pilots or pressure-loaded regulators. Its rugged design and multiple outlet ports offer versatility for a wide variety of applications.



MEGR-11301F

Part No.	Inlet (1 Port)	Outlet (3 Ports)	Max Inlet Pressure	Outlet Range
MEGR-11301F	1/4" FNPT	1/4" FNPT	5,500 PSI	0-120 PSI



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High Pressure Regulators



MEGR-6120 SERIES HIGH PRESSURE ADJUSTABLE REGULATORS

The MEGR-6120 Series are UL listed high-pressure regulators that meet a variety of applications for liquid or vapor service. The compact body design makes these regulators particularly useful in installations with space limitations. The basic MEGR-6120 Series regulators come equipped with a hand wheel adjustment. The non-adjustable ME6121 Series provides a tamper-resistant spring case and one of seven fixed set points: 5, 10, 20, 30, 40, 50, or 60 PSI.

The MEGR-6120 & MEGR-6121 Series are UL listed as high pressure, non-relief regulators. Both MEGR-6120 & MEGR-6121 Series regulators contain brass materials that are not compatible with anhydrous ammonia service.



ADJUSTABLE REGULATORS

Part No.	Inlet/Outlet	Range
MEGR-6120-30	1/4" FNPT	1-30 PSI
MEGR-6120-60	1/4" FNPT	1-60 PSI
MEGR-6120-100	1/4" FNPT	1-100 PSI



NON-ADJUSTABLE REGULATORS

Part No.	Inlet/Outlet	Range
MEGR-6121-05	1/4" FNPT	5 PSI
MEGR-6121-10	1/4" FNPT	10 PSI
MEGR-6121-20	1/4" FNPT	20 PSI
MEGR-6121-30	1/4" FNPT	30 PSI
MEGR-6121-40	1/4" FNPT	40 PSI
MEGR-6121-50	1/4" FNPT	50 PSI
MEGR-6121-60	1/4" FNPT	60 PSI

Capacities: BTU/H (Vapor)		
Outlet Set Point	Inlet Pressure	BTU /HR
15 PSI	50 PSI	850,000
15 PSI	100 PSI	1,700,000
15 PSI	150 PSI	2,500,000
20 PSI	50 PSI	900,000
20 PSI	100 PSI	1,800,000
40 PSI	100 PSI	1,500,000
40 PSI	150 PSI	2,000,000
50 PSI	100 PSI	1,300,000
50 PSI	150 PSI	1,800,000
50 PSI	200 PSI	2,300,000

TECH TIP:

Regulator Installation Tips

- Do not oversize regulators. Pick the smallest regulator and orifice that will handle the maximum flow requirements.
- Regulator body size should not be larger than the pipe size.
- Regulator should be installed higher than the tank service valve with the pigtail sloping towards the tank.
- Refer to NFPA 58 for installation code compliance.
- Vents should be pointed down to help avoid the accumulation of water condensation or other materials in the spring case.
- Do not reduce the size of the vent for remote venting.
- Inspect regulators when providing service or maintenance.
- Follow manufacturers' instructions on service life and regulator replacement.



Commercial Low Pressure Regulators



MEGR-IHSRL/CS/S SERIES LOW PRESSURE COMMERCIAL & INDUSTRIAL REGULATORS

The MEGR-IHSRL Series offers a full size high capacity light commercial type regulator with an adjustment range from 6-14" WC, a heavy duty cast iron body with a universal body to bonnet union for fast relocation of inlet to outlet vent location. These light commercial second stage regulators are used to reduce outlet pressures from first stage regulators (normally 10 PSI) to 11" WC.

The MEGR-SI202/MEGR-CSI200 Series commercial/industrial regulators are large capacity, low pressure second stage units for installation at schools, bakeries, and similar applications. They contain a limited capacity internal relief valve and can be used in conjunction with either MEGR-1627 Series or MEGR-1630 Series high-pressure regulators. For high capacity installations, the MEGR-1289H Series relief valve is required to be installed in the downstream system.



MEGR-SI202G-CNC

Part No.	Inlet/Outlet	Orifice	Range	Setting	Max Inlet Pressure	Capacity @ 25 PSI Inlet	Capacity @ 10 PSI Inlet
MEGR-IHSRL-BFC	3/4" FNPT	3/8"	6-14" WC	11" WC	40 PSI	-	2,000,000 BTU
MEGR-IHSRL-CFC	1" FNPT	3/8"	6-14" WC	11" WC	40 PSI	-	2,500,000 BTU
MEGR-CSI200IR6EC1	3/4" FNPT	1/2"	6-14" WC	11" WC	25 PSI	2,100,000 BTU	1,600,000 BTU
MEGR-CSI200IR6EC3	1" FNPT	1/2"	6-14" WC	11" WC	25 PSI	2,500,000 BTU	1,900,000 BTU
MEGR-CSI200IR6EC6	1-1/4" FNPT	1/2"	6-14" WC	11" WC	25 PSI	3,100,000 BTU	2,800,000 BTU
MEGR-CSI200IR7EC1	3/4" FNPT	5/16"	6-14" WC	7" WC	25 PSI	*1,250,000 BTU	*985,000 BTU
MEGR-CSI200IR7EC3	1" FNPT	5/16"	6-14" WC	7" WC	25 PSI	*1,620,000 BTU	*1,525,000 BTU
MEGR-SI202G-BNC	1-1/2" FNPT	1"	9-18" WC	11" WC	25 PSI	14,700,000 BTU	10,800,000 BTU
MEGR-SI202G-CNC	2" FNPT	1"	9-18" WC	11" WC	25 PSI	30,000,000 BTU	23,000,000 BTU
MEGR-SI202H-CNK	2" FNPT	1"	1.5-3.25 PSI	2 PSI	25 PSI	22,200,000 BTU	10,300,000 BTU

* Flow rates listed in BTU Natural Gas

MEGR-1133 SERIES SECOND STAGE MANUAL ADJUSTABLE REGULATOR

The MEGR-1133 Series is a manual, direct acting, self-operating, spring loaded, and adjustable low pressure regulator. It is used in applications where pressure reduction is required. The regulator will reduce the risk of "shock" from abrupt changes of downstream conditions. This can help prevent safety equipment from shutting an operation down. The MEGR-1133 is equipped with external pressure registration; an external control line is needed to connect the output pressure port with the diaphragm chamber. The MEGR-1133 utilizes a balance diaphragm to reduce the effects of supply pressure changes on the output pressure. The external pressure registration of the standard MEGR-1133 also allows it to be used as a monitor regulator.



MEGR-1133

Part No.	Inlet/Outlet	Orifice	Range	Setting	Capacity @ 10 PSI Inlet	Capacity @ 20 PSI Inlet
MEGR-1133H-2	2" FNPT	2"	2-5 PSI	2 PSI	27,405,000 BTU	52,700,000 BTU
MEGR-1133H-3	2" FNPT	2"	5-10 PSI	5 PSI	22,300,000 BTU	41,600,000 BTU
MEGR-1133L-4	2" FNPT	2"	8.5-18" WC	14" WC	45,600,000 BTU	77,100,000 BTU
MEGR-1133L-6	2" FNPT	2"	.75-2 PSI	2 PSI	46,700,000 BTU	77,100,000 BTU



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Pilot Operated Regulators



MEGR-199 SERIES PILOT OPERATED REGULATORS

The MEGR-199 Series Industrial Regulators are large capacity, pilot operated, low or high pressure units for use in applications with loads demanding up to 75,000,000 BTU/H capacity. These regulators are best suited for industrial applications where high flow capacity and a downstream monitor control line can be applied. The MEGR-199 series provides exceptional downstream control while operating at very high capacities with minimal droop under varying flow and inlet pressures.



MEGR-199

Part No.	Pressure Service	Inlet/Outlet	Orifice	Range	Setting	Max Inlet Pressure	Capacity @ 20 PSI Inlet
MEGR-199-501P	Low	2" FNPT	1-1/8"	7" WC - 2 PSI	1 PSI	150 PSI	48,825,000 BTU
MEGR-199-503P	Low	2" FNPT	1-1/8"	2-10 PSI	10 PSI	150 PSI	61,425,000 BTU
MEGR-199-504P	Low	2" FNPT	1-1/8"	5-15 PSI	15 PSI	150 PSI	63,000,000 BTU
MEGR-199-510P	High	2" FNPT	7/8"	7" WC - 2 PSI	1 PSI	250 PSI	29,295,000 BTU
MEGR-199-511P	High	2" FNPT	7/8"	1-5 PSI	5 PSI	250 PSI	33,075,000 BTU
MEGR-199-512P	High	2" FNPT	7/8"	5-15 PSI	15 PSI	250 PSI	37,800,000 BTU
MEGR-199-513P	High	2" FNPT	7/8"	2-10 PSI	10 PSI	250 PSI	36,225,000 BTU
MEGR-199-515P	High	2" FNPT	7/8"	10-20 PSI	20 PSI	250 PSI	40,950,000 BTU
MEGR-199-903P	High	2" FNPT	7/8"	10-65 PSI	30 PSI	250 PSI	44,100,000 BTU
MEGR-199-502PH	High	2" FNPT	1-1/8"	1-5 PSI	5 PSI	300 PSI	55,125,000 BTU
MEGR-199-503PH	High	2" FNPT	1-1/8"	2-10 PSI	10 PSI	300 PSI	61,425,000 BTU
MEGR-199-504PH	High	2" FNPT	1-1/8"	5-15 PSI	15 PSI	300 PSI	63,000,000 BTU
MEGR-199-505PH	High	2" FNPT	1-1/8"	10-20 PSI	20 PSI	300 PSI	67,725,000 BTU
MEGR-199-901PH	High	2" FNPT	1-1/8"	10-65 PSI	30 PSI	300 PSI	74,025,000 BTU
MEGR-199M-504PH	Monitor	2" FNPT	1-1/8"	5-15 PSI	15 PSI	300 PSI	42,650,000 BTU
MEGR-199M-505PH	Monitor	2" FNPT	1-1/8"	10-20 PSI	20 PSI	300 PSI	67,725,000 BTU
MEGR-199M-901PH	Monitor	2" FNPT	1-1/8"	10-65 PSI	30 PSI	300 PSI	74,025,000 BTU

*Capacity based on inlet pressure 20 PSI greater than outlet with 20% droop

Relief Valves



MEGR-198H SERIES LIQUID BACK PRESSURE RELIEF VALVES

The MEGR-198H Series, liquid service valves are direct-operated relief valves for use on relief and back pressure applications involving large LP-Gas pumping systems and vaporizers. Internal pressure registration eliminates the need for a control line.

Part No.	Inlet/Outlet	Relief Setting	Outlet Range	Relief Capabilities	
				10PSI Over Set Point	50 PSI Over Set Point
MEGR-198H-22	3/4" FNPT	100 PSI	70-140 PSI	49 GPM	93 GPM
MEGR-198H-30	1" FNPT	100 PSI	70-140 PSI	49 GPM	93 GPM
MEGR-198H-31	1" FNPT	175 PSI	130-200 PSI	52 GPM	109 GPM



MEGR-198H

MEGR-1289H SERIES VAPOR BACK PRESSURE RELIEF VALVES

The MEGR-1289H Series relief valve is installed between large second stage regulators and the burner to provide high capacity relief. They are ideal for low pressure settings due to the increased sensitivity provided by the large diaphragm area. Suitable as a pressure high capacity relief device when installed between a first and second stage regulator.



MEGR-1289

Part No.	Inlet/Outlet	Range	Setpoint	Max Inlet	SCFH/Propane
MEGR-1289H/1	2" FNPT	7-18" WC	9" WC	25 PSI	55,000
MEGR-1289H/2	2" FNPT	.5-2.25 PSI	1 PSI	25 PSI	55,500
MEGR-1289H/3	2" FNPT	1.75-7 PSI	3 PSI	25 PSI	58,000
MEGR-1289H/4	2" FNPT	4-10 PSI	6 PSI	25 PSI	58,500
MEGR-1289H/5	2" FNPT	10-15 PSI	12 PSI	25 PSI	61,000
MEGR-1289H/41	1" FNPT	1-4.5 PSI	2 PSI	100 PSI	45,500
MEGR-1289H/42	1" FNPT	4-15 PSI	8 PSI	100 PSI	46,000
MEGR-1289H/43	1" FNPT	10-20 PSI	15 PSI	100 PSI	48,000
MEGR-1289H/49	1" FNPT	15-50 PSI	25 PSI	100 PSI	49,000
MEGR-1289HH-1	1" FNPT	45-75 PSI	50 PSI	100 PSI	50,000
MEGR-1290H/43	3/4" FNPT x 1" FNPT	10-20 PSI	15 PSI	100 PSI	40,000
MEGR-1290H/49	3/4" FNPT x 1" FNPT	15-50 PSI	25 PSI	100 PSI	50,000



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044



LOW PRESSURE SINGLE STAGE REGULATORS

The MEGR-230 single-stage regulators are approved for use in small portable applications and outdoor cooking appliances utilizing low pressure. These are not approved for RV use.

Part No.	Inlet	Outlet	Setting	Vent	Capacity
MEGR-218	FPOL	3/8" FNPT w/ Handwheel	11" WC	90°	140,000 BTU
MEGR-230	1/4" FNPT	3/8" FNPT	11" WC	Outlet	140,000 BTU
MEGR-230-9	POL	3/8" FNPT	11" WC	Outlet	140,000 BTU
MEGR-230-90	1/4" FNPT	3/8" FNPT	11" WC	90°	140,000 BTU
MEGR-230-1618	Black QCC	3/8" FNPT	11" WC	90°	100,000 BTU
MEGR-230-1326	Black QCC	3/8" FNPT	11" WC	Outlet	100,000 BTU
MEGR-231	Hardnose POL	3/8" FNPT	11" WC	90°	140,000 BTU



MEGR-230



MEGR-1912 SERIES SINGLE STAGE REGULATORS

The MEGR-1912 Series UL Listed regulators are direct operated, spring-loaded models designed for use in a variety of service and industrial applications. These regulators have limited-capacity internal relief across the diaphragm to help minimize over pressurization. The MEGR-1912 Series with capacity ratings of less than 320,000 BTU/hr (129 scfh), are often used on small portable outdoor appliances.

TECH NOTE: Underwriters Laboratories (UL) requires horizontally mounted regulators to be installed with vent opening protection to prevent blockage by freezing rain.

Part No.	Inlet	Outlet	Range	Setting	Capacity
MEGR-1912/101	1/4" FNPT	3/8" FNPT	9.25-13" WC	11" WC	242,953 BTU
MEGR-1912/104	1/4" FNPT	1/4" FNPT	9.25-13" WC	11" WC	242,953 BTU
MEGR-1912/109	1/4" FNPT	3/8" FNPT	5-10" WC	7" WC	242,953 BTU
MEGR-1912/197	1/4" FNPT	3/8" FNPT	12-24" WC	20" WC	313,488 BTU
MEGR-1912H/108	1/4" FNPT	3/8" FNPT	0.8-2.7 PSI	1.5 PSI	297,814 BTU
MEGR-1912H/520	1/4" FNPT	1/4" FNPT	2.7-5 PSI	3.5 PSI	-



MEGR-1912-197



FISHER "LITTLE JOE" REGULATORS

Fisher 'Little Joe' 912 series has been popular for years. Large orifice minimizes freeze-ups, rugged construction insures long dependable service life. For use on small portable appliances and outdoor cooking appliances. These are not for use in RV or domestic applications.

Part No.	Inlet	Outlet	Setting	Capacity
912-101	1/4" FNPT	3/8" FNPT	11" WC	220,000 BTU
912-122	MPOL	3/8" FNPT	11" WC	220,000 BTU



912-101



NGR Series



The NMT® NGR series spring loaded gas regulators with internal relief provide consistent and controlled pressure in a variety of residential, industrial and commercial applications. The NGR meets ANSI Z21.80/CSA 6.22 for Class I, Class II, Vent Limiting and OPD (Overpressure Protection Device) applications and is designed to be used in many applications where non-corrosive dry gases are used. These regulators are recommended for use with generators.



NGR02

NGR02-XXX

	A	B	C	D	E
VALVE BODY	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	
ORIFICE	1/8"	1/4"	3/8"	1/2"	3/16"
SPRING	GREEN	SILVER	YELLOW/BLACK	YELLOW	WHITE

NGR04-XXX

	A	B	C	D	E	F	G	H	E
VALVE BODY	1-1/4" NPT	1-1/2" NPT	2" NPT	2" FL	3" FL				
ORIFICE	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"			
SPRING	BROWN	GRAY	BLACK	BLUE	SILVER	RED/GRAY	YELLOW	RED	WHITE

NGR06-XXX

	A	B	C	D	E	F	G
VALVE BODY	1-1/4" NPT	1-1/2" NPT	2" NPT	2" FL	3" FL		
ORIFICE	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	
SPRING	ORANGE	GREEN	BLACK	PURPLE	SILVER	YELLOW	WHITE

Body	Orifice	Capacity @ 10 PSI In
NGR02	1/8"	612,814
NGR02	1/4"	1,719,371
NGR02	3/8"	2,844,979
NGR02	1/2"	3,711,809
NGR04	1/4"	2,587,788
NGR04	3/8"	5,556,600
NGR04	1/2"	9,144,576
NGR04	5/8"	10,240,020
NGR04	3/4"	16,066,512
NGR04	7/8"	20,908,692
NGR06	1/4"	2,473,481
NGR06	3/8"	6,061,457
NGR06	1/2"	10,762,340
NGR06	5/8"	17,071,463
NGR06	3/4"	19,422,698
NGR06	7/8"	21,402,436

*Capacity based on 14" WC Set Point

NGR SPRINGS

Part No.	Spring Color	Spring Range	Use With
S02A	Green	6.5 - 16" WC	NGR02
S02B	Silver	14 - 28" WC	NGR02
S02C	Yellow/Black	26 - 42" WC	NGR02
S02D	Yellow	1 - 3 PSI	NGR02
S0204E	White	2 - 5 PSI	NGR02/04
S04A	Brown	3 - 7" WC	NGR04
S04B	Gray	4 - 13" WC	NGR04
S04C	Black	9 - 14" WC	NGR04
S04D	Blue	9 - 15" WC	NGR04
S04E	Silver	12 - 20" WC	NGR04
S04F	Red/Gray	13 - 28" WC	NGR04
S04G	Yellow	1 - 2 PSI	NGR04
S04H	Red	1 - 2.5 PSI	NGR04
S0608A	Orange	2 - 4" WC	NGR06
S0608B	Green	3 - 7" WC	NGR06
S0608C	Black	5 - 13" WC	NGR06
S0608D	Purple	7 - 20" WC	NGR06
S0608E	Silver	19 - 56" WC	NGR06
S0608F	Yellow	1.5 - 3 PSI	NGR06
S0608G	White	2.5 - 7 PSI	NGR06



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N5 Series



N5 REGULATOR

The NMT® N5 Series gas regulator is a Certified CSA 6.22/ANSI Z21.80 self-operating regulator with vent limiting option for use in residential, commercial and industrial applications. The N5 vent allows for indoor use without the need to pipe external vent lines. With the added benefit of extended corrosion resistance, the N5 allows for various applications where the best regulation performance is required.



N5A

TECH NOTE: Tech Note: Norgas regulators may be installed horizontally or vertically with a vent elbow. The N5 series is not recommended for use on generators - please see the NGR series on page 33 for applicable regulators.

N5 Series Regulator Selection Guide

N5X-XXXX-X-XXXXXX

Code 1 - Body (N5X)		Code 2 - Pipe Size (XXXX)		Code 3 - Spring (X)		Code 4 - Optional Vent Limiter (XXXXXX)	
Character	Description	Character	Description	Character	Description	Character	Description
A	N5A Body, 2 PSIG, 3/8" - 3/4"	0375	3/8" NPT Pipe Size (N5A)	O	Orange Spring, 3-13" WC	VL0125	1/8" Vent Limiter (N5A)
B	N5B Body, 2 PSIG, 1/2" - 1"	0500	1/2" NPT Pipe Size (N5A/N5B)	S	Silver Spring, 7-11" WC (CSA)	VL0375	3/8" Vent Limiter (N5B)
C	N5C Body, 2 PSIG, 1-1/4" - 1-1/2"	0750	3/4" NPT Pipe Size (N5A/N5B)	G	Green Spring, 10-23" WC	VL0500	1/2" Vent Limiter (N5C/N5D)
D	N5D Body, 2 PSIG, 1-1/2" - 2"	1000	1" NPT Pipe Size (N5B)	Y	Yellow Spring, 12-14" WC (CSA)		
AN	N5A Body, 15 PSIG, 3/8" - 1/2"	1250	1-1/4" NPT Pipe Size (N5C)	R	Red Spring, 15-30" WC		
BN	N5B Body, 15 PSIG, 1/2" - 1"	1500	1-1/2" NPT Pipe Size (N5C/N5D)	W	White Spring, 0.75-1.5 PSI		
CN	N5C Body, 15 PSIG, 1-1/4" - 1-1/2"	2000	2" NPT Pipe Size (N5D)				
DN	N5D Body, 15 PSIG, 1-1/2" - 2"						

Setting	Capacity - BTUs			
	N5A	N5B	N5C	N5D
4" WC	568,361	1,608,239	2,783,063	4,604,040
7" WC	568,361	1,559,023	2,714,796	4,588,164
10" WC	544,547	1,608,239	2,714,796	4,286,520
14" WC	539,784	1,484,406	2,698,920	3,984,876
21" WC	563,598	1,422,490	2,289,319	3,651,480
1 PSI	476,280	1,236,740	1,920,996	2,473,481

*Capacity based on 2 PSI inlet pressure

N5 SERIES ACCESSORIES

	Vent Limiter	Vent Cap	Vent Elbow
N5A	VL0125	VC0125	VE0125
N5B	VL0375	VC0375	VE0375
N5C/D	VL0500	VC0500	VE0500



N5 VENT CAP



N5 VENT ELBOW

N5 Series



N5 OPD

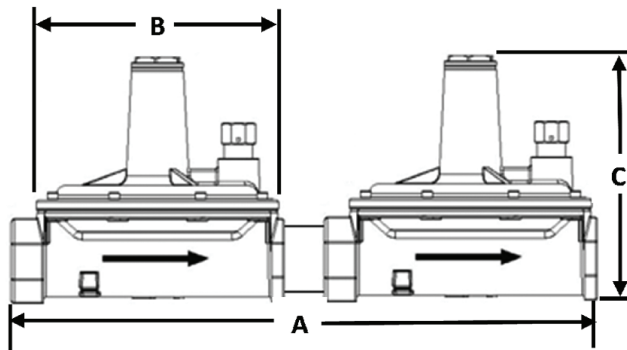
The NMT® N5 OPD (Overpressure Protection Device) Series gas regulator is a Certified CSA 6.22/ANSI Z21.80 self-operating OPD two stage regulator with vent limiting for use in residential, commercial and industrial applications. The OPD function allows for installation in applications where pressures must be limited to 2psig per CSA 6.22/ANSI Z21.80. The standard vent limiting feature allows for indoor use without the need to pipe external vent lines while still maintaining OPD protection.



N5 OPD



Model	Pipe Sizes	Vent Options	Outlet Pressure	Capacity - BTUs		
				€ 3 PSI In	€ 5 PSI In	€ 10 PSI In
N5AOPD	3/8", 1/2"	1/8"	7" WC	428,652	476,280	555,660
			14" WC	381,024	420,714	444,528
N5ABOPD	1/2"	1/8", 3/8"	7" WC	635,040	912,870	1,031,940
			14" WC	619,164	746,172	968,436
N5BOPD	1/2", 3/4", 1"	3/8"	7" WC	976,374	1,087,506	1,151,010
			14" WC	833,490	984,312	1,127,196
N5COPD	1-1/4", 1-1/2"	1/2"	7" WC	2,889,432	3,067,243	3,413,340
			14" WC	2,659,230	2,938,648	3,175,200
N5CDOPD	1-1/2"	1/2"	7" WC	4,453,218	5,566,126	6,432,955
			14" WC	4,132,523	4,948,549	5,566,126
N5DOPD	1-1/2", 2"	1/2"	7" WC	5,953,500	6,310,710	7,064,820
			14" WC	5,258,131	5,659,794	5,999,540



N5OPD DIMENSIONS

Model	Pipe Size (NPT)	Vent (NPT)	Dimension (Inches)			Weight (lbs)
			A	B	C	
N5AOPD	3/8", 1/2", 3/4"	1/8"	9.0"	4.0"	3.5"	1.8
N5ABOPD	1/2"	1/8", 3/8"	10.7"	4.0" / 5.5"	5.5"	2.7
N5BOPD	1/2", 3/4", 1"	3/8"	12.5"	5.5"	5.5"	3.6
N5COPD	1-1/4", 1-1/2"	1/2"	15.7"	7.0"	7.5"	6.7
N5CDOPD	1-1/2"	1/2"	19.5"	7.0" / 9.2"	9.4"	11.1
N5DOPD	1-1/2", 2"	1/2"	22.4"	9.2"	9.4"	15.5



MAXITROL®

MAXITROL 325 SERIES LINE REGULATORS

Lever Acting design - Line certified.

Used in 2 PSIG piping systems for propane installations. 325 Series can only be used as an appliance regulator with a maximum 2 PSIG inlet pressure. 325 Series does not have an internal relief valve and cannot be used as a second stage regulator.

325-SERIES



RMI Part No. w/ Vent Limiter Installed	Vent Port	Inlet/Outlet	Propane Spring Range	Spring Setting	Operating Inlet PSI	BTU Capacity Single Appliance	BTU Capacity All Appliances Combined
325-3L-3/8	1/8" Limiter Included	3/8"	7-11" WC	11" WC	2 PSI	225,000	402,500
325-3L-1/2		1/2"				225,000	402,500
325-5AL-1/2	3/8" Limiter Included	1/2"				684,250	805,000
325-5AL-3/4		3/4"				684,250	966,000
325-5AL-1		1"				684,250	966,000
325-7AL-1.25	1/2" Limiter Included	1-1/4"				2,012,500	2,012,500
325-7AL-1.5		1-1/2"				2,012,500	2,012,500

MAXITROL GAS APPLIANCE REGULATORS

(Maximum Inlet Pressure 1/2 or 1 PSI.)

Designed for small & medium-sized main burner and pilot load applications where precise control of flows is essential. Not to be used as a line regulator.

"Straight-thru-flow" design provides accurate sensitive regulation at extremely low differential pressures. Used on all types of residential, commercial and industrial appliances and equipment.



RV48

NOT TO BE USED AS AN IN-LINE REGULATOR

RMI Part No.	Vent Limiter *	Inlet / Outlet	Propane Spring Range **	Spring Setting	Maximum Inlet PSI	App. Propane BTU Capacity
RV12L-1/8	Installed	1/8"	5"-12"	11"WC	1/2 PSI	25,000
RV20L-1/4	Installed	1/4"	8"-12"	11"WC	1/2 PSI	50,000
RV47L-3/8	Installed	3/8"	8"-12"	11"WC	1/2 PSI	125,000
RV47L-1/2	Installed	1/2"	8"-12"	11"WC	1/2 PSI	125,000
RV48L-1/2	Installed	1/2"	5"-12"	11"WC	1/2 PSI	250,000
RV48L-3/4	Installed	3/4"	5"-12"	11"WC	1/2 PSI	250,000
RV52-1/2	12A04	1/2"	5"-12"	11"WC	1/2 PSI	530,000
RV52-3/4	12A04	3/4"	5"-12"	11"WC	1/2 PSI	530,000
RV53-3/4	12A04	3/4"	5"-12"	11"WC	1/2 PSI	755,000
RV53-1	12A04	1"	5"-12"	11"WC	1/2 PSI	755,000
RV61-1	12A04	1"	5"-12"	11"WC	1 PSI	1,325,000
RV61-1-1/4	12A04	1-1/4"	5"-12"	11"WC	1 PSI	1,325,000
RV81-1-1/4 ***	Must be vented to atmosphere	1-1/4"	5"-12"	11"WC	1 PSI	2,725,000
RV81-1-1/2 ***		1-1/2"	5"-12"	11"WC	1 PSI	2,725,000
RV91-2 ***		2"	5"-12"	11"WC	1 PSI	4,250,000
RV91-2-1/2 ***		2-1/2"	5"-12"	11"WC	1 PSI	4,250,000

* The letter "L" designates vent limiter installed. Regulators without "L" require either vent limiter to be added or to be vented to the atmosphere.
 ** Other spring ranges are available for all regulators. For natural gas setting with 3" W.C.-6" W.C. Springs, add, "-36" to Part No. (e.g. RV12L-1/8-36)
 *** Recommended for normal horizontal mounting position only.

MAXITROL VENT PROTECTOR

For outdoor applications. Must be mounted in an upright position.



VENT LIMITER FOR MAXITROL REGULATORS

Automatic safety vent limiting device - Ball check permits free inhalation for regulator-diaphragm response on opening cycle, but limits gas escapement to non-hazardous amount should a diaphragm rupture. For proper orientation, regulator must be mounted in the horizontal position with the vent limiter in the upright position.



	RMI Part No.	Thread size	For uses on Maxitrol Regulators
Vent Limiting Orifice	12A06	1/8"	RV48, RV52, RV53, RV 60, RV61
Vent Limiter	12A04	1/8"	RV48, RV52, RV53, RV 60, RV61
	12A09	1/8"	325-3
	12A39	3/8"	325-5
	12A49	1/2"	325-7A
Vent Covers	13A15	1/8"	325-3
	13A15-5	3/8"	325-5
	13A25	1/2"	325-7A

PIGTAILS AND HOGTAILS

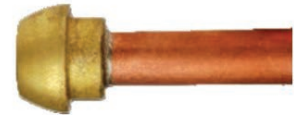
TECH NOTE: ME1600D Series Dielectric pigtails/ hogtails are intended to isolate metallic piping from sources of electrical current and to help prevent galvanic corrosion when used on underground containers. The ME1600D dielectric pigtail/ hogtail would typically be installed at the ASME tank directly upstream of the first stage regulator prior to underground piping, isolating the underground metallic piping from electric current.

Description	Approx Length inches	PIGTAILS - Part Number			
		1/4" Tube OD		1/4" Tube OD Dielectric	
		Long Nipple	Short Nipple	Long Nipple	Short Nipple
POL X POL 7/8"	6	-	1664-6	-	-
	12	1662-12	1664-12	ME1662D-12	ME1664D-12
	20	1662-20	1664-20	ME1662D-20	ME1664D-20
	30	1662-30	1664-30	-	-
	36	1662-36	1664-36	-	-
	48	1662-48	1664-48	-	-
POL X POL 1-1/8"	20	1660-20	-	-	-
	30	1660-30	-	-	-
	36	1660-36	-	-	-
	48	1660-48	-	-	-
1/4" INV FL X POL 7/8"	15	-	1665-15	-	-
	20	1663-20	1665-20	-	-
	30	1663-30	1665-30	-	-
	36	1663-36	1665-36	-	-
	48	1663-48	1665-48	-	-
1/4" INV FL X POL 1-1/8"	20	1661-20	-	-	-
	30	1661-30	-	-	-
	36	1661-36	-	-	-
	40	1661-40	-	-	-
	48	1661-48	-	-	-
1/4" MNPT X POL 1-1/8"	6	1679-6	1669-6	-	-
	12	1679-12	1669-12	ME1679D-12	ME1669D-12
	18	1679-18	1669-18	-	-
	20	1679-20	1669-20	ME1679D-20	ME1669D-20
	30	1679-30	1669-30	-	-
	36	1679-36	1669-36	-	-
	48	1679-48	1669-48	-	-

Description	Approx Length inches	HOGTAILS - Part Number			
		3/8" Tube OD		3/8" Tube OD Dielectric	
		Long Nipple	Short Nipple	Long Nipple	Short Nipple
POL X POL 7/8"	6	ME1680L-6	1680-6	-	-
	12	ME1680L-12	1680-12	ME1680LD-12	ME1680D-12
	20	ME1680L-20	1680-20	ME1680LD-20	ME1680D-20
	30	ME1680L-30	1680-30	-	-
	36	ME1680L-36	1680-36	-	-
	48	ME1680L-48	1680-48	-	-



Long Nipple



Short Nipple



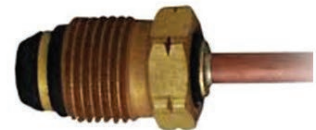
1/4" Inverted Flare



1/4" MNPT



Male Hard Nose POL,
7/8" Nut



Dielectric version



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

FLEXIBLE HOSE PIGTAILS



RMI Part No.	Inlet	Outlet	Length
MER403-12	7/8" Hardnose POL	1/4" Male Inv Fl.	12"
MER403-18	7/8" Hardnose POL	1/4" Male Inv Fl.	18"
MER403-24	7/8" Hardnose POL	1/4" Male Inv Fl.	24"
MER403-30	7/8" Hardnose POL	1/4" Male Inv Fl.	30"
MER403-48	7/8" Hardnose POL	1/4" Male Inv Fl.	48"
MER403-60	7/8" Hardnose POL	1/4" Male Inv Fl.	60"
MER403-72	7/8" Hardnose POL	1/4" Male Inv Fl.	72"
MER403-120	7/8" Hardnose POL	1/4" Male Inv Fl.	120"

*Other sizes and configurations available - contact RMI customer service for more info

TEE MANIFOLDS

TEE MANIFOLDS

RMI Part No	Inlets	Outlet	Nut Size	Check
1701A	F POL	M HARD NOSE POL	7/8"	Yes
1702A	F POL	M HARD NOSE POL	1-1/8"	Yes
ME1705A	F POL	1/4" MNPT	-	Yes
1700A	1/4" F INV FL	1/4" MNPT	-	Yes
MEP456A	1/4" F INV FL	1/4" MNPT	-	Manual Throwover



MEP456A



1700A



1701B



1702B

MULTIPLE CYLINDER TEE BLOCK MANIFOLDS

RMI Part No	Inlets	Outlet	Nut Size	Check
1701B	F POL	M HARD NOSE POL	7/8"	No
1702B	F POL	M HARD NOSE POL	1-1/8"	No
1701B-SN	F POL	M SOFT NOSE POL	7/8"	No
1701X	F POL	M 0.9 GPM EXCESS FLOW HARD NOSE POL	7/8"	Yes
1701B-X-SN	F POL	M 0.9 GPM EXCESS FLOW SOFT NOSE POL	7/8"	Yes
ME1704B	F POL	FPOL	1-1/8"	No
1700B	1/4" F INV FL	1/4" MNPT	-	No

MOUNTING BRACKETS



P100A



MEGR-100C

RMI Part No.	Compatible Regs	
MEGR-100C	Full size or compact MEC, or R622, R632, R642 and R622H series	Universal Bowtie
P100A	R622, R632, R642, R622H, R122H, R222, R232, and 912 Series	Triangle Bracket

VENT ASSEMBLIES

These units attach directly to the regulator vent connection or to a regulator vent line. Units with a stabilizer assembly are intended for regulators with stability problems, giving a restricted breathing rate under normal conditions, opening for rapid discharge when necessary.

RMI Part No.	Vent Style	Size	Stabilizer
Y602-13	Angle Type	1/4" FNPT	No
Y602-5	Angle Type	3/8" FNPT	No
Y602-7	Angle Type	1/2" FNPT	No
Y602-8	Angle Type	1/2" FNPT	Yes
Y602-9	Angle Type	3/4" FNPT	No
Y602-1	Umbrella Type	1/4" FNPT	No
Y602-2	Umbrella Type	1/4" FNPT	Yes
VENT- 3/4	-	3/4" FNPT	No
VENT-1	-	1" FNPT	No



VENT-34



UMBRELLA TYPE



ANGLE TYPE

MEC FLEX VENT KIT

Application:

The MEC Flex-Vent provides a safe and easy solution to vent LP Gas Regulators away from openings, sources of ignition or other potential fire hazards. Meets all requirements of the new flexible material allowance in the 2011 NFPA-58, section 5.8.3.1 (3).



Features:

- Durable hose constructed of flexible PVC material suitable for use with LP Gas vapor
- UV stable for maximum resistance to outdoor exposure
- 3/4" NPT swivel inlet for easy installation
- Standard 90-degree vent assembly with screen
- Mounting clamps and coated masonry screws supplied
- Crimped ends for maximum durability

RMI Part No.	Description
ME960-36	MEC Flex-vent Kit - Fixed Ends - 3ft
ME960-48	MEC Flex-vent Kit - Fixed Ends - 4ft
ME960-72	MEC Flex-vent Kit - Fixed Ends - 6ft
ME960-120	MEC Flex-vent Kit - Universal Outlet (not crimped) -10ft
ME960-120C	MEC Flex-vent Kit - Universal Outlet (crimped) -10ft

REGULATOR COVERS

Hinged polyethylene cover for easy access to regulator.



RMI Part No.	Description
H-200P	2nd Stage Regulator Cover, polyethylene

Vapor Meters

RESIDENTIAL METERS

American Meter has a full line of Vapor meters. Domestic and commercial meters are compact, lightweight, rugged die-cast aluminum alloy construction. Meters are temperature compensated for accurate measurement.

RMI Part No.	Meter Connection	Position	Meter Working Pressure	Index Available**	SCFH*		BTU/Hr*	
					Propane	Propane	Propane	Propane
AM-250TC-CF	3/4" FNPT	Side	5#	Cubic Feet	160	404,000		
AC-250TC-CF	1"MC	Top	5#	Cubic Feet	160	404,000		
AL-425TCL-CF	1-1/4" MC	Top	10#	Cubic Feet	270	694,000		

* @60-degree F., 11" W.C. Inlet

** Must have Special Index or factor index reading when operating pressure is greater than 11" W.C. Adjustment must be made when operating at altitudes greater than 1000 feet above sea level. Cubic foot indexes only per National Board of Weights & Measures.



AC-250



AM-250

COMMERCIAL & INDUSTRIAL METERS

Large commercial and industrial vapor meters have rugged construction, lightweight and ample capacity for all sizes of propane installations.

RMI Part No.	Meter Connection	Position	Meter Working Pressure	Index Available**	@60-degree, 11" W.C.**		@60-degree, 10# PSIG	
					CFH	BTU	CFH	BTU
AL-425TCH-CF	1-1/4" MC	TOP	25#	Cubic Feet	270	694,000	840	2,124,000
AL-425TCH-CFH	2-1/4" MC	TOP	25#	10# Index	-	-	840	2,124,000
AC-630TC-CF	1-1/2" MC	TOP	25#	Cubic Feet	395	989,000	1,070	2,684,000
AL-800TC-CF	1-1/2" MC	TOP	20#	Cubic Feet	515	1,299,000	1,620	4,086,000
AL-1000TC-CF	1-1/2" MC	TOP	25#	Cubic Feet	645	1,627,000	2,140	5,392,000
AL-1400TC-CF	3" FNPT	SIDE	100#	Cubic Feet	900	2,270,000	2,850	7,190,000
AL-2300TC-CF	4" FNPT	SIDE	100#	Cubic Feet	1,475	3,758,000	4,730	11,929,000
AL-5000TC-CF	4 FNPT	SIDE	100#	Cubic Feet	3,225	8,171,000	10,370	26,148,000



AL-1400

Rebuilt meters available upon request

Must have Special Index or factor index reading when operating pressure is greater than 11" WC Adjustment must be made when operating at altitudes greater than 100 feet above sea level.

** Capacity based on 1/2" WC drop. Capacity will double if based on 2" drop across meter.

GAS TURBINE METERS

Compact, high-performance turbine meter for accurate totalizing of gas volume in the flow range of 800 to 10000 cfh and working pressures of up to 275 psig with aluminum housing.

- Magnetic drive - eliminates leaks
- Versatile mounting - can be mounted vertically or horizontally
- Capable of handling pressure surges without internal damage

Contact RMI technical service for application assistance.

RMI Part No.	Description	Capacity (Millions of BTU/HR)		
			@5 PSIG	@10 PSIG
3GTS-275	3" Flange Mount Meter	2.1-25	2.4-32.5	2.6-42.5
4GTS-175	4" Flange Mount Meter	3-45	3.5-60	2.2-75



4GTS-175



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

METER CONNECTION SETS

Used to connect meters to piping. Kit consists of swivel fitting, nut, and gasket. Not required if using a prefab meter bar. Connection sets included for AL-1400 meters and larger. Components also available individually.

RMI Part No.	Description
SWIVELSET-250	1" 20LT Meter Connection Set for AC-250
SWIVELSET-425	1-1/4" 30LT Meter Connection Set for AL-425
SWIVELSET-800	1-1/2" 45LT Meter Connection Set for AC-630, AL-800, AL-1000



GASKET



NUT



SWIVEL

COMMON VAPOR METER REPLACEMENT PARTS

RMI Part No.	Description
54885G007	Standard Index for 250/425 Series
INDEX-GASKET	Index Cover Gasket 250/425 Series
INDEX-COVER	Index Cover 250/425 Series
INDEX-10#/425	10# Index for 425/630 Series
INDEX-10#/800	10# Index for 800/1000 series
METER-PLUG	Red Tamper-Proof Security Seal Plug



INDEX-10#/425

Meter Bar Accessories

LOCKING SERVICE VALVES WITH INSULATED UNION

- Tamper resistant
- Fire resistant
- High security
- Maintenance Free

Maximum allowable operating pressure 100 PSI

LV-8050



RMI Part No.	Description
LV-8050-34	3/4" Locking Service Valve
LV-8050-100	1" Locking Service Valve
LV-8050-114	1-1/4" Locking Service Valve
LV-8050-200	2" Locking Service Valve
LD-7115	Lok-Dome for 8050 Valves

JOMAR SAFE BALL VALVE WITH BY-PASS

- Perform periodic meter change-out, in service, without interrupting service
- Use barrel or pad lock-see Service Tools

RMI Part No.	Description
243-004D	3/4" Safe Ball w/By-Pass Valve Insulated Union
243-005D	1" Safe Ball w/By-Pass Valve Insulated Union
243-006D	1-1/4" Safe Ball w/By-Pass Valve Insulated Union



243-004D

REGULATOR/METER BRACKETS

RMI Part No.	H x L Size	U-bolt Size	For Pipe Size	Insulated	For meter
UMB-525-H	5-1/2" x 8"	1-1/4"	3/4" - 1"	Yes	AC-250TC-CF
UMB-525-H114	5-1/2" x 8"	2"	1-1/4" - 1-1/2"	Yes	AC-425TC-CF
UMB-525-N200	5-1/2" x 9"	2-1/2"	2"	No	AC-425TC-CF



UMB-525

* Note: When using bracket with meter bars, use the center hole bolt.



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Prefab Regulator Assemblies

RPM-MB-750

- LV-8050-34 locking service valve with insulated union
- Includes Fisher Regulator w/High Capacity Relief
- 3/4" x 8" Nipples
- MB-730 Meter Bar
- Painted & Pressure Tested
- For AM meter model, top connections



RPM-MB-750

RMI Part No.	Inlet/ Outlet	For METER	Regulator Included
RPM-MB-750	3/4"	AC-250TC-CF	R642-CFF
RPM-MB-750A	3/4"	AC-250TC-CF	R652-DFF

Meter and Mounting Bracket NOT included

RP-750

- LV-8050-34 locking service valve with insulated union
- Includes Fisher regulator w/High Capacity Relief
- 3/4" x 4" Nipples
- Painted and pressure tested
- For AM meter model, side connections



RP-750

RMI Part No.	Inlet/ Outlet	For METER	Regulator Included
RP-750	3/4"	AM-250TC-CF	R642-CFF
RP-750A	3/4"	AM-250TC-CF	R652-DFF

PFMB-0750-S0

- 3/4" locking service valve
- Insulated union on outlet end
- 1/4" pressure tap on outlet
- Includes high capacity Fisher regulator
- Painted and pressure tested
- For AC meter model, 1" 20LT top connections



PFMB-0750-S0

RMI Part No.	Inlet/ Outlet	For Meter	Regulator Included
PFMB-0750-S0	3/4"	AC-250TC-CF	HSRL-BFC

Meter Bars

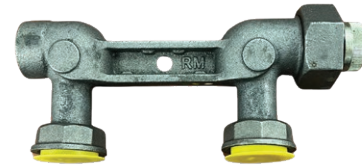
METER BARS

RMI Part No.	Inlet/ Outlet	Meter Connection	For Meter
MB-701*	1" / 3/4"	1"	AC-250TC-CF
MB-730	3/4"	1"	AC-250TC-CF
MB-740	1-1/4"	1-1/4"	AL-425TC-CF

* The MB-701 is a meter bar with an integral locking service valve & insulating union outlet.



MB-701



MB-730

MULTIPLE METER BAR ASSEMBLY

RMI Part No.	Meter Bar	Manifold Pipe Size	Length	For Meter
MB-701-2*	Double	1-1/4"	32"	AC-250TC-CF
MB-701-3*	Triple	1-1/4"	48"	AC-250TC-CF

* Note: Mount on bracket UMB-525-H using center bolt hole.



MB-701-3



Polyethylene Pipe & Accessories

POLYETHYLENE PIPE

Polyethylene pipe may be fusion welded or mechanically connected and used only underground with 30 pounds maximum pressure. Polyethylene piping is a safe and economical method of satisfying industrial, commercial & residential customers' needs for long runs of underground piping. No worries of corrosion. Our pipe comes individually wrapped in plastic, eliminating the need to uncoil the entire roll if you aren't using the whole length. Just pull what you need from the center.



Size	SDR / Wal Thickness	500' roll	300' Roll	250' roll	150' roll	40' Straight Length
1/2" IPS	SDR 9.3; 0.090"	PE2406-12	-	-	PE2406-12-150	-
1/2" CTS	SRD 7.0; 0.090"	PE2406-12CTS	-	-	PE2406-12CTS-150	-
3/4" IPS	SDR 11.0; 0.095"	PE2406-34	-	PE2406-34-250	-	-
1" IPS	SDR 11.0; 0.119"	PE2406-100	-	-	PE2406-100-150	-
1" CTS	SDR 11.05; 0.099"	PE2406-100CTS	PE2406-1CTS-300	-	-	-
1-1/4" IPS	SDR 10.0; 0.166"	PE2406-114	-	PE2406-114-250	PE2406-114-150	-
2" IPS	SDR 11.0; 0.216"	PE2406-200	-	PE2406-200-250	PE2406-200-150	PE2406-200-40**
3" IPS	SDR 11.5; 0.304"	PE2406-300	-	-	-	PE2406-300-40**

*Larger sizes available - reach out to RMI customer service for more info & sizing

** Minimum of five 40' lengths. Non stock, FOB factory.

POLYMINDER

Keeps pipe roll intact, off the floor, rolled up, safe from damage and always ready for easy installation or retrieval.

- Handles 1/4", 1/2", 3/4" and 1" rolls
- Pipe dispensers for your plant, work site, trencher or service truck
- Pipe roll can be up to: 15" in width, 46" outside diameter
- Accepts any size inside diameter
- Pipe dispensing opening between reels is 2.5"

RMI Part No.	Description
POLYMINDER-CART	Poly Pipe Spooler Push Cart
POLYMINDER-HITCH	Hitch-Mounted Poly Pipe Spooler



POLYMINDER CART



POLYMINDER HITCH

POLY COATED TRACER WIRE

Copper Clad Steel Tracer Wire is the intelligent choice for tracer wire. This product combines the strength of hi-carbon steel with the conductivity and corrosion resistance of copper through a metallurgical bonding process. The result: a more cost-effective composite with superior performance characteristics over traditional 100% copper wire.

RMI Part No.	Description
14-1-CCS	14 Gauge Copper Clad Steel Tracer Wire
12-1-CCS	12 Gauge Copper Clad Steel Tracer Wire
90120	GEL-LUG



RMI Part No.	Description
14-1	14 gauge poly tracer wire - 500' spool
12-1	12 gauge poly tracer wire - 500' spool

Polyethylene Pipe & Accessories

TRACER SPACER

The Tracer Spacer is a simple, low cost, snap-on device designed to provide a consistent separation between plastic pipe and its' tracer wire. Separation prevents damage to the gas line caused by lightning strikes, stray voltage, and downed power lines.



TRACER SNAP



TRACER SPACER

RMI Part No.	Description
TS-75X6	Tracer Snap Wire Retainer 3/4" fits 1/2" PIPE
TS-125X6	Tracer Snap Wire Retainer 1-1/4" X6"
TS-150X6	Tracer Snap Wire Retainer 1-1/2"X6"
TS-2X12	Tracer Snap Wire Retainer 2" X 12"
TS-2X6	Tracer Snap Wire Retainer 2"X6"
TS-0.75X6	Tracer Snap Wire Retainer 3/4"X6"
TS-1X2	Tracer Snap Wire Retainer 1"X2"
TS-1X6	Tracer Snap Wire Retainer 1"X6"
TSR050	Tracer Spacer for 1/2" CTS
TSR100	Tracer Spacer for 3/4" & 1" PIPE
TSR125	Tracer Spacer for 1-1/4" PIPE
TSR200	Tracer Spacer for 2" PIPE

SHOVEL BARRIER

Standard caution tape is easily broken and frequently missed by homeowners or excavation crews due to its random placement in a trench over utility lines. Shovel Barrier has the ability to bring excavation to a halt by having strategic placement and acting as an actual barrier over utility lines. A woven geotextile with an extreme breaking strength, Shovel Barrier adds significant protection, warns, and can be used to locate any underground utility line it is installed over. Includes tracer wire.



Part No.	Color	Label	Tracer Wire	Length	Width
SB-325	Yellow	GAS	14 AWG Copper	325'	5.5"

MARKING EQUIPMENT

Bury locator tape 6" below grade directly above polyethylene pipe. Metallic and non-metallic tape is available.

RMI Part No.	Description
GT-3	Metallic Locator Tape - 2" x 1,000ft
NT-3	Non-Metallic Locator Tape - 3" x 1,000ft
CST-3	3" Non-Metallic yellow tape w/"Caution" Marking Only
78-004	Yellow marking Flags, 4"X5"-100 count
POST-66D-Y	Yellow Domed Marking Post 66" w/ "Caution Buried Gas Line"



GT-3



POST-66D-Y



Risers & Transitions



X-RISERS

With the use of the X-Riser® system, gas is distributed from main to meter, meter to appliance, or propane tank to house with a solid (jointless) underground pipe. Combining this philosophy with the long list of features & benefits of the Sealastic® sealing technology makes the X-Riser® the most reliable, safest, and most cost-effective method for gas piping systems.

RMI Part No.	Outlet	Tube Size	Wall	Conduit Length (in.)
XR-10B-8-36-L-ZDC	1/2" MPT	1/2 CTS	0.090"	36
XR-10B-8-72-L-ZDC	1/2" MPT	1/2 CTS	0.090"	72
XR-10B-8-96-L-ZDC	1/2" MPT	1/2 CTS	0.090"	96
XR-10B-8-144-L-ZDC	1/2" MPT	1/2 CTS	0.090"	144
XR-10B-12-36-L-ZDC	3/4" MPT	1/2 CTS	0.090"	36
XR-10B-12-72-L-ZDC	3/4" MPT	1/2 CTS	0.090"	72
XR-10B-12-96-L-ZDC	3/4" MPT	1/2 CTS	0.090"	96
XR-10B-12-144-L-ZDC	3/4" MPT	1/2 CTS	0.090"	144
XR-13B-8-36-L-ZDC	1/2" MPT	1/2" IPS	0.090"	36
XR-13B-8-72-L-ZDC	1/2" MPT	1/2" IPS	0.090"	72
XR-17C-12-36-L-ZDC	3/4" MPT	3/4" IPS	0.095"	36
XR-17C-12-72-L-ZDC	3/4" MPT	3/4" IPS	0.095"	72
XR-17C-12-96-L-ZDC	3/4" MPT	3/4" IPS	0.095"	96
XR-10B-8SN-36-L-ZDC	1/2" Female Flare Swivel	1/2"CTS	0.090"	36
XR-10B-8SN-72-L-ZDC	1/2" Female Flare Swivel	1/2"CTS	0.090"	72
XR-10B-8SN-96-L-ZDC	1/2" Female Flare Swivel	1/2"CTS	0.090"	96
XR-17C-10SN-36-L-ZDC	1/2" Female Flare Swivel	3/4" IPS	0.095"	36
XR-17C-10SN-72-L-ZDC	1/2" Female Flare Swivel	3/4" IPS	0.095"	72
XR-17C-10SN-96-L-ZDC	1/2" Female Flare Swivel	3/4" IPS	0.095"	96
XR-21J-16-36-L-ZDC	1" MPT	1" IPS	0.119"	36 W/Cflexliner™
XR-21J-16-72-L-ZDC	1" MPT	1" IPS	0.119"	72 W/Cflexliner™



PERFECTION FLEXIBLE RISERS

Riser allows the installer to run the polyethylene pipe to a Permasert connector located at the service head adapter. Choice of pre-bent epoxy coated pipe, flexible with stub riser, or fully flexible kit. Complies with NFPA-58 and CAN/CGA-B149.2-m95. The fully flexible riser kit can be used to connect the plastic service line to the tank. No longer need to have a coupling, fusion, transition or copper fitting below ground.



Fully Flexible Riser Kit*			Stub Flexible Riser w/ Liner	Rigid Pre-Bent Riser w/ Liner	Servi-sert Fitting**	Size	
36"	60"	84"	36" Flex w/ Nipple	30" Vert X 24" Horiz		Plastic	Pipe
71354	-	71353	71351	71350	71110	1/2" CTS	1/2"
71356	-	71355	71463	71453	71100	1/2" CTS	3/4"
71271	-	-	-	-	-	1/2" IPS	3/4"
71410	71411	71412	71721	71304	71161	3/4" IPS	3/4"
-	-	-	71731	-	71160	1" IPS	1"
71200P	-	-	71600	71720	71151	1" CTS	1"



* Conforms to requirements of NFPA58

** Servi-Sert fitting for use with pipe only. Not used with risers.



Risers & Transitions



PERFECTION PERMASERT RISERS

Perfection anodeless riser with Permasert 2.0 coupling installed, which allows for fast, easy, and reliable mechanical connection.



Part No.	Plastic (Inlet)	Pipe (Outlet)	Vertical Height	Horizontal Length
PM77205	1/2" CTS	1/2" NPT	18"	18"
PM77253	1/2" CTS	1/2" NPT	30"	24"
PM77195	1/2" CTS	3/4" NPT	18"	18"
PM77181	1/2" CTS	3/4" NPT	30"	24"
PG79354	3/4" IPS	3/4" NPT	30"	25"
PG77120	1" CTS	3/4" NPT	30"	25"
PG78442	1" IPS	1" NPT	30"	26"
PG75901	1-1/4" IPS	1-1/4" NPT	30"	25"
PG75906	2" IPS	2" NPT	34"	16"

PERFECTION ANODELESS RISERS

Service risers are pre-bent to 30" vertical X 24" horizontal. Anodeless risers require no cathodic protection, since the outside epoxy coated casing is not the gas carrier—plastic runs all the way through. Risers and transition fittings can be used with mechanical or fusion fittings.



Size		Anodeless Riser 30" Vert X 24" Horiz	Transition Fittings Straight 18"
Pipe	Plastic		
1/2"	1/2" IPS	-	TF-12X12
1/2"	1/2" CTS	-	TF-12X12CTS
3/4"	1/2" IPS	TRA-34X12	TF-34X12
3/4"	1/2" CTS	TRA34X12CTS	TF-34X12CTS
3/4"	3/4" IPS	TRA-34X34	TF-34X34
3/4"	1" CTS	TRA-34X100CTS*	TF-34X100CTS
1"	3/4" IPS	TRA-100X34	-
1"	1" IPS	TRA-100X100	TF-100X100
1"	1" CTS	TRA-100X100CTS*	TF-100X100CTS
1-1/4"	1-1/4" IPS	TRA-114X114	TF-114X114
2"	2" IPS	TRA-200X200*	TF-200X200
3"	3" IPS	TRA-300X300*	TF-300X300
4"	4" IPS	TRA-400X400*	TF-400X400

* Stub risers—with fused polyethylene 90-degree elbow and polyethylene pip pigtail.

TRANSITION FITTINGS

Transition fitting is epoxy coated and should be cathodically protected.



TRA-34X34



Mechanical Fittings



Permasert fittings are non-corrosive and require no cathodic protection or protective coatings. The complete system complies with NFPA 58. Permasert fittings utilize a slotted, tapered collet to “grip” the tubing. With this system, the greater the pull-out force, the more tightly the collet grips the tubing. As a result, the pull-out strength of Permasert couplings is greater than the connected polyethylene tubing. The coupling’s one-piece construction ensures consistent, gas-tight connections in any weather conditions. Perfection’s Permasert 2.0 line of mechanical fittings seals on both the inside and outside of the pipe, creating a double barrier against leaks.

NOTE: Installer must be certified.

TECH TIP: RMI provides certification and training classes for Perfection products. Call your local sales rep to schedule a training session.

PERMASERT MECHANICAL COUPLINGS

RMI Part No.	PE Pipe Size	SDR Size	Wall Thickness
PC50100	1/2" CTS	SDR7	0.090"
PC50701	1/2" IPS	SDR9.3	0.090"
PC50030	3/4" IPS	SDR11	0.095"
PC50102	1" CTS	SDR11.5	0.099"
PC50601	1" IPS	SDR11	0.119"
PC50035010	1-1/4" IPS	SDR10	0.166"
PC50314	2" IPS	SDR11	0.216"



PC50030

PERMASERT XL LARGE DIAMETER MECHANICAL COUPLINGS

RMI Part No.	Size
55161	2" IPS - SDR 11
55131	3" IPS - SDR 11/11.5
55101	4" IPS - SDR 11/11.5
55182	6" IPS - SDR 11.5
55196	8" IPS - SDR 11.5



55131

PERMASERT REDUCING COUPLINGS

RMI Part No.	Size	SDR/Wall	Size	SDR/Wall
PC50751	1/2" CTS	SDR7.0 (0.090")	1/2" IPS	SDR9.3 (0.090")
PC50969	1/2" CTS	SDR7.0 (0.090")	3/4" IPS	SDR11 (0.095")
PC50149	1/2" CTS	SDR7.0 (0.090")	1" CTS	SDR11.5 (0.099")
PC50641	1/2" CTS	SDR7.0 (0.090")	1" IPS	SDR11 (0.119")
PC50756	1/2" IPS	SDR9.3 (0.090")	3/4" IPS	SDR11 (0.095")
PC50148	3/4" IPS	SDR11 (0.095")	1" CTS	SDR11.5 (0.099")
PC51432	3/4" IPS	SDR11 (0.095")	1" IPS	SDR11 (0.119")
PC50195010	3/4" IPS	SDR11 (0.095")	1-1/4" IPS	SDR10 (0.166")
PC50623	1" CTS	SDR11.5 (0.099")	1" IPS	SDR11 (0.119")
PC50192	1" CTS	SDR11.5 (0.099")	1-1/4" IPS	SDR10 (0.166")
PC50343010	1" IPS	SDR11 (0.119")	1-1/4" IPS	SDR10 (0.166")
PC50333010	1-1/4" IPS	SDR10 (0.166")	2" IPS	SDR11 (0.216")



PC50969

PERMASERT REPAIR COUPLINGS

Locate and inspect a damaged pipe and simply and easily repair damaged section with size of coupling required. No need for fusion, welding, or taping. Save on repair time.

RMI Part No.	Size	Length	SDR / Wall Thickness
PC50056	1/2" CTS	12"	SDR7 (0.090")
PC50740	1/2" IPS	12"	SDR9.3 (0.090")
PC50175	3/4" IPS	12"	SDR11 (0.095")
PC50172	1" CTS	12"	0.099" / 0.103"
PC50640	1" IPS	13"	SDR11 (0.119")
PC50320100*	1-1/4" IPS	13-1/4"	SDR10 (0.166")
PC50341*	2" IPS	15-1/2"	SDR11 (0.216")

* **IMPORTANT:** 1-1/4" AND 2" have special installation instructions provided on packaging.



PC50740

PE100 WYES AND REDUCING WYES

- Creates a “branch” in each dwelling service line for the installation of multiple service lines.
- Use of a blind end cap allows installation of a full piping system to a housing development.



PC51704

RMI Part No.	Description	Size	SDR/Wall
PC51702	WYE	1/2" CTS	.090
PC51704	WYE	1 CTS	.099
PC51766	Reducing WYE	3/4" IPS X 1/2" CTS	.090

Mechanical Fittings



COPPERSERT TRANSITION COUPLINGS

RMI Part No.	PE Pipe Size	Copper Size	SDR/Wall
PS41007	1/2" CTS	3/8" OD	0.090"
PS41013	1/2" CTS	1/2" OD	0.090"
PS41002	1/2" CTS	5/8" OD	0.090"
PS41140	1/2" IPS	1/2" OD	SDR9.3
PS41133	3/4" IPS	1/2" OD	SDR11
PS41130	3/4" IPS	5/8" OD	SDR11
PS41150	1" CTS	5/8" OD	0.090/0.102"
PS41153	1" CTS	1/2" OD	0.090/0.102"



PS41013

PERMASERT TEES

Remarkably easy to use. Available in same size Tee or a 3-way reducing configuration. Same lasting grip as in mechanical couplings. No need for tools, fusion or wrenches.

RMI Part No.	Size	SDR / Wall
PC50199	1/2" CTS	0.090"
PC50730100	1/2" IPS	SDR 9.3
PC50929	3/4" IPS	SDR 11
PC50292	1" CTS	0.099" / 0.103"
PC50634	1" IPS	SDR 11
PC50327010	1-1/4" IPS	SDR 10
PC50316	2" IPS	SDR 11



PC50929

PERMASERT REDUCING TEES



PC50461

RMI Part No.	Size 1	SDR / Wall	Size 2	SDR / Wall	Size 3	SDR / Wall
PC51335	1/2" CTS	0.090"	1/2" CTS	0.090"	1" CTS	0.090"
PC50731	1/2" IPS	SDR 9.3	1/2" IPS	SDR 9.3	1/2" CTS	0.090"
PC50461	3/4" IPS	SDR 11	3/4" IPS	SDR 11	1/2" CTS	0.090"
PC50451	1" CTS	0.099"/0.103"	1" CTS	0.099"/0.103"	1/2" CTS	0.090"
PC50632	1" IPS	SDR 11	1" IPS	SDR 11	1/2" CTS	0.090"
PC50635	1" IPS	SDR 11	1" IPS	SDR 11	3/4" IPS	SDR 11
PC51325	1-1/4" IPS	SDR 10	1-1/4" IPS	SDR 10	3/4" IPS	SDR 11
PC50328100	1-1/4" IPS	SDR 10	1-1/4" IPS	SDR 10	1" CTS	0.099"/0.103"
PC50348100	2" IPS	SDR 11	2" IPS	SDR 11	1" CTS	0.099"/0.103"
PC51323100	2" IPS	SDR 11	2" IPS	SDR 11	1-1/4" IPS	SDR 10

PERMASERT BLIND END CAPS & STUBS

Used to safely shut off service or to close the end of a service line. Only the open end of "stub" is functional. Both ends of blind "cap" may be used as a coupling.

Cap Part No.	Stub Part No.	Size	SDR / Wall
PC50016	PC50015	1/2" CTS	0.090"
PC50716	PC50717	1/2" IPS	0.090"
PC50026	PC50809	3/4" IPS	SDR11
PC50045	PC50048	1" CTS	0.099" / 0.103"
PC51501	PC50612	1" IPS	SDR11
PC50033	PC50024100	1-1/4" IPS	SDR10
PC50317	PC51770	2" IPS	SDR11



PC50016



PC50612

PERMALOCK SELF-TAPPING 2.0 MECHANICAL OUTLET TEES

Permalock mechanical tapping tee provides a simple gas tight, non-heat fusion polyethylene service line connection. No special tools required for installation. (Standard socket set and Allen wrenches needed.)



PL55901

RMI Part No.	Main Size	Outlet*	SDR / Wall
PL54201	1-1/4" IPS	1/2" CTS	0.090"
PL54290	1-1/4" IPS	3/4" IPS	SDR 11
PL55702	2" IPS	1/2" CTS	0.090"
PL55901	2" IPS	3/4" IPS	SDR 11
PL55951	2" IPS	1" IPS	SDR 11
PL55990	2" IPS	2" IPS	SDR 11
PL54102	3" IPS	1/2" CTS	0.090"
PL54150	3" IPS	2" IPS	SDR 11
PL55716	4" IPS	1/2" CTS	0.090"
PL55902	4" IPS	3/4" IPS	SDR 11
PL55992	4" IPS	2" IPS	SDR 11

* Outlet is a Permasert fitting.



Mechanical Fittings



PERMASERT 90-DEGREE ELBOW COUPLING

As with other Perfection mechanical connections, elbows are easy to use and reliable. No tools or fusion are required.



RMI Part No.	Size	SDR / Wall
PC50294	1/2" CTS	0.090"
PC50732100	1/2" IPS	SDR 9.3
PC51620	3/4" IPS	SDR 11
PC51333	1" CTS	0.099" / 0.103"
PC50636	1" IPS	SDR 11
PC50325010	1-1/4" IPS	SDR 10
PC50315	2" IPS	SDR 11

PERMASERT INLINE EXCESS FLOW COUPLINGS

Permasert couplings with built-in excess flow valve meet the requirements for jurisdictional piping systems under US DOT CFR Title 49, Part 192.381. Used primarily at each branch off a main line feeding a residence or small commercial building.

RMI Part No.	Description	SCFH Propane*	BTU Propane
PC51474	1/2" CTS Coupling w/EFV	250	630,000
PC50581	1/2" IPS Coupling w/ EFV	250	630,000
PC50584	3/4" IPS Coupling w/EFV	250	630,000
PC51476	1" CTS Coupling w/EFV	250	630,000
PC51636	1" IPS Coupling w/EFV	250	630,000
PC51518	1-1/4" IPS Coupling w/EFV	250	630,000

*Other configurations available



PC50584

PERMASERT SHUT-OFF VALVES

Polyethylene shut-off valve is compatible with all PE gas distribution systems. Valve is rated equivalent to the maximum allowable operating pressure of PE piping to which it is connected.

RMI Part No.	Size	SDR / Wall
PV45051	1/2" CTS	0.090"
PV45100	3/4" IPS	SDR 11
PV45071	1" CTS	0.099" / 0.103"
PV45200	1" IPS	SDR 11
PV45170100	1-1/4" IPS	SDR 10
PV46011	2" IPS	SDR 11



PV46011

HANDLEY CURB BOXES FOR UNDERGROUND VALVES

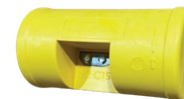
445-S



RMI Part No.	Description	Valve Size	Adj. Height
445-S	Curb Box w/ Support	1/2" - 1-1/4"	24"
445-L	Curb Box	2"	24"
445EXT	15" Extension for 445-S	-	-
GHA4-3	4" ID Heavy Duty Curb Box	2"-3"	32"-44"
GH4B6-3	6" ID Heavy Duty Curb Box	4"	32"-44"
PWCBL3.5	Wrench for Curb Box Lid	3/4" - 3"	-

PERMASERT 2.0 CHAMFER TOOLS

Chamfering tool permits the tubing to be completely stabbed without damaging the internal seals on Permasert connectors. These tools chamfer the inside and outside of the pipe and must be used on Permasert 2.0 fittings.



58500

RMI Part No.	Description
58500	1/2" CTS Permasert 2.0 Chamfer Tool
58501	1/2" IPS Permasert 2.0 Chamfer Tool
58502	3/4" CTS Permasert 2.0 Chamfer Tool
58503	3/4" IPS Permasert 2.0 Chamfer Tool
58504	1" CTS Permasert 2.0 Chamfer Tool
58505	1" IPS Permasert 2.0 Chamfer Tool
58506	1-1/4" CTS Permasert 2.0 Chamfer Tool
58507	1-1/4" IPS Permasert 2.0 Chamfer Tool
58508	1-1/2" IPS Permasert 2.0 Chamfer Tool
58509	2" IPS Permasert 2.0 Chamfer Tool

RISER BRACKETS

74500X



RMI Part No.	Description
74506	Bracket for 1/2" - 2" Risers - 4" Offset
74500X	Bracket for 1/2" - 2" Risers - 6" Offset
74491	Bracket for 1/2" - 2" Risers - 9" Offset
74440	Foundation Mount Bracket Kit - 3/4" - 2"
09800	Wall Mounting Hardware
31733	5ft Support Post

Poly Pipe Linesizing Charts

Length (ft)	Calculated Maximum Capacity (Propane Gas) BTU's per Hour						
	CTS		IPS				
Nom. OD	1/2"	1"	3/4"	1"	1-1/4"	1-1/2"	2"
DR	7	11.5	11	11	10	11	11
Avg ID	0.436	0.918	0.848	1.062	1.308	1.534	1.917
PE Pipe Line Sizing - 2PSIG Inlet with 1 PSIG Pressure Drop							
10	1,067,000	7,568,000	6,143,000	11,102,000	19,227,000	29,225,000	52,557,000
20	734,000	5,201,000	4,222,000	7,630,000	13,215,000	20,086,000	36,122,000
30	589,000	4,177,000	3,390,000	6,128,000	10,612,000	16,130,000	29,007,000
40	504,000	3,575,000	2,902,000	5,244,000	9,082,000	13,805,000	24,826,000
50	447,000	3,168,000	2,572,000	4,648,000	8,050,000	12,235,000	22,003,000
60	405,000	2,871,000	2,330,000	4,211,000	7,294,000	11,086,000	19,937,000
70	372,000	2,641,000	2,144,000	3,874,000	6,710,000	10,199,000	18,341,000
80	346,000	2,457,000	1,994,000	3,604,000	6,242,000	9,488,000	17,063,000
90	325,000	2,305,000	1,871,000	3,382,000	5,857,000	8,902,000	16,010,000
100	307,000	2,178,000	1,768,000	3,195,000	5,532,000	8,409,000	15,123,000
125	272,000	1,930,000	1,567,000	2,831,000	4,903,000	7,453,000	13,403,000
150	247,000	1,749,000	1,419,000	2,565,000	4,443,000	6,753,000	12,144,000
PE Pipe Line Sizing - 11" w.c. Inlet with 0.5" w.c. Pressure Drop							
10	116,000	826,000	670,000	1,211,000	2,098,000	3,188,000	5,734,000
20	80,000	568,000	461,000	833,000	1,443,000	2,193,000	3,944,000
30	64,000	456,000	370,000	669,000	1,159,000	1,762,000	3,168,000
40	55,000	391,000	316,000	573,000	992,000	1,508,000	2,712,000
50	49,000	346,000	281,000	508,000	880,000	1,337,000	2,404,000
60	44,000	314,000	255,000	460,000	797,000	1,212,000	2,179,000
70	41,000	289,000	234,000	424,000	733,000	1,115,000	2,005,000
80	38,000	269,000	218,000	394,000	682,000	1,037,000	1,865,000
90	36,000	252,000	205,000	370,000	640,000	973,000	1,750,000
100	34,000	238,000	193,000	349,000	605,000	920,000	1,654,000
125	30,000	211,000	171,000	310,000	536,000	815,000	1,466,000
150	27,000	191,000	155,000	281,000	486,000	739,000	1,329,000

Average ID used in all calculations. It equals the nominal OD minus 2.12 times the minimal wall thickness.

For flow in SCF/hr at sea level divide flow by 2488. Heat value of Propane Gas is 2488 BTU/scf at sea level.

Calculations used low pressure equation from Chapter 12 in National Fuel Gas Code.

This table is for informational purposes only and is intended for use as a reference guide. It should not be used in place of the advice of a professional engineer. It does not contain or confer any warranty or guarantee of any kind.



Socket Fusion Equipment



SOCKET FUSION KIT

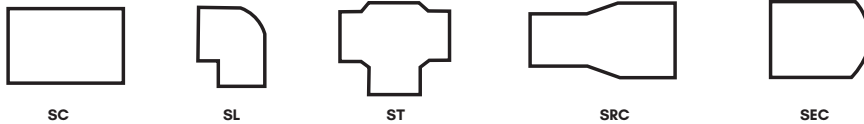
This kit contains everything you need to get started with socket fusion for 1/2" IPS through 2" IPS pipe.

Kit Includes:

- Model SF3 Heater with high temp handle
- Model SF3 Heater Muff
- Clamp Bracket Assembly
- 1/2" IPS plug and socket
- 3/4" IPS plug and socket
- 1" IPS plug and socket
- 1-1/4" IPS plug and socket
- 1-1/2" IPS plug and socket
- 2" IPS plug and socket
- 1/2" IPS depth gage/chamfer tool
- 3/4" IPS depth gage/chamfer tool
- 1" IPS depth gage/chamfer tool
- 1-1/4" IPS depth gage/chamfer tool
- 1-1/2" IPS depth gage/chamfer tool
- 2" IPS depth gage/chamfer tool
- 1/2" IPS Cold Ring
- 3/4" IPS Cold Ring
- 1" IPS Cold Ring
- 1-1/4" IPS Cold Ring
- 1-1/2" IPS Cold Ring
- 2" IPS Cold Ring
- 15/8" Capacity Ratchet Cutter
- 2-1/2" Capacity Ratchet Cutter
- 500° Temp-Stik
- 525° Temp-Stik
- Digital Countdown Timer
- Wrench Hex Key 3/16"
- Wrench Hex Key Screwdriver 3/16"
- Professional Tool Box
- Procedure Manual

RMI Part No.	Description
360001736	Socket Fusion Kit 1/2"IPS - 2" IPS

SOCKET FUSION KIT



Socket Fusion Fittings								
Size/Style	RMI Part No.						RMI Part No.	
	IPS x IPS Couplings						CTS x CTS Couplings	
	1/2" IPS	3/4" IPS	1" IPS	1-1/4" IPS	2" IPS	3" IPS	1/2" CTS	1" CTS
Coupling	SC-12	SC-34	SC-100	SC-114	SC-200	SC-300	SC-12CTS	SC-100CTS
90-degree Elbow	SL-12	SL-34	SL-100	SL-114	SL-200	SL-300	SL-12CTS	SL-100CTS
Tee	ST-12	ST-34	ST-100	ST-114	ST-200	ST-300	ST-12CTS	ST-100CTS
End Cap	SEC-12	SEC-34	SEC-100	SEC-114	SEC-200	SEC-300	SEC-12CTS	SEC-100CTS
IPS x CTS Reducer Couplings								
1/2" CTS	SRC-12X12CTS	SRC-34X12CTS	SRC-100X12CTS	SRC-114X12CTS	--	--	--	SRC-100CX12CT
1" CTS	--	--	--	SRC-114X100CT	SRC-200X100CT	--	--	--
IPS x IPS Reducers								
1/2" IPS	--	SRC-34X12	SRC-100X12	SRC-114X12	--	--		
3/4" IPS	--	--	SRC-100X34	SRC-114X34	--	--		
1" IPS	--	--	--	SRC-114X100	SRC-200X100	--		
1-1/4" IPS	--	--	--	--	SRC-200X114	--		
2" IPS	--	--	--	--	--	SRC-300X200		

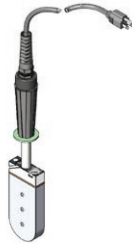
IPS= Iron Pipe Size (AN ID measurement)
CTS= Copper Tubing Size (An OD measurement)

Socket Fusion Equipment



ELECTRIC HEATING TOOL

Thermostatically heats to 500 degrees. Requires 115 volts. Extension handle is available for easier fusion.



RMI Part No.	Description
EB3000	Model 2 Electric Fusion, 1000 watts
EB0000	Extension handle, Models 2 & 4
HM3000	Heater Muff

COLD RING

Used for rounding out pipe and prevents the socket fitting from sliding on to the pipe too far. One for each size pipe is required.



RMI Part No.	Pipe Size
CR0620CTS	1/2 " CTS
CR0750	3/4" IPS
CR0010	1" IPS
CR0110CTS	1" CTS
CR0120	1-1/4 "IPS
CR0020	2" IPS
CR0030	3" IPS

HEATER SOCKET FUSION FACES

Required on the EB3000 for each size pipe.



RMI Part No.	Pipe Size
SP2620CTS	1/2 " CTS
SP2750	3/4 " IPS
SP2010	1" IPS
SP2110CTS	1" CTS
SP2120	1-1/4 " IPS
SP2020	2" IPS
SP2030	3" IPS

CHAMFERING TOOL DEPTH GAUGE COMBINATION

Handy tool for accurate sizing to proper depth on pipe. One tool is required for each size of pipe.

***Not for use with Permasert Mechanical Fittings**



RMI Part No.	Pipe Size	Description
DGCHI2CTS	1/2 " CTS	Chamfer tool / Depth Gauge
DGCH34	3/4 " IPS	Chamfer tool / Depth Gauge
DGCHI00	1" IPS	Chamfer tool / Depth Gauge
DGCHI00CTS	1" CTS	Chamfer tool / Depth Gauge
DGCH114	1-1/4 " IPS	Chamfer tool / Depth Gauge
DGCH200	2" IPS	Chamfer tool / Depth Gauge

TOOLS FOR 3" PE PIPE

RMI Part No.	Description
109-400	3" Chamfer Tool
TC4QP	3" Plastic Pipe Cutter



SHEARS

Ratchet type to clean cut plastic pipe up to 2".

RMI Part No.	Description
55190	Plastic cutter 1/2"-1"
SHEARS	1/2" -1-1/4" Plastic pipe shears
SHEARS-2	1/2" - 2" Plastic pipe shears
BLADE	Replacement blade for SHEARS
BLADE-2	Replacement blade for SHEARS-2



SHEARS-2

PLASTIC PIPE SHUT-OFF TOOL

Designed to stop gas flow at any accessible point. Useable up to 2" PE Pipe.

RMI Part No.	Description
77XXXX	1/2" - 2" Shut-off Tool



77XXXX

Electrofusion Equipment



ELECTROFUSION EQUIPMENT

Electrofusion is an automated method of joining PE pipe with integral heating elements. Electrofusion offers several advantages over traditional heat fusion procedures. Electrofusion will create a fusion that is stronger than the surrounding pipe. While using a computerized processor to determine the fusion requirements of the fitting - removes “human” element. If anything interferes with the completion of the fusion joint, the processor will detect the problem and alert the operator. The processor allows for documentation that every fusion was completed properly. Ray Murray, Inc. offers a full line of electrofusion equipment and fittings - contact RMI for assistance in laying out and quoting of your job.



**ELECTROFUSION
COUPLING**



**ELECTROFUSION
REDUCER**



ELECTROFUSION TEE



**ELECTROFUSION
TAPPING TEE**

Black HDPE Fittings									
Style/Size	IPS Fittings							CTS Fittings	
	1/2" IPS	3/4" IPS	1" IPS	1-1/4" IPS	2" IPS	3" IPS	4" IPS	1/2" CTS	1" CTS
Coupling	360000885	360000889	360000893	360000897	360000920	360000933	360000936	360000883	360000891
End Cap	-	360000860	360000862	360000866	360000869	360000871	360000874	360004294	360000861
Tapping Tees - Butt Outlet									
1/2" IPS	-	-	-	-	360062647	-	360062650	-	-
3/4" IPS	-	-	-	360001232	360001258	360001294	360001347	-	-
1" IPS	-	-	-	360021460	360001276	360001311	360001339	-	-
1/2" CTS	-	-	-	360001225	360001246	-	360021575	-	-
1" CTS	-	-	-	360001238	360001267	360001304	360001333	-	-
Reducer Couplings									
1/2" IPS	-	-	360001071	-	-	-	-	-	-
3/4" IPS	-	-	360001073	-	-	-	-	-	360001067
1" IPS	-	-	-	360001081	-	-	-	-	-
1-1/4" IPS	-	-	-	-	360001084	-	-	-	-
2" IPS	-	-	-	-	-	360001087	360001089	-	-
3" IPS	-	-	-	-	-	-	360001091	-	-
1/2" CTS	-	360001061	360001069	-	-	-	-	-	360001064
1" CTS	-	-	360001075	360001080	-	-	-	-	-



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Electrofusion Equipment



ELECTROFUSION MACHINE

- Robust, cast aluminum housing
- Intuitive user guidance menu
- Protective transport box and pouch for barcode pen
- USB interface for memory download and software update
- Prevention of electrical damage
- Clear and explicit error messages
- Worldwide training, support and service network
- Water resistant design to IP54 standards



MSA 340

RMI Part No.	Description
MSA340	Easy Fuse 115V Electrofusion Machine

Yellow MDPE Fittings									
Style/Size	IPS Fittings							CTS Fittings	
	1/2" IPS	3/4" IPS	1" IPS	1-1/4" IPS	2" IPS	3" IPS	4" IPS	1/2" CTS	1" CTS
Coupling	360000886	360000890	360000894	360000898	360000921	360000934	360000937	360000884	360000892
End Cap	360000859	360021200	360000863	360000867	360029059	360029060	360029061	360000858	360021201
Tapping Tees - Butt Outlet									
1/2" IPS	-	-	-	360021425	360021490	360021541	360021586	-	-
3/4" IPS	-	-	-	360001233	360001259	360001295	360001325	-	-
1" IPS	-	-	-	360001244	360001278	360001312	360001340	-	-
1/2" CTS	-	-	-	360001226	360001247	360021538	360001315	-	-
1" CTS	-	-	-	360001240	360001270	360001306	360001335	-	-
Reducer Couplings									
1/2" IPS	-	360001063	360001072	-	-	-	-	-	-
3/4" IPS	-	-	360001074	360004295	-	-	-	-	360001068
1" IPS	-	-	-	360001083	360021370	-	-	-	-
1-1/4" IPS	-	-	-	-	360001085	-	-	-	-
2" IPS	-	-	-	-	-	360001088	360001090	-	-
3" IPS	-	-	-	-	-	-	360001092	-	-
1/2" CTS	-	360001062	360001070	360021363	-	-	-	-	360001065
1" CTS	-	-	360001076	-	360021369	-	-	-	-



Copper Tubing

TECH NOTE: Burial of bare copper is not recommended unless sleeved.

COPPER REFRIGERATION TUBING

Refrigeration tubing is commonly sold by the OD. LP usage should be limited to interior applications, originating from the second stage regulator to the appliance.

RMI Part No.		Nominal Size OD	Wall Thickness
50 Ft. Coil	100 Ft. Coil		
RCT18-50	-	1/8"	.030"
RCT14-50	RCT14-100	1/4"	.030"
RCT38-50	RCT38-100	3/8"	.032"
RCT12-50	RCT12-100	1/2"	.032"
RCT58-50	RCT58-100	5/8"	.035"



TYPE "L"

Type "L" tubing is commonly sold by the ID. It is typically used for both internal and external. LP usage is acceptable downstream of the first stage regulator. Type "L" may also be used downstream of the second stage regulator if desired.

RMI Part No.		Nominal Size		Wall Thickness
60 Ft. Coil	100 Ft. Coil	ID	OD	
LCT14-60	LCT14-100	1/4"	3/8"	.030"
LCT38-60	LCT38-100	3/8"	1/2"	.035"
LCT12-60	LCT12-100	1/2"	5/8"	.040"
LCT58-60	LCT58-100	5/8"	3/4"	.042"

TYPE "K"

Type "K" tubing is commonly sold by the ID. It is typically used for both internal and external. LP usage is acceptable for tank vapor pressure and liquid applications (i.e. Fill station bypass lines).

RMI Part No.		Nominal Size		Wall Thickness
60 Ft. Coil	100 Ft. Coil	ID	OD	
KCT14-60	KCT14-100	1/4"	3/8"	.035"
KCT38-60	KCT38-100	3/8"	1/2"	.049"
KCT12-60	KCT12-100	1/2"	5/8"	.049"
KCT58-60	-	5/8"	3/4"	.049"

Poly Coated Copper Tubing



GAS-TEC YELLOW POLYETHYLENE COATED COPPER TUBING

- Factory-coated copper with yellow polyethylene material for added corrosion protection
- For installation above and below ground
- Continuous line markings for easy identification



REFRIGERATION/GENERAL PURPOSE

RMI Part No.		Nominal Size ID	Flare Copper OD	Wall Thickness
50 Ft. Coil	100 Ft. Coil			
RCT38-50-C	RCT38-100-C	1/4"	3/8"	.030"
RCT12-50-C	RCT12-100-C	3/8"	1/2"	.035"
RCT58-50-C	RCT58-100-C	1/2"	5/8"	.040"

TYPE "L"

RMI Part No.		Nominal Size ID	Flare Copper OD	Wall Thickness
60 Ft. Coil	100 Ft. Coil			
LCT14-60-C	LCT14-100-C	1/4"	3/8"	.030"
LCT38-60-C	LCT38-100-C	3/8"	1/2"	.035"
LCT12-60-C	LCT12-100-C	1/2"	5/8"	.040"
LCT58-60-C	LCT58-100-C	5/8"	3/4"	.042"

TYPE "K"

RMI Part No.		Nominal Size ID	Flare Copper OD	Wall Thickness
60 Ft. Coil	100 Ft. Coil			
KCT14-60-C	KCT14-100-C	1/4"	3/8"	.030"
KCT38-60-C	KCT38-100-C	3/8"	1/2"	.049"
KCT12-60-C	KCT12-100-C	1/2"	5/8"	.049"
KCT58-60-C	-	5/8"	3/4"	.049"

PRO-TEC ORANGE GROOVED POLYETHYLENE COATED COPPER TUBING FOR OIL

- Factory-coated copper with orange polyethylene material for added corrosion protection
- For installation above and below ground
- Continuous line markings for easy identification
- Grooved coating for easy leak detection

RMI Part No.	Description
30385	3/8" OD Oil Tubing - 50' Coil
30125	1/2" OD Oil Tubing - 50' Coil



Copper Accessories

COPPER STOPPER TERMINATION FLANGE

- Transitions copper tube to standard pipe
- Protects line from damage
- Allows complete installation in one visit
- Fits all 3/8", 1/2", and 5/8" flare x MPT fittings and can easily be joined to standard FPT Fittings



71900

RMI Part No.	Description
71900	Copper Stopper Termination Flange

COPPER TUBING SHIELD

Flexible plastic-coated steel conduit to protect copper tubing at tank and service end of installation.



SSP300

RMI Part No.	Description
SSP300	3' Copper Tubing Protective Shield
SSP400	4' Copper Tubing Protective Shield
SSP600	6' Copper Tubing Protective Shield

GAS-KIT MASONRY KIT

- Special size of drill and J-Clip shank grips tight.
- Plastic inserts prevent galvanic action, grips in all masonry.
- All material is rust resistant. Case is unbreakable, waterproof, and spillproof.

Use instructions:

1. Drill hole in masonry, brick, etc.
2. Install plastic insert in material flush with wall
3. Hammer in J-Clip device to hold tubing, pipe, or cable



GK-135

RMI Part No.	Description
GK-135	Drill, Plastic Inserts, JCL-1 Clips, & Carrying Case

TUBE CLIPS

RMI Part No.	Description	Package
JCL-1	Copper J-Clip for 3/8" & 1/2"	100
JCL-2	Copper J-Clip for 5/8"	100
H24-050	Plastic Clip w/ Nail for 1/2"	50
PIPEST-12	Two-Hole Copper Strap for 3/8" & 1/2"	100
PIPEST-34	Two-Hole Copper Strap for 5/8"	100



JCL-2



PIPEST-12



Flare Fittings

SHORT FORGED NUT

RMI Part No.	Flare	Pack
NS4C	1/4"	100
NS4E	3/8"	100
NS4F	1/2"	100
NS4I	5/8"	50
NS4K	3/4"	25



REDUCING NUTS

RMI Part No.	Flare	Pack
NRS4EC	3/8" X 1/4"	50
NRS4FE	1/2" X 3/8"	50
NRS4IE	5/8" X 3/8"	50
NRS4IF	5/8" X 1/2"	50

FLARE ELBOW

RMI Part No.	Flare	Pack
55EXXX	3/8" x 3/8"	50
55FXXX	1/2" x 1/2"	25
55FE	1/2" x 3/8"	25
55IXXX	5/8" x 5/8"	10
55IE	5/8" x 3/8"	5
55IF	5/8" x 1/2"	10
55KXXX	3/4" x 3/4"	10



SWIVEL NUT

RMI Part No.	Flare	Pack
US4E	3/8" x 3/8"	50
US4EC	3/8" x 1/4"	25
US4F	1/2" x 1/2"	25
US4FE	1/2" x 3/8"	25
US4I	5/8" x 5/8"	10
US4IF	5/8" x 1/2"	10
US4K	3/4" x 3/4"	10



FULL UNION

RMI Part No.	Flare	Pack
42CXXX	1/4"	50
42EXXX	3/8"	50
42FXXX	1/2"	25
42IXXX	5/8"	10
42KXXX	3/4"	50



REDUCING UNION

RMI Part No.	Flare	Pack
42EC	3/8" x 1/4"	50
42FC	1/2" x 1/4"	20
42FE	1/2" x 3/8"	50
42IE	5/8" x 3/8"	25
42IF	5/8" x 1/2"	25

MALE ADAPTER

RMI Part No.	Flare		Pack Std/LS
	Standard	Long Shank	
48CA	-	1/4" x 1/8"	50
48CC	-	1/4" x 1/4"	50
48CE	-	1/4" x 3/8"	50
48CF	-	1/4" x 1/2"	50
48EA	-	3/8" x 1/8"	50
48EC	-	3/8" x 1/4"	50
48EE	-	3/8" x 3/8"	50
48EF	48EF-LS	3/8" x 1/2"	25/20
48EK	48EK-LS	3/8" x 3/4"	25/20
48FC	-	1/2" x 1/4"	25
48FE	-	1/2" x 3/8"	40
48FF	48FF-LS	1/2" x 1/2"	25/20
48FK	48FK-LS	1/2" x 3/4"	20/20
48IC	-	5/8" x 1/4"	25
48IE	-	5/8" x 3/8"	25
48IF	48IF-LS	5/8" x 1/2"	25/25
48IK	48IK-LS	5/8" x 3/4"	25/10
48KF	-	3/4" x 1/2"	25
48KK	-	3/4" x 3/4"	25



2-WAY TEE

RMI Part No.	Flare	Pack
45EEC	3/8" X 3/8" X 1/4"	25
45EEE	3/8" X 3/8" X 3/8"	25
45EEF	3/8" X 3/8" X 1/2"	25
45FEF	1/2" X 3/8" X 1/2"	25
45FFE	1/2" X 1/2" X 3/8"	25
45FFF	1/2" X 1/2" X 1/2"	25
45IIF	5/8" X 5/8" X 1/2"	25



Flare Fittings

FEMALE ADAPTER

RMI Part No.	Fl x MNPT	Pack
46CA	1/4" x 1/8"	100
46CC	1/4" x 1/4"	100
46EA	3/8" x 1/8"	50
46EC	3/8" x 1/4"	50
46EE	3/8" x 3/8"	50
46EF	3/8" x 1/2"	25
46EK	3/8" x 3/4"	25
46FE	1/2" x 3/8"	40
46FF	1/2" x 1/2"	25
46FK	1/2" x 3/4"	25
46IE	5/8" x 3/8"	25
46IF	5/8" x 1/2"	25
46IK	5/8" x 3/4"	10



FLARE PLUG

RMI Part No.	Flare	Pack
P2CXXX	1/4"	100
P2EXXX	3/8"	100
P2FXXX	1/2"	50
P2IXXX	5/8"	25



PLASTIC FLARE PLUG

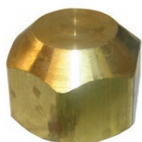
RMI Part No.	Flare	Pack
T-6XXX	3/8"	25
T-7XXX	1/2"	25
T-8XXX	5/8"	25



*Dirt Seal Only - Do not use under pressure

FLARE CAP

RMI Part No.	Flare	Pack
N5EXXX	3/8"	100
N5FXXX	1/2"	50
N5IXXX	5/8"	25
N5KXXX	3/4"	30



MALE ELBOW ADAPTER

RMI Part No.	Flare	Pack
49CA	1/4" X 1/8"	50
49CC	1/4" X 1/4"	25
49CE	1/4" X 3/8"	50
49CF	1/4" X 1/2"	25
49EA	3/8" X 1/8"	50
49EC	3/8" X 1/4"	50
49EE	3/8" X 3/8"	25
49EF	3/8" X 1/2"	25
49EK	3/8" X 3/4"	10
49FC	1/2" X 1/4"	25
49FE	1/2" X 3/8"	25
49FF	1/2" X 1/2"	25
49FK	1/2" X 3/4"	20
49IE	5/8" X 3/8"	25
49IF	5/8" X 1/2"	25
49IK	5/8" X 3/4"	20
49KF	3/4" X 1/2"	25
49KK	3/4" X 3/4"	25



FEMALE ELBOW ADAPTER

RMI Part No.	Flare	Pack
54EC	3/8" x 1/4"	25
54EE	3/8" x 3/8"	25
54EF	3/8" x 1/2"	25
54EK	3/8" x 3/4"	10
54FE	1/2" x 3/8"	25
54FF	1/2" x 1/2"	20
54FK	1/2" x 3/4"	25
54IE	5/8" x 3/8"	10
54IF	5/8" x 1/2"	20
54IK	5/8" x 3/4"	10



3-WAY REDUCING TEE

RMI Part No.	Fl x Fl x Fl 1 x 2 x 3	Pack
44EEC	3/8" X 3/8" X 1/4"	10
44EEF	3/8" X 3/8" X 1/2"	10
44EEI	3/8" X 3/8" X 5/8"	10
44FEE	1/2" X 3/8" X 3/8"	10
44FEF	1/2" X 3/8" X 1/2"	10
44FFE	1/2" X 1/2" X 3/8"	10
44FFI	1/2" X 1/2" X 5/8"	10
44FFK	1/2" X 1/2" X 3/4"	10
44IFF	5/8" X 1/2" X 1/2"	10
44IFI	5/8" X 1/2" X 5/8"	10
44IIE	5/8" X 5/8" X 3/8"	10
44IIF	5/8" X 5/8" X 1/2"	10

3-WAY TEE

RMI Part No.	Flare	Pack
44CXXX	1/4"	50
44EXXX	3/8"	25
44FXXX	1/2"	25
44IXXX	5/8"	25
44KXXX	3/4"	20

3



1

2

SAE COPPER SEAL BONNET

RMI Part No.	Flare	Pack
BICXXX	1/4"	100
BIEXXX	3/8"	100
BIFXXX	1/2"	100
BIIXXX	5/8"	25
BIKXXX	3/4"	25



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

JOMAR "BLUE CAP" BRASS GAS BALL VALVES

- 600PSI WOG
- Blue reversible locking "T" handle
- UL Listed, CSA Compliant
- -40°F to 300°F
- Available with 1/8" port



B2002FF-1/2



BT2002FF-1/2

Thread Size	Standard	Box Qty	Pressure Port	Box Qty
Flare x Flare				
3/8" x 3/8"	B2002FF-3/8	12	BT2002FF-3/8	12
1/2" x 1/2"	B2002FF-1/2	12	BT2002FF-1/2	12
5/8" x 5/8"	B2002FF-5/8	8	BT2002FF-5/8	8
FNPT x FNPT				
3/8" x 3/8"	B2002-3/8	12	BT2002-3/8	10
1/2" x 1/2"	B2002-1/2	12	BT2002-1/2	10
3/4" x 3/4"	B2002-3/4	8	BT2002-3/4	8
FNPT x Flare				
1/2" x 3/8"	B2002F-3/8	14	-	-
1/2" x 1/2"	B2002F-1/2	14	BT2002F-1/2	10
MNPT x Flare				
1/2" x 3/8"	B2002MF-3/8	12	-	-
1/2" x 1/2"	B2002MF-1/2	12	-	-

JOMAR ECONOMY BRASS GAS BALL VALVES

- 175PSI WOG
- Yellow or red reversible locking handle
- UL Listed, CSA Compliant
- -20°F to 300°F
- Low-cost option

Thread Size	Yellow Handle	Box Qty	Red Handle	Box Qty
Flare x Flare				
3/8" x 3/8"	102-612	10	-	-
1/2" x 1/2"	102-613	10	-	-
5/8" x 5/8"	102-614	10	-	-
FNPT x FNPT				
1/2" x 1/2"	102-603	10	102-623	10
3/4" x 3/4"	102-604	10	102-624	10
1" x 1"	102-605	6	102-625	6
FNPT x Flare				
1/2" x 1/2"	102-633	10	-	-



102-624



102-613

STAINLESS STEEL APPLIANCE CONNECTORS

Suitable for indoor and outdoor installations including:

- Appliances
- Water heaters
- Grills
- Fire pits
- Fireplaces



10-3131-12

RMI Part No.	Description
90-1022	3/8" OD X 3/8" FIP
90-1031	3/8" OD X 1/2" MIP
90-1031-A	3/8" OD X 1/2" MIP BLACK
90-1032	3/8" OD X 1/2" FIP
90-2021-A	1/2" OD X 3/8" MIP BLACK
90-2022	1/2" X 3/8" FIP
90-2031	1/2" OD X 1/2" MIP
90-2031-A	1/2" OD X 1/2" MIP BLACK
90-2032	1/2" OD X 1/2" FIP
90-2042	1/2" OD X 3/4" FIP
90-3031	5/8" OD X 1/2" MIP
90-3032	5/8" OD X 1/2" FIP
90-3041	5/8" OD X 3/4" MIP
90-3042	5/8" OD X 3/4" FIP
90-4041	1" OD X 3/4" MIP
90-4042	1" OD X 3/4" FIP
90-5052	1-1/4" OD X 1" FIP

10 SERIES - 3/8" OD (1/4" ID)

RMI Part No. 1/2" MIP 1/2" MIP	Box Qty	RMI Part No. 1/2" MIP 1/2" FIP	Box Qty	Length	BTU Capacity (LP)
10-3131-12	25	10-3132-12	25	12"	76,800
10-3131-18	25	10-3132-18	25	18"	70,080
10-3131-24	25	10-3132-24	25	24"	64,000
10-3131-30	25	10-3132-30	25	30"	58,240
10-3131-36	25	10-3132-36	25	36"	53,440
10-3131-48	25	10-3132-48	25	48"	45,280
10-3131-60	12	10-3132-60	12	60"	39,840
10-3131-72	12	10-3132-72	12	72"	36,960

20 SERIES - 1/2" OD (3/8" ID)

RMI Part No. 1/2" MIP 1/2" MIP	Box Qty	RMI Part No. 1/2" MIP 1/2" FIP	Box Qty	Length	BTU Capacity (LP)
20-3131-12	25	20-3132-12	25	12"	163,200
20-3131-18	25	20-3132-18	25	18"	148,960
20-3131-24	25	20-3132-24	25	24"	136,000
20-3131-30	25	20-3132-30	25	30"	123,360
20-3131-36	25	20-3132-36	25	36"	113,760
20-3131-48	25	20-3132-48	25	48"	96,800
20-3131-60	12	20-3132-60	12	60"	85,120
20-3131-72	12	20-3132-72	12	72"	78,560

30 SERIES - 5/8" OD (1/2" ID)

RMI Part No. 1/2" MIP 1/2" MIP	Box Qty	RMI Part No. 1/2" MIP 1/2" FIP	Box Qty	Length	BTU Capacity (LP)
30-3131-12	25	30-3132-12	25	12"	288,000
30-3131-18	25	30-3132-18	25	18"	262,720
30-3131-24	25	30-3132-24	25	24"	240,000
30-3131-30	25	30-3132-30	25	30"	217,600
30-3131-36	25	30-3132-36	25	36"	200,000
30-3131-48	25	30-3132-48	25	48"	169,600
30-3131-60	12	30-3132-60	12	60"	149,120
30-3131-72	12	30-3132-72	12	72"	137,600



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

BLACK EPOXY COATED STAINLESS STEEL GAS CONNECTORS

For gas logs and gas fireplace inserts

- Designed to reduce glare and hide the connector from view
- High-temp coating withstands temperatures up to 350°F
- Adaptors and flare nuts are plated with zinc di-chromate to reduce visibility



20A-2131-12

10A SERIES - BLACK 3/8" OD CONNECTORS

RMI Part No. 3/8" MIP x 1/2" MIP	Box Qty	Length	BTU Capacity (LP)
10A-2131-12	25	12"	76,800
10A-2131-18	25	18"	70,080
10A-2131-24	25	24"	64,000
10A-2131-36	25	36"	57,700

20A SERIES - BLACK 1/2" OD CONNECTORS

RMI Part No. 3/8" MIP x 1/2" MIP	Box Qty	RMI Part No. 3/8" MIP x 1/2" FIP	Box Qty	Length	BTU Capacity (LP)
20A-2131-12	25	20A-2132-12	25	12"	163,200
20A-2131-18	25	20A-2132-18	25	18"	148,960
20A-2131-24	25	20A-2132-24	25	24"	136,000
20A-2131-36	25	20A-2132-36	25	36"	113,760

WHISTLE-FREE PREMIUM BLACK COATED APPLIANCE CONNECTORS

- Coated with high-temp black epoxy for reduced visibility
- Special corrugation design eliminates whistling produced by high-BTU gas appliances



T102-2131-12

T102 SERIES - BLACK WHISTLE-FREE 3/8" OD CONNECTORS

RMI Part No. 3/8" MIP 1/2" MIP	Box Qty	Length	BTU Capacity (LP)
T102-2131-12	25	12"	76,800
T102-2131-18	25	18"	70,080
T102-2131-24	25	24"	64,000
T102-2131-36	25	36"	57,700

T202 SERIES - BLACK WHISTLE-FREE 1/2" OD CONNECTORS

RMI Part No. 3/8" MIP 1/2" MIP	Box Qty	Length	BTU Capacity (LP)
T202-2131-12	25	12"	163,200
T202-2131-18	25	18"	148,960
T202-2131-24	25	24"	136,000
T202-2131-36	25	36"	113,760

HIGH BTU PVC COATED APPLIANCE CONNECTORS

- Flame-resistant antimicrobial coating provides UV and corrosion protection
- Ideal for outdoor installations
- For commercial HVAC units, water heaters, boilers, furnaces, etc.



41-4142-24

41 SERIES - PVC COATED HIGH FLOW 1" OD CONNECTORS

RMI Part No. 3/4" MIP x 3/4" FIP	Length	BTU Capacity (LP)
41-4142-24	24"	465,440
41-4142-36	36"	409,440
41-4142-48	48"	344,000

51 SERIES - PVC COATED HIGH FLOW 1-1/4" OD CONNECTORS

RMI Part No. 3/4" MIP x 3/4" FIP	Length	BTU Capacity (LP)
51-5152-24	24"	930,880
51-5152-36	36"	825,440
51-5152-48	48"	708,320

COMMERCIAL MOVEABLE APPLIANCE CONNECTORS

- Stainless steel corrugated tube with stainless braid reinforcement
- Durable antimicrobial coating for added protection and easy cleaning
- Adjustable restraining devices to protect connector when appliance is moved

Thread Size	Length	RMI Part No.	RMI Part No.	BTU Capacity (LP)
		No Quick Disconnect	Quick Disconnect	
1/2" FNPT	36"	1650BP-36	1650BPQ-3	77,000
1/2" FNPT	48"	1650BP-48	1650BPQ-4	68,000
1/2" FNPT	60"	1650BP-60	1650BPQ-5	60,000
1/2" FNPT	72"	1650BP-72	1650BPQ-6	55,000
3/4" FNPT	36"	1675BP-3	1675BPQ-3	218,000
3/4" FNPT	48"	1675BP-4	1675BPQ-4	180,000
3/4" FNPT	60"	1675BP-5	1675BPQ-5	158,000
3/4" FNPT	72"	1675BP-6	1675BPQ-6	139,000

* 1" and 1-1/4" connectors also available - please contact customer service for more info



COMMERCIAL APPLIANCE CONNECTOR

RESTRAINING DEVICES

RMI Part No.	Description
RDC-36	36" Restraining Device
RDC-48	48" Restraining Device
RDC-60	60" Restraining Device

THERMAL QUICK CONNECT COUPLINGS

RMI Part No.	Description
A50	QD Coupling for 1/2" Connectors
A75-M/F	QD Coupling for 3/4" Connectors



RESTRAINING KIT



APPLIANCE CONNECTOR INSTALLED



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

COUNTERSTRIKE CSST TUBING

The flexibility and long lengths of CounterStrike® CSST make it perfect for remodel/repair work. It can be pulled like wire, which minimizes the need to remove and replace walls, while at the same time potentially reducing both construction cost and shortening lead times. CounterStrike® features a single robust protective jacket over a non-annealed CSST, which offers enhanced crush resistance. The superior crush resistance of CounterStrike® CSST means that it lays straighter, is simpler to cut and pulls easier in new home construction.



TECH NOTE: System must be electrically bonded to manufacturers instructions, local codes and the AHJ.

Size	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Reel Length	RMI Part No.						
25ft	-	CS-500-25	CS-750-25	CS-100-25	-	-	-
50ft	-	CS-500-50	CS-750-50	CS-100-50	-	-	-
100ft	CS-375-100	CS-500-100	CS-750-100	CS-100-100	-	-	-
150ft	-	-	-	-	CS-125-150	CS-150-150	CS-200-150
180ft	-	-	-	CS-100-180	-	-	-
250ft	CS-375-250	CS-500-250	CS-750-250	-	CS-125-250	CS-150-250	-
500ft	-	CS-500-500	-	-	-	-	-

FLEXIBLE STEEL CONDUIT

Provides protection for CSST at termination fittings and horizontal runs between wall studs. Also ideal for situations where extra protection would be beneficial.

RMI Part No.	Description	Size	Length
FPY-375CT	Cut Conduit - Fits 3/8" CSST	3/4"	1ft
FPY-375-50	Conduit Roll - Fits 3/8" CSST	3/4"	50ft
FPY-500CT	Cut Conduit - Fits 1/2" CSST	1"	1ft
FPY-500-50	Conduit Roll - Fits 1/2" CSST	1"	50ft
FPY-750CT	Cut Conduit - Fits 3/4" CSST	1-1/4"	1ft
FPY-750-25	Conduit Roll - Fits 3/4" CSST	1-1/4"	25ft
FPY-1000CT	Cut Conduit - Fits 1" CSST	1-1/2"	1ft
FPY-1000-25	Conduit Roll - Fits 1" CSST	1-1/2"	25ft
FPY-1250-25	Conduit Roll - Fits 1-1/4" CSST	2"	25ft
FPY-1500-25	Conduit Roll - Fits 1-1/2" CSST	2-1/2"	25ft
FPY-2000-25	Conduit Roll - Fits 2" CSST	3"	25ft
TAPE	Tape - Outdoor Silicone	1"	12yd
TAPE-2	Tape - Outdoor Silicone	2"	12yd
TAPE-BLACK	Tape - Black	1"	12yd



CSST REDUCING FITTINGS

RMI Part No.	Size 1	Size 2	Size 3
Male Adapters - CSST x NPT			
RST500-750	1/2"	3/4"	-
RST750-500	3/4"	1/2"	-
RST1000-750	1"	3/4"	-
Male Tee - CSST x CSST x MPT			
T500-750	1/2"	1/2"	3/4"
Reducing Tee - CSST x CSST x CSST			
TF750-T500	3/4"	3/4"	1/2"
TF1000-T500	1"	1"	1/2"
TF1000-T750	1"	1"	3/4"
TF1250-T500	1-1/4"	1-1/4"	1/2"
TF1250-T750	1-1/4"	1-1/4"	3/4"
TF1250-T1000	1-1/4"	1-1/4"	1"
TF1500-T500	1-1/2"	1-1/2"	1/2"
TF1500-T750	1-1/2"	1-1/2"	3/4"
TF1500-T1000	1-1/2"	1-1/2"	1"
TF1500-T1250	1-1/2"	1-1/2"	1-1/4"
TF2000-T500	2"	2"	1/2"
TF2000-T750	2"	2"	3/4"
TF2000-T1000	2"	2"	1"
TF2000-T1250	2"	2"	1-1/4"
TF2000-T1500	2"	2"	1-1/2"

STRIKER PLATES

Provides protection for CSST against penetration where tubing is fixed or movement is restricted by the wood framing.

RMI Part No.	Description	Size
FGP-SP-025	Quarter Striker Plate	3" x 2"
FGP-SP-050	Half Striker Plate	3" x 7"
FGP-SP-075	Three Quarter Striker Plate	3" x 9"
FGP-SP-100	Full Striker Plate	3" x 12"
FGP-SP-617	6-1/2" x 17" Striker Plate	6-1/2" x 17"



FGP-SP-025



FGP-SP-050



FGP-SP-075



FGP-SP-100

Size	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Description	RMI Part No.						
Male Adapter	FST-375*	FST-500	FST-750	FST-1000	FST-1250	FST-1500	FST-2000
Female Adapter	FSTF-375*	FSTF-500	FSTF-750	FSTF-1000	-	-	-
Coupling	CPLG-375	CPLG-500	CPLG-750	CPLG-1000	CPLG-1250	CPLG-1500	CPLG-2000
Straight Flange	RFG-375	RFG-500	RFG-750	RFG-1000	RFG-1250	-	-
90° Flange Fitting	-	ELLS-500	-	-	-	-	-
90° Flange Valve	RF90V-375	RF90V-500	RF90V-750	-	-	-	-
CSST Tee	-	TF500-T500	TF750-T750	TF1000-T1000	-	-	-
CSST x FPT Tee	-	T500-500	T750-750	T1000-1000	-	-	-
Split Rings	RING-375	RING-500	RING-750	RING-1000	RING-1250	RING-1500	RING-2000

* 3/8" size fittings have 1/2" MPT threads



CPLG-500



ELLS-500



FST-500



FSTF-500



RF90V-500



RFG-500



RING-500



TF500-T500



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

MANIFOLDS

Pre-engineered and fabricated multiport manifolds for ease of installation. Pressure tested and suitable for CSST installations where appliance distribution lines are separated. Provides central distribution point for individual runs to each appliance.

RMI Part No.	Description	Size
MI-PC	Coated Manifold	3/4" x 1/2" x 1/2" (4)
MB2	Manifold Bracket	-
MI-ST-500	Stackable Manifold	1/2"F - M X 1/2" (2)
MI-ST-750	Stackable Manifold	3/4"F - M X 1/2" (2)
MB-ST	Stackable Manifold Bracket	Fits MI-ST
LC-XX	Load Center w/ Bracket	-
MI-PC-1X	Large Coated Manifold	1-1/4" x 1" x 3/4" (4)
MI-PC-2X	Large Coated Manifold	2" x 1-1/2" x 1" (4)



MI-PC

METER TERMINATIONS

RMI Part No.	Description
MT6-500	1/2" x 6" Meter Termination
MT6-750	3/4" x 6" Meter Termination
MT6-1000	1" x 6" Meter Termination
MT6-1250	1-1/4" x 6" Meter Termination
MT12-500	1/2" x 12" Meter Termination
MT12-750	3/4" x 12" Meter Termination
MT12-1000	1" x 12" Meter Termination
MT12-1250	1-1/4" x 12" Meter Termination



METER TERMINATIONS

BONDING CLAMPS

RMI Part No.	Size - CSST	Size - Pipe
GC-1	3/8", 1/2"	1/2", 3/4", 1"
GC-2	3/4", 1", 1-1/4"	1-1/4", 1-1/2", 2"
GC-3	1-1/2", 2"	2-1/2" - 4"



GC-1

METAL WALL BOXES

RMI Part No.	Description	Size
WBTM-375	7" x 7" x 3" Metal Wall Box w/ Valve	3/8"
WBTM-500	7" x 7" x 3" Metal Wall Box w/ Valve	1/2"
WBTM-750	7" x 7" x 3" Metal Wall Box w/ Valve	3/4"



WBTM-500

TUBE CUTTERS

RMI Part No.	Description	Size
32925	Cutter No. 15	3/8" - 1"
TC-151	Cutter No. 151	3/8" - 1-1/4"
TC-152	Cutter No. 152	1-1/4" - 2"
FGP-E-5272	Cutter Wheel	1-1/4" - 2"

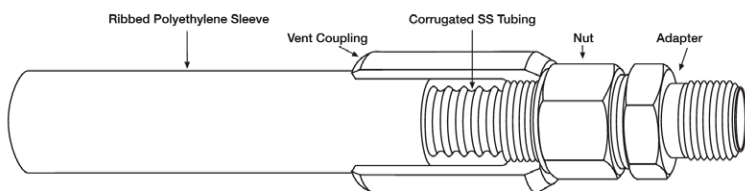


TUBE CUTTER

TRACPIPE PS-II TUBING

A pre-sleeved, "one-step" gas installation system for underground, rooftop, or exterior wall applications. TracPipe PS-II can be installed under buildings, slab, roads, or driveways - it's perfect for gas installations in a variety of applications where speed, reliability, and safety are paramount.

Length	100ft	150ft	250ft
Size	RMI Part No.		
3/8"	-	-	UGP-375-250
1/2"	UGP-500-100	-	UGP-500-250
3/4"	UGP-750-100	-	UGP-750-250
1"	UGP-100-100	-	UGP-100-250
1-1/4"	-	UGP-125-150	-
1-1/2"	-	UGP-150-150	-
2"	-	UGP-200-150	-



PS-II COUPLINGS

RMI Part No.	Size	Pack Size
UGC-375	3/8"	25
UGC-500	1/2"	20
UGC-750	3/4"	16
UGC-1000	1"	9
UGC-1250	1-1/4"	9
UGC-1500	1-1/2"	8
UGC-2000	2"	5



UGC-750

TRACPIPE PS-II MALE ADAPTERS

TracPipe PS-II fittings are constructed from TracPipe patented Autoflare fittings with a plastic containment coupling and 1/4" NPT vent port. Fittings assemble without special tools.

RMI Part No.	Size	Pack Size
UGF-375	3/8"	25
UGF-500	1/2"	20
UGF-750	3/4"	16
UGF-1000	1"	9
UGF-1250	1-1/4"	9
UGF-1500	1-1/2"	8
UGF-2000	2"	5



UGF-1000

TracPipe **CounterStrike**
Flexible Gas Piping by OmegaFlex.

Leading Supplier for Natural Gas and Propane

CounterStrike® CSST
Safety • Ease • Innovation • Performance



Press Tools & Accessories

RP350 STANDARD PRESS TOOL

RMI Part No.	Description
70138	RP350 Press Tool w/ Case & 1/2"-1" MegaPress Jaws
67053	RP350 Press Tool w/ Case & 1/2"-2" ProPress Jaws
67058	RP350 Press Tool w/ Case & 1/2"-1" ProPress Jaws
67063	RP350 Press Tool w/ Case
67083	RP350 Press Tool Only

RP350 ACCESSORIES

RMI Part No.	Description
56513	18V 2.5AH Lithium Battery - RP350
56518	18V 5.0AH Lithium Battery - RP350
67338	RP350 Carrying Case
64383	120V Charger - RP350



67053 - RP350 TOOLKIT



57363 - RP241 TOOLKIT



57398 - RP240 TOOLKIT

RP240 & RP241 COMPACT PRESS TOOLS

RMI Part No.	Description
57398	RP240 Press Tool w/ Case & 1/2"-1-1/4" ProPress Jaws
57413	RP240 Compact Tool w/ Case
57363	RP241 Press Tool w/ Case & 1/2"-1-1/4" ProPress Jaws
57383	RP241 Compact Tool w/ Case

RP240 & RP241 ACCESSORIES

RMI Part No.	Description
55183	12V 2.5AH Lithium Battery - RP240/RP241
55193	12V Charger - RP240/241

REAMER & PREP TOOLS

RMI Part No.	Description
29993	Reamer, EN 227S SS
37993	Prep Tool, 1/2" - 1" MegaPress
37988	Prep Tool, 1-1/4" - 2" MegaPress



29993

PROPRESS JAWS FOR COPPER

RMI Part No.	Size
Compact Jaws	
16958	1/2"
16963	3/4"
16978	1"
31228	1-1/4"
Standard Jaws	
76652	1/2"
76657	3/4"
76662	1"
76667	1-1/4"
76672	1-1/2"
76677	2"
ProPress XL Kit	
20483	2-1/2" - 4"



PROPPRESS JAWS

MEGAPRESS JAWS FOR STEEL

RMI Part No.	Size
Compact Jaws	
48433	1/2"
48438	3/4"
48443	1"
Standard Jaws	
37958	1/2"
37963	3/4"
37968	1"
Standard Jaw Kit	
48558	1/2" - 1"
48553	1/2" - 2"
Ring-Actuated Jaws	
21878	V2 Actuator
37973	1-1/4"
37978	1-1/2"
37983	2"
MegaPress XL Jaws	
60658	XL Booster
66868	2-1/2" - 4"
60643	2-1/2"
60648	3"
60653	4"



MEGAPRESS JAWS

Carbon Steel Gas Press Systems

VIEGA MEGAPRESS G PRESS SYSTEM

Viega MegaPressG is a press fitting system for carbon steel pipe approved for use in gas and fuel oil applications. Viega MegaPressG is ideal for industrial, commercial, and residential applications and performs well in both new installations and retrofits projects.

- Sizes available from 1/2" - 4"
- Suitable for use with ASTM Schedule 5 to Schedule 40 carbon steel pipe
- Corrosion-resistant zinc nickel coating
- More than 200 different fitting configurations
- Approved for underground applications
- Save time and money on prep and labor vs traditional threading methods

VIEGA MEGAPRESS G COUPLINGS

RMI Part No.	Size	Stop	Extended
25001	1/2"	Yes	-
22009	3/4"	Yes	-
25011	1"	Yes	-
25016	1-1/4"	Yes	-
25021	1-1/2"	Yes	-
25026	2"	Yes	-
25031	1/2"	No	-
25036	3/4"	No	-
25041	1"	No	-
25046	1-1/4"	No	-
25051	1-1/2"	No	-
25056	2"	No	-
25071	1/2"	No	Yes
25076	3/4"	No	Yes
25081	1"	No	Yes
25086	1-1/4"	No	Yes
25091	1-1/2"	No	Yes
25096	2"	No	Yes



COUPLING NO STOP



COUPLING W/ STOP



EXT COUPLING

VIEGA MEGAPRESS G REDUCERS

RMI Part No.	Size	Size
FTG x P		
26001	3/4"	1/2"
26006	1"	1/2"
26011	1"	3/4"
26016	1-1/4"	1"
26021	1-1/2"	3/4"
26031	1-1/2"	1"
26026	1-1/2"	1-1/4"
26036	2"	1"
26041	2"	1-1/4"
26046	2"	1-1/2"
P x P		
25931	3/4"	1/2"
25936	1"	1/2"
25941	1"	3/4"
25946	1-1/4"	3/4"
25951	1-1/4"	1"
25956	1-1/2"	1-1/4"
25961	2"	1-1/4"
25966	2"	1-1/2"



FTG X P REDUCER



P X P REDUCER



Carbon Steel Gas Press Systems

VIEGA MEGAPRESS G TEES

RMI Part No.	Size 1	Size 2	Size 3
P x P x P			
25301	1/2"	1/2"	1/2"
25331	3/4"	3/4"	1/2"
25306	3/4"	3/4"	3/4"
25336	1"	1"	1/2"
25341	1"	1"	3/4"
25311	1"	1"	1"
25491	1-1/4"	1-1/4"	1/2"
25496	1-1/4"	1-1/4"	3/4"
25351	1-1/4"	1-1/4"	1"
25316	1-1/4"	1-1/4"	1-1/4"
25361	1-1/2"	1-1/2"	1/2"
25366	1-1/2"	1-1/2"	3/4"
25371	1-1/2"	1-1/2"	1"
25376	1-1/2"	1-1/2"	1-1/4"
25321	1-1/2"	1-1/2"	1-1/2"
25381	2"	2"	1/2"
25386	2"	2"	3/4"
25391	2"	2"	1"
25396	2"	2"	1-1/4"
25401	2"	2"	1-1/2"
25326	2"	2"	2"
P x P x FPT			
25406	3/4"	3/4"	1/2"
25481	3/4"	3/4"	3/4"
25411	1"	1"	1/2"
25416	1"	1"	3/4"
25486	1-1/4"	1-1/4"	1/2"
25506	1-1/4"	1-1/4"	3/4"
25501	1-1/4"	1-1/4"	1"
25436	1-1/2"	1-1/2"	1/2"
25441	1-1/2"	1-1/2"	3/4"
25446	1-1/2"	1-1/2"	1"
25451	1-1/2"	1-1/2"	1-1/4"
25456	2"	2"	1/2"
25461	2"	2"	3/4"
25466	2"	2"	1"
25471	2"	2"	1-1/4"
25476	2"	2"	1-1/2"



VIEGA MEGAPRESS G ELBOWS

45 Degree Angle			90 Degree Angle		
RMI Part No.	P1	P2	RMI Part No.	P1	P2
25231	1/2"	1/2"	25201	1/2"	1/2"
25236	3/4"	3/4"	25206	3/4"	3/4"
25241	1"	1"	25211	1"	1"
25246	1-1/4"	1-1/4"	25216	1-1/4"	1-1/4"
25251	1-1/2"	1-1/2"	25221	1-1/2"	1-1/2"
25256	2"	2"	25226	2"	2"



VIEGA MEGAPRESS G STREET ELBOWS

45 Degree Angle			90 Degree Angle		
RMI Part No.	P	FTG	RMI Part No.	P	FTG
26101	1/2"	1/2"	26051	1/2"	1/2"
26106	3/4"	3/4"	26056	3/4"	3/4"
26111	1"	1"	26061	1"	1"
26116	1-1/4"	1-1/4"	26066	1-1/4"	1-1/4"
26121	1-1/2"	1-1/2"	26071	1-1/2"	1-1/2"
26126	2"	2"	26076	2"	2"



VIEGA MEGAPRESS G UNIONS

RMI Part No.	Size	Size
P x P		
25701	1/2"	1/2"
25706	3/4"	3/4"
25711	1"	1"
25716	1-1/4"	1-1/4"
25721	1-1/2"	1-1/2"
25726	2"	2"
FPT x P		
25651	1/2"	1/2"
25656	3/4"	3/4"
25661	1"	1"
25666	1-1/4"	1-1/4"
25671	1-1/2"	1-1/2"
25676	2"	2"



Carbon Steel Gas Press Systems

VIEGA MEGAPRESS G ADAPTERS

RMI Part No.	P	MPT
Viega MegaPress G Male Adapters		
25101	1/2"	1/2"
25106	3/4"	3/4"
25111	1"	1"
25116	1-1/4"	1-1/4"
25121	1-1/2"	1-1/2"
25126	2"	2"
RMI Part No.	P	FPT
Viega MegaPress G Female Adapters		
25131	1/2"	1/2"
25576	3/4"	1/2"
25136	3/4"	3/4"
25581	1"	1/2"
25586	1"	3/4"
25141	1"	1"
25591	1-1/4"	1/2"
25596	1-1/4"	3/4"
25601	1-1/4"	1"
25146	1-1/4"	1-1/4"
25606	1-1/2"	1/2"
25611	1-1/2"	3/4"
25616	1-1/2"	1"
25621	1-1/2"	1-1/4"
25151	1-1/2"	1-1/2"
25626	2"	1/2"
25631	2"	3/4"
25636	2"	1"
25641	2"	1-1/4"
25646	2"	1-1/2"
25156	2"	2"



MALE ADAPTER



FEMALE ADAPTER

VIEGA MEGAPRESS G CAP

RMI Part No.	Size
25731	1/2"
25736	3/4"
25741	1"
25746	1-1/4"
25751	1-1/2"
25756	2"



CAP

VIEGA MEGAPRESS G BALL VALVES

RMI Part No.	Size	Size
P x P		
30600	1/2"	1/2"
30605	3/4"	3/4"
30610	1"	1"
30615	1-1/4"	1-1/4"
30620	1-1/2"	1-1/2"
30625	2"	2"
FPT x P		
30630	1/2"	1/2"
30635	3/4"	3/4"
30640	1"	1"
30645	1-1/4"	1-1/4"
30650	1-1/2"	1-1/2"
30655	2"	2"
MPT x P		
30660	1/2"	1/2"
30665	3/4"	3/4"
30670	1"	1"
30675	1-1/4"	1-1/4"
30680	1-1/2"	1-1/2"
30685	2"	2"



P X P VALVE



FPT X P VALVE



MPT X P VALVE

APOLLO POWERPRESS BALL VALVES

- Yellow Visual Control Ring
- Carbon Steel Body
- 125 PSI MAOP
- 5 Year Warranty
- Made in the USA

RMI Part No.	Size	Size
P x P		
89FVH4301	1/2"	1/2"
89FVH4401	3/4"	3/4"
89FVH4501	1"	1"
89FVH4601	1-1/4"	1-1/4"
89FVH4701	1-1/2"	1-1/2"
89FVH4801	2"	2"



P X P VALVE

Copper Water Press Systems

VIEGA PROPRESS COUPLINGS

RMI Part No.	Size	Size	Stop	Stop
78047	1/2"	1/2"	Yes	-
78052	3/4"	3/4"	Yes	-
78057	1"	1"	Yes	-
78062	1-1/4"	1-1/4"	Yes	-
78067	1-1/2"	1-1/2"	Yes	-
78072	2"	2"	Yes	-
78172	1/2"	1/2"	No	-
78177	3/4"	3/4"	No	-
78182	1"	1"	No	-
78187	1-1/4"	1-1/4"	No	-
78192	1-1/2"	1-1/2"	No	-
78197	2"	2"	No	-
79005	1/2"	1/2"	No	Yes
79010	3/4"	3/4"	No	Yes
79015	1"	1"	No	Yes
79020	1-1/4"	1-1/4"	No	Yes
79025	1-1/2"	1-1/2"	No	Yes
79030	2"	2"	No	Yes



COUPLING



EXT COUPLING

VIEGA PROPRESS REDUCERS

RMI Part No.	P1	P2
78147	3/4"	1/2"
15603	1"	1/2"
78152	1"	3/4"
15593	1-1/4"	3/4"
78157	1-1/4"	1"
18473	1-1/2"	3/4"
15588	1-1/2"	1"
78162	1-1/2"	1-1/4"
18468	2"	3/4"
15608	2"	1"
22328	2"	1-1/4"
78167	2"	1-1/2"



REDUCER

VIEGA PROPRESS LEAD-FREE TEES

RMI Part No.	P1	P2	FPT
79580	1/2"	1/2"	1/2"
79585	3/4"	3/4"	1/4"
79590	3/4"	3/4"	1/2"
79595	3/4"	3/4"	3/4"
79760	1"	1"	1/2"
79765	1"	1"	3/4"
79770	1-1/4"	1-1/4"	1/2"
79775	1-1/4"	1-1/4"	3/4"
79780	1-1/2"	1-1/2"	1/2"
79785	1-1/2"	1-1/2"	3/4"
79790	2"	2"	1/2"
79795	2"	2"	3/4"



LEAD FREE BRONZE TEE

Copper Water Press Systems

VIEGA PROPRESS TEES

RMI Part No.	P1	P2	P3
77377	1/2"	1/2"	1/2"
77382	1/2"	1/2"	3/4"
15493	1/2"	1/2"	1"
77392	3/4"	1/2"	1/2"
77397	3/4"	1/2"	3/4"
77402	3/4"	3/4"	1/2"
77387	3/4"	3/4"	3/4"
77407	3/4"	3/4"	1"
22263	1"	1/2"	3/4"
94767	1"	1/2"	1"
77417	1"	3/4"	1/2"
77422	1"	3/4"	3/4"
77427	1"	3/4"	1"
77432	1"	1"	1/2"
77437	1"	1"	3/4"
77412	1"	1"	1"
15488	1"	1"	1-1/4"
22253	1-1/4"	1/2"	1-1/4"
22258	1"	3/4"	3/4"
22268	1-1/4"	3/4"	1"
22248	1-1/4"	3/4"	1-1/4"
22238	1-1/4"	1"	1/2"
94763	1-1/4"	1"	3/4"
14568	1-1/4"	1"	1"
94757	1-1/4"	1-1/4"	1/2"
77452	1-1/4"	1-1/4"	3/4"
77447	1-1/4"	1-1/4"	1"
77442	1-1/4"	1-1/4"	1-1/4"
79660	1-1/2"	1"	3/4"
15458	1-1/2"	1"	1"
15463	1-1/2"	1"	1-1/2"
22233	1-1/2"	1-1/4"	3/4"
15453	1-1/2"	1-1/4"	1"
15483	1-1/2"	1-1/4"	1-1/4"
15448	1-1/2"	1-1/2"	1/2"
77462	1-1/2"	1-1/2"	3/4"

RMI Part No.	P1	P2	P3
77467	1-1/2"	1-1/2"	1"
77472	1-1/2"	1-1/2"	1-1/4"
77457	1-1/2"	1-1/2"	1-1/2"
15518	2"	1-1/2"	1-1/4"
15513	2"	1-1/2"	3/4"
15498	2"	1-1/2"	1"
15508	2"	1-1/2"	1-1/4"
15503	2"	1-1/2"	1-1/2"
22228	2"	1-1/2"	2"
15538	2"	2"	1/2"
94777	2"	2"	3/4"
84772	2"	2"	1"
77487	2"	2"	1-1/4"
77482	2"	2"	1-1/2"
77477	2"	2"	2"



Copper Water Press Systems

VIEGA PROPRESS ELBOWS

45 Degree Angle			90 Degree Angle		
RMI Part No.	P1	P2	RMI Part No.	P1	P2
77607	1/2"	1/2"	77317	1/2"	1/2"
77023	3/4"	3/4"	77022	3/4"	3/4"
77028	1"	1"	77027	1"	1"
77033	1-1/4"	1-1/4"	77032	1-1/4"	1-1/4"
77038	1-1/2"	1-1/2"	77037	1-1/2"	1-1/2"
77043	2"	2"	77042	2"	2"



45 ELBOW



90 ELBOW

VIEGA PROPRESS ADAPTERS

MPT			FPT		
RMI Part No.	P	MPT	RMI Part No.	P	FPT
79210	1/2"	3/8"	79295	1/2"	3/8"
79215	1/2"	1/2"	79300	1/2"	1/2"
79220	1/2"	3/4"	79305	1/2"	3/4"
79225	3/4"	1/2"	79310	3/4"	1/2"
79230	3/4"	3/4"	79315	3/4"	3/4"
79235	3/4"	1"	79320	1"	1-1/2"
79240	1"	3/4"	79325	1"	3/4"
79245	1"	1"	79330	1"	1"
79250	1"	1-1/4"	79335	1"	1-1/4"
79255	1-1/4"	1"	79340	1-1/4"	1/2"
79260	1-1/4"	1-1/4"	79345	1-1/4"	1"
79265	1-1/4"	1-1/2"	79350	1-1/4"	1-1/4"
79270	1-1/2"	1-1/4"	79355	1-1/4"	1-1/2"
79275	1-1/2"	1-1/2"	79360	1-1/2"	1-1/4"
79280	1-1/2"	2"	79365	1-1/2"	1-1/2"
79285	2"	1-1/2"	79370	2"	2"
79290	2"	2"			



P X FPT ADAPTER



P X MPT ADAPTER



Copper Water Press Systems

VIEGA PROPRESS ZERO LEAD BRASS UNIONS

RMI Part No.	Size	Size
P x P		
79125	1/2"	1/2"
79130	3/4"	3/4"
79135	1"	1"
79140	1-1/4"	1-1/4"
79145	1-1/2"	1-1/2"
79150	2"	2"
P x FPT		
79700	1/2"	1/2"
79705	3/4"	3/4"
79710	1"	1"
79715	1-1/4"	1-1/4"
79720	1-1/2"	1-1/2"
79725	2"	2"
P x MPT		
79730	1/2"	1/2"
79735	3/4"	3/4"
79740	1"	1"
79745	1-1/4"	1-1/4"
79750	1-1/2"	1-1/2"
79755	2"	2"



P X P UNION



P X FPT UNION



P X MPT UNION

VIEGA PROPRESS CAP

RMI Part No.	Size
77712	1/2"
77717	3/4"
77722	1"
77727	1-1/4"
77732	1-1/2"
77737	2"



CAP

VIEGA PROPRESS ZERO LEAD BRASS VALVES

Locking Handle			Non-Locking Handle		
RMI Part No.	P1	P2	RMI Part No.	P1	P2
79923	1/2"	1/2"	79920	1/2"	1/2"
79928	3/4"	3/4"	79925	3/4"	3/4"
79933	1"	1"	79930	1"	1"
79938	1-1/4"	1-1/4"	79935	1-1/4"	1-1/4"
79943	1-1/2"	1-1/2"	79940	1-1/2"	1-1/2"
79948	2"	2"	79950	2"	2"



BALL VALVE



Fittings

SCHEDULE 40 FITTINGS

		1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Key	Description	RMI Part No.					
1	45° Elbow	40-103-08	40-103-12	40-103-16	40-103-20	40-103-24	40-103-32
2	90° Elbow	40-104-08	40-104-12	40-104-16	40-104-20	40-104-24	40-104-32
3	90° Street Elbow	40-110-08	40-110-12	40-110-16	40-110-20	40-110-24	40-110-32
4	Tee	40-108-08	40-108-12	40-108-16	40-108-20	40-108-24	40-108-32
5	Cross	40-102-08	40-102-12	40-102-16	40-102-20	40-102-24	40-102-32
6	Union	40-109-08	40-109-12	40-109-16	40-109-20	40-109-24	40-109-32
7	Coupling	40-100-08	40-100-12	40-100-16	40-100-20	40-100-24	40-100-32
8	Plug	40-105-08	40-105-12	40-105-16	40-105-20	40-105-24	40-105-32
9	Cap	40-114-08	40-114-12	40-114-16	40-114-20	40-114-24	40-114-32

*All schedule 40 fittings and nipples are available black or galvanized. For galvanized, add "G" before the part #



SCHEDULE 40 REDUCER FITTINGS

		1/2" x 3/8"	3/4" x 1/2"	1" x 1/4"	1" x 1/2"	1" x 3/4"	1-1/4" x 1"	1-1/4" x 3/4"	1-1/2" x 1-1/4"	1-1/2" x 1"	2" x 1-1/2"	2" x 1-1/4"
Key	Description	RMI Part No.										
10	Bushing	40-106-0806	40-106-1208	40-106-1604	40-106-1608	40-106-1612	40-106-2016	40-106-2012	40-106-2420	40-106-2416	40-106-3224	40-106-3220
7	Coupling	40-107-0806	40-107-1208	40-107-1604	40-107-1608	40-107-1612	40-107-2016	40-107-2012	40-107-2420	40-107-2416	40-107-3224	40-107-3220
2	90° Elbow	40-104-0806	40-104-1208	40-104-1604	40-104-1608	40-104-1612	40-104-2016	40-104-2012	40-104-2420	40-104-2416	40-104-3224	40-104-3220

*All schedule 40 fittings and nipples are available black or galvanized. For galvanized, add "G" before the part #



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Nipples

SCHEDULE 40 NIPPLES

PIPE SIZE	LENGTH													
	CLOSE	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	8"	10"	12"
1/2"	40-123-00	40-123-015	40-123-02	40-123-025	40-123-03	40-123-035	40-123-04	40-123-045	40-123-05	40-123-055	40-123-06	40-123-08	40-123-10	40-123-12
3/4"	40-124-00	40-124-015	40-124-02	40-124-025	40-124-03	40-124-035	40-124-04	40-124-045	40-124-05	40-124-055	40-124-06	40-124-08	40-124-10	40-124-12
1"	40-125-00	-	40-125-02	40-125-025	40-125-03	40-125-035	40-125-04	40-125-045	40-125-05	40-125-055	40-125-06	40-125-08	40-125-10	40-125-12
1-1/4"	40-126-00	-	40-126-02	40-126-025	40-126-03	40-126-035	40-126-04	40-126-045	40-126-05	40-126-055	40-126-06	40-126-08	40-126-10	40-126-12
1-1/2"	40-127-00	-	40-127-02	40-127-025	40-127-03	40-127-035	40-127-04	40-127-045	40-127-05	40-127-055	40-127-06	40-127-08	40-127-10	40-127-12
2"	40-128-00	-	-	40-128-025	40-128-03	40-128-035	40-128-04	40-128-045	40-128-05	-	40-128-06	40-128-08	40-128-10	40-128-12

*All schedule 40 fittings and nipples are available black or galvanized. For galvanized, add "G" before the part #

SCHEDULE 40 NIPPLE KITS

RMI Part No.	Description
GK-TRAYRUN-12	1/2" Nipple Kit, 1-1/2" - 6", 7 Each w/ Tray
GK-TRAY-12	1/2" Steel Nipple Tray Only - Holds 77pcs
GK-TRAYRUN-34	3/4" Nipple Kit, 1-1/2" - 6", 6 Each w/ Tray
GK-TRAY-34	3/4" Steel Nipple Tray Only - Holds 66pcs
GK-TRAYRUN-1	1" Nipple Kit, 2" - 6", 5 Each w/ Tray
GK-TRAY-12	1" Steel Nipple Tray Only - Holds 50pcs



Sediment Trap Kits

SCHEDULE 40 SEDIMENT TRAP KITS

Don't be caught short! Basic components (tee, nipples, and cap) come packaged together for convenience and assurance of having the correct parts for the job.

RMI Part No.	Description
75ST-06	3/8" Sediment Trap
75ST-08	1/2" Sediment Trap
75ST-12	3/4" Sediment Trap



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Fittings

SCHEDULE 80 FITTINGS

	Pressure (PSI)	1/4" *	3/8" *	1/2" *	3/4" *	1" *	1-1/4" *	1-1/2" *	2" *	2-1/2" *	3" *
Description	RMI Part No.										
45° Elbow	2000	103-04	103-06	103-08	103-12	103-16	103-20	103-24	103-32	103-40	103-48
90° Elbow	3000	104-04	104-06	104-08	104-12	104-16	104-20	104-24	104-32	104-40	104-48
90° Street Elbow	3000	110-04	110-06	110-08	110-12	110-16	110-20	110-24	110-32	-	-
Tee	2000	108-04	108-06	108-08	108-12	108-16	108-20	108-24	108-32	108-40	108-48
Cross	2000	102-04	102-06	102-08	102-12	102-16	102-20	102-24	102-32	102-40	102-48
Union	3000	109-04	109-06	109-08	109-12	109-16	109-20	109-24	109-32	109-40	109-48
Coupling	3000	100-04	100-06	100-08	100-12	100-16	100-20	100-24	100-32	100-40	100-48
Plug	3000	105-04	105-06	105-08	105-12	105-16	105-20	105-24	105-32	105-40	105-48
Cap	3000	114-04	114-06	114-08	114-12	114-16	114-20	114-24	114-32	114-40	114-48

*= Pipe Size

SCHEDULE 80 SCREWED REDUCING FITTINGS, FORGED STEEL

	1/4" x 1/8" *	3/8" x 1/4" *	1/2" x 1/8" *	1/2" x 1/4" *	1/2" x 3/8" *	3/4" x 1/4" *	3/4" x 3/8" *	3/4" x 1/2" *
Description	RMI Part No.							
Bushing	106-0402	106-0604	106-0802	106-0804	106-0806	106-1204	106-1206	106-1208
Reducer Coupling	-	107-0604	-	107-0804	107-0806	107-1204	107-1206	107-1208
Swage, Concentric	-	-	-	-	-	150-1204	-	150-1208
Swage, Eccentric	-	-	-	-	-	-	-	-

	1" x 1/4" *	1" x 3/8" *	1" x 1/2" *	1" x 3/4" *	1-1/4" x 1/4" *	1-3/8" x 3/8" *	1-1/4" x 1/2" *	1-1/4" x 3/4" *
Description	RMI Part No.							
Bushing	106-1604	106-1606	106-1608	106-1612	106-2004	106-2006	106-2008	106-2012
Reducer Coupling	-	-	107-1608	107-1612	-	-	107-2008	107-2012
Swage, Concentric	150-1604	-	150-1608	150-1612	-	-	150-2008	150-2012
Swage, Eccentric	-	-	-	-	-	-	-	-

	1-1/4" x 1" *	1-1/2" x 1/4" *	1-1/2" x 3/8" *	1-1/2" x 1/2" *	1-1/2" x 3/4" *	1-1/2" x 1" *	1-1/2" x 1-1/4" *	2" x 1/4" *
Description	RMI Part No.							
Bushing	106-2016	106-2404	106-2406	106-2408	106-2412	106-2416	106-2420	106-3204
Reducer Coupling	107-2016	-	-	-	-	107-2416	107-2420	-
Swage, Concentric	150-2016	-	-	-	150-2412	150-2416	150-2420	-
Swage, Eccentric	151-2016	-	-	-	-	151-2416	151-2420	-

*= Pipe Size



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Fittings

	2" x 3/8" *	2" x 1/2" *	2" x 3/4" *	2" x 1" *	2" x 1-1/4" *	2" x 1-1/2" *	2-1/2" x 2" *	3" x 3/4" *
Description	RMI Part No.							
Bushing	106-3206	106-3208	106-3212	106-3216	106-3220	106-3224	106-4032	106-4804
Reducer Coupling	-	107-3208	107-3212	107-3216	107-3220	107-3224	107-4032	-
Swage, Concentric	-	150-3208	150-3212	150-3216	150-3220	150-3224	150-4032	-
Swage, Eccentric	-	-	-	151-3216	151-3220	151-3224	-	-

	3" x 1/2" *	3" x 3/4" *	3" x 1" *	3" x 1-1/4" *	3" x 1-1/2" *	3" x 2" *	3" x 2-1/2" *	4" x 3" *
Description	RMI Part No.							
Bushing	106-4808	106-4812	106-4816	106-4820	106-4824	106-4832	106-4840	106-6448
Reducer Coupling	-	-	-	-	-	107-4832	107-4840	-
Swage, Concentric	-	-	-	-	-	150-4832	150-4840	-
Swage, Eccentric	-	-	-	-	-	-	-	-

*= Pipe Size



45D ELBOW



90D ELBOW



BUSHING



CONCENTRIC SWAGE



COUPLING



ECCENTRIC SWAGE



STREET ELBOW



TEE



UNION



Nipples

SCHEDULE 80 PIPE NIPPLES



SCH 80 NIPPLE

Pipe Size	LENGTH												
	CLOSE	1-1/2"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
	RMI Part No.												
1/4"	121-00	121-015	121-02	121-03	121-04	121-05	121-06	-	121-08	-	-	-	-
3/8"	122-00	122-015	122-02	122-03	122-04	122-05	122-06	-	122-08	-	-	-	-
1/2"	123-00	123-015	123-02	123-03	123-04	123-05	123-06	-	123-08	-	123-10	-	123-12
3/4"	124-00	-	124-02	124-03	124-04	124-05	124-06	124-07	124-08	124-09	124-10	124-11	124-12
1"	125-00	-	125-02	125-03	125-04	125-05	125-06	125-07	125-08	125-09	125-10	125-11	125-12
1-1/4"	126-00	-	126-02	126-03	126-04	126-05	126-06	126-07	126-08	126-09	126-10	126-11	126-12
1-1/2"	127-00	-	127-02	127-03	127-04	127-05	127-06	127-07	127-08	127-09	127-10	127-11	127-12
2"	128-00	-	-	128-03	128-04	128-05	128-06	128-07	128-08	128-09	128-10	128-11	128-12
2-1/2"	129-00	-	-	-	129-04	-	129-06	-	-	129-09	129-10	-	-
3"	130-00	-	-	130-03	130-04	130-05	130-06	130-07	130-08	130-09	130-10	130-11	130-12

Flanges

FLEXITALLIC SPIRAL WOUND FLANGE GASKETS

RMI Part No.	Size	Weight	ID	OD
300/0200	2"	300#	2-3/4"	4-3/4"
300/0300	3"	300#	4"	5-7/8"
300/0300M	3" Modified	300#	4-1/4"	5-7/8"
300/0400	4"	300#	5"	7-1/8"
150/1400	14"	150#	14-5/8"	17-3/4"
SG15M	15" Manway	150#	15"	16-3/4"
150/1600	16"	150#	16-5/8"	20-1/4"
150/1800	18"	150#	18-11/16"	21-5/8"
150/2000	20"	150#	20-11/16"	23-7/8"



BLIND FLANGE



SCREWED FLANGE



SLIP-ON FLANGE



FLEXITALLIC GASKET

300 LB. STANDARD FORGED STEEL FLANGES

RMI Part No.	Flange Size & Type	Flange Diameter	Thread/ Pipe Size	Type of Flange
20/3R/SC	1-1/4" RF	5-1/4"	1-1/4" NPT	Screwed
20/3R/SO	1-1/4" RF	5-1/4"	1-1/4" PIPE	Slip-On
24/3R/SC	1-1/2" RF	6-1/2"	1-1/2" NPT	Screwed
32/3F/SC	2" FF	6-1/2"	2" NPT	Screwed
32/3R/SC	2" RF	6-1/2"	2" NPT	Screwed
32/3R/SO	2" RF	6-1/2"	2" PIPE	Slip-On
32/3R/BL	2" RF	6-1/2"	-	Blind
40/3R/SC	2-1/2" RF	7-1/2"	2-1/2" NPT	Screwed
40/3R/SC32	2-1/2" RF	7-1/2"	2" NPT	Screwed
48/3R/SC	3" RF	8-1/4"	3" NPT	Screwed
48/3R/SO32	3" RF	8-1/4"	2" PIPE	Slip-On
48/3F/BL	3" FF	8-1/4"	-	Blind
48/3R/SC32	3" RF	8-1/4"	2" NPT	Screwed
48/3F/SO	3" FF	8-1/4"	3" PIPE	Slip-On
48/3R/BL	3" RF	8-1/4"	-	Blind
64/3F/SO	4" FF	10"	4" PIPE	Slip-On

*Other sizes and styles may be available. Contact RMI customer service for more info

STUDS W/ NUTS

B7 Studs with two 2H nuts for ANSI Flange Assembly

300# FLANGE REQUIREMENTS

RMI Part No.	Flange Size	Stud Size	No. of Studs
132-08250	1/2"	1/2" x 2-1/2"	4
132-10300	3/4"	5/8" x 3"	4
132-10300	1"	5/8" x 3"	4
132-10300	1-1/4"	5/8" x 3"	4
132-12350	1-1/2"	3/4" x 3-1/2"	4
132-10350	2"	5/8" x 3-1/2"	8
132-12400	3"	3/4" x 4"	8
132-12450	4"	3/4" x 4-1/2"	8

150# MANWAY REQUIREMENTS

RMI Part No.	Flange/ Manway Size	Stud Size	No. of Studs
132-16500	14"	1" x 5"	12
132-16550	16"	1" x 5-1/2"	16
132-18600	18"	1-1/8" x 6"	16
132-18600	20"	1-1/8" x 6"	20

RIDGID TOOL HAND THREADERS

RMI Part No.	Description
632-36475	Exposed Ratchet Threader Kit 1/2"-2"
632-36505	Exposed Ratchet Threader Kit 1/8"-2"
632-41935	Model 700 115V Power Head Only 1/8"-2"

*Die Heads not included with 632-41935



632-36505



632-41935

ACCESSORIES

RMI Part No.	Description
632-38625	Metal Case- Holds 6 Die Heads
632-97375	Metal Case- Holds 9 Die Heads
632-42950	Metal Case for 700 Threader

DIE HEADS AND REPLACEMENT DIES

RMI Part No.	Description	RMI Part No.	Description
632-65950	1/8" 12R Die Head	632-37810	1/8"-27 NPT Die Only
632-65955	1/4" 12R Die Head	632-37815	1/4"-18 NPT Die Only
632-65960	3/8" 12R Die Head	632-37820	3/8"-8 NPT Die Only
632-65965	1/2" 12R Die Head	632-37825	1/2"-14 NPT Die Only
632-65970	3/4" 12R Die Head	632-37830	3/4"-14 NPT Die Only
632-65975	1" 12R Die Head	632-3785	1"-11-1/2 NPT Die Only
632-65980	1-1/4" 12R Die Head	632-37840	1-1/4"-11-1/2 NPT Die Only
632-65985	1-1/2" 12R Die Head	632-37845	1-1/2"-11-1/2 NPT Die Only
632-65990	2" 12R Die Head	632-37850	2"-11-1/2 NPT Die Only

RIDGID 300 POWER DRIVE- THE STANDARD IN PIPE THREADING

Includes:

- 300 Power Drive
- 1206 Stand
- Reamer and Cutter
- Set 1.2" - 3.4" Dies
- Set 1" - 2" Dies
- Oiler
- Foot Switch



632-15682

RMI Part No.	Description
632-15682	Complete Threading System

MILWAUKEE BAND SAW

RMI Part No.	Description
495-6238	120V Band Saw Kit
433-80098	10TPI 5-Pack of Bansaw Blades
433-80107	14TPI 5-Pack of Bansaw Blades
433-38424	14TPI 25-Pack of Bansaw Blades



RECTORSEAL NO. 5

- Slow dry, soft set sealant
- Brushable to plus 20°F
- Yellow color



RMI Part No.	Description
25431	1 pt. Brush Top Can
25551	1/2" pt. Brush Top Can
25631	1/4" pt. Brush Top Can

LA-CO PIPETITE-STICK

- Sealant in handy stick form



RMI Part No.	Dimensions	Description
11175	11/16" X 4-3/4"	Regular Stick

JOHN CRANE PIPE THREAD & GASKET SEALER

- PLS-2 paste type pipe thread sealer for natural and LP-Gas
- Lead Free



RMI Part No.	Description
PB04	1/4" pt. (1 lb.) Brush Top Can
PB16	1 pt. (4 lb.) Brush Top Can

JOMAR® SEAL "GIMME THE GREEN STUFF!" PIPE SEALER

- Slow Dry-Soft Set
- -50°F to 400°F Range
- Lead Free
- AGA Design Certified



RMI Part No.	Description
400-104	1 pint- Brush Top Can
400-102	1/4" pint- Brush Top Can

TFE PIPE THREAD SEALER

- JC-30 Teflon paste lead free type sealer.
- Will not stain hands or clothing



RMI Part No.	Description
JC04	Teflon Paste Sealer 1/4" pt. Brush Top Can

THIXOGREASE® MULTI-PURPOSE EXTREME PRESSURE SINGLE PHASE GREASE

- Non-hardening formulation
- Wide Use Temperature Range -40°F to 575°F
- Superior Chemical Resistance methane, acids, NH₃
- Dramatic Wear Reduction



RMI Part No.	Description
3115627	14 oz. Tube- NLGI #2

TEFLON TAPE

Heavy-Duty high MIL Teflon tape. Made in the USA



RMI Part No.	Description
TT41	1/2" Tape, 520" roll, White
TT41Y	1/2" Tape, 520" roll, Yellow
TT33	3/4" Tape, 520" roll, White
TT33Y	3/4" Tape, 520" roll, Yellow

GASOLIA SOFT-SET

- Smooth, non-hardening sealant with Teflon.
- Brushable to -50°F.



RMI Part No.	Description
SS16	1 PT. Brush Top Can
SS08	1/2" pt. Brush Top Can
SS04	1/4" pt. Brush Top Can

JOHN CRANE "FREE ALL"

- Penetrates rust and saves time and labor



RMI Part No.	Description
FA06	6 oz. Aerosol Can
FA12	12 oz. Aerosol Can

Small Diameter Hose, Ferrules, & Tools

SMALL DIAMETER RUBBER BRAIDED HOSE

Small Diameter Parker hose for outdoor use on grills, recreation appliances, construction heaters, and torches. Available in cut lengths or economical bulk reels.

- UL-21 Approved Hose
- 350 Working pressure with 1750 psi Minimum burst pressure
- For use with Crimped Ferrules and Hose Barb fittings

TECH NOTE: RMI's in-house team can build custom hose assemblies to your specs. Contact our customer service team for more information.



PARKER HOSE CUTAWAY

SMALL DIMETER HOSE

RMI Part No	I.D.	O.D.	Weight (lbs) per 100'
LPGH-1/4	1/4"	.610"	14
LPGH-3/8	3/8"	.750"	22
LPGH-1/2	1/2"	.937"	32

ACCUFLEX THERMOPLASTIC HOSE

RMI Part No	I.D.	O.D.	Weight (lbs.) per 100'
LPGH-5/16	5/16"	.580"	16

BRASS HOSE FERRULES



RMI Part No.	I.D.	Ferrule length	Ferrule Thickness	RMI Hose Part
7325	.562"	1"	.024"	-
7326	.593"	1"	.024"	LPGH-5/16
7327	.625"	1"	.024"	LPGH-1/4
7328	.656"	1"	.024"	-
7329	.687"	1"	.024"	-
7330-B	.718"	1"	.024"	-
7331	.750"	1"	.024"	-
7332	.781"	1"	.024"	LPGH-3/8
7333	.812"	1"	.024"	-

HOSE CUTTING TOOL

For fast, easy, and clean hose cuts. Cuts hose up to 1-1/4". Replacement blades available

RMI Part No.	Description
11420CT	1-1/4" Hose Cutter
11450BLADES	Reversible Blades for 11420CT



11420CT

HOSE BARB & FERRULE KITS

Provides Standard Hose barb fittings and ferrules for either 1/4" or 3/8" double braid hose. Kits include the following fittings: 9/16" LH; 3/8" Female flare; 3/8" Male flare; 1/4" FNPT; 3/8FNPT; 3/8"MNPT; POL & Ferrules.



HBFK-1/4

RMI Part No.	Description
HBFK-1/4	Fitting & Ferrule Kit 1/4" hose
HBFK-3/8	Fitting & Ferrule Kit 3/8" hose

CRIMPING TOOLS

Hand Crimp Tool: To be used with 3/16", 1/4", and 3/8" I.D. Hose Ferrules. Press with a Vise.



C-3

Bench Model Hose Crimper:

Low cost, Portable, and easy to use. Rugged construction.



CR-100

RMI Part No.	Description
C-3	Hand Crimp Tool (3/16", 1/4", 3/16", & 3/8" I.D. Hose)
CR-100	Bench Crimper (3/16", 1/4", 5/16", & 3/8" I.D. Hose)



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Hose Barb Fittings & Adapters

FEMALE NPT BY HOSE BARB CONNECTORS

Hose barb by female national pipe thread fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
555XXX	1/4"	1/4" NPT
557XXX	3/8"	1/4" NPT
558XXX	1/4"	3/8" NPT
560XXX	3/8"	3/8" NPT
104-0608	3/8"	1/2" NPT



555XXX

MALE NPT BY HOSE BARB CONNECTORS

Hose barb by male national pipe thread fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
102-0402	1/4"	1/8" NPT
541XXX	1/4"	1/4" NPT
543XXX	3/8"	1/4" NPT
557XXX	1/4"	3/8" NPT
516-3/8	5/16"	3/8" NPT
539XXX	3/8"	3/8" NPT
102-0608	3/8"	1/2" NPT
102-0612	3/8"	3/4" NPT



537XXX

9/16" -18L.H. FEMALE BY HOSE BARB CONNECTORS

Hose barb by 9/16"-18 left hand Female thread fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
8-17	1/4"	9/16"-18 L.H.
8-20	3/8"	9/16"-18 L.H.



8-17

9/16" -18L.H. MALE BY HOSE BARB CONNECTOR

Hose barb by 9/16"-18 left hand male thread fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
41-B	1/4"	9/16"-18 L.H.



41-B

9/16" -18L.H. HOSE CONNECTOR

RMI Part No.	Thread size
31XXXX	9/16"-18 L.H. X 9/16"-18 L.H.
33XXXX	1/4" NPT X 9/16"-18 L.H.
3153	3/8" NPT X 9/16"-18 L.H.



3153

1"-20 SWIVEL ADAPTER

Hose barb by 1"-20 swivel adapter for connection of 1lb propane bottles to hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Description
ME-484	1/4"	Female 1"-20 Swivel
ME-496	1/4"	Male 1"-20 Swivel



ME-496

POL BY HOSE BARB CONNECTORS

Hose barb by POL thread fitting for hoses to connect to propane tank service valves, with or without excess flow protection and hand wheels.
Must use ferrule and crimp hose on barb end.

RMI Part No.	Hose I.D.	Outlet
ME5930	1/4"	POL
ME1683	1/4"	POL w/ Excess Flow Check
ME1656	1/4"	POL w/ Handwheel (plastic)
ME1655	1/4"	Handwheel & Excess Flow Check



ME1656



ME5930

TYPE 1 (QCC) BY HOSE BARB CONNECTORS

Hose barb by Type 1 QCC thread fitting for hoses to hook into portable Propane tank service valves with Type 1 QCC service valves
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Outlet
ME517-25H	1/4"	QCC Nut x 1/4" Barb, 100,000 BTU Black
ME518-25H	1/4"	QCC Nut x 1/4" Barb, 200,000 BTU Green
ME518-38H	3/8"	QCC Nut x 3/8" Barb, 200,000 BTU Green
ME519-38H	3/8"	QCC Nut x 3/8" Barb, 400,000 BTU Red



ME517-25H

Hose Barb Fittings & Adapters

FEMALE FLARE SWIVEL BY HOSE BARB CONNECTORS

Hose barb by Female Flare thread swivel fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
143-0407	1/4"	1/4" O.D.
HC-4335F	1/4"	3/8" O.D.
516-38SW	5/16"	3/8" O.D.
ME4355	3/8"	3/8" O.D.
ME4357	3/8"	1/2" O.D.



HC-4335F

MALE INVERTED FLARE BY HOSE BARB CONNECTORS

Hose barb by 1/4" Male Inverted Flare thread fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
HC-5133	1/4"	1/4" Male Inverted Flare



HC-5133

MALE FLARE BY HOSE BARB CONNECTORS

Hose barb by Male Flare thread fitting for hoses
Must use ferrule and crimp hose on barb end

RMI Part No.	Hose I.D.	Thread size
142-0407	1/4"	1/4" O.D.
HC-5835	1/4"	3/8" O.D.
ME4855	3/8"	3/8" O.D.
HC-4857	3/8"	1/2" O.D.



HC-4835

HOSE BARB SPLICER

Hose barb by hose barb fitting for splicing hoses
Must use ferrule and crimp hose on barb ends

RMI Part No.	Hose Size
ME27C	1/4" I.D. x 1/4" I.D.
ME27E	3/8" I.D. x 3/8" I.D.
139XXX	5/16" I.D. x 5/16" I.D.



ME27C

POL Fittings & Adapters

MALE POL ADAPTERS

Male POL fitting for adapting from a POL service valve to copper tubing or pipe.
Hard nose designed for brass on brass seal

RMI Part No.	Size
858XXX	MPOL x 1/4" MNPT
ME1650	MPOL x 9/16"-18 LH
ME345	90 Deg MPOL x 1/4"
ME357	MPOL x 1/2" FNPT
ME352	MPOL x 3/8" MNPT
ME353	MPOL x 3/8" Flare
ME355	MPOL x 1/2" Flare
ME356	MPOL x 5/8" Flare
ME1002B	7/8" Hex POL Nut Only
85NL	1-1/8" Hex POL Nut Only
ME1002A	1/4" Tail Piece of 858



ME1650



ME357



ME353

MALE POL WITH SOFT NOSE (O-RING) SEAL AND HAND WHEEL ADAPTOR

Male POL adapter with rubber o-ring for seal and hand wheel to connect propane tank service valve to pipe.

RMI Part No.	Excess flow	Full Flow	Hand Wheel	Size Description
ME1645	X		X	Soft Nose POL x 9/16"-18LH
ME1653	X		X	Soft Nose POL x 1/4" MNPT
G-1654		X	X	Soft Nose POL x 1/4" MNPT
ME1654AR		X	Brass	Soft Nose POL x 1/4" MNPT
ME475		60 Orifice	X	Soft Nose POL with Hand Wheel x 1"-20 Male



G-1654



ME475

POL Fittings & Adapters

PLUGS & ADAPTORS

RMI Part No.	Outlet Description
A-48W	1/4" NPT x 1/4" Inverted Flare inlet Adapter
P499	1/4" NPT x 1/4" Inverted Flare w/ screen
A116	1/4" NPT- Street Elbow
P500	1/4" Inverted flare plug
105-4	1/4" Inverted Flare nut



A-48W



A116



P500

POL CAPS & PLUGS -BRASS

Brass Plugs and Caps for POL service valves and cap for Male POL fittings

RMI Part No.	Size
ME1691	MPOL Plug- 7/8" Hex
A-1699	Female POL Cap



ME1691

CGA 555 LIQUID PROPANE ADAPTORS

Formerly A982 Connection: Liquid propane service valve adapters to connect to pipe

RMI Part No.	Valve Connection	Outlet Thread Size
72-76	FEM. 555	1/4" MNPT
M307	FEM. 555	9/16"-18LH
802XXX	FEM. 555	FPOL
ME307	MPOL	M. 555
672XXX	Brass Hand Nut	CGA 555
663XXX	Nipple Hand Tight	1/4" NPT
ME309-1	FEM. 555 Cap & Chain assembly	



802XXX

FEMALE POL ADAPTOR

Female POL adapter to connect male pigtail or POL fitting to pipe

RMI Part No.		Thread size
Fisher	M.E.C.	
M301	ME301	FPOL x 1/4" FNPT
M303	ME303	FPOL x 1/2" FNPT
-	ME304	FPOLx 3/4" FNPT
-	ME305	FPOL x FPOL
M284	ME284	FPOL x 1/4" MNPT
M285	ME285	FPOL x 3/8" MNPT
M286	ME286	FPOL x 1/2" MNPT
M287	ME287	FPOL x 3/4" MNPT



M284

PLASTIC POL PLUG & QCC DUST CAP

Plastic Plug with Strap and O-ring. Required Safety Plug for all portable cylinders without a QCC filled and transported or stored at a residence.

QCC Type 1 Dust cap for keeping the threads and connection clean when not connected to an appliance



87P-S



94QC1

RMI Part No.	Description	Bag Qty
87P-S	Plastic Male POL Plug with Strap (o-ring style)	100
94QC1	QCC Type 1 Plastic dust cap	50

EXCESS FLOW MANIFOLD ADAPTORS

Allows manifolding of ASME containers while providing excess flow protection for the container vapor outlets.

RMI Part No.	Inlet	Outlet	Closing Flow
ME353EX9	MPOL	3/8" M. FL	0.9 GPM
ME354EX18	MPOL	3/8" M. FL	1.8 GPM
ME354EX9	MPOL	1/2" MPT	0.9 GPM
ME354EX18	MPOL	1/2" MPT	1.8 GPM
ME355EX9	MPOL	1/2" M. FL	0.9 GPM
ME355EX18	MPOL	1/2" M. FL	1.8 GPM
ME356EX9	MPOL	5/8" M. FL	0.9 GPM
ME356EX18	MPOL	5/8" M. FL	1.8 GPM



ME353EX9

Brass Pipe Fittings

BRASS PIPE THREAD ELBOWS

RMI Part No.	Description
BEL-4HP	90 Deg 1/4" FNPT x 1/4" FNPT
BSL-4HP	45 Deg 1/4" FNPT x 1/4" NPT
BL-4-4LP	90 Deg 3/8" FNPT x 3/8" NPT



BRASS PIPE THREAD TEES

RMI Part No.	Description
3 way Female	
BFT-4LP	1/4" NPT
BFT-6HP	3/8" NPT
Female to Male NPT	
BMT-4HP	1/4" NPT (Branch)
BST-4HP	1/4" NPT (Street)



BRASS PIPE THREAD CROSSES

RMI Part No.	Description
BCR-4LP	1/4" NPT



BRASS PIPE THREAD PLUGS

RMI Part No.	Description	Hex
P-2HP	Hex Plug x 1/8" NPT	7/16"
P-4HP	Hex Plug x 1/4" NPT	5/8"
P-6HP	Hex Plug x 3/8" NPT	11/16"



BRASS PIPE THREAD HEX NIPPLE MALE X MALE

RMI Part No.	Description	Length	Hex
B-4HP	1/4" NPT x 1/4" NPT	1.437	5/8"
B-6HP	3/8" NPT x 3/8" NPT	1.5	11/16"



BRASS REDUCERS FEMALE TO FEMALE

RMI Part No.	Description	Length	Hex
BF-6-4HP	3/8" NPT x 1/4" NPT	1.281	7/8"
BF-8-4HP	1/2" NPT x 1/4" NPT	1.671	1-1/8"



BRASS PIPE THREAD BUSHINGS FEMALE X MALE

RMI Part No.	Description	Length	Hex
BB-2-4HP	1/8" NPT x 1/4" NPT	0.875	5/8"
BB-4-6HP	1/4" NPT x 3/8" NPT	0.968	3/4"
BB-4-8HP	1/4" NPT x 1/2" NPT	1.125	7/8"
BB-6-8HP	3/8" NPT x 1/2" NPT	1.125	7/8"
BB-8-12HP	1/2" NPT x 3/4" NPT	1.168	1-1/8"



BRASS COUPLINGS FEMALE TO FEMALE

RMI Part No.	Description	Length	Hex
BF-2HP	1/8" NPT x 1/8" NPT	0.8	9/16"
BF-4HP	1/4" NPT x 1/4" NPT	1.187	3/4"
BF-6HP	3/8" NPT x 3/8" NPT	1.18	7/8"



BRASS SHUT OFF VALVES

RMI Part No.	Inlet	Outlet
208	9/16"-18LH Male	1/4" MNPT
211	1/4" MNPT	1/4" MNPT
218	1/4" FNPT	1/4" MNPT
208-F	9/16"-18LH Male	1/4" FNPT
217	1/4" MNPT	1/4" FNPT



BRASS PIPE THREAD ADAPTER FEMALE TO MALE

RMI Part No.	Description	Length	Hex
BA-4-2HP	1/4" NPT x 1/8" NPT	1.062	3/4"
BA-4HP	1/4" NPT x 1/4" NPT	1.281	3/4"
BA-6-4HP	3/8" NPT x 1/4" NPT	1.312	7/8"



BRASS PIPE THREAD REDUCING BUSHING MALE TO MALE

RMI Part No.	Description	Length	Hex
B-6-4HP	3/8" NPT x 1/4" NPT	1.467	11/16"
B-8-4HP	1/2" NPT x 1/4" NPT	1.687	7/8"
B-8-6HP	1/2" NPT x 3/8" NPT	1.718	7/8"



NEEDLE VALVES

Needle Valves: Carbon steel valve with stainless steel needle provides high quality accurate flow adjustment and shut off. Ideal for pressure gauges, bleed valves and shutoff valves



USE FOR PRESSURE GAUGE IN PIPING

RMI Part No.	Description
N20SK	1/4" FNPT Straight Valve
N20-10S	1/4" FNPT 90 degree Angle Valve
NMF20BK	1/4" MNPT x 1/4" FNPT Brass Valve

BRASS PIPE THREAD NIPPLE

RMI Part No.	Description	Length
BN-2-25HP	1/8" NPT	2-1/2"
BN-4-20HP	1/4" NPT	2"



Type 1 (QCC) Fittings

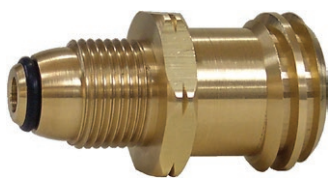
TECH TIP: TYPE 1 (QCC) connectors used for BBQ's and other outdoor appliances incorporate an internal excess flow check valve. Open the container valve slowly. If the valve is opened too quickly, the excess flow device will be activated closing the flow of propane to the appliance. If the excess flow valve is activated, close the appliance control valves and container valve. Wait 60 seconds to allow pressure in the line to equalize. Open the container valve slowly and attempt to light the appliance.

For safety reasons, always turn the cylinder valve off when done with use.

POL X TYPE 1 (QCC) ADAPTER

Converts POL cylinder valve to a Type 1 (QCC) outlet

RMI Part No.	Description
ME398	MPOL x Male QCC
94QC1	Push on Dust cap with strap



ME398

TYPE 1 QCC ADAPTORS

Adapts Type 1 (QCC) to 1/4" male and female thread

RMI Part No.	Description	Shut off Device
ME399	Male QCC x 1/4" MNPT	Quick Close
ME393-1	Male QCC x 1/4" FNPT	Quick Close
ME393-EX	Male QCC x 1/4" MNPT with Excess flow	Quick Close



ME393-1



ME399

RV TYPE 1 ACME PIGTAILS

Used for connecting portable LP cylinder with RV regulators, Type 1 (QCC) to rubber hose to inverted flare or MNPT. Heat sensitive bushing with a melting point of 240 to 300° F is available by adding H to part number. UL-CGA Listed flow limiting device providing protection and limiting flow to 10 SCFH.



MER425 SERIES

RMI Part No.	Description
MER425-12	Type1 ACME x 1/4" Inverted Flare 12" length
MER425-15	Type1 ACME x 1/4" Inverted Flare 15" length
MER425-18	Type1 ACME x 1/4" Inverted Flare 18" length
MER425-20	Type1 ACME x 1/4" Inverted Flare 20" length
MER425-24	Type1 ACME x 1/4" Inverted Flare 24" length
MER425-30	Type1 ACME x 1/4" Inverted Flare 30" length
MER425-36	Type1 ACME x 1/4" Inverted Flare 36" length
MER425-60	Type1 ACME x 1/4" Inverted Flare 60" length
MER426-20	Type1 ACME x 1/4" MNPT 20" length
MER426H-20	Type1 ACME x 1/4" MNPT w thermal protection

TYPE 1 (QCC) COUPLINGS

- Used for connecting regulators or hoses to Type 1 (QCC) portable cylinder valves
- 3 flow capacity options for greater protection in all types of applications
- Thermal sensitive sleeve protects against uncontrolled release in a fire. **Sleeve will soften and back check valve will push the coupling off of the tank.**



QCC COUPLING

RMI Part No.	Description	Flow Restriction	Color
ME517	QCC Nut x 1/4" NPT	100,000 BTU	Black
ME518	QCC Nut x 1/4" NPT	200,000 BTU	Green
ME519	QCC Nut x 1/4" NPT	400,000 BTU	Red
EVACUATION COUPLING			
ME517EV	QCC Nut for Evacuation Only	Full Flow	Black

Hose Assemblies and 1"-20 Fittings

1"-20 HOSE ASSEMBLIES

- Tested and listed hose assemblies for adapting 1 lbs bottle connections
- Multiple lengths and connections
- 1/4" Inside diameter



MER407 SERIES

MER421 SERIES

RMI Part No.	Length	Description
MER421-60	5 ft.	1"-20 Male x Female
MER421-144	12 ft.	
MER407-36	3 ft.	POL x 1"-20 Male
MER407-48	4 ft.	
MER407-60	5 ft.	
MER407-72	6 ft.	
MER407-144	12 ft.	
MER408-60	5 ft.	9/16"-18 LH x 9/16"-18 LH
MER408-144	12 ft.	
MER410-24	24 in.	3/8" MNPT x 3/8" Female Flare
MER410-30	30 in.	
MER410-48	48 in.	

RV AND CAMPING HOSE KITS: FLOW LONGER KIT & STAY LONGER KIT

- Adaptor tees and hoses for adapting a camping outdoor appliance on to the camper gas system
- Adaptor and hose to attached a portable cylinder to the RV gas system



MER471

MER472

RMI Part No.	Adaptor Kit	Kit Contains
MER470	Flow Longer Kit	ME415 tee and ME421-144
MER471	Flow Longer Kit-Plus Kit	G-423P and ME421-144
MER472	Stay Longer Kit	ME420 Tee 5' pigtail w/ MPOL x 1/4" inverted flare, rods
MER473	Stay Longer Kit-Plus Kit	ME420 Tee 5' pigtail w/ MPOL x 1/4" inverted flare, rods and ME421-144

1"-20 BRASS FITTINGS

RMI Part No.	Description
ME487	FPOL x 1"-20 Female
ME488	1"-20 Male x 1/4" MNPT
ME492	1"-20 Male x 1/4" FNPT
ME417	1"-20 Male x 1/4" MNPT with Check and o-ring
ME493	1"-20 Male x 9/16"-18LH with Check and o-ring
ME494	1"-20 Male x 9/16"-18LH



ME417

ME487

ME488

ME492

ME493

ME494

1"-20 ADAPTOR TEE, CONNECTORS AND CAP

RMI Part No.	Description
G-423P	MPOL x 1-5/16" ACME and 1"-20 Male
ME412	Female 1-5/16" ACME x 1"-20 Male x 1"-20 Male
ME413	MPOL x 1"-20 Male (2)
ME414	1"-20 Female X 1"-20 Male (2)
ME415	FPOL x MPOL x 1"-20 Male
ME420	ME415 with 1/4" female inverted flare side outlet
ME475	Softnose Handwheel POL x 1"-20 Male
ME483	1"-20 Female Cap
SECOND CHANCE GRILL ADAPTER	
ME480	Female 1" -20 x 1-5/16" Male ACME



ME412

ME413

ME414

ME415

ME420

ME475

ME480

ME483



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044



Gas Convenience Outlets and Quick Connectors

STURGIS FUEL GAS OUTLET CONNECTION FOR INDOOR AND OUTDOOR USE

- AGA Certified
- Capacity: 42,000 Btu/hr
- Built-In Thermal protection prevents gas flow if connection is exposed to temperatures in excess of 200°F
- 1/2 PSI Max Inlet Pressure

RMI Part No.	Description	Inlet	Outlet
103028	Model 3/375	1/2" FNPT 90 deg & Plug	1/2" M SAE
103029	Model 3/375	1/2" FNPT 90 deg & Plug	3/8" FNPT
103030	Model 3/375	1/2" FNPT 90 deg	48"x 3/8" ID Indoor Appliance Connector & Plug
103031	Model 3/375	1/2" FNPT 90 deg	144" x 3/8" ID Outdoor Appliance Connector with Integral Plug
103040	Model 3/375 Dual	1/2" FNPT 90 deg	Two 3/8" FNPT



MODEL 3-375



103551

RMI Part No.	Description	Inlet	Outlet
104401	Quick Connector (outdoor)	3/8" FNPT	CSN-375 F
104007	Quick Connector Socket/ Valve	3/8" FNPT	3/375 F
104088	Quick Connector Socket/ Valve	1/2" FNPT	3/375 F
104014	Quick Connector Socket/ Valve	1/2" FNPT 90 degree	3/375 F
401207	Connector Plug	3/375M	3/8" FNPT
302001	Dust Cap		-
302003	Dust Plug		-
103551	SS Outlet Box		-
103221-144	12ft Outdoor Appliance Connector	3/375 F	3/8" SAE (F)
100484-144	12ft Outdoor Appliance Connector	3/375 M	3/8" SAE (F)
100529	12ft Outdoor Appliance Connector w/ Valve	3/375 M	3/8" SAE (F)
100462-144	12ft Outdoor Appliance Connector SS Braid	3/375 M	3/8" SAE (F)
100358-144	12ft Outdoor Appliance Connector	3/375 M	1/2" SAE (F)



103221

Gas Convenience Outlets and Quick Connectors

HANSEN GAS-MATE COUPLINGS

AGA Approved

Couplings for the connection of cooking appliances and hose assemblies for Natural and LP gas up to 12" W.C. BTU Rating of 87,000 BTU at 11" WC

TECH TIP: Open valves slowly to prevent excess flow slugging and lowered flow rates,



PLUG



SOCKET

Female Socket	Male Plug	Thread Size	Plastic Dust Plug	Metal Dust Cap
HAN100-006	HAN100-506	3/8"	HANPSDC-2HK	HANPDC-2-HK
HAN100-008	HAN100-508	1/2"	HANPSDC-3HK	HANPDC-3-HK
HAN100-010	HAN100-510	3/4"	HANPSDC-4HK	HANPDC-4-HK
HAN100-012	HAN100-512	1"	HANPSDC-6HK	-

HANSEN ONE-WAY SHUT-OFF QUICK HOSE COUPLING

Female Sockets and Male plugs

LP gas only, high or low pressure couplings up to 363,000 BTUs at 10 PSI

HANSEN FEMALE SOCKETS

Female NPT	Male NPT	Hose Barb	Size
HAN1000	HAN1100	HAN1600	1/4"
HAN1200	HAN1300	HAN1700	3/8"



PLUG X FPT



PLUG X HOSE BARB



PLUG X MPT

HANSEN MALE PLUGS

Female NPT	Male NPT	Hose Barb	Size
HAN11	HAN10	HAN16	1/4"
HAN15	HAN14	HAN17	3/8"



SOCKET X FPT



SOCKET X HOSE BARB



SOCKET X MPT



Outlet Boxes



STAINLESS STEEL OUTLET BOX

- 1/2 PSI max
- Constructed of weather durable brushed stainless steel
- Direct connection to existing residential gas system
- Choice of surface or recessed mount single outlet
- Recessed model has a lockable door that swings out and is labeled gas
- Surface mount in single or double outlet with flip up door
- Easy access quick disconnect safety shut-off
- Compatible with Hansen fittings
- 75,000 BTU natural gas/ 118,000 BTU propane per outlet



BBQ-4SS

RMI Part No.	Description
BBQ-4SS	Recessed, single outlet, lockable, box with swing open door
BBQ-4SM	Surface mount, single outlet box with flip open door
BBQ-DBL-SS	Surface mount, double outlet box with flip open door
BBQ-4HOSE	3/8" MNPT x 3/8" Flare Swivel 10' hose
HAN100-506	Hansen 3/8" Male Plug

PVC OUTLET BOX

- 1/2 psi max
- Constructed of weather durable UV rated PVC in Grey or White
- Direct connection to existing residential gas system
- Surface mount in single outlet with flip up door
- Easy access quick disconnect safety shut-off
- Compatible with Hansen fittings only
- 75,000 BTU natural gas/ 118,000 BTU propane per outlet



BBQ-4W

RMI Part No.	Description
BBQ-4G	Surface mount, Grey single outlet box with flip open door
BBQ-4W	Surface mount, White single outlet box with flip open door
BBQ-4HOSE	3/8" MNPT X 3/8" Flare Swivel 10' Hose
HAN100-506	Hansen 3/8 " Male Plug



MEC GAS OUTLET BOX

Utilizes standard LP gas outdoor appliance regulator and connector. Both models provide full capacity at 10 psi or higher inlet pressure for all outdoor appliances without modification. Allows for operation from an existing gas system simply thread the Type 1 QCC or POL connector onto the MEC Gas Box and turn on the shut off valve.

Features:

- Universal 1-5/16" M ACME/ FPOL outlet connection
- Universal 1/2" FNPT inlet connection
- Primary shutoff valve for each outlet connection
- Secondary safety shutoff poppet at each outlet for zero discharge at disconnect
- For use with 10-250 PSI inlet pressure
- Universal Mounting Hardware
- Hinged Cover with Latching Mechanism
- Weather resistant Nylon case



ME952GRY

RMI Part No.	Description	Color
ME951BLK	Single, 1-5/16" Male ACME/FPOL with 1/2" FNPT inlet	Black
ME951GRY	Single, 1-5/16" Male ACME/FPOL with 1/2" FNPT inlet	Grey
ME951IVY	Single, 1-5/16" Male ACME/FPOL with 1/2" FNPT inlet	Ivory
ME952BLK	Dual, 1-5/16" Male ACME/FPOL with 1/2" FNPT inlet	Black
ME952GRY	Dual, 1-5/16" Male ACME/FPOL with 1/2" FNPT inlet	Grey
ME952IVY	Dual, 1-5/16" Male ACME/FPOL with 1/2" FNPT inlet	Ivory

MEC GAS OUTLET BOX ACCESSORIES

RMI Part No.	Description	Length
ME428-60	Extension Hose assembly M.QCC/FPOL x F.QCC	60"
ME428-120	Extension Hose assembly M.QCC/FPOL x F.QCC	120"




RAY MURRAY, INC.

Visit www.raymurray.com for a full selection of available **Hearth & Outdoor Living** Products



Thermoid Bobtail Hose



BOBTAIL DELIVERY HOSE WITH FACTORY CRIMPED PRO-SUR BRASS ENDS

RMI Part No.	I.D.	O.D.	Length	Shipping Weight
TLPGH-1-100CT*	1"	1.5"	100'	63 Lbs
TLPGH-1-125CT	1"	1.5"	125'	77 Lbs
TLPGH-1-150CT	1"	1.5"	150'	92 Lbs
TLPGH-1-175CT	1"	1.5"	175'	102 Lbs

* available as a special order

POLAR FLEX LOW TEMP (-55F) DELIVERY HOSE WITH FACTORY PRESSURE TESTED ENDS

- UL-21 approved
- 350 Max WP 1750 min Burst
- Smooth cover, Thermalon
- Oil Resistant and Flame retardant
- -55 to 180 Deg. F
- Four-spiral reinforcement
- Tested to D.O.T. Requirements



THERMOID POLARFLEX

POLAR FLEX HOSE

RMI Part No.	I.D.	O.D.	Length	Shipping Weight
TLPGH-1-125CTPF	1"	1.5"	125'	77
TLPGH-1-150CTPF	1"	1.5"	150'	92

FAIRVIEW BOBTAIL DELIVERY HOSE

RMI Part No.	I.D.	O.D.	Length	Min Temp	Max Temp
I16C1500MP16MPI6-P1	1"	1.5"	125'	-60°F	212°F
I16C1800MP16MPI6-P1	1"	1.5"	150'	-60°F	212°F

Parker Bobtail Hose



BOBTAIL DELIVERY HOSE WITH FACTORY CRIMPED PRESSURE TESTED BRASS ENDS

- UL-21 approved
- 350 Max WP 1750 min Burst
- Smooth cover, Thermalon
- Oil Resistant and Flame retardant
- -40 to 180 Deg. F
- Four-spiral reinforcement
- Tested to D.O.T. Requirements



PARKER BOBTAIL HOSE

RMI Part No.	I.D.	O.D.	Length	Shipping Weight
LPGH-1-125CT	1"	1.5"	125'	80
LPGH-1-150CT	1"	1.5"	150'	95
LPGH-3/4-125CT	3/4"	1.25"	125'	70
LPGH-3/4-150CT	3/4"	1.25"	150'	83

PARKER X-TREME LOW-TEMP BOBTAIL HOSE

- -65 to 180 degrees F
- Neoprene Cover



PARKER X-TREME HOSE

RMI Part No.	I.D.	O.D.	Length	Shipping Weight
EXLPGH-1-125CT	1"	1.5"	125'	80
EXLPGH-1-150CT	1"	1.5"	150'	95

Smart-Hose Passive Shutdown System DOT & Facility Hose

SMART-HOSE PASSIVE SHUTDOWN SYSTEM -DOT & FACILITY HOSE

The Smart-Hose meets the requirements of the DOT standards and additions to NFPA for a passive shut down system. The patented system features an internal cable connected to normally unseated "valve plungers or wedges" located on each end of the cable. In the event of coupling -to-hose separation, stretching to the point of an unsafe condition or hose severance, the valve "wedges" are released and instantly seat, stopping the flow in both directions.

- Complies with HM-225
- Provides advanced safety
- Prevents product loss
- Prevents property damage
- No Added field maintenance beyond normal hose care and inspections
- Factory Recoupling program available

LIFELINE BREAK-AWAY FEATURES

- Available for 2" DOT or Facility Hose
- Engineered break away point
- Factory rebuildable

1 INCH SMART-HOSE ASSEMBLIES

RMI Part No.	Description
CG-LPG-16-R10	1" x 10' Smart-Hose
CG-LPG-16-R15	1" x 18.5' Smart-Hose
CG-LPG-16-R20	1" x 20' Smart-Hose
CG-LPG-16-R25	1" x 25' Smart-Hose
CG-LPG-16-R30	1" x 30' Smart-Hose

2 INCH SMART-HOSE ASSEMBLIES WITH BREAKAWAY

RMI Part No.	Description
CG-LPG-32-BR15-3	2" x 15' Smart hose with breakaway
CG-LPG-32-BR20-3	2" x 18.5' Smart hose with breakaway

2 INCH FACILITY HOSE WITH BREAKAWAY

RMI Part No.	Description
CG-LPG-32-BR12-3F	2" x 12' Smart-Hose with breakaway
CG-LPG-32-BR15-3F	2" x 15' Smart-Hose with breakaway



NORMAL FLOW - VALVE OPEN



HOSE BREAK - VALVE CLOSED

1.25 INCH SMART-HOSE ASSEMBLIES

RMI Part No.	Description
CG-LPG-20-R10	1.25" x 10' Smart-Hose
CG-LPG-20-R15	1.25" x 18.5' Smart-Hose
CG-LPG-20-R20	1.25" x 20' Smart-Hose
CG-LPG-20-R25	1.25" x 25' Smart-Hose
CG-LPG-20-R30	1.25" x 30' Smart-Hose

2 INCH SMART-HOSE ASSEMBLIES

RMI Part No.	Description
CG-LPG-32-R10-3	2" x 10' Lifeline 3
CG-LPG-32-R15-3	2" x 15' Lifeline 3
CG-LPG-32-R20-3	2" x 18.5' Lifeline 3
CG-LPG-32-R25-3	2" x 25' Lifeline 3
CG-LPG-32-R30-3	2" x 30' Lifeline 3

2 INCH SMART-HOSE FACILITY HOSE

RMI Part No.	Description
CG-LPG-32-R10-3F	2" x 10' Facility Hose
CG-LPG-32-R15-3F	2" x 15' Facility Hose



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Propane Hose, Fittings, and Wraps



TECH TIPS:

- Hose manufacturers do not recommend the use of screw-in type reusable couplings
- The cover of all LP-gas Hose must be perforated to prevent gas buildup among the various layers of the hose
- LP gas hose can be used for natural gas service in outdoor applications only, and at a maximum pressure of 50 psi.

DAYCO/PARKER BRAND HOSE

- UL-21 approved
- 350 Max WP 1750 min Burst
- Smooth cover, Thermalon
- Abrasive Resistant
- -40 to 180 Deg. F

RMI Part No.	I.D.	O.D.	Weight (lbs) per 100'	Reel Length
LPGH-1/4	1/4"	0.610"	14	750'
LPGH-3/8	3/8"	3/4"	22	600'
LPGH-1/2	1/2"	0.937"	30	500'
LPGH-3/4	3/4"	1-1/4"	53	350'
LPGH-1	1"	1-1/2"	66	300'

Note: Bulk Hose reel lengths may not be continuous and may be sectioned in up to 3 varying lengths.

ACCUFLEX THERMOPLASTIC HOSE

RMI Part No.	I.D.	O.D.	Weight (lbs) per 100'	Reel Length
LPGH-5/16	5/16"	.580"	16	600'

DAYCO BULK TRANSFER HOSE

- UL-21 approved
- 350 Max WP 1750 min Burst
- Wrapped Impression Neoprene cover
- 3 braid reinforcement

RMI Part No.	I.D.	O.D.	Weight (lbs) per 100'
LPGH-1-1/4	1.25"	1.875"	95
LPGH-1-1/2	1.50"	1.78125"	125
LPGH-2	2"	2.75"	170

PROWRAP HOSE PROTECTION

- Easy to install
- Tight grip prevents sliding
- UV Resistant
- -70 to 180 Deg. F



RMI Part No.	Description
PWLD-16	66ft length 1/4" -3/4" hose
PWLD-20	66ft Length 1"-1-1/4" hose
PWLD-32	12.5 Ft. length 1-1/2" - 2" Hose

RAY MURRAY INC. CRIMPED HOSE ASSEMBLY

RMI Factory Trained personnel will make custom crimped hose assemblies to your requirements.

If you require a hose assembly to be tested to DOT requirements they can be made up to the sizes below.

(Note: Custom wire braid flex connectors can be made as well)



RMI Part No.	Hose I.D.	Thread Size	Minimum Length	Crimp Fitting Part No.
1/4 HOSEKIT	1/4"	1/4"	6"	4NP-4SB
3/8 HOSEKIT	3/8"	3/8"	6"	6NP-6SB
1/2 HOSEKIT	1/2"	1/2"	6-3/4"	8NP-8SB
3/4 HOSEKIT	3/4"	3/4"	6-3/4"	12NP-12SC
1 HOSEKIT	1"	1"	7"	16MP-16LAR
1 1/4 HOSEKIT	1-1/4"	1-1/4"	9"	20NP-20SBA
1 1/2 HOSEKIT	1-1/2"	1-1/2"	9-1/2"	24NP-24BC
2 HOSEKIT	2"	2"	11-1/4"	32NP-32LA

RAY MURRAY TESTED CRIMPED HOSE ASSEMBLIES

RMI Part No.	Hose I.D.	Thread Size	Minimum Length	Max Length
3/4 HOSEKIT-TESTED	3/4"	3/4"	6-3/4"	50ft
1 HOSEKIT-TESTED	1"	1"	7"	50ft
1 1/4 HOSEKIT-TESTED	1-1/4"	1-1/4"	9"	40ft
1 1/2 HOSEKIT-TESTED	1-1/2"	1-1/2"	9-1/2"	30ft
2 HOSEKIT-TESTED	2"	2"	11-1/4"	30ft



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Motor Fuel Hose & Couplings

PIPE TO HOSE SWIVEL ADAPTORS

RMI Part No.		NPT pipe	NPS swivel
Male Adaptor	Female Adaptor		
107-8-8	207-8-8	1/2"	1/2"
107-12-12	207-12-12	3/4"	3/4"
107-16-16	207-16-16	1"	1"
107-20-20	207-20-20	1-1/4"	1-1/4"
107-24-24	207-24-24	1-1/2"	1-1/2"
107-32-32	207-32-32	2"	2"



FEMALE ADAPTER



MALE ADAPTER

FEMALE ANGLE FF FOR SS BRAID HOSE

RMI Part No.	Hose I.D.	Female Flare size	Angle
27720-6	5/16"	3/8"	45 degree
27920-6	5/16"	3/8"	90 Degree



27720-6



27920-6

LPG STAINLESS STEEL BRAID HOSE WITH CLOTH

Seamless oil-resistant synthetic rubber high temperature hose. One Stainless steel wire braid and two polyester braids. Cloth cover is impregnated with fire and mildew-resistant compounds. Typically seen on forklifts and industrial trucks.



PARKER STAINLESS STEEL BRAID HOSE

RMI Part No.	I.D.	Hose O.D.	Working pressure	Burst Pressure
SS25UL-4	3/16"	0.52	350	1750
SS25UL-5	1/4"	0.58	350	1750
SS25UL-6	5/16"	0.67	350	1750
SS25UL-8	13/32"	0.77	350	1750
SS25UL-10	1/2"	0.92	350	1750
SS25UL-12	5/8"	1.08	350	1750

TWO-BOLT CLAMP TYPE HOSE COUPLING

RMI Part No.		Hose I.D.	Thread size
Marshall Excelsior	Fisher		
ME3162-08	M3162-08	1/2"	1/2"
ME3162-12	M3162-12	3/4"	3/4"
ME3162-16	M3162-16	1"	1"
ME3162-20	M3162-20	1-1/4"	1-1/4"
ME3162-24	M3162-24	1-1/2"	1-1/2"
ME3162-32	M3162-32	2"	2"
-	M3162-48	3"	3"



ME3162 SERIES

BRASS BULKHEAD FITTINGS

RMI Part No.	Description
BH-38	3/8" Flare straight through
BHT-38	3/8" Flare x 1/4" NPT x 1/4" NPT Tee
MET444	1/4" Flare x 1/4" NPT x 1/4" NPT Tee



MET444

HOSE ENDS FOR SS HOSE

FEMALE 45D FLARE

RMI Part No.	Hose I.D.	Female 45 Flare
20820-4	3/16"	1/4"
20820-5	1/4"	1/4"
20820-6	5/16"	1/4"
20820-8	13/32"	1/2"
20820-8-10	1/2"	1/2"
20820-10	1/2"	5/8"
20820-12-12	5/8"	3/4"



20820

MALE NPT

RMI Part No.	Hose I.D.	Male NPT
20120-4-4	3/16"	1/4"
20120-4-5	1/4"	1/4"
20120-4-6	5/16"	1/4"
20120-8-8	13/32"	1/2"
20120-8-10	1/2"	1/2"
20120-12-10	1/2"	3/4"
20120-12-12	5/8"	3/4"

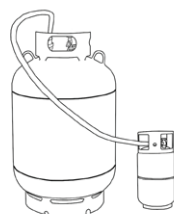


20120

DRIFT HOSE

A drift hose can be used to transfer liquid propane from a forklift cylinder to an empty container by pressure differential. Fittings can be removed from the drift hose to convert from forklift adapter to POL.

RMI Part No.	Description
DRIFTHOSE	1/2" x 10' Drift Hose Kit



ACME Filler Couplings

ACME BRASS FILLER COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Type of ACME Nut	Description
-	ME790	Knurled Brass Nut	1-1/4" F ACME x 1/4" MNPT
M100	ME100		1-1/4" F ACME x 3/8" MNPT
M101	ME101		1-1/4" F ACME x 1/2" MNPT
M110	ME110		1-3/4" F ACME x 1/2" MNPT
M111	ME111		1-3/4" F ACME x 3/4" MNPT
M112	ME112		1-3/4" F ACME x 1" MNPT
-	ME110C	EZ Grip Brass Wing Nut	1-3/4" F ACME x 1/2" MNPT
-	ME111C		1-3/4" F ACME x 3/4" MNPT
-	ME112C		1-3/4" F ACME x 1" MNPT
-	ME120		2-1/4" F ACME x 1-1/4" MNPT
M120	ME120S		2-1/4" F ACME x 1-1/4" MNPT Steel Nipple
M130	ME130		3-1/4" F ACME x 2" MNPT Steel Nipple
-	ME130A		3-1/4" F ACME x 2" MNPT w/ Screen
-	ME130-WR		3-1/4" F ACME x 2" MNPT w/ Ring
M664-24	-		4-1/4" F ACME x 3" MNPT



ME100



ME130

ACME STEEL FILLER COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Type of ACME Nut	Description
-	ME635-4	Heavy Duty Grip Steel	1-3/4" F ACME X 1/2" MNPT
M653-6	ME635-6		1-3/4" F ACME X 3/4" MNPT
M653-8	ME635-8		1-3/4" F ACME x 1" MNPT
-	ME635-10		1-3/4" F ACME x 1-1/4" MNPT
M631-6	ME111S	Knurled Steel Nut	1-3/4" F ACME x 3/4" MNPT
M631-8	ME112S		1-3/4" F ACME x 1" MNPT
-	ME111SC	EZ Grip Steel Wing Nut	1-3/4" F ACME x 3/4" MNPT
-	ME112SC		1-3/4" F ACME x 1" MNPT
-	ME113SC		1-3/4" F ACME x 3/4" FNPT
M121	ME121S		2-1/4" F ACME x 1-1/4" MNPT
M133	ME130S		3-1/4" F ACME x 2" MNPT
M634-24	-		



ME635-6



ME111S



ME130S



ACME Filler Couplings

ACME BRASS VAPOR COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Description
M140	ME140	1-1/4" F ACME X 3/8" MNPT Vapor Return
M394	-	1-1/4" F ACME X 3/8" MNPT - 6-1/4" Long
M141	ME141	1-1/4" F ACME x 1/2" MNPT Vapor Return
M150	ME150	1-3/4" F ACME x 3/4" MNPT Vapor Return
M151	ME151	1-3/4" F ACME x 1" MNPT Vapor Return
M160	-	2-1/4" F ACME x 1-1/4" MNPT Vapor Return
-	ME160	2-1/4" F ACME x 1-1/4" MNPT Vapor Return - Brass w/ Steel Nipple



ME141



ME160S

ACME STEEL VAPOR COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Description
M640-4	ME141S	1-1/4" F ACME x 1/2" MNPT Vapor Return
-	ME150S	1-3/4" F ACME x 3/4" MNPT Vapor Return
-	ME646-4	1-3/4" F ACME x 1/2" MNPT Vapor Return- 7" O.A.L.
M646-6	ME646-6	1-3/4" F ACME x 1" MNPT Vapor Return- 7" O.A.L.
M646-8	ME646-8	1-3/4" F ACME x 1" MNPT Vapor Return- 7" O.A.L.
-	ME646-10	1-3/4" F ACME x 1-1/4" MNPT Vapor Return- 7" O.A.L.
M641-8	ME151S	1-3/4" F ACME x 1" MNPT Vapor Return- 3-1/4" O.A.L.
-	ME160S	2-1/4" F ACME x 1-1/4" MNPT Vapor Return- 3-3/8" O.A.L.



ME646-10

SWIVEL ACME HOSE COUPLING

RMI Part No.		Material	Hose I.D.	F. ACME Size
Marshall Excelsior	Fisher			
ME3162-32S	M3162-32S	Steel	2"	3-1/4"
ME3162-32B	M3162-32B	Brass	2"	3-1/4"



ME3162 SERIES

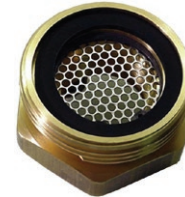
ACME Adapters

ACME BRASS MALE ACME X MPT ADAPTOR

Fisher Part No.	Marshall Excelsior Part No.	Description
M498-4/2*	ME498-4/2*	1-1/4" M ACME x 1/2" MNPT x 1/4 FNPT ADAPTOR
M498-6/3*	ME498-6/3*	1-1/4" M ACME x 3/4" MNPT x 3/8 FNPT ADAPTOR
M141	ME215	1-3/4" M ACME x 3/4" MNPT ADAPTOR
M150	ME216	1-3/4" M ACME x 1" MNPT ADAPTOR
M151	ME217	1-3/4" M ACME x 1-1/4" MNPT ADAPTOR
M160	ME217A	1-3/4" M ACME x 1-1/4" MNPT ADAPTOR WITH SCREEN
-	ME233	2-1/4" M ACME x 1-1/4" MNPT ADAPTOR
-	ME502-12/8*	2-1/4" M ACME x 1-1/2" MNPT x 1" FNPT ADAPTOR
-	ME502-16/10*	2-1/4" M ACME x 2" MNPT x 1-1/4 FNPT ADAPTOR
-	ME502-16/12*	2-1/4" M ACME x 2" MNPT x 1-1/2 FNPT ADAPTOR
-	ME503-16	3-1/4" M ACME x 2" MNPT ADAPTOR
-	ME503A-16	3-1/4" M ACME x 2" MNPT ADAPTOR with SCREEN
-	ME503-20	3-1/4" M ACME x 2-1/2" MNPT ADAPTOR
-	ME262	3-1/4" M ACME x 3" MNPT ADAPTOR
-	ME262A	3-1/4" M ACME x 3" MNPT ADAPTOR with SCREEN



ME503-16



ME503A-16

* NPT pipe threads are dual threaded male and female

ACME BRASS ADAPTOR WITH VENT VALVES

ME503JB-16



RMI Part No.	Description
ME252JB-16	3-1/4" M Acme X 2" FNPT with Brass Vent Valve
ME252AJB-16	3-1/4" M Acme X 2" FNPT with Screen and Brass Vent Valve
ME503JB-16	3-1/4" M Acme X 2" MNPT with Brass Vent Valve
ME503AJB-16	3-1/4" M Acme X 2" MNPT with Screen and Brass Vent Valve

ACME ADAPTOR WITH SS VENT VALVES

ME503JS



RMI Part No.	Description
ME252JS-16	3-1/4" M ACME X 2" FNPT Stainless Steel
ME252SJS-16	3-1/4" M ACME X 2" FNPT Stainless Steel w Vent Valve
ME252AJS-16	3-1/4" M ACME X 2" FNPT Stainless Steel w Vent Valve & Screen
ME503SJS-16	3-1/4" M ACME X 2" MNPT Stainless Steel w Vent
ME503JS-16	3-1/4" M ACME X 2" MNPT Stainless Steel
ME503AJS-16	3-1/4" M ACME X 2" MNPT Stainless Steel with Screen & Vent Valve

ACME BRASS MALE X FNPT ADAPTOR

Fisher Part No.	Marshall Excelsior part No.	Description
M192	ME192	1-1/4" M ACME x 1/2" FNPT
M193	ME193	1-1/4" M ACME x 3/4" FNPT
-	ME210	1-3/4" M ACME x 1/4" FNPT
M211	ME211	1-3/4" M ACME x 3/8" FNPT
-	ME212	1-3/4" M ACME x 1/2" FNPT
-	ME213	1-3/4" M ACME x 3/4" FNPT
-	ME214	1-3/4" M ACME x 1" FNPT
-	ME250	3-1/4" M ACME x 1-1/4" FNPT
-	ME250A	3-1/4" M ACME x 1-1/4" FNPT with Screen
-	ME251	3-1/4" M ACME x 1-1/2" FNPT
-	ME252-16	3-1/4" M ACME x 2" FNPT
-	ME252A-16	3-1/4" M ACME x 2" FNPT w Screen
M498-4/2*	ME498-4/2*	1-1/4" M ACME x 1/4" FNPT x 1/2" MNPT
M498-6/3*	ME498-6/3*	1-1/4" M ACME x 3/8" FNPT x 3/4" MNPT
-	ME502-12/8*	2-1/4" M ACME x 1" FNPT x 1-1/2" MNPT
-	ME502-16/10*	2-1/4" M ACME x 1-1/4" FNPT x 2" MNPT
-	ME502-16/12*	2-1/4" M ACME x 1-1/2" FNPT x 2" MNPT
-	ME508-24	3-1/4" M ACME x 3" FNPT
-	ME508A-24	3-1/4" M ACME x 3" FNPT with Screen

* NPT pipe threads are dual threaded, Female & Male.



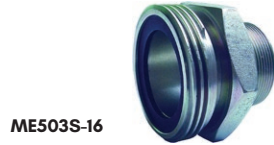
ME252-16

ACME Adapters

ACME STEEL MALE X MNPT ADAPTOR

Marshall Excelsior Part No.	Description
ME520S-8	1-1/4" M ACME x 1" MNPT
ME521S-4	1-3/4" M ACME x 1/2" MNPT
ME215S	1-3/4" M ACME x 3/4" MNPT
ME216S	1-3/4" M ACME x 1" MNPT
ME217S	1-3/4" M ACME x 1-1/4" MNPT
ME233S	2-1/4" M ACME x 1-1/4" MNPT
ME502S-16/10 *	2-1/4" M ACME x 2" MNPT x 1-1/4" FNPT
ME503S-16	3-1/4" M ACME x 2" MNPT
ME262S	3-1/4" M ACME x 3" MNPT

* NPT Pipe threads are dual threaded male & female



ME503S-16

ACME STEEL MALE X FNPT ADAPTOR

Marshall Excelsior Part No.	Description
ME213S	1-3/4" M ACME x 3/4" FNPT
ME214S	1-3/4" M ACME x 1" FNPT
ME502S-16/10*	2-1/4" M ACME x 1-1/4" FNPT x 2" MNPT
ME252S-16	3-1/4" M ACME x 2" FNPT
ME508S-24	3-1/4" M ACME x 3" FNPT

* NPT Pipe threads are dual threaded male & female



ME213S

ACME BRASS MALE ACME ADAPTOR

Marshall Excelsior Part No.	Description
ME270	1-1/4" M ACME x 1-1/4" M ACME
ME273	1-3/4" M ACME x 1-3/4" M ACME
ME275	2-1/4" M ACME x 2-1/4" M ACME
ME277	3-1/4" M ACME x 3-1/4" M ACME



ME277

ACME STEEL MALE ACME ADAPTOR

Marshall Excelsior Part No.	Description
ME273S	1-3/4" M ACME x 1-3/4" M ACME
ME275S	2-1/4" M ACME x 2-1/4" M ACME
ME277S	3-1/4" M ACME x 3-1/4" M ACME



ME277S

ACME BRASS ADAPTOR

Fisher Part No.	Marshall Excelsior Part No.	Description
M611	ME611	2-1/4" F ACME x 1-3/4" M ACME
M612	ME612	3-1/4" F ACME x 1-3/4" M ACME
M442	ME442	3-1/4" F ACME x 1-1/4" FNPT
-	ME614	3-1/4" F ACME x 2-1/4" M ACME
M613	ME623	4-1/4" F ACME x 3-1/4" M ACME



ME612

ACME STEEL ADAPTOR

Fisher Part No.	Marshall Excelsior Part No.	Description
-	ME611S	2-1/4" F ACME x 1-3/4" M ACME
M622	ME612S	3-1/4" F ACME x 1-3/4" M ACME
-	ME442S	3-1/4" F ACME x 1-1/4" FNPT
-	ME614S	3-1/4" F ACME x 2-1/4" M ACME



ACME Caps

ACME METAL CAPS

Fisher Part No.	Marshall Excelsior Part No.	Type of ACME Nut	Description
-	ME220FP	Knurled Brass	1-1/4" F ACME Cap
M229	ME229	Knurled Brass	1-3/4" F ACME Cap
M229-1	ME229-1	Knurled Brass	1-3/4" F ACME Cap with Ring and Chain
M219	ME229S	Knurled Steel	1-3/4" F ACME Cap
M219-1	ME229S-1	Knurled Steel	1-3/4" F ACME Cap with Ring and Chain
-	ME229F	Wing Nut Brass	1-3/4" F ACME Cap
-	ME229F-1C	Knurled Brass	1-3/4" F ACME Cap with Cable
-	ME229FS	Wing Nut Steel	1-3/4" F ACME Cap
-	ME229FS-1	Wing Nut Steel	1-3/4" F ACME Cap with Ring and Chain
-	ME229FS-1C	Knurled Steel	1-3/4" F ACME Cap with Cable
M431	ME431	Wing Nut Brass	2-1/4" F ACME w/ Knob Plug
-	ME431F-1C	Wing Nut Brass	2-1/4" F ACME w/ Knob Plug with Ring and Cable
M432	ME431FS	Wing Nut Steel	2-1/4" F ACME w/ Knob Plug
-	ME431FS-1	Wing Nut Steel	2-1/4" F ACME w/ Knob Plug with Ring and Chain
M441	ME441F	Wing Nut Brass	3-1/4" F ACME Cap w/ Knob Plug
-	ME441F-1C	Wing Nut Brass	3-1/4" F ACME Cap with Cable
M443	ME441FS	Wing Nut Steel	3-1/4" F ACME Cap w/ Knob Plug
-	ME441FS-1	Wing Nut Steel	3-1/4" F ACME Cap w/ Knob Plug Ring and Chain
M605-34	-	Wing Nut Brass	4-1/4" F ACME Cap with Knob and Plug
M625-34	-	Wing Nut Steel	4-1/4" F ACME Cap with Knob and Plug



ME229



ME431FS-1

ACME PLASTIC CAPS

Fisher Part No.	Marshall Excelsior Part No.	Description
-	ME106	3-1/4" F ACME Dust Cap Yellow Plastic
-	ME106-1	3-1/4" F ACME Dust Cap Yellow Plastic w/ Ring and chain
M108	ME108	1-1/4" F ACME Cap Yellow Plastic
-	ME108-1	1-1/4" F ACME Cap Yellow Plastic w/ Ring and chain
M109	ME109	1-3/4" F ACME Cap Yellow Plastic
-	ME109-1	1-3/4" F ACME Cap Yellow Plastic w/ Ring and chain



ME108-1

ACME CAPS WITH FLANGE

RMI Part No.				F. ACME	Flange Diameter
Brass		Steel			
Cap w/ Flange	Cap w/ Flange & Cable	Cap w/ Flange	Cap w/ Flange & Cable		
ME229F5	ME229F5-1C	ME229FS5	ME229FS5-1C	1-3/4"	5"
ME441F8	ME441F8-1C	ME441FS8	ME441FS8-1C	3-1/4"	8"



ME229F5-1C



ACME Tools, Wear Gauges, and Accessories

HEAVY DUTY SPANNER WRENCH

Aluminum ACME Spanner wrench for 1-3/4", 2-1/4", 3-1/4", and 4-1/4" Female ACME Caps.

Part No.	Description
MEP120B	17-1/2" long Aluminum ACME Wench



MEP120B

CHAINS AND CABLES FOR CAPS AND PLUGS

Fits	Fisher Part No.	Marshall Excelsior Part No.	Type
1-1/4" ACME Cap & Plug	P147*	MEP147*	Chain
1-3/4" ACME Plug	P147*	MEP147*	Chain
1-3/4" ACME Cap and Plug	P148**	MEP148**	Chain
2-1/4" ACME Plug	P148**	MEP148**	Chain
2-1/4" ACME Cap	P167	MEP168	Cable
3-1/4" ACME Plug	P183	MEP183	Chain
2-1/4" ACME Cap	P167	MEP168	Cable
4-1/4" ACME Plug	P167	MEP168	Cable

*P147 & MEP147 ring fits over 3/4" MNPT

**P148 & MEP148 ring fits over 1-1/4" MNPT



MEP147



MEP167



MEP168

ACME DUST PLUGS

RMI Part No.									M. ACME
Aluminum			Brass			Plastic			
Plug Only	Chain Only	Plug w/ Chain	Plug Only	Chain Only	Plug w/ Chain	Plug Only	Chain Only	Plug w/ Chain	
-	-	-	ME178B	MEP148	ME178B-1	ME178	MEP147	ME178-1	1-1/4"
ME239	MEP148	ME239-1	ME179	MEP148	ME179B-1	ME179	MEP148	ME179-1	1-3/4"
-	-	-	ME180B	MEP168	ME180B-1	ME180	MEP148	ME180-1	2-1/4"
-	-	-	ME181B	MEP168	ME181B-1	ME181	ME183	ME181-1	3-1/4"



ME179-1



ME181B

ACME WEAR GAUGES "GO-NO-GO GAUGE"

The importance of Secure ACME connections during the transfer of gas cannot be over emphasized.

Whereas transfer hoses are covered by statutory inspection, no such provision exists for the connectors, yet they are subjected to constant use and sometimes abuse. As a result, the point when they should be changed becomes subjective.

ACME couplings should be regularly checked for

- WEAR
- CRACKS
- CORROSION
- SPLITS
- OVALITY

To measure wear, the gauges have a suitable wear allowance built in. If the gauge can be threaded more than one turn on (or into), the coupling has reached or exceeded the acceptable wear limits and should be changed.

Available as boxed sets or individual items

Full instructions included.

RH sets include 1-3/4", 2-1/4" and 3-1/4" plugs and rings for checking Right hand threads



906467KIT

RMI Part No.	Description
253566	3-1/4" ACME Ring Gauge for Male ACME Adapter
253570	2-1/4" ACME Ring Gauge for Male ACME Adapter
253568	1-3/4" ACME Ring Gauge for Male ACME Adapter
253578	3-1/4" ACME Plug Gauge for Female ACME Coupling
253581	2-1/4" ACME Plug Gauge for Female ACME Coupling
253569	1-3/4" ACME Plug Gauge for Female ACME Coupling
906467KIT	Complete set with carrying case

*Order ring gauges to test male ACMEs and plug gauges to test female ACMEs

Hose End & Toggle Valves

ME791 TOGGLE VALVE

Marshall Excelsior Quick acting hose end valve features standard or Locking device on the handle, Positive shut-off, and maximum flow.

RMI Part No.		Inlet	Outlet	Vent Valve
Without Lock	With Lock			
ME791C	ME792C	1/2"	1/4"	No
ME791CJ	ME792CJ	1/2"	1/4"	Yes
ME791D	ME792D	1/2"	1/2"	No
ME791DJ	ME792DJ	1/2"	1/2"	Yes



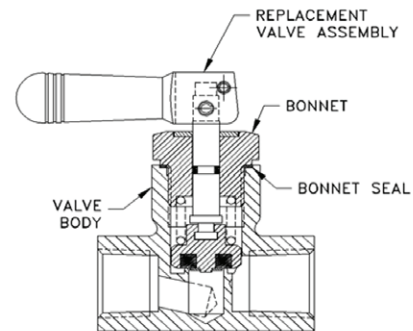
ME791 SERIES

TECH TIP: NFPA 58 requires a listed quick-acting shutoff valve to be installed at the discharge end of a transfer hose on a vehicle fuel dispensing and dispensing systems.

MARSHALL EXCELSIOR DISPENSING VALVES

- Quick Opening and Closing action with locking mechanism
- Stainless Bleed valve included
- All Steel and Stainless components

TECH TIP: Add ME850 series Swivel to prevent hose kinking - See page 219.



RMI Part No.	Size	Ports	Bleed Valve Installed
Angle			
ME810-4	1/2"	1	Yes
ME810-6	3/4"	1	Yes
ME810-8	1"	1	Yes
Globe			
ME820-4	1/2"	1	Yes
ME820-6	3/4"	1	Yes
ME820-8	1"	1	Yes
Economy Globe			
ME821-4	1/2"	2	No
ME821-6	3/4"	2	No
ME821B-4	1/2"	2	Yes
ME821B-6	3/4"	2	Yes



ME820-6

REPAIR KITS

RMI Part No.	Description
ME800-HRK	Handle Repair Kit, ME800, ME810, & ME820 Series
ME791K	Non-Locking Series Bonnet Repair Kit, ME791 Series
ME792K	Locking Series Bonnet Repair Kit, ME792 Series



Hose End & Toggle Valves

MEC EXCELA-FLANGE HOSE-END VALVE

- Stainless Steel construction & FKM trim for maximum service life
- 4 bolt Excela-Flange™ inlet connection for quick service and replacement
- Integrated stainless swivel inlet design
- Vents less than .50cc for minimal loss of product at disconnect
- Split bonnet - sealed packing chamber design to protects seals
- Dedicated internal operation spring for smooth performance
- Self-locking toggle handle prevents accidental valve discharge
- Toggle handle and stem assembly rotate 360°
- High flow design for increased operational efficiency
- Ergonomic nozzle grip with stainless steel 1-3/4" Female Acme insert



ME 1075 SERIES

HOSE END VALVE CONFIGURATIONS

Part No.	Description	Inlet (FNPT)	Outlet (F. ACME)
ME1075	Valve Only - No inlet flange or swivel	-	1-3/4"
ME1075-6	3/4" FNPT Inlet Flange - Factory Installed	3/4"	1-3/4"
ME1075-8	1" FNPT Inlet Flange - Factory Installed	1"	1-3/4"
ME1075WS-6	3/4" FNPT Inlet Swivel - Factory Installed	3/4"	1-3/4"
ME1075WS-8	1" FNPT Inlet Swivel - Factory Installed	1"	1-3/4"

ACCESSORIES

Part No.	Description
ME1075V-6FK*	3/4" FNPT Inlet Flange Kit
ME1075V-8FK*	1" FNPT Inlet Flange Kit
ME857V-6*	3/4" FNPT Inlet Swivel Kit
ME857V-8*	1" FNPT Inlet Swivel Kit
MEP801	Hose End Valve Holster

*Kits include (4) SS cap screws & FKM flange seal o-ring

REGO BOBTAIL HOSE END VALVE

- Operator friendly contoured fluted handle
- Self-Locking handle
- Vents less than 1/500th of a gallon when connected

TECH TIP: Add ME850 Series swivel to prevent hose kinking

RMI Part No.	Description
A7797	1" x 1-3/4" Min Bleed Bobtail hose end valve
A7797-50	Repair Kit



A7797

MARSHALL EXCELSIOR BOBTAIL HOSE END VALVE

- Pressure tested to 600 PSIG
- User friendly handles
- Quick Opening and Closing action with locking mechanism
- Extremely Low gas loss
- All Steel and Stainless construction



ME800

RMI Part No.	Size	Description
ME800	1" x 1-3/4"	Bobtail hose end valve
ME800WS	1" x 1-3/4"	with swivel installed
ME800C	1" x 1-3/4"	With composite handle
ME800CWS	1" x 1-3/4"	With composite handle and swivel
ME800G	1" x 1-3/4"	Fluted Handle (REGO style)
ME800GWS	1" x 1-3/4"	Fluted Handle and swivel (REGO style)
ME800EXT	1" x 1-3/4"	Extended version
ME800EXTWS	1" x 1-3/4"	Extended version with swivel
ME800-SARK	1" x 1-3/4"	Stem Assembly repair Kit
ME800-LSRK	1" x 1-3/4"	Lower seal repair Kit

Filler Couplings and Adapters

FILLER HOSE ADAPTORS

Hose End Check Adaptors which may be left on the tank filler valve in case of valve failure. All Models have an integral breakaway feature in case of a truck roll away that will leave the check intact on the tank.

RMI Part No.	Style	Swivel	Bleed Valve Installed
ME570	COMPACT	NO	NO
ME571	TALL	NO	NO
ME572	COMPACT	YES	NO
ME574	TALL	YES	YES
ME571H*	TALL	NO	NO

* ME571H is a high flow adaptor up to 86 GPM



ME571H



ME574

EXTENDED FILLER HOSE ADAPTOR

- 7" Extension
- Eliminates unsafe stacking of Multiple check adaptors
- Integral break away feature

RMI Part No.	Description
ME572EXT	Standard Handle
ME572EXTHD	Heavy Duty Handle
ME574EXT	Standard Handle with Bleeder
ME574EXTHD	Heavy Duty Handle with Bleeder



ME572EXTHD



ME574EXT

FLO-MAX FULL FLOW FILLER HOSE ADAPTOR

- Up to 30% higher flow rates through full port body
- Includes key for shutoff valve

RMI Part No.	Description
ME578	1-3/4" F ACME Swivel x 1-3/4" M ACME
ME578-02	Replacement KEY and ring



ME578

FILLER HOSE ADAPTORS

Intended for the outlet of bobtail truck filling hose. The M570 & ME570 enables the filling hose to be removed if the filler valve fails to close.

RMI Part No.	Description
M570	1-3/4" ACME Filler Hose Adaptor for M570
T13098T0012	Replacement outer washer for M570
T13103T0012	Replacement inner washer
ME570	1-3/4" ACME Filler Hose Adaptor
ME571-06	Replacement outer washer for ME570
ME571-2.03	Replacement inner washer for ME570



M570



ME570

MARSHALL POL FILLER COUPLINGS

Soft Nose POL Coupling for Hand Tight O-ring seal

RMI Part No.	INLET	OUTLET	Length	Type
ME390	1/4" MNPT	POL	6"	Heavy Duty
ME390S	1/4" MNPT	POL	6"	Heavy Duty
M390	1/4" MNPT	POL	6"	Standard
M388	1/4" MNPT	POL	2-1/2"	Short

* All brass shafts, except ME390S, which has a steel shaft



ME390

Filler Couplings and Adapters

MARSHALL POL FILLER ADAPTOR

Adapts POL Filler coupling to 1-3/4" ACME or QCC type 1

RMI Part No.	Description
ME568	F POL x 1-3/4" ACME Adaptor
ME392	F POL x 1-5/16" QCC type 1 Adaptor
ME394	FPOL x 1-5/16" M QCC Type 1 Adaptor



ME392

TYPE 1 FILLER COUPLING

RMI Part No.	Description
ME515	1/4" x Type 1 w/ Knurled handle
ME516	1/4" x Type 1 w/ Forged handle
ME516S	1/4" x Type 1 w/ SS nipple
ME796	Quick fill adaptor



ME516



ME796

TYPE 1 QCC FILLER ADAPTOR

Adapts to QCC type 1 (QCC 1-5/16") filler adaptors to POL, Fork Lift, or 1-3/4" ACME valves

RMI Part No.	Description
ME393	Male QCC x MPOL w/ hand wheel
ME393-1	1-5/16" M ACME x 1/4" FPT Adaptor
ME394	Male QCC x Female 1-1/4" Fork lift
ME569	Male QCC x Female 1-3/4" ACME



ME394

FORK TRUCK OR LIFT TRUCK FILLER COUPLINGS

Extended motor fuel filling connector permits fast, easy connection through the cylinder collar. Available with FPOL inlet.

RMI Part No.	INLET	OUTLET
ME790	1/4" MNPT	1-1/4 ACME M.F.



ME790

DOT MULTIVALVES

Intended for use in vapor withdrawal service for DOT containers up to 420 lbs as fuel line shutoff valves in combination with a fill and vapor relief valve. Ideal for on-site filling without interruption of service by combining all functions into single tank opening.

RMI Part No.	Filler Connection	Inlet	Outlet	Dip Tube Length	Relief STD PSI	Vent Type
MES-PVE2030BC-8.6	1-3/4" ACME	3/4" NGT	F.POL	8.6"	375	N/A
MES-PVE2030BC-11.6	1-3/4" ACME	3/4" NGT	F.POL	11.6"	375	N/A
MES-PVE2030BC-10.6	1-3/4" ACME	3/4" NGT	F.POL	10.6"	375	N/A
MES-PVE2030BCSC-10.6	1-3/4" ACME	3/4" NGT	F.POL	10.6"	375	MEJ401SC
MES-PVE2035AT-11.2	1-3/4" ACME	1" NGT	F.POL	11.2"	375	N/A
MES-PVE2035AT-11.7	1-3/4" ACME	1" NGT	F.POL	11.7"	375	N/A
MES-PVE2035ATSC-250-11.7	1-3/4" ACME	1" NGT	F.POL	11.7"	250	MEJ401SC



MES-PVE2030BC



MES-PVE2035AT

MEC MULTISERVICE VAPOR VALVES FOR ASME TANKS

The ME662 Series Multi-Service Valve is intended for use in vapor withdrawal service for ASME containers or as fuel line shutoff valve in combination with an integral double check fill and vapor equalization valve. The ME665 Series Multi-Service Valve is intended for use in vapor withdrawal service for ASME containers or as fuel line shutoff valve in combination with an integral double check vapor equalization valve.

RMI Part No.	Filler Connection	Inlet	Outlet	Dip Tube Length	Vent Type
ME662	1-3/4" ACME	1-1/2" MNPT	F.POL	16.0"	MEJ401
ME662SC	1-3/4" ACME	1-1/2" MNPT	F.POL	16.0"	MEJ401SC
ME665	NONE	3/4" MNPT	F.POL	12.0"	MEJ401
ME665SC	NONE	3/4" MNPT	F.POL	12.0"	MEJ401SC



ME662



ME665

ACCESSORIES

RMI Part No.	Description
ME9101BRK	Replacement Universal Bonnet Repair Assy (less handwheel)
ME9101C1BRK	Complete ASME/DOT Valve Replacement Bonnet Assy w/ Handwheel
ME663	Replacement Double Check Vapor Return Valve 3/4"MNPT x 1-1/4"ACME
ME662-901K	Replacement Double Check Fill Valve Kit for ME662
ME662-102	Handwheel ME662/ME665

MEC LIQUID SERVICE VALVES

Intended for use in liquid service for DOT containers up to 100 lb. LPG capacity as fuel line shutoff valves in combination with a liquid fill and vapor relief valve.

RMI Part No.	Inlet	Outlet	Dip Tube Length	Relief STD PSI	Vent Type	Cylinder Type
MES-PVE3250CLM-11.6	3/4" NGT	CGA 555	11.6"	375	MEJ401	Up to 100 lb DOT



MES-PVE3250CLM



MEC VAPOR WITHDRAWAL VALVES

Intended for use in vapor withdrawal service for containers up to 100 lb. LPG capacity as fuel line shutoff valves in combination with a vapor relief valve.

RMI Part No.	Description	Inlet	Outlet	Dip Tube Length	Relief STD PSI	Vent Type	Container Type
MES-PVE3250BC-312	LP Service Valve w/o Dip Tube	3/4" NGT	F.POL	-	312	-	ASME
MES-PVE3250C-375	LP Service Valve w/o Dip Tube	3/4" NGT	F.POL	-	375	-	DOT
MES-PVE3250CLG-10.6	LP Service Valve w/ 10.6" Dip tube	3/4" NGT	F.POL	10.6	375	MEJ401	DOT
MES-PVE3250CLG-11.6	LP Service Valve w/ 11.6" Dip tube	3/4" NGT	F.POL	11.6	375	MEJ401	DOT



MES-PVE3250C-375

MEC UNDERGROUND CLUSTER MANIFOLD VALVES

These multi-purpose valves are designed for use on domestic ASME underground tanks that require a single opening except for a separate liquid withdrawal port.

TECH NOTE: Gauge and internal liquid fill pipe not included. See page 116 for UG tank gauges.

RMI Part No.	Description	Inlet	Outlet	Dip Tube Length	Relief STD PSI
MES-PVE2098AT	Underground Multivalve w/ MEJ400C Fixed Liquid Level Type	2-1/2" FNPT	F. POL	30"	250
MES-PVE2098ATSC	Underground Multivalve w/ MEJ400SC Fixed Liquid Level Type	2-1/2" FNPT	F. POL	30"	250



MES-PVE2098AT

UNDERGROUND TANK CLUSTER REMOVAL TOOL

Universal design for convenient removal of underground tank cluster valves using a standard 3/4" drive socket wrench.

RMI Part No.	Description
MEP126	Underground Cluster Valve Removal Tool



MEP126

MEC ASME LOCKING FILLER VALVE

Designed to allow maximum product transfer with its manually operated open throat design. These valves have an integral high flow primary soft-seat back check and a manually operated secondary shutoff valve for maximum protection against leaks. Because these valves provide a manually operated shutoff device, the need for a flow restricting fill check adapter has been eliminated.

RMI Part No.	Description	Filler Valve MNPT	Hose End	Additional Keys
ME600-6	ASME Locking Filler Valve w/ Protective Cap	3/4"	1-3/4" Male Acme	ME578-02
ME600-10	ASME Flomax Locking Filler Valve w/ Protective Cap	1-1/4"	1-3/4" Male Acme	ME578-03



ME600-10

MEC ASME/DOT CONTAINER SERVICE VALVES

Intended for use in vapor withdrawal service for ASME and DOT containers or as fuel line shutoff valves.

NOTE: These valves do not incorporate an integral pressure relief valve and are intended for use in containers that have a separate stand-alone pressure relief valve sized to properly handle the container's capacity.

RMI Part No.	Description	Inlet	Outlet	Dip Tube Length
ME9101C1	ASME/DOT Container Service Valve	3/4" MNPT	F. POL	N/A
ME9101D-11.1	ASME/DOT Container Service Valve	3/4" MNPT	F. POL	11.1"
ME9101D-11.7	ASME/DOT Container Service Valve	3/4" MNPT	F. POL	11.7"



ME9101C1

GRAND HALL 100# DOT STANDARD SERVICE VALVE

Intended for use in vapor withdrawal service for DOT containers up to 100 lb. LPG capacity as fuel line shutoff valves in combination with a vapor relief valve.

RMI Part No.	Description	Inlet	Outlet	Dip Tube Length
PV1000	100 lb Cylinder Valve	3/4"	POL	N/A
PV10010.2	100 lb Cylinder Valve	3/4"	POL	10.02
PV10011.6	100 lb Propylene Cylinder Valve	3/4"	POL	11.6



PV10010.2

MEC ASME/DOT MANIFOLDING SERVICE VALVES

Intended for use in vapor withdrawal service for ASME tanks where more than one vessel is installed. The internal excess flow device at the inlet of the shutoff valve provides excess flow protection in the event of a downstream line break.

RMI Part No.	Description	Inlet	Outlet	Excess Flow GPM	Bonnet Repair Kit
ME9101C5	ASME/DOT Manifold Service Valve	3/4" MNPT	F. POL	2.6	ME9101BRK



ME9101C5

MEC ASME AND DOT FULL INTERNAL PRESSURE RELIEF VALVES

Used as pressure relief device on larger ASME engine fuel containers and recreational vehicle containers. Use MEVS-PVE445AT on multipoint 420-lb. DOT containers. Protective cap MEPS-UEP16Y included. Supplied with Everseal pre-applied thread sealant

RMI Part No.	Description	Inlet	Installation Hex	Relief Setting	Pipeaway Adapter
MEVS-UVE445AM/250	ASME Engine Fuel Service Valve	1" MNPT	1-5/16"	250 PSI	MEPS-445-21
MEVS-PVE445AT/375	420 LB Cylinder Service Valve	1" MNPT	1-5/16"	375 PSI	MEPS-445-21



MEVS-UVE445AM250



MEC VAPOR EQUALIZING VALVES

The upper check can be opened with vapor equalizing hose couplings equipped with projecting nozzle tips where the lower check is a normally open excess flow type. The lower excess flow check assembly automatically closes when flow out of the container exceeds its rated capacity.



ME663

RMI Part No.	Description	Inlet	Outlet	Closing Flow	Upper Seal Repair Kit
ME663	Double Check Vapor Return Valve w/ Plastic Cap	3/4" MNPT	1-1/4" Acme	4,000 SCFH/LPG	ME663SRK
ME664	Single Check Vapor Return Valve w/ Plastic Cap	3/4" MNPT	1-1/4" Acme	N/A	N/A

MEC DOT AND ASME FIXED LIQUID LEVEL VENT GAUGE

Designed to provide a way to visually determine that a tank has reached maximum allowable fill capacity. The dip tube end of a fixed liquid level gauge should be set equal to 80% of the liquid level tank capacity and installed in the vapor space of the tank. The vent valve should be opened before filling begins during which time vapor will be discharged. Once the tank reaches maximum liquid fill capacity (80% of the tank capacity), liquid will begin to discharge from the vent valve telling the operator the tank has reached maximum allowable fill capacity and the filling operation should cease immediately.

RMI Part No.	Description	Inlet	Dip Tube Length	Orifice Size
MEJ410-5.7	DOT/ASME Fixed Liquid Level Vent Gauge	1/4"	5.7"	#54
MEJ410-6.6	DOT/ASME Fixed Liquid Level Vent Gauge	1/4"	6.6"	#54
MEJ410-6.9	DOT/ASME Fixed Liquid Level Vent Gauge	1/4"	6.9"	#54
MEJ410-120	DOT/ASME Fixed Liquid Level Vent Gauge	1/4"	12.0"	#54
MEJ410/72-5.7	DOT/ASME Fixed Liquid Level Vent Gauge	1/4"	5.7"	Low Emission #72



MEJ410-6.9

MEC VENT VALVES

Marshall Excelsior is the only manufacturer in the industry that offers three types of vent valves—Low Emission, Self-Cleaning Low Emission, and Standard Vent Valves. All the vent valves below are designed to minimize loss of product while allowing the operator to effectively bleed down connections and detect liquid while filling containers.

RMI Part No.	Description	Inlet	Material	Orifice Size	Bleeder Screw
MEJ400	Liquid Level Vent Valve	1/4"	Brass	#54	MEJ401 or MEJ401SC
MEJ400SC	Self Cleaning Liquid Level Vent Valve	1/4"	Brass	#54	MEJ401SC
MEJ400/72	Liquid Level Vent Valve	1/4"	Brass	Low Emission #72	MEJ401
MEJ602H	90° Degree Elbow Vent Valve w/ Hydrostatic Relief	1/4"	Brass	#54	N/A
MEJ606	90° Degree Elbow Vent Valve 1/4" MPT x 1/4" M. Flare	1/4"	Brass	#54	MEJ400, MEJ401, or MEJ401SC
MEJ402S	Liquid Level Vent Valve w/ T-Handle	1/4"	Stainless Steel	#54	N/A



MEJ602H



MEC ASME AND DOT COMBINATION VALVES

Developed to mount a pressure gauge and fixed tube liquid level gauge all in one valve. The shutoff portion of the valve increases the pressure gauge's life and accuracy by eliminating constant gauge pressure and allows for easy gauge replacement. To replace a gauge simply close the valve and open the vent valve to relieve pressure before pressure gauge.

The valve can be installed at the maximum fill level or a 1/8" MNPT dip tube can be installed on the container connection side to set any liquid level desired. For use in ASME bulk storage containers and DOT transport tank installations

Additionally, these valves can be used for a wide variety of other applications, including in-line use, as they meet the requirements of UL 125 - Flow Control Valves.



ME830

RMI Part No.	Description	Container Connection	Material	Gauge Included	Dip Tube Connection FNPT	Stainless Steel Vent Valve	Stainless Steel 0-400 PSIG Pressure Gauge
ME830	LPG/NH3 Combination Valve	3/4" MNPT	Ductile	No	1/8"	Included	MEJ526 or MEJ542
ME830SS	LPG/NH3 Combination Valve	3/4" MNPT	Stainless Steel	No	1/8"	Included	MEJ526 or MEJ542
MEJ415	LPG/NH3 Combination Valve	3/4" MNPT	Steel	No	1/4"	MEJ402S	MEJ542
MEJ415G	LPG/NH3 Combination Valve w/ Gauge	3/4" MNPT	Steel	Yes	1/4"	Included	Included

MEC LIQUID TRANSFER VALVES

Designed to provide a safe means to transfer liquid or vapor from a storage container. The ME449 Series valves can be directly installed for full-time use in the liquid or vapor port of the storage container when configured with an integral excess flow check, or when utilized in conjunction with a liquid withdrawal tank valve with integral excess flow protection and the appropriate liquid withdrawal adapter.



ME449

RMI Part No.	Description	Inlet	Outlet	Excess Flow	HydroStatic Relief	Excess Flow Check Valve	Vent Valves	Closing Flow	Material
ME449	Liquid Transfer Valve	3/4"	3/4"	No	MEH225 or MEH25/450	ME449X-110-KIT	MEJ400, MEJ400SC, MEJ400/72, MEJ402S	N/A	Brass
ME449H	Liquid Transfer Valve w/ Hydrostatic Relief	3/4"	3/4"	No	Included	ME449X-110-KIT	MEJ400, MEJ400SC, MEJ400/72, MEJ402S	N/A	Brass
ME449EXS/22	Liquid Transfer Valve w/ 22 GPM Excess Flow	3/4"	3/4"	Yes	N/A	-	MEJ400, MEJ400SC, MEJ400/72, MEJ402S	22	Brass
ME450	Liquid Transfer Valve	1-3/4" ACME	3/4"	No	N/A	-	MEJ400, MEJ400SC, MEJ400/72, MEJ402S	N/A	Brass
ME449X/19.5	Liquid Transfer Valve w/19.5 GPM Excess Flow	3/4"	3/4"	Yes	N/A	ME449X-110-KIT	MEJ400, MEJ400SC, MEJ400/72, MEJ402S	19.5	Brass



MEC LIQUID TRANSFER ADAPTERS

Designed for use between the liquid transfer shutoff valve and the liquid withdrawal tank valve. These adapters enable the tank valve to open properly and allows a tight seal when transferring liquid. Special threads on the tank valve and the adapter help eliminate tampering.

RMI Part No.	Description	Inlet	Outlet	Material	Gasket
ME458	Liquid Transfer Adapter	1-5/8" UNF	3/4" FNPT	Brass	-
ME453	Liquid Transfer Adapter	3/4" NGT	3/4" FNPT	Brass	-
ME455	Liquid Transfer Adapter	3/4" NGT	3/4" FNPT	Brass	-
ME458S	LPG/NH3 Rated Liquid Transfer Adapter	1-5/8" UNF	3/4" FNPT	Steel	ME458-03



ME458

MEC LIQUID WITHDRAWAL TANK VALVES

MEC liquid withdrawal check valves provides excess flow protection in the event of a downstream connection or line failure. The safety breakaway feature leaves valve seals intact in the event of truck roll-away.

RMI Part No.	Description	Inlet	Outlet	Material
ME460	Liquid Withdrawal Check Valve	3/4" Male	1-5/8" UNF Male	Brass
ME462	Liquid Withdrawal Check Valve	1-1/4" Male	1-5/8" UNF Male	Brass
ME462S	Liquid Withdrawal Check Valve	1-1/4" Male	1-5/8" UNF Male	Steel
ME462SS	Liquid Withdrawal Check Valve	1-1/4" Male	1-5/8" UNF Male	Stainless Steel



ME460

MEC MULTIPURPOSE FILLER BYPASS RETURN VALVE FOR DISPENSING APPLICATIONS

Ideally suited for use as a high capacity combination double check fill and liquid bypass return line shut-off valve. These valves are equipped standard with an integrated excess flow feature that is internal to the tank protecting against tank separation. The preinstalled side mounted ME601-6 double check fill valve allows for safe low emissions container filling at a convenient right angle orientation. The top mount 3/4" FNPT port above integrated shut-off valve seat allows for maximum liquid bypass return flow rates without adding an external line shut-off valve.

RMI Part No.	Description	Tank Connection	Outlet Fill	Bypass Return	Closing Flow Liquid	Closing Flow Vapor	Hydrostatic Relief
ME673DEX-6SP	Multipurpose Filler Bypass Return Valve	1-1/4" Male	1-3/4"	3/4" FNPT	58 GPM	27,000 SCHF	MEH225



ME673DEX-6SP

MEC MULTIPURPOSE FILLER BYPASS RETURN VALVE

Intended for use as a high capacity liquid withdrawal valve with a manual shut off device in LPG or NH3 containers. These valves are equipped with an integrated excess flow feature that is internal to the container. The ME671DIBC is equipped with an integrated back check (IBC) feature built into the lower portion of the seat disc assembly. This feature allows liquid pressure built upstream of the shut-off disc assembly to automatically be relieved back to the container when line pressures exceed 10-25 PSI over container pressure. The (IBC) feature eliminates the need for hydrostatic relief valves to protect upstream piping or lines as well as greatly reducing product emissions and overall system safety.



ME671DIBC-8

RMI Part No.	Description	Inlet	Outlet Fill	Excess Flow Rate	Integrated Back Check	Hydrostatic Relief	Vent Valve
ME671DIBC-8	Multipurpose Valves w/ Back Check and Excess Flow	1-1/4"	1"	58 GPM	Yes	N/A	MEJ400 or MEJ402S
ME672D	Multipurpose Angle Valve w/ Excess Flow	1-1/4"	1"	78 GPM	No	MEH225 or MEH225SS	MEJ400 or MEJ402S



MEC DOT MOTOR FUEL CYLINDER SERVICE VALVES

Intended for vapor or liquid withdrawal service on DOT forklift or engine fuel containers. Two closing flow rates are offered - 1.6 GPM for medium to light duty vehicles and 2.6 GPM for those with greater fuel demands.

RMI Part No.	Description	Inlet	Outlet	Excess Flow	Wrench	Repair Kit
ME9101P5	Forklift Service Valve	3/4" MNPT	3/8" MNPT	1.6 GPM	MEP125	ME9101P5BRK
ME9101P5H	Forklift Service Valve	3/4" MNPT	3/8" MNPT	2.6 GPM	MEP125	ME9101P5BRK
ME9101H4	Forklift Service Valve	3/4" MNPT	3/8" M Flare	1.6 GPM	MEP125	ME9101BRK
ME9101H6	Forklift Service Valve	3/4" MNPT	3/8" M Flare	2.6 GPM	MEP125	ME9101BRK



ME9101P5H



MEP125

MEC ENGINE FUEL FILLER VALVES AND CONNECTIONS

ME220F Series has a durable riveted valve stem, chrome plated body and wrench flats for easy installation. ME220M has two seals - an O-ring to minimize product loss during connection and a gasket to seal the two connections during the filling operations.

RMI Part No.	Description	Inlet	Outlet	Application	Protective Brass Cap
ME220M	Male Forklift Connector	3/8" FNPT	1-1/4" M. Acme	Service Valve	ME220FP
ME220F	Female Forklift Connector	1-1/4" F. Acme	1/4" FNPT	Fuel Line	-
ME220ML	Quick Closing Vapor Service Forklift Connector	3/8" FNPT	1-1/4" M. LH Acme	Service Valve	ME220FLP
ME790	Filler Coupling Forklift Adapter	1-1/4" F. Acme	1/4" MNPT	Filler Valve	-



ME220M

MEC DOT FULL INTERNAL PRESSURE RELIEF VALVES

Designed for use on forklift cylinders and other DOT removable cylinders up to 122 pounds of LP-Gas capacity. The working components of this valve are located inside the tank reducing possible malfunction caused by outside debris or other foreign materials.

TECH TIP: NFPA #58 states, "All containers used in industrial trucks (including fork lift truck cylinders) service shall have the container pressure relief valve replaced by a new or unused valve within 12 years of the date of manufacture of the container and every 10 years thereafter."



MEV75FIR

RMI Part No.	Description	Inlet	Rain Cap	45 Degree Pipeaway	90 Degree Pipeaway	Relief STD PSI
MEV75FIR	Internal Pressure Relief Valve	3/4" MNPT	MEP175C	MEP175-45	MEP175-90	375



MEC MOTOR FUEL CYLINDER DOUBLE CHECK FILLER VALVE

Designed for DOT forklift, engine fuel, and ASME residential tanks, these double check filler valves automatically open with pump pressure providing maximum product flow rates. Once flow ceases, both upper and lower check mechanisms close to prevent product loss from the container. The lower check serves as a secondary seat to limit product loss in the event that the primary upper seat fails to operate properly due to damage.

RMI Part No.	Description	Tank Connection	Filler Connection	Cap & Lanyard	Repair Kit
ME601-6	Double Fill Valve w/ Cap and Lanyard	3/4"	1-3/4" M Acme	ME601-902	ME601-6SRK
ME601-10	Double Fill Valve w/ Cap and Lanyard	1-1/4"	1-3/4" M Acme	ME601-903	ME601-10SRK



ME601-6

GRAND HALL MOTOR FUEL VALVE TRIM

These valves are designed for vapor or liquid withdrawal service on DOT fork lift containers and ASME containers. These valves are equipped with an excess flow limiter. These valves feature double O-ring stem seals, a tamper-proof design, a sturdy brass handwheel, and a recessed excess flow valve.

RMI Part No.	Description	Inlet	Outlet
PV33FA	Female Forklift Connector	1-1/4" F ACME	1/4" FPT
PV33MA	Male Forklift Connector	3/8" FPT	1-1/4" M ACME
PV33SV	Forklift Service Valve	3/4" MPT	3/8" MPT
PV33RV	3/4" Relief Valve 375 PSI	3/4" MPT	-
PV33FV	3/4" Filler Valve	3/4" MPT	1-3/4" ACME
PV33FG	3/4" Universal 33# Forklift Gauge	3/4" MPT	-
PV33VV	Fixed Liquid Level Gauge	1/4" MPT	-



PV33SV

TECH TIP: NFPA# 58 2020 Edition 5.9.3.1 - Cylinders with 4 lb through 40 lb propane capacity for vapor service shall be equipped or fitted with a listed overfilling prevention device and a fixed maximum liquid level gauge.

GRAND HALL OPD VALVES

RMI Part No.	Description	Inlet	Dip Tube Length
PV45SOPD	4.5# OPD Valve Steel	3/4" MNPT	2.2"
PV11SOPD	11# OPD Valve Steel	3/4" MNPT	3"
PV20SOPD	20# OPD Valve Steel	3/4" MNPT	4.0"
PV30SOPD	30# OPD Valve Steel	3/4" MNPT	4.7"
PV40SOPD	40# OPD Valve Steel	3/4" MNPT	6.4"
PV6AOPD	6# OPD Valve Aluminum	3/4" MNPT	3.2"
PV10AOPD	10# OPD Valve Aluminum	3/4" MNPT	3.6"
PV30AOPD	30# OPD Valve Aluminum	3/4" MNPT	4.7"
PV40AOPD	40# OPD Valve Aluminum	3/4" MNPT	6.4"
PV20AOPDHTZ	20# OPD Valve Aluminum Horizontal	3/4" MNPT	4.0"



PV20SOPD

CAVAGNA OPD VALVES

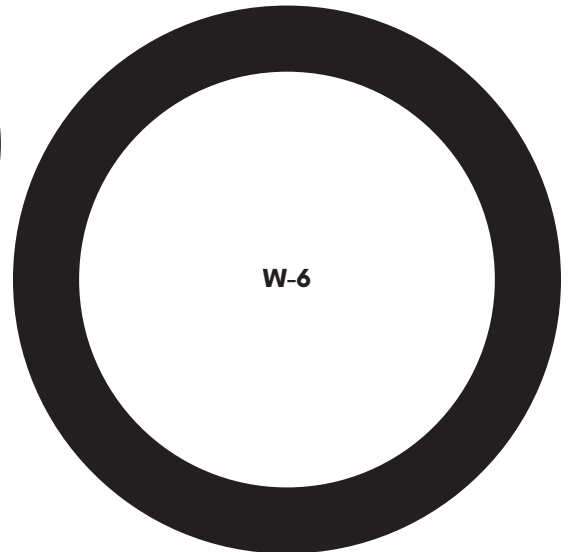
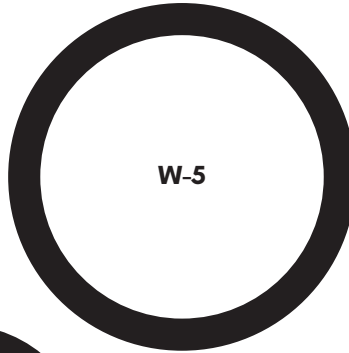
RMI Part No.	Description	Inlet	Dip Tube Length
80-8107	20# OPD Valve w/ 4.0" Dip Tube	3/4"	4"
80-8109	30# OPD Valve w/ 4.7" Dip Tube	3/4"	4.7"
80-8110	40# OPD Valve w/ 6.4" Dip Tube	3/4"	6.4"



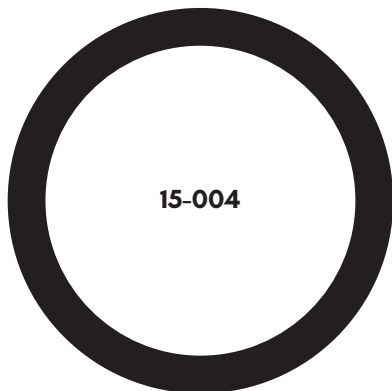
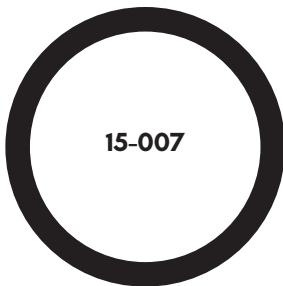
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FLAT WASHERS (ACTUAL SIZE)

RMI Part No.	Size	Use
W-4XXX	1-1/4"	Fork lift Conn.
W-2XXX	1-3/4"	Filler & Vapor Valves & Adaptors
W-3XXX	1-1/4"	
W-5XXX	2-1/4"	
W-6XXX	3-1/4"	

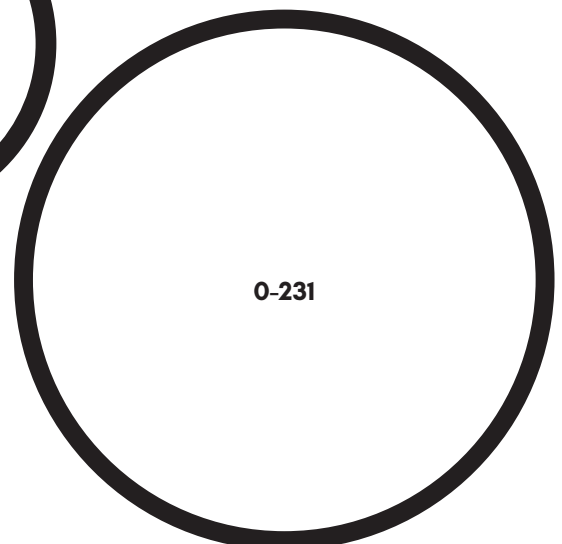
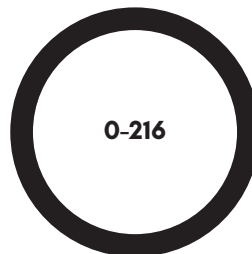
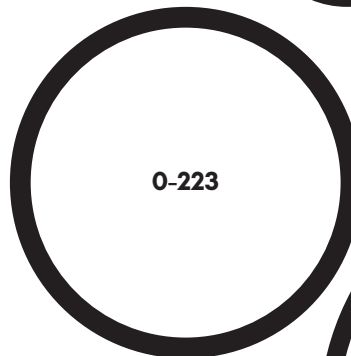
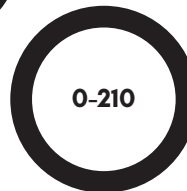


FLOAT GAUGE GASKETS (ACTUAL SIZE)



RMI Part No.	Use Description
15-004	Senior Float gauge gasket
15-007	Junior Float gauge gasket

O-RINGS (ACTUAL SIZE) BUNA-N



RMI Part No.	Size	Use
0-110	POL	POL Nipple
0-114	1-1/4" ACME	Internal Fork Lift
0-210	1-1/4" ACME	Filler & Vapor Valves & Adaptors
0-216	1-3/4" ACME	
0-223	2-1/4" ACME	
0-231	3-1/4" ACME	
0-238**	4-1/4" ACME	

* Other Polymers are available
** Not shown on diagram



Quality Steel

QUALITY STEEL ABOVEGROUND TANKS

- Manufactured in the USA
- 5 Year Warranty
- RegO Valves
- Vacuum-purged from factory
- Powder coated or primed
- Rated at 250 PSIG from -20°F to 125°F
- UL Listed
- NFPA 58 & ASME Compliant



ABOVEGROUND TANKS

PART#	CAPACITY	DIAMETER	OVERALL LENGTH	OVERALL HEIGHT	LEG WIDTH*	LEG SPACING*	WEIGHT (lbs)	QTY/ STACK	STACKS/ LOAD
AWT120AGW	120 wg	24"	5'-8"	2'-10"	1'-1-1/2"	2'-10" OR 3"-11"	260	16	8
AWT250AGW	250 wg	30"	7'-10"	3'-6"	1'-5"	4'-11"	480	9	6
AWT320AGW	320 wg	30"	9'-7"	3'-6"	1'-5"	5'	620	9	5
AWT500AGW	500 wg	37-1/2"	10'	4'	1'-8"	5'	950	8	5
AWT1000AGW	1000 wg	41"	16'	4'-3"	1'-8"	10'-1"	1800	5	3
AWT1450AGW	1450 wg	46-1/2"	17'-4"	4'-9"	1'-9"	11'-7"	2650	4	2
AWT1990AGW	1990 wg	46-1/2"	23'-11"	4'-9"	1'-9"	16'	3520	4	2

QUALITY STEEL UNDERGROUND TANKS

- Manufactured in the USA
- 1 Year Warranty
- Vacuum-purged from factory
- Powder coated or primed & painted
- NFPA 58 & ASME Compliant



UNDERGROUND TANKS

PART#	CAPACITY	DIAMETER	OVERALL LENGTH	OVERALL HEIGHT
AWT120UGLR	120 wg	24"	5'-8"	4'-5"
AWT250UGLR	250 wg	30"	7'-10"	5'-1"
AWT320UGLR	320 wg	30"	9'-7"	5'-1"
AWT500UGLR	500 wg	37-1/2"	10'	5'-7"
AWT1000UGLR	1000 wg	41"	16'	5'-10"
AWT1450UGLR	1450 wg	46-1/2"	17'-4"	6'-4"
AWT1990UGLR	1990 wg	46-1/2"	23'-11"	6'-4"

LEG WIDTH	WEIGHT (lbs)	QTY/STACK	STACKS/LOAD
1'-1-1/2"	260	6	8
1'-5"	480	5	6
1'-5"	620	5	5
1'-8"	950	5	5
1-8"	1800	5	3
1'-9"	2650	4	2
1'-9"	3550	4	2

* Standard 24" riser; short risers available upon request

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Manchester

MANCHESTER ASME TANKS

Manchester manufactures domestic vertical and horizontal ASME tanks ranging in size from 57 to 1,000 gallons. Tanks are manufactured in the USA and come vacuum pre-purged, epoxy powder coated, and fully fitted with RegO valves and Rochester gauges. Full and partial mixed loads are available, please reach out to your RMI sales rep for load-sizing assistance.



VERTICAL ASME
TANK - 420ASME

VERTICAL ASME TANKS

RMI Part No.	Capacity (W.G.)	Cylinder Diameter (In)	Height (In)	Weight (Lbs)	Qty / Stack	Stacks /Load
100ASME	28.5	18	37.1	85	20	9
200ASME	57	24	41.9	188	16	9
420ASME	118	30	53.8	291	9	9

HORIZ AG ASME TANKS

RMI Part No.	Capacity (W.G.)	Cylinder Diameter (In)	Overall Length	Height	Leg Width (In)	Leg Spacing	Weight (Lbs)	Qty / Stack	Stacks /Load
M120AG	120	24	5' 8"	2' 10-1/4"	10-1/8	3' 0"	310	12	8
M250AG	250	30	7' 10"	3' 4-3/16"	12-3/4	3' 6"	471	9	6
M320AG	320	30	9' 7"	3' 4-3/16"	12-3/4	4' 1/4"	566	9	5
M500AG	500	37.5	9' 10"	3' 11-1/2"	15	5' 0"	920	6	5
M1000AG	1000	41	15' 11"	4' 2-15/16"	16-1/4	9' 0"	1737	5	3

HORIZ UG ASME TANKS

RMI Part No.	Capacity (W.G.)	Cylinder Diameter (In)	Overall Length	Height w/ 28" Riser*	Leg Width (In)	Leg Spacing	Weight (Lbs)	Qty / Stack	Stacks /Load
M120UGLLR	120	24	5' 8"	4' 7-13/16"	10-1/8	3' 0"	342	9	7
M250UGLR	250	30	7' 10"	5' 1-9/16"	12-3/4	3' 6"	494	7	6
M320UGLR	320	30	9' 7"	5' 1-9/16"	12-3/4	4' 1/4"	597	7	5
M500UGLR	500	37.5	9' 10"	5' 9-3/8"	15	5' 0"	953	5	5
M1000UGLR	1000	41	15' 11"	6' 3/16"	16-1/4	9' 0"	1812	4	3

* Standard 28" riser; short risers available upon request

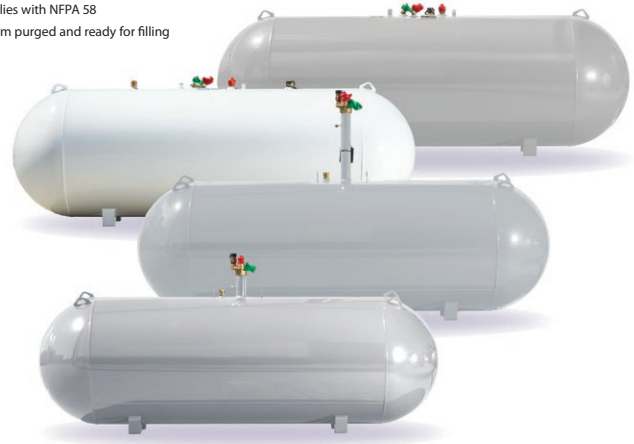


Ray Murray is proud to carry
Manchester Tank's Horizontal
Domestic Propane Tanks

Manchester Tank's Domestic Propane Tanks for commercial and industrial use encompass a wide variety of industries and are used in a multitude of applications such as, heating, construction, commercial cooking, dry cleaning, crop drying, temporary heat and more.

VESSEL FEATURES

- Sizes range from 120 to 1,000 gallons
- Tanks fully fitted with RegO valves and Rochester liquid level gauges
- Designed and constructed in accordance with the ASME Section VIII Division I Code latest edition
- Complies with NFPA 58
- Vacuum purged and ready for filling
- Stainless steel data plates
- All welded products are x-rayed and pressure tested per ASME Sec VIII, Div I requirements, followed by rigorous leak test inspections, both pre and post valve



Quality tanks
made safely
by good people
since 1946.

Manchester Tank & Equipment Co.
manchestertank.com

PROUDLY MADE IN THE U.S.A.



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Replacement Parts for ASME Tanks

UNDERGROUND REPLACEMENT PARTS

Tank Size	Multivalve*	Liquid Withdrawl Valve	JR Float Gauge
120 wg	MES-PVE2098AT	ME460	MES-FG1281-001R
250 wg			MES-FG1281-002R
320 wg			MES-FG1281-002R
500 wg			MES-FG1281-003R
1000 wg			MES-FG1281-004R
1450 wg			ME462
1990 wg	JB400HP-1		

* Must cut dip tube to length specified on tank



MES-FG1281



ME665

ABOVEGROUND REPLACEMENT PARTS

Tank Size	Multivalve*	Liquid Withdrawl Valve		Relief Valve	Fill Valve	
		Bottom 1-1/4"	Top 3/4"			
120 wg	ME665	ME462	ME460	MEVS-UVE433AM/250	ME601-10	
250 wg						
320 wg						
500 wg			ME462	MEVS-UVE443AM/250		
1000 wg						MEVS-UVE453AM/250
1450 wg						
1990 wg			MEVS-UVE453AM/250 (2)			

* Must cut dip tube to length specified on tank



HA254J

ABOVEGROUND GAUGES

Tank Size Diameter	Jr Flanged			Sr Flanged	Threaded - 1-1/4"		Threaded 1"	
	Rochester	MEC	Squibb	Squibb	MEC	Squibb	MEC	Squibb
120g - 24" dia.	6281-12-24	MES-FG1280-001R	JA124I	SA130A	MES-FG2281-001R	TA130A	MES-FG3981-002R	HA130A
250g - 30" dia.	6281-15-30	MES-FG1280-002R	JA154I	SA160A	MES-FG2281-002R	TA160A	MES-FG3981-003R	HA160A
320g - 30" dia.								
500g - 37" dia.	6281-19-37	MES-FG1280-003R	JA192J	SA194A	MES-FG2281-003R	TA194A	MES-FG3981-004R	HA194A
1000g - 41" dia.	6281-04041	MES-FG1280-004R	JA206I	SA214A	MES-FG2281-004R	TA210A	MES-FG3981-005R	HA210A
1450/1990g - 45" dia	-	-	-	-	-	TA240A	-	-
420lb Vertical	6821-85	-	JA250J	-	-	TA254S	MES-FG3981-001R	HA254J
200lb Vertical	6821-89B	-	JA176B	-	-	TA180A	-	HA180A

DOMES & LIDS

RMI Part No.	Description
02-338/339	Composite Dome for Quality Steel UG Tanks
AWTDOME-UG	Steel Dome for Quality Steel UG Tanks
AWTDOME-AG	Steel Dome for Quality Steel AG Tanks
A98233.18	Steel Dome for Manchester AG 120-250g Tanks
A97043.18	Steel Dome for Manchester AG 320-1000g Tanks
A97430	Composite Shroud for Manchester UG LR Tanks
A79959	Manchester Tank Black Plastic Lid for 420ASME
A59888	Replacement Cotter Pin for 420ASME Lid
A79958	Cover Hinge
A79957	Clevis Pin
A759888	Cotter Pin



02-338-339



A97430

HIGH COLLAR DOT CYLINDERS

Excellent for both stationary and portable cylinder installations. Lightweight & rugged for either domestic or construction applications.

RMI Part No.	Propane Capacity (lbs)	Valve Type	Diameter	Height	Tare Weight (lbs)
50HC-10	50	POL 10%	14.5"	28.5"	46
60HC-10	60	POL 10%	12.2"	43.5"	46
100HC-10	100	POL 10%	15.1"	46.5"	71
100HC-M	100	Multivalve	15.1"	46.5"	71



100HC-10

UNIVERSAL LIFT TRUCK CYLINDERS

Standard valves include liquid service valve, relief valve, universal float gauge, 10% valve. Universal lift truck cylinders can be used in vertical or horizontal service. Cylinders include 1428M ACME connector installed. Steel or Aluminum cylinders are available.

Aluminum		Steel		Propane Capacity (lbs)	Diameter (in)	Height (in)
Part No.	Weight (lbs)	Part No.	Weight (lbs)			
AL20MF-F-A	19	20MF-F-A	25.5	20	12.25	20-1/8
AL33MF-F-A	23.5	33MF-F-A	35	33.5	12.25	27-5/8
AL43MF-F-A	26.5	43MF-F-A	41	43.5	12.25	33-5/8



33MF-F-A



AL33MF-F-A

PORTABLE STEEL CYLINDERS

Meet or exceed specifications 4BA-240 or 4BW-240. Durable white powder coated finished cylinder is excellent for grills, RV, and torch applications.

RMI Part No.	Propane Capacity (lbs)	Diameter (in)	Height (in)	Weight (lbs)
5-TYPE1-OPD	5	8	12	10
10-TYPE1-OPD	10	8.9	17.4	15
11-TYPE1-OPD	11	12.2	12.4	14
20-TYPE1-OPD	20	12.2	17.6	18
30-TYPE1-OPD	30	12.2	23.4	26
40-TYPE1-OPD	40	12.2	29.4	31



20-TYPE1-OPD

PORTABLE ALUMINUM CYLINDERS

These meet or exceed DOT specifications 4E-240. Clear aluminum finish cylinders are used on many torch, RV, and grill applications.

"RMI Part No."	Propane Capacity (lbs)	Diameter (in)	Height (in)	Weight (lbs)
AL20-OPD	20	12-1/2	20-5/8	12
AL30-OPD	30	12-1/2	26-1/2	17
AL40-OPD	40	12-1/2	32	19



ALUMINUM CYLINDERS

Typical Underground Tank Installation

CATHODIC PROTECTION REGULATIONS AND PRINCIPLES

NFPA 58 requires the protecting of underground tanks in accordance with good engineering practice. Cathodic protection is the accepted method of protecting underground metal structures. Tanks should be protected by installing anode bags to the factory installed anode connector. They should be coated completely, and isolated electrically with the installation of insulated unions.

TECH TIP: Soil conditions and other variables may affect number of anodes required. Consult engineer or other appropriate professional.

TYPICAL IRON PIPE ANODE REQUIREMENTS

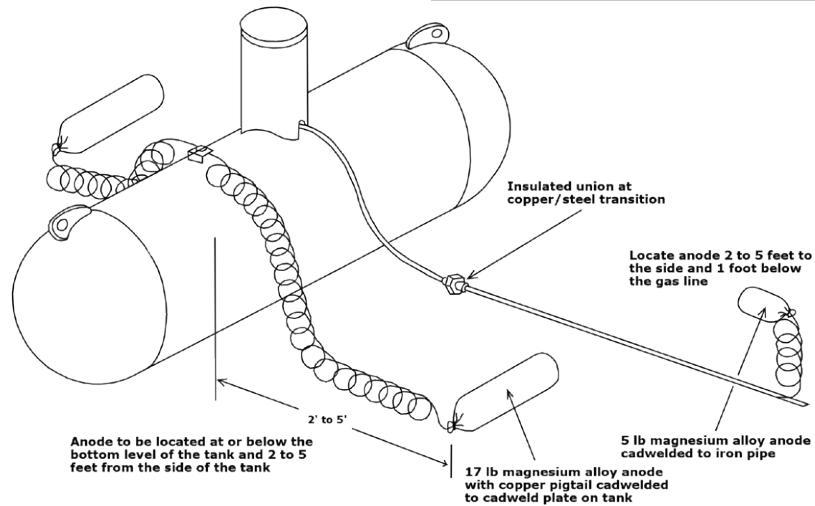
Pipe size	Install one 5# Anode Bag for this length pipe
3/4"	500'
1"	475'
1-1/4"	450'
1-1/2"	425'
2"	400'

TYPICAL IRON PIPE ANODE REQUIREMENTS

Pipe size	Install one 17# Anode Bag for this length pipe
3"	700'
4"	500'
6"	400'
8"	350'

TYPICAL TANK ANODE REQUIREMENTS

Tank size	Number of 17# Anode Bags
500 Gallon	1
1000 Gallon	2
1990 Gallon	3
3000 Gallon	4
4000 to 5000 Gallon	6
10,000 Gallon	8
15,000 Gallon	10
20,000 Gallon	12
25,000 to 30,000 Gallon	14



ANODE BAGS

Magnesium Anode Bags are 91% magnesium, 3% zinc, 6% aluminum alloy. The anodes are prepackaged in cloth bags with low resistivity, quick wetting prepared back fill consisting of 75% hydrated gypsum, 20% bentonite, and 5% sodium sulphate.

Standard magnesium anodes are most commonly used in the propane industry because they work best in the majority of underground conditions found in the United States. However, high potential anodes may be used in dry or sandy areas where it's important for greater voltage, and therefore more current. High-Potential anodes produce a minimum of minus 1.75 volts, vs 1.5 volts for standard anodes. The anode bag should be placed into wet hole at least 2' from the tank and at a depth greater than that of the tank. Wet the area above the anode.



ANODE BAGS

RMI Part No.		Size
Standard Anode	High-Potential Anode	
MG-17	MG-17-HP	17#
MG-9	MG-9-HP	9#
MG-5	MG-5-HP	5#

SPIKE ANODES

Spike Anodes are for the protection of small underground gas lines, such as copper tubing. Comes standard with 36" cable and stainless steel adjustable pipe clamp.

SPIKE ANODE



RMI Part No.	Description
MG-DR-1.0	1 lb Spike Anode - 3/4" x 12" w/ Cable & Clamp
MG-DR-1.5	1.5 lb Spike Anode - 3/4" x 18" w/ Cable & Clamp
MG-DR-CLAMP	3/4" - 1-1/2" Adjustable Anode Clamp w/ 18" Wire
MG-DR-CLAMP-1	3/4" - 1-1/2" Adjustable Anode Clamp
MG-DR-CLAMP-2	1-1/2" - 2-1/2" Adjustable Anode Clamp
MG-DR-CLAMP-3	3-1/2" - 4-1/2" Adjustable Anode Clamp

CORROSION PROTECTION TAPES

TAPECOAT® CT 10/40W is a white cold-applied coating in tape form that consists of a heavy polymer film and synthetic elastomeric coating that bonds immediately to its own backing to provide a moisture proof seal.

COLD PRIME prepares metal surfaces for the application of cold applied tapes.

SCOTCHRAP® 50 is a tough PVC plastic tape with special high tack adhesive, formulated to resist corrosion. Easy to apply - does not use a removable plastic release film.



127732-10



MM50-2

RMI Part No.	Description
CT-200	2IN. WIDE TAPECOAT X 50FT
CT-400	4IN. WIDE TAPECOAT X 50FT
TC-1	1 GAL. COLD PRIME COATING
MM50-2	SCOTCHRAP PROTECTION 2IN x 100FT
MM50-4	SCOTCHRAP 50 PROTECT 4IN x 100FT
127732-10	SCOTCHRAP PIPE PRIMER 1 GALLON

TAPECOAT COVERAGE

Pipe size	2" Wide	4" Wide
3/4"	26.5'	-
1"	21.1'	-
1-1/4"	16.7'	-
2"	11.7'	25.1'
2-1/2"	9.6'	20.7'
3"	7.9'	17'

*Lineal feet of pipe coated per roll with minimum overlap (does not include fittings, bends, ect.)

INSULATING UNIONS

Insulating unions are made of malleable iron with a buna-n gasket and rated to 150 PSI working pressure for vapor lines, or extra heavy forged steel with a nylon gasket and rated to 3000 PSI working pressure for liquid lines.



1U-150-034

Thread Size	150# Working Pressure	3000# Working Pressure
1/2"	1U-150-012	1U-3000-012
3/4"	1U-150-034	1U-3000-034
1"	1U-150-100	1U-3000-100
1-1/4"	1U-150-114	1U-3000-114
1-1/2"	1U-150-112	1U-3000-112
2"	1U-150-200	1U-3000-200

MEC SPACE-SAVER BRASS DIELECTRIC UNIONS

Intended to isolate metallic piping from sources of electrical current and to help prevent galvanic corrosion, the ME690 dielectric union would typically be installed at the ASME tank directly downstream of the first stage regulator but prior to underground piping and/or at the inlet of the second stage regulator above-ground at the dwelling.



ME690

RMI Part No.	Description
ME690-4-6	Brass Dielectric Union - 1/2" MPT x 3/8" Male Flare
ME690-6-6	Brass Dielectric Union - 3/4" MPT x 3/8" Male Flare
ME690-4-8	Brass Dielectric Union - 1/2" MPT x 1/2" Male Flare
ME690-6-8	Brass Dielectric Union - 3/4" MPT x 1/2" Male Flare
ME690-4-10	Brass Dielectric Union - 1/2" MPT x 5/8" Male Flare
ME690-6-10	Brass Dielectric Union - 3/4" MPT x 5/8" Male Flare

JOMAR BALL VALVE WITH DIELECTRIC UNION

1/4-turn, hot forged brass, 2-piece design, standard port, with dielectric union, appliance type gas ball valves. 100% tested.

- Reversible tamper-proof, lockable handle
- Pressure rating: 600 WOG/150 WSP
- Temp range: -40°F to 300°F
- Double Viton® O-ring stem design



101-403DU

Thread Size	RMI Part No.	Case
FNPT x FNPT		
1/2" x 1/2"	101-403DU	8
3/4" x 3/4"	101-404DU	4
FNPT x Flare		
1/2" x 1/2"	101-513DU	8
MIP x FIP		
1/2" x 1/2"	101-803DU	6
3/4" x 3/4"	101-804DU	4
MIP x Flare		
1/2" x 1/2"	101-703DU	6



Cathodic Protection Tools

HALF CELL

Used to check the potential of cathodic protection for buried tanks and piping.

The advantages over a Potential Meter:

- Gives a direct reading of potential for OPS compliant documentation vs. Go/No Go dial
- Utilizes standard digital multimeter

Use Instructions:

- Fill 1/3 full of Copper Sulfate Crystals, add distilled water, shake gently to saturate.
- Attach Multimeter Black lead to half Cell, Red lead to brass tank valve, contact moist earth several feet away from tank -.85 to -1.80 indicates good protection.
- When crystals are gone, empty and dispose of hazardous fluid, rinse with distilled water, re-prep



MODEL 6B

RMI Part No.	Description
MODEL 6B	Half Cell Reference Electrode - Pointed Tip
118027	Replacement Tip for Half Cell
16906	12 oz. Copper Crystals for Half Cell
049-011	1lb, 3oz Copper Crystals for Half Cell
049-012	32oz Anti-Freeze Solution
093-002B	Model 6B Repair Kit

JCP100 CATHODIC PROTECTION TEST KIT

JCP100 Test Kit Includes:

- Voltmeter
- Half Cell
- Test Leads
- Carrying Case

This test kit allows fast and accurate pipe to soil potential to determine anode effectiveness.



JCP100

RMI Part No.	Description
JCP100	Cathodic Protection Test Kit

C. P. MINI BOX TEST STATION

Cathodic protection test station allows for the testing of anode potential without disturbing the ground. Leads are attached to terminal block in the cap and securely fastened down. The entire cap assembly is easily lifted and tilted for testing.



TEST STATION

RMI Part No.	Description
MINIBOX	Cathodic Protection Test Station, 18"

POTENTIAL METER - TESTING CATHODIC PROTECTION

To facilitate a yearly test on installed anodes. The MCM Series Potential Meter makes this test very simple. Touch wire to tank and ground half-cell to earth. Test can be made in minutes.

For Checking The Output Of An Anode

1. Remove protective caps from meter and electrode.
2. Connect orange negative lead to tank.
3. Contact earth with electrode (the porous plug should be in contact with moist soil. Grass should not be allowed to come between plug & soil.)
4. Take and record reading & polarity. Reading should be at least -0.85 volts.
5. Replace protective cap at lower end of electrode.



MCM-1A



MCM-1D

RMI Part No.	Description
MCM-1A	Analog Electronic Potential Meter Kit w/ Case
MCM-1D	Digital Electronic Potential Meter Kit w/ Case
16203	Electrode Extension
16906	Copper Sulfate, 12oz
17105	Anti-Freeze Solution, 8oz



Cathodic Protection Tools

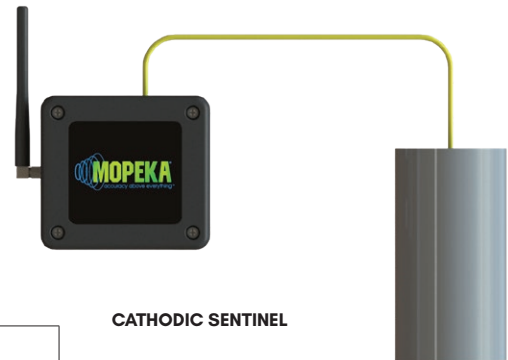
MOPEKA CATHODIC SENTINEL

Ensure you always have peace of mind around the protection of your underground tanks with the first of its kind Cathodic Sentinel by Mopeka®. The Mopeka® Cathodic Sentinel solution is designed to actively monitor and test the cathodic protection levels of your tanks in the field and send reports directly to your back office software. Rated for both Pressurized and Non-pressurized underground tanks.

Features:

- Provides safe, consistent, accurate and reliable readings for the protection of all your underground tanks
- Estimates remaining life expectancy of Anodes
- Measure ground moisture content
- Real-time readings straight to your desktop or mobile device
- Accurate voltage test
- Accurate current test
- 10-year replaceable battery
- Bluetooth, Wi-Fi, Cellular, & Satellite data transmission options
- Compliance to EPA and NFPA regulatory requirements

Contact RMI Customer Service for more information!



Commodity	All liquids
Mounting Location	Under the Lid and in the Ground
UL, UCL, ATEX Certifications	Class 1, Division 1, Group D, Class 1, Zone 1, Group IIA, IP68
Tank Type	All Tank Types
Tank Orientation	Underground
Operating Temperature Range	-50° TO 60°C -55° TO 140°F
Default Communications	Global SIM 4G LTE CAT M1, NB-IoT, Boosted Bluetooth
Battery Life*	10 years, replaceable
Battery Type	Energizer Lithium AA.
Warranty	3 yrs

*Based on 2 updates in a 24 hour period

**4G LTE CAT M1 or 4G LTE NB-IoT

TECH TIP:

Cathodic Testing Requirements

According to NFPA 58; 2020 Edition; Section 6.19:

- Cathodic protection systems must produce a voltage of -0.85 or less
- Systems must be tested within 180 days of installation
- A second test must be performed 12 to 18 months after the initial test
- Periodic follow-up testing must be conducted no more than every 36 months
- If a failure occurs, it must be corrected within 180 days, and the installer must restart the testing cycle as if it is a new installation
- Installers should retain documentation on the last 2 tests



SAFTCART™

MOTOR FUEL CYLINDER CART

Safely transports six cylinders.
Does not require straps or chains.
Practical for delivery trucks, industry,
and shipping docks.



FLC33

RMI Part No.	Description
FLC33	Motor Fuel Cylinder Cart

HAND TRUCKS

Strong steel frame, 12" air tires, and safety chain.

RMI Part No.	Description
7325-S	100# Cylinder Hand Truck
7-900-4P	420# & 200# & 100# Heavy Duty Hand Truck
MW-2001	Tire & Wheel for Both Hand Trucks
909020	Replacement Handle Grip



7-900-4P



7325-S

MUSCLE MAN TANK DOLLY

Compensation related injuries are COSTLY! Consider your investment in personnel! This piece of equipment is one that your company should not be without.

- One person operation
- Goes virtually everywhere
- Shipped fully assembled & ready to go!



RTC420NG3

RMI Part No.	Description
RTC420M2	Manually Operated 420# Cylinder Dolly
RTC420G	Motorized 3-Speed Gear-Drive 420# Cylinder Dolly
Accessories	
RTC120	120 Gallon Horizontal ASME Tank Adapter
RTC2-100	100lb Cylinder Adapter - Carries 2 Cylinders
RTC50	200ASME Tank Adapter
RTC-DUAL	Dual Wheel Kit
RTC2516	Trailer Hitch Adapter



HORIZONTAL TANK DOLLIES

The Yank-A-Tank is equipped to handle 420 ASME uprights, 120, 250, & 330 gallon horizontal tanks. Not recommended for 500 gallon tanks. With its ergonomic design to prevent injuries and 10:1 lifting ratio, the YANK-A-TANK was built with the technician in mind. Easily maneuver tanks into hard-to-reach areas. The Yank-A-Big-Tank dolly system is available for the transportation of 500s & 1000s.

RMI Part No.	Description
YANK-A-TANK	Tank Dolly for 120-250 Gallon Horizontals
YANK-A-TANK HITCH	Trailer Hitch Mounting Attachment
YANK-A-BIG-TANK	Tank Dolly for 500-1000 Gallon Horizontals



YANK-A-TANK

YANK-A-BIG-TANK



MOTOMAX TANK MOVER

Move tanks up to 1,000 Gallons with ease!

- Just several minutes to hookup or disconnect
- Brakes, throttle & speed controls
- No hydraulics or gearboxes to drag down power curve and complicate powertrain
- Unique direct drive-No expensive components to replace or loss of efficiency through hydraulics, clutches or gear boxes
- 2 speed forward, 1 speed reverse
- No mar tank lifters
- Cargo hook to lift entire unit in and out of crane trucks
- Can be adjusted to fit through 36" gates
- Max carrying capacity 2,400lbs

RMI Part No.	Description
MOTO-MAX MOVER	Power Tank Mover with Jack and Trailer Dolly



HEAVY DUTY CARGO STRAP (10,000 LBS)

2" PVC impregnated webbing, chain and hook ends; 10,000 lb. capacity.

HEAVY DUTY RATCHET STRAP (3,000 lbs.)

Powerful 9 to 1 mechanical advantage cargo binder, ratchet holds tightly yet releases easily. Excellent for light duty tie downs.

RMI Part No.	Description	Capacity
10R13CG	OAL 13' Long Strap , with 9 1/2" ratchet	10,000 lbs
10R20CG	OAL 20' long Strap	10,000 lbs
RS-100	2" Nylon Webbing 20' long Steel S hook attachment ends	3,000 lbs



10R13CG



RS-100

HEAVY DUTY CARGO BINDERS (10,000 LBS)

RMI Part No.	Description
CB12X4FH	12' long 1-3/4" wide with Flat hook ends
CB12X4DLT	12' long 1-3/4" wide with Delta hook ends
CB12X4FSH	12' long 1-3/4" wide with Snap hook ends



CB12X4FH



DELTA RING



FLAT HOOK



SNAP HOOK

INTERNAL VAN STRAPS

- **V50CB12EC:** One-piece automatic spring loaded trigger; easy to use.
- **V50CB12EC-3:** Three-piece E-clip construction, manual trigger

RMI Part No.	Description	Capacity
V50CB12EC	OAL 12' Long Yellow Strap , with E-Clip (#1265)	1000 lbs
V50CB12EC-3	OAL 12' Long Yellow Strap, with 3 Piece E-Clip (#1825)	1000 lbs
1803	Ratchet Buckle, 4000# MBS capacity 2" wide	4,000 lbs



INTERNAL VAN STRAPS

PROPANE TANK INSTALLATION EQUIPMENT



Install and remove full residential storage tanks with one operator, and the RTC420 line of tank dollies.

Motorized or manual versions available, each designed to safely transport a single 420 LB (100-Gallon) D.O.T. cylinder.

Tank installations that hit the Spot, every time!
800-431-5564



MOTORIZED
RTC420NG3



MANUAL
RTC420M2



Renaldo Sales & Service, Inc.
1770 Milestrip Rd. • North Collins, NY 14111
info@renaldo.org • www.renaldo.org



Made In The USA

FISK TANK LIFTING JACK

Lifts end of ASME propane tanks up to 1000 gal. for leveling and supporting.

RMI Part No.	Description
2068	13" Fisk SAF-T-JAK

FISK TANK LIFTING JACK



DANDI-BLOCK PROPANE TANK FOUNDATION

High density recycled polyethylene - UV protection added to resin prevents deterioration of blocks.

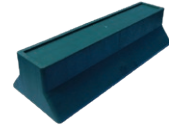
- Extremely lightweight and durable - reusable
- Minimizes Workman's Comp. claims
- Reduces back & hand injuries
- Can be attached to tank
- Does not hold moisture
- Minimizes rust & corrosion



22626



51026



81230

DANDI-BLOCKS FOR VERTICAL TANKS

Designed for 100# through 420# tanks. Can also accommodate smaller cylinders. Weighs 6lbs per block.

RMI Part No.	Description
22626	Round Plastic Base for Vertical Tanks

DANDI-BLOCKS FOR HORIZONTAL TANKS

Designed for horizontal ASME tanks up to 1,000 G.W.C. Only one block required for each end of the tank. Lifts high enough to allow for tank painting, mowing, and other maintenance as needed. 12lbs per block.

RMI Part No.	Description
51026	Plastic Base 120-325 Gallon Tank - 26.5" x 10" x 5"
81230	Plastic Base for 1000 Gallon Tank - 30" x 11" x 7"

INFORMATION: CONCRETE PADS FOR UNDERGROUND PROPANE TANKS

Concrete pads can be used to offset the buoyancy of tanks in high water table areas. Propane tanks may float to the ground surface if not properly anchored. In order to assure sufficient protection, the weight of the tank and pad must be greater than the buoyancy of the empty tank.

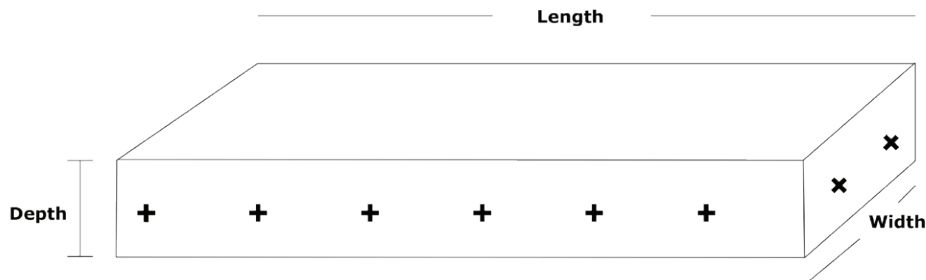
Calculations

- Multiply Tank Gallons x 8.34 (weight of water)
- Subtract weight of empty tank
- Total equals weight to offset
- 1 CU. FT of Concrete Weighs 155 lbs.
- 1 Yard of Concrete Weighs 4200 lbs.
- 1 SQ. FT 1" Thick = 13 lbs

SAMPLE PAD SIZE

Tank Size	Length	Width	Depth	Weight
325	14'	6'	2"	2185 lbs
500	14'	7'	3"	3825 lbs
1000	20'	7'	4"	7280 lbs

Concrete base should be approximately 1' larger than tank on each side and reinforced with rebar. Tank may be bolted or strapped to pad. Tank should be protected and insulated from strapping. Backfill with sand for maximum protection. **Important: This information is meant as a guideline only for installation and reinforcement. Contact a mechanical engineer for exact specifications and installation.**



PROPANE TANK STABILIZATION SYSTEM E Z ONE STEP ANCHORING SYSTEM

- Heavy Duty Anchors
- Compacting Discs
- Stainless Steel Strapping
- Anchor Drive Machines

NFPA 58 Section 6.8.1.6 2020 Edition: Where necessary to prevent floatation due to possible high flood waters around above ground or mounded containers, or high water table for those underground and partially underground containers shall be securely anchored.

RMI Part No.	Description
EZ-1346	36" Double Helix Anchor
EZ-1284	50" Double Helix Anchor
EZ-2375	Galvanized Steel Strapping (100' per roll)
EZ-2382	Plastic Sheathing for EZ-2375 Strapping (150' per roll)
EZ-2010*	Bolts to Tie Strapping to Anchor
EZ-2370	Stainless Steel Sling w. Straps for 420# Tank
EZ-2730	Anchor Drive Machine
EZ-2741	Anchor Adaptor for Drive Machine

* 2 bolts needed per anchor, sold as each

E-Z CONCRETE MINUTE MAN ANCHORS

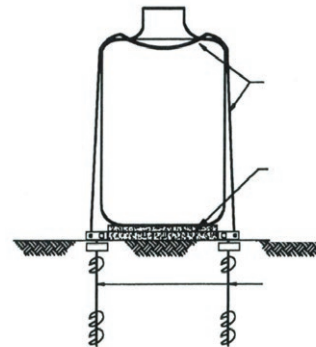
RMI Part No.	Description
EZ-1450	Anchor to be installed in wet concrete
EZ-2391	Anchor to be installed in 5/8" hole drilled in dry concrete

TECH TIP:

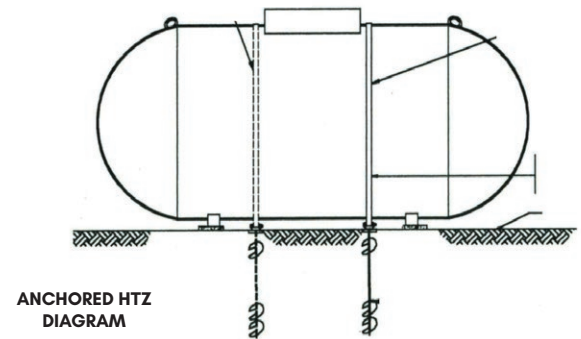
Hole Specs for Underground Tanks

These numbers are approximate and are meant for general reference only. Tank dimensions vary by manufacturer. Please consult an engineer for exact specs.

Tank Size (Gallons)	Length	Width	Hole Specifications		
			Depth	Width	Length
120	5' 6"	24"	3' 5"	4'	8'
250	7' 10"	30"	3' 7"	4' 6"	10'
500	9' 10"	37"	4' 6"	4' 6"	12'
1000	16' 8"	41"	5'	6'	19'
1450	18'	47"	5' 6"	6' 6"	20'
1990	24'	46"	5' 6"	6' 6"	28'



ANCHORED 420#
DIAGRAM



ANCHORED HTZ
DIAGRAM

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Paint



SUMTER COATING ENAMELS

- 300-400 sq. ft. coverage per gallon at 2millimeter thickness
- Great Durability
- Good Color Retention
- Good Gloss Retention



RMI Part No.	Description	Package
880W2202	No. 7 Silicone Alkyd (White) Enamel	1 GAL
880W2202-5	No. 7 Silicone Alkyd (White) Enamel	5 GAL
880W2203	No. 7 Blued White Enamel	1 GAL
880W2203-5	No. 7 Blued White Enamel	5 GAL
880D4450	No. 7 Pearl Gray Enamel	1 GAL
880L0184	No. 7 Tan Enamel	1 GAL

DOMES ENAMELS

RMI Part No.	Description	Package
886N8684	Enviro Tuff Black Enamel	1 GAL
886R8699	Enviro Tuff I.H. Red/Safety Red Enamel	1 GAL

SUMTER UNI-POX PRIMER

- Fast Coat Time
- Great Coverage
- Excellent Corrosion Resistance



UNI-POX PRIMER

RMI Part No.	Description	Package
855D1373	Uni-Pox Gray Primer	1 GAL
855W1370	Uni-Pox Off-White Primer	1 GAL
855W1370-5	Uni-Pox Off-White Primer	5 GAL

SUMTER ALUMINUM TANK PAINTS

- Long life
- Bright Finish
- Excellent Weather Durability

ALUMINUM TANK PAINT



RMI Part No.	Description
888S2005	SC 2000 Aluminum Tank Paint
888S2006	SC 2110 Strontium Chromate Aluminum



ALUMINUM

PAINTING TOOLS

RMI Part No.	Description
SC-BC003	Bucket Cover (4 Pack)
SC-BG001	Bucket Grid w/ Dimple
SC-CR063	Contour Roller, 7" - Complete
SC-CR006	Contour Roller, 7" - Refill
SC-TR09K	Tank Roller, 9"
SC-LCV16	Lambswool Refill for SC-TR09K
SW-WB042	Wire Brush w/ Metal Scraper
SC-TTB002	Tank Trim Brush w/ 12" Handle



SC-BG001

SUMTER MASTICS

- Provides chemical resistance
- Penetrates & slows rust

RMI Part No.	Description	Package
880N2209	No. 122 Foot Ring Protector	1 GAL
856X2210	Thinner (XL)	1 GAL
856X2210-5	Thinner (XL)	5 GAL



FOOT RING PROTECTOR

PROCHEMASTIC COATING

- Durable Rust and Corrosion Protection
- Excellent for Foot rings, Cylinder and Tank bottoms, Underground tanks and piping

RMI Part No.	Description	Package
PRO-CHEM-5	Non-Hardening Heavy Fluffy Compound for Brush Application. Excellent Rust Protection	5 GAL

How Much Paint Do I Need?

In order to calculate the amount of paint to use, refer to the paint manufacturer's product data sheet for the spread rate per gallon. Divide the total surface area of your tank in square feet by the spread rate per gallon, then multiply the result by 1.1 for loss if brushing/rolling, or by 1.3 if spraying. This will leave you with the approximate number of gallons required. We have calculated these values below for the most common tank sizes, but surface area may vary by tank manufacturer.

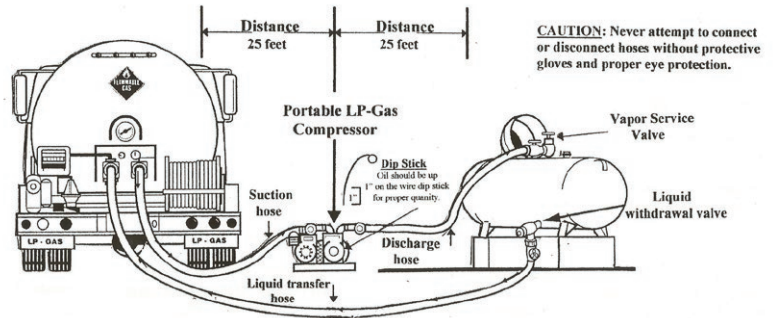
Tank Size (Gallons)	Approx. Sq. Ft.	Paint Needed Per Coat
30,000	1,950	8 Gallons
18,000	1,250	5 Gallons
12,000	1,150	4 Gallons
1,000	225	1 Gallon
500	115	1/2 Gallon
320	85	1/3 Gallon
250	55	1/4 Gallon
120	42	1/5 Gallon
120 (Vert)	40	1/6 Gallon

**Paint amounts are approximate and may vary depending on tank dimensions and thickness of coat*

TANK EVACUATION VAPOR COMPRESSOR

This compressor transfers liquid by increasing vapor pressure on the tank being emptied and decreasing it on tank being filled. The liquid can be moved into a bulk truck or another bulk tank. Three transfer hoses are required: one vapor hose from a vapor source to the compressor, one vapor hose from the compressor to the evacuated tank vapor space, and one liquid hose from the tank being evacuated to the receiving tank or truck fill valve.

Save your expensive truck pump from damage when evacuating tanks in the field at an 8 to 15 GPM flow rate. Uses include on-site upgrading or downgrading size of storage in the field, emptying cylinders or tanks in need of repair, and emergency filling of bobtails.



COMPRESSOR COMPONENTS

RMI Part No.	Description	Fuel
K-COMP	Compressor Only	-
K-MOTOR	Motor for K-LPG	Propane
K-MOTOR-GAS	Motor for K-GAS	Gasoline
K-K2	25' Hose & Valve kit	-

COMPRESSORS

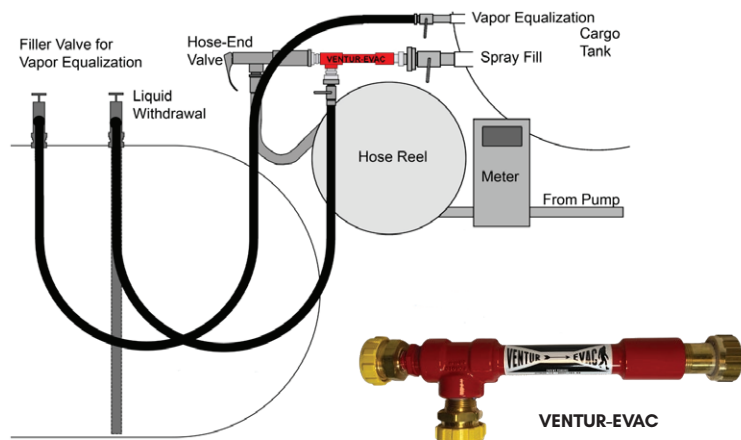
RMI Part No.	Description	Fuel	Inlet/ outlet
K-LPG	Compressor and Motor	Propane	1/2" NPT
K-GAS	Compressor and Motor	Gasoline	1/2" NPT
K-ELECTRIC	Compressor and 1 HP motor	Electric	1/2" NPT

VENTUR-EVAC

The VENTUR-EVAC is designed FOR the propane industry BY propane people. Evacuating a propane tank has never been easier. At only 6 pounds, the VENTUR-EVAC is highly portable and easy to carry. The lightweight design and ease of use will render current evacuation methods obsolete.

Tank evacuations can now be performed by your delivery drivers while they are on their routes. By carrying the VENTUR-EVAC in the toolbox of your bulk truck, additional service personnel are not required, thereby reducing labor costs.

RMI Part No.	Description
VENTUR-EVAC	Tank Evacuation Tool
VENTUR-EVAC-KIT	Complete Hose & Fittings Kit



SMITH PORTABLE PUMP UNITS

- Used to evacuate tanks or for applications where electricity is not available
- 3-1/2 HP gasoline powered Honda engine
- Spark arrestor and shielded ignition comply with NFPA 58

RMI Part No.	Description	Fuel	Inlet/ Outlet
EG-1Z	Portable Pump, 10GPM	Gasoline	3/4"
EC-HZ	Portable Pump, 15GPM	Gasoline	1"



EC-HZ



MANUAL TANK INVERTER

- Low-cost simple design with no bells or whistles
- Less than 40lbs of force required to invert a full 420ASME
- Bottom access hole for inspection/ painting of tank undersides
- Rock-solid construction - 10 Year/10,000 Cycle Guarantee
- Made in the USA

RMI Part No.	Description
LPG TANK INVERTER	Manual Tank Inverter
LPG TANK ROLLER	Tank Roller Attachment



MANUAL TANK INVERTER

"LITTLE GIANT" AIR POWERED TANK INVERTER

- Capable of lifting and inverting full 420# cylinders
- Versatile; handles single or dual cylinders, 100# through 420#
- Comes completely assembled from factory
- Small footprint, saves valuable dock space
- Runs on compressed air or nitrogen, no electric motors or switches

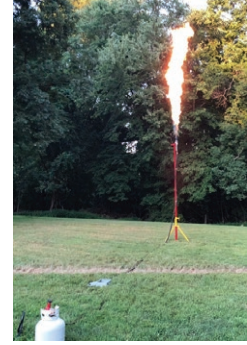
RMI Part No.	Description
LITTLEGIANT-AP	Air Powered Tank Inverter
LITTLEGIANT	Hydraulic Tank Inverter

LITTLEGIANT-AP



RED DRAGON PROPANE FLARE

Allows for fast and safe evacuation of tanks and truck tanks. Complete assembly includes hoses, flare torch for vapor or liquid, pilot with an ignitor, safety control valve and electronic on/off switch.



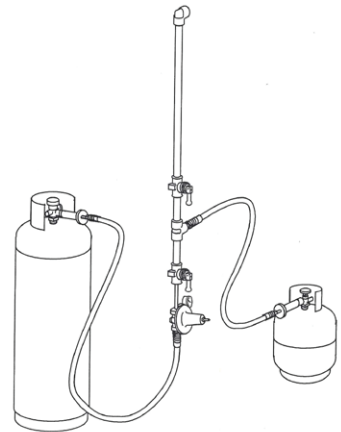
RMI Part No.	Description	Vapor Capacity btu/hr	Liquid Capacity G.P.H
PF-16-LPS	1/2" Propane Flare	48,300,000	529
PFM-16-LPS	Manual 1/2 Propane Flare	48,300,000	529
PFM-25	25ft Flare Hose Extension Kit		
PFM-31	Manual Flare Fittings Kit		

CYLINDER PURGE SYSTEM

- Safe Cylinder Purging
- Precise 15# Vapor Purging
- Save Time & Avoid Injury
- Allows for Easy Purging (especially QCC-1 valves)
- Vents Vapor Away from Operator

Purge-1 Includes:

- Regulator w/ Gauge (C)
- Dual Positive Snap Valves (A & B)
- Elbow, Tee & Connections
- One - 8' Length of 3/8" LP Hose for Vapor Inlet w/ POL Coupling (not assembled)
- One - 10' Length of 3/8" LP Hose for Cylinder Purge w/ POL Coupling (not assembled)
- One -1/2" 90° Elbow (E)
- One - 4' Threaded Vent Pipe (D)
- Note: Can be mounted horizontally, but would require additional vent pipe



RMI Part No.	Description
PURGE-1	POL x POL Purging system Assembled
Y602-7	1/2" FNPT Angle type Vent Assembly
PURGE-2	Similar to PURGE-1 Unassembled w/ lower cost valves and regulator
PURGE-3	Similar to PURGE-1 Unassembled w/ 3 way economy valve

METHANOL

RMI Part No.	Description
METHANOL-5	Methanol 99.99% dehydrated 5 gallon pail
METHANOL-55G	Methanol 99.99% dehydrated 55 gallon Drum, Factory Drop ship

METHANOL REQUIREMENTS FOR WATER REMOVAL

Container Size	Minimum Amount of Methanol Required
100lbs	1/8 Pint (2 fl. oz.)
420lbs	1/2 Pint (8 fl. oz.)
250 Gal	1 Quart
500 Gal	1/2 Gallon
1000 Gal	1 Gallon



METHANOL-55G

ALCOJECT METHANOL INJECTOR

Highly portable, used to inject methanol into tanks. Holds 5 oz. of methanol. Empties in 5-10 strokes. Check valves prevent back flow of propane pressure.

For use in the field on containers suspected of containing moisture or with which regulator freeze ups have occurred.



ABJ-2

RMI Part No.	Description
ABJ-2	Methanol Injector with o ring and wing nut for hand tight connection
ABJ-AA	Adaptor female POL x 1-3/4" ACME for connection from injector to fill valve
ABJ-RK	Repair Kit for ABJ-2
ABJ-POL	Replacement POL connecting adaptor with check

METHANOL INJECTOR

- Heavy Gauge Steel Construction
- One Gallon Reservoir
- Self-Venting Cap
- 500 psi Maximum Injection Pressure
- Unit Weight-Approx. 38 lbs.
- 24" Handle with cushion grip
- (6 Strokes = 1 Pint)



INJECT-1

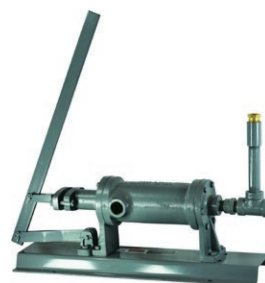
RMI Part No.	Description
INJECT-1	1 Gallon Methanol Injector with Hose Assembly
STD-MK1990	Repair Kit for INJECT-1

KRUG HAND PUMP

Simple piston hand pump for uses in filling portable and motor fuel cylinders.

Six gallon capacity at 40 strokes per minute. Can also be used to pump methanol into systems.

RMI Part No.	Description	Inlet	Outlet
K-HP	Hand Pump	1" FNPT	3/4" FNPT
K-HPRK	Old Style pump repair kit		
K-HPRK-A	New Style repair kit		



K-HP

VAC FILL

All in one filling adaptor. This completely assembled unit allows verification of vacuum on vacuum purged tanks, introduce methanol and fill the tank. Can be used on any size tank. Includes combination gauge, hose, POL adaptor, 1-3/4" ACME adaptor and isolating valves.

RMI Part No.	Description
VAC-FILL	Assembled Filling Adaptor



VAC-FILL

PREPURGED VACUUMED TANK METHANOL HOSE

6' Hose assembly to add methanol into vacuum purged tanks

RMI Part No.	Description
MTH-HOSE	6' Methanol hose with POL and nut for hand tight connection



MTH-HOSE

PAD & BARREL LOCKS AND KEYS

Pad and barrel locks used for locking meters or tank domes. Keyed alike for easy service or delivery.

RMI Part No.	Description
500BRK	Break-away Lock Keyed alike
8509910	High Security Barrel Lock
8610005	Barrel Lock key



500BRK



BARREL LOCK & KEY

SAFETY LOCK POL VALVE LOCKS AND KEYS

One key free with 12 locks purchased

- Easy to install
- Tamper resistant
- Reduces Pilferage
- No padlock required
- Interchangeable parts

Used for locking POL valves, the easy to install ME530 securely locks POL service valves to help prevent unauthorized hookups, reduce pilferage and increases security. The tamper resistant ME530 is effective for credit control, tank and cylinders in storage and out of service vessels. Properly installed, the ME530 assists safe turn on and gas checks for "out of Gas" calls and new customers Keyed alike for easy service or delivery.



ME530 & ME530-03

RMI Part No.	Description
ME530	Saf-T-Lok Cylinder Valve Lock (Brass POL plug w/Oring seal/ plated steel lock collar/tamper seal plug)
ME530-03	Key for ME530 Lock

POL & FILL VALVE LOCKS AND KEYS

- Every Dealer has his or her own registered key
- Can be keyed alike to other lock styles
- Over 60,000 useable key combinations
- 7 Pin anti pick tubular mechanism
- Rust resistant solid brass construction
- Prevent unauthorized hookups, unauthorized deliveries, and lock for non-payment



B531G

RMI Part No.	Description
B531G	POL Plug/ lock set
B545B-A0	Padlock-Specially Keyed
S533G-LLVC-A0	Locking Cap for Liquid Fill Valve
S533G-H-AT-LLVC-A0	Heavy Duty Airtight Locking Cap
S502K-C	Key for S533G Series Lock



S533G-H-AT-LLVC-A0



S533G-LLVC-A0

Cylinder Maintenance Tools

STEEL STAMP

Heavy Duty Steel Stamps to stamp the recertification date clearly, as required by D.O.T. regulations, on cylinders.



STEEL STAMPS

RMI Part No.	Description
SK-09E/316	3/16" Stamp Dies 0-9 & E
SK-09E/14	1/4" Stamp Dies 0-9 & E
SK-09E/38	3/8" Stamp Dies 0-9 & E
SK-AZ-3/16	3/16" Stamp Dies Letters A-Z
SK-AZ/14	1/4" Stamp Dies Letters A-Z
SK-AZ/38	3/8" Stamp Dies Letters A-Z

AIR OPERATED E-Z STAMP

Air operated lightweight tool for dating requalified DOT cylinders.

Stamps the date clearly as required by D.O.T. regulations. Takes less than 30 seconds to stamp the complete date on a cylinder. Dies are 3/8" square and print 1/4" characters. E-Z STAMP requires only 60 psi air pressure for operation.



EZ STAMP

RMI Part No.	Description
CP-711	Gun, Head, Stamp Dies 0-9 & E
CP-711-14	Stamp Dies A-Z
CP-711L	Gun, Head, Stamp Dies 0-9 & A-Z

AIR SCRIBE

Air operated lightweight tool for dating requalified DOT cylinders or marking metal tools



AIR SCRIBE

RMI Part No.	Description
CP9361	Air Scribe Kit
P-054177	Replacement Stylus for Air Scribe

PIT GAUGE

For accurate and convenient measuring of cylinder rust pits, gouges and dents as required for DOT visual inspection of gas cylinders. Highly polished stainless steel gauge comes with pocket size leather case.



PG-100

RMI Part No.	Description
PG-100	Pit Gauge with case

BOT-L-WRENCH

For fast & easy cylinder valve replacement and installation.



BOT-L-WRENCH

RMI Part No.	Description
20-1	WRENCH POL PLUG
20-2	VALVE WRENCH
20-3	HANDLE
20-4	CHAIN VISE
20-7	MOTOR FUEL WRENCH
20-8A	WRENCH FOR OPD VALVE
F100-1	Wrench Kit - Includes 20-1, 20-2, 20-3, 20-4

OPD CYLINDER VALVE WRENCH

These wrenches quickens installing and removal of QCC-1 cylinder valves from DOT Cylinders. The wrench works on all Style 1(QCC-1) valves.



MEP122

TECH TIP: A Bleed orifice safety Feature will indicate any pressure remaining in the cylinder before removing the valve by simply opening the valve slightly prior to loosening.

RMI Part No.	Description
MEP121	VALVE WRENCH MALE POL
MEP122	VALVE WRENCH TYPE 1 QCC/OPD
MEP125	MOTOR FUEL VALVE WRENCH



Cylinder Vises & Equipment

WALL HUGGER CYLINDER VISE

Aluminum Wall-Mounted Cylinder Holder. Compact design actually takes up less floor space than a sheet of paper, yet does not compromise on quality. At 53 lbs. can ship UPS! Can handle 20#-100# cylinders.



RMI Part No.	Description
WALLHUGGER	Wall- Mounted cylinder holder

CYLINDER VISE AND MOUNTING BASE

CYLINDER VISE

Firmly holds 12" to 14" diameter cylinders and comes with inserts for 5 gallon cylinders. Other inserts are available upon request, down to 4 inches. The easily adjustable snap-action latch locks cylinders securely into place.



MOUNTING STAND

Mounting Stand has a sturdy 20" x 24" base and stands approximately 3 feet tall, for easy working access. As an additional feature to the stand, a four-level adjustable height support has been added as a safety precaution. This model also comes with a built-on work tray for your convenience.



RMI Part No.	Description
CVM-200	Cylinder Vise
CVM-BASE	Mounting base for Cylinder Vise

CYLINDER CAPS, COLLARS, AND PLUGS

PROTECTIVE COLLARS

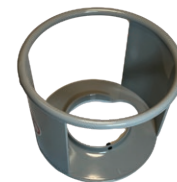
For use on cylinders in transit and on construction sites to conform with DOT and OSHA requirements. Use S-501 for easy fit over multivalve.

PROTECTIVE CAPS

For use on cylinders in transit. Fits over standard cylinder valve.

CYLINDER PLASTIC PLUGS

Plastic rain plug for cylinders without a valve. (Not a gas tight seal.)



RMI Part No.	Description
CC-101	3-1/8" Cap
S-501	Collar 3-1/2" Neck for Multi Valve Cylinders
PT-3/4	3/4" Threaded Plastic Plug



At Ray Murray, Inc., we pride ourselves on providing our customers with exceptional training events. Whether instructed by in-house Technical Support staff or Manufacturer Representatives, our classes are designed to promote safety and technical training and to support you and your organization's success. We also conduct training classes outside of RMI University at industry events. Look for our classes when attending, and stop by to see us!

**UNLOCK YOUR POTENTIAL
WITH OUR
EXPERT TRAINING
CLASSES**



MopekIoT Remote Monitoring Systems



MOPEKA IOT TANK MONITORING

- **Nothing is more accurate than sonar.** Sonar is a time-tested technology provided in advanced military applications and used every day all over the world in scientific and commercial applications... *Accuracy Above Everything, that's the Mopeka advantage.*
- **Mopeka Product's sonar sensors can measure within +/-1%** of the actual tank level—far exceeding current 20-year old mechanical gauge technology.
- **Not reliant on mechanical tank gauges** that can wear out or fail over time
- **Our Mopeka Pro Plus and TD40 sensors are Class 1 Div 1.** Since we do not penetrate the tank, we are inherently safer than traditional read-ready gauges and are able to operate in ANY environment.
- **Many ways to transmit data** including 4G LTE, M1, NB-IoT, and Satellite options.
- **Our sensors work on all single-walled above ground tanks.** With easy-to-change programming, the sensors can monitor any liquid commodity. Residential tanks, bulk plants and small cylinders! Monitor propane, butane, distillates, gasoline, lubricants, water...
- **Contact your RMI Rep** about our flexible payment plans.



PROCHECK-SENSOR & PROPLUS-RES-B

PROCHECK-SENSOR

Designed for aboveground residential tanks from 20lb cylinders up to 1,000 gallons. Bluetooth only, no monitoring fees. Simple consumer-facing app or web portal to allow your customers to monitor their own levels.

PROPLUS-RES

Designed for aboveground residential tanks, 1,000 gallons or less. Simply affix the magnetic monitor to the bottom of the tank to start transmitting a reading.

PROPLUS-B

Designed for aboveground bulk storage tanks up to 11' in diameter. Simply affix the magnetic monitor to the bottom of the tank to start transmitting a reading.



TD40

TD40

Designed for non-pressurized tanks up to 16' deep, including oil, gasoline, water, and more. Simply affix to a hole in the top of the tank to start transmitting a reading.

Remote Monitors & Remote Ready Dials

REMOTE FUEL LEVEL MONITOR

Remote monitor displays the propane level for both above ground and underground tanks. A multi-colored bar graph is easy to read. Ready to install kit includes display monitor (operated on 120V AC), and dial for tank. Outside grade 2-conductor 18/22 gauge cable is needed to connect tank to monitor.



136619

RMI Part No.	Description
136619	Commercial /Industrial % reading with alarm and dry contacts



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

REMOTE READY DIALS

Dial Size	Dial Style	Range	RMI Part No.		
			Horizontal AG	Horizontal UG	Vertical
JR	Drop-In	5-94%	5AZCS03375	-	-
JR	Drop-In	10-80%	-	-	5AZDS03387
JR	Snap-On	5-95%	-	-	5AYTS03367
JR	Snap-On	10-81%	-	-	5AYTS03366
JR	Std (2 Ear) Screw-On	5-95%	5AYRS03367	-	-
JR	Std (2 Ear) Screw-On	5-95%	-	5AYRS03383	-
JR	Std (2 Ear) Screw-On	10-81%	5AYRS03366	-	-
JR	Capsule A	E-90%	5AZDS03385	-	-
JR	Capsule A	5-85%	-	-	5AZDS03389
JR	Capsule A	5-94%	-	5AZDS03381	-
JR	Capsule B	E-90%	5AZES03376	-	-
JR	Capsule B	5-94%	-	5AZES03377	-
JR	Capsule B	10-80%	-	-	5AZES03391
SR	Std (2 Ear) Screw-On	5-95%	5AWGS03378	-	-
SR	Std (2 Ear) Screw-On	10-81%	-	-	5AWGS03382
JR	Std (2 Ear)	Std (2 Ear)	5AYRS03367	5AYRS03383	5AWGS03382



REMOTE READY DIAL

ROCHESTER NON-REMOTE READY DIALS

RMI Part No.	Description
5AWGS03382	SR. Style 420# Vertical Cyl 10-80% dial face number 5-434
5-01852	JR. Style 200# Vertical Cyl 5-85% dial face number 5-1852

SQUIBB REMOTE READY DIALS

RMI Part No.	Style	Tank	Range	Dial face#
2-JR	JR	Old Obsolete	5-94%	2701
2-SR	SR	Old Obsolete	5-94%	2201
2701-CV	JR	Horiz AG	5-94%	2701
2700-CV	JR	Chemi-Trol UG	5-94%	2700
2700-CV-TOP	JR	Trinity & American UG	5-94%	2700
2733U-CV	JR	33# Lift Truck	13-40% or 5-20%	2733U
2743U-CV	JR	43# Lift Truck	13-40% or 5-20%	2743U
2765CV	JR	420#	10-70%	2765
2722-CV	JR	200#	5-90%	2722



SQUIBB DIAL

UNIVERSAL DIAL KITS FOR OLD-STYLE GAUGES

RMI Part No.	Description
3181-01749	Jr. Style Horizontal tank 5-95%
3180-S-17-1	Sr. Style Horizontal tank 5-95%

DIAL SCREWS AND GASKETS

RMI Part No.	Description
40-414	Screw for Jr. Head
40-415	Screw for Sr. Head
40-416	Screw for dial Jr. or Sr.
15-004	Sr. Gauge Gasket
15-007	Jr. Gauge Gasket



GASKET



SCREW



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

RIDGID STEEL AND ALUMINUM PIPE WRENCHES



RMI Part No.	Description
31020-14	14" Steel Pipe Wrench
31025-18	18" Steel Pipe Wrench
31030-24	24" Steel Pipe Wrench
31035-36	36" Steel Pipe Wrench
31040-48	48" Steel Pipe Wrench
31045-60	60" Steel Pipe Wrench
31095-814	14" Aluminum Pipe Wrench
31105-824	36" Aluminum Pipe Wrench
31110-836	14" Aluminum Pipe Wrench
31115-848	48" Aluminum Pipe Wrench



THERMOCOUPLE WRENCHES

Alloy steel open end hex wrench.

RMI Part No.	Description
GK-382	Thermocouple wrench 3/8" x 7/16"



GK-382

NON-SPARKING MALLET

RMI Part No.	Description
ER119	Non-Sparking Mallet



ER119

HANDI-LITE

6" match clip extends to 24" for easy lighting of pilots burners and grills. Available with or without a magnet for retrieval of screws and hard to reach metal parts.

RMI Part No.	Description
HANDI-LITE	Extendable match holder with Magnet
Z6-413	Extendable match holder no Magnet



HANDI-LITE

SPANNER WRENCHES

For tightening and loosening 2-1/4", 3-1/4", and 4-1/4" ACME couplings.

RMI Part No.	Description
MEP120B	ACME Spanner Wrench 2-1/4" and 3-1/4"
MEP120C	ACME Spanner Wrench 3-1/4" and 4-1/4" EZ Turn
J-WRENCH	3-1/4" Box style J Wrench



J-WRENCH



MEP120B



MEP120C

DRILL KITS

Various combinations of drills with handles in a plastic case. See part no. and description for kit make-up.



G4080

RMI Part No.	Description
G1939	(21) Gauging Drills #19-#39; RHM-90 Reamer with handle and plastic case
G4080	(41) Gauging Drills #40-#80; RMH-90 Reamer with handle and plastic case

INDIVIDUAL REPLACEMENT DRILLS

RMI Part No.	Description
DH-19 thru DH-80	Individual Replacement drills #19-#80 with handles
RMH-80; RMH-90	Individual Replacement Reamer, #80 & #90 with handles



REPLACEMENT DRILL

IMPERIAL EASTMAN FLARE TOOLS

RMI Part No.	Description
500-FA	"Rol-Air" Flare Tool Flares 3/16" to 5/8" OD Tubing
525-F	"Grabber Rol-Air" flare tool one opening fits all sizes copper tubing



500-FA



525-F

FLARING & CUTTING KIT

RMI Part No.	Description
124-FA	Kit includes 500-FA & 274-FC



124-FA

LEVER TYPE TUBE BENDERS

Each 364-FHA tool bends one size. The 370-FH will bend three sizes. Heavy duty benders make smooth short radius bends up to 180°.



364-FHA-08-FA

RMI Part No.	Description
364-FHA-06	3/8" OD Tubing bender
364-FHA-08	1/2" OD Tubing bender
364-FHA-10	5/8" OD Tubing bender
370-FH	1/4", 3/8", 1/2" OD bender



364-FHA-10

SPRING TYPE TUBE BENDERS

For Hand Bending of Soft Tube, available in 3 sizes.

RMI Part No.	Description
102-E	3/8" OD Tubing bender
102-F	1/2" OD Tubing bender
102-I	5/8" OD Tubing bender



102 SERIES

PAPCO TOOLS

Papco 420

Unmatched flexibility and efficiency for precision flaring. Swing release and hex clamp blocks rotate in dependable 45° single lap flare.

Papco 512

Clean cutting, durable, wide-roller tubing cutter.

RMI Part No.	Description
420XXX	"Papco" Rothenberger Flaring tool
512XXX	"Papco" Rothenberger Tubing cutter
51212	Replacement cutting wheel for 512XXX



420XXX



512XXX

PARKER FLARING TOOL

Swing Release Type For 3/16" through 3/4" OD Tubing.



945TH

RMI Part No.	Description
945TH	Parker Flaring tool

IMPERIAL EASTMAN COPPER TUBING CUTTERS

RMI Part No.	Description
127-FB	"IMP" cutter 1/8"-5/8" OD tubing
174-F	"Big IMP" cutter 3/8"-1-1/8" OD tubing
274-FC	"Hi-Duty" cutter 1/8"-1-1/8" OD tubing
75015	Cutting Wheels for 127-FB & 274-FC



127-FB



274-FC

GAS CONTROL TAP KIT

Kit provides taps to refurbish damaged or cross threaded gas connections. The three taps will rework standard thermocouple, main burner, and pilot outlets. Thread gauge determines proper tap selection.

RMI Part No.	Description
TPK-1	Complete Gas Control Tap Kit
Individual parts to kit	
TP-11/32DL	Thermocouple Tap- 11/32" x 32 NS
TP-3/8-18	Main Burner Tap- 3/8" x 18 NPT
TP-7/16-24	Pilot Tap- 7/16" x 24 NS
TP-TG	Thread Gauge- 18 Blade

GAS-KIT ORIFICE KITS

GK-201: Contains 10 each of standard cap orifices and 10 each of plug types to cover most conversion applications plus those "hard to get" taps and drills to refurbish thread connections.

GK-202: Contains 20 each of standard cap orifices and 20 each of 5 plug types.

RMI Part No.	Description
GK-201	Orifice Kit, w/ Taps & Drills
GK-202	Orifice Kit Only

To install a specific orifice, use drill and tap as shown in the chart below

DRILLS & TAPS FOR USE WITH GAS-KIT ORIFICE KITS

Orifice			Drill		Tap	
RMI Part No.	Type	Thread	RMI Part No.	Size	RMI Part No.	Size
CO-400/80	Cap	3/8" x 27	-	-	-	-
PO-512/80	Plug	5/16" x 32	GK-180D	9/32"	GK-180T	5/16" x 32
PO-518/80	Plug	11/32" x 32	GK-188D	5/16"	GK-188T	11/32" x 32
PO-508/80	Plug	1/4" x 28	GK-185D	#3	GK-185T	1/4" x 28
PO-501/80	Plug	17/64" x 36	GK-187D	øB	GK-187T	17/64" x 36
PO-511/80	Plug	7/16" x 27	GK-182D	øY6	GK-182T	7/16" x 27

GAS-KIT MI-100K ORIFICE ADAPTOR KIT

Kit will renew 80-90% of all orifices to use higher BTU gases.

Instructions: Remove existing orifice. Insert into anvil. Ream out orifice in conjunction with hand piece. Remove orifice from anvil, insert adaptor. Place orifice on end of anvil. Use driving tool & strike with hammer to set adaptor. Insert crimping tool into anvil. Strike with hammer & flare adaptor.

RMI Part No.	Description
MI-100K	Complete Orifice Adaptor Kit
Individual parts to kit	
MI-100	Adaptor
TL-061	Hand Piece
TL-062	Crimping
TL-063	Driving tool
TL-064	Adaptor Crimping tool
TL-070	Reamer
TL-074	Anvil



MI-100K

ANDERSON & FORRESTER ORIFICE KITS

MI-131: 23 Most Common Sizes & Chart (Over 300 Pieces)

MI-135: 23 Most Popular LP Orifices & Chart (Nearly 300 Pieces)

RMI Orifice Kit Part No.			
MI-131		MI-135	
Serviceman's Orifice Kit		LP Plug & Cap Orifice Kit	
Contains		Contains	
Part No.	Pcs.	Part No.	Pcs.
CO-400	25	CO-400	25
MI-100	30	CO-401	10
MI-108	10	CO-402	10
PO-501	12	CO-403	10
PO-505	5	CO-405	5
PO-508	20	MI-100	30
PO-511	10	MI-108	10
PO-515	12	PO-501	10
PO-518	20	PO-505	5
PO-519	15	PO-508	15
PO-520	10	PO-511	10
PO-523	12	PO-518	10
PO-529	15	PO-519	15
PO-530	12	PO-520	10
PO-533	10	PO-523	10
PO-536	8	PO-527	10
PO-538	10	PO-529	15
PO-539	15	PO-531	10
PO-543	10	PO-533	15
PO-554	8	PO-536	10
PO-557	10	PO-538	10
PO-558	10	PO-539	15
PO-559	10	PO-543	10



MI-131

COMPRESSED AIR GUN

This compressed air gun is designed to blow out condensate drain lines with 800 PSI of oil-free carbon dioxide and can be used for other purposes where compressed air is desired. The flexible hose makes it easy to reach difficult locations.

RMI Part No.	Description
GG-1	Portable CO2 Air Pump
GGC-12	12-Pack CO2 Refill Cartridges for GG-1



GG-1



GGC-12

Gas-Kit Serviceman's Kit

APPLIANCE LEVEL

Automatically levels any surface in all directions (360°) at one time.

RMI Part No.	Description
GK-001	Appliance Level



APPLIANCE LEVEL

DRILLS

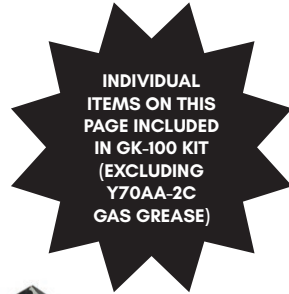
Sixteen (16) special length high speed drills cover definite orifice capacities.

RMI Part No.	BTU/HR*
D-45	48,659
D-47	44,604
D-48	41,839
D-50	35,480
D-52	29,214
D-53	25,619
D-54	21,933
D-55	19,537
D-56	16,548
D-59	12,164
D-62	10,450
D-65	8,865
D-68	6,957
D-70	5,627
D-72	4,524
D-80	1,517



DRILLS

* measured @ 11" W.C.



FILES

Files held in flip-out partition for quick & easy handling. Four files, each with specific functions.



RMI Part No.	Description
GK-FF	Flat File- cleans slotted pilots, burners and ribbon burners
GK-LF	Large Round File-cleans ports on stovetop, oven broiler water heater and space heater burners
GK-SF	Small Round File-cleans ports on star, top oven broilers water heaters and space heater burners
GK-HF	Hook File-cleans entrainment port on side of burner head



GK-100



SERVICEMAN'S KIT

A compact unit with features created to meet the demands of the "on the road", gas serviceman. Contains reamers, drills, midget wrench, files, orifice hole reducer kit, leveler, and miscellaneous tools as listed below.

RMI Part No.	Description
GK-100	Gas-Kit Serviceman's Kit

COMBINATION MIDGET WRENCH

Set includes 20 tooth offset ratchet & 2 Phillips head screw slot drivers.

RMI Part No.	Description
GK-140	Combination Midget Wrench Set
Set Parts	
GK-140A	CM-13 Ratchet Only
GK-140B	#1 Phillips Head Only
GK-140B-1	#2 Phillips Head Only



MISCELLANEOUS TOOLS AND GAS COCK GREASE

Specialty tools for the gas serviceman tool kit.

Gas cock grease will not break down in hydrocarbon gases or temperatures up to 185°F.

RMI Part No.	Description
GK-003	Chip Brush - Loosens & removes chips in drilled hoods
GK-007	Double Collet Pin Vise-Holds drills, reamers, and chip brush
Y70AA-2C	Gas Cock Grease-21/2 oz. *

* this is not included in GK-100 Kit



REAMERS

Five cornered reamers-clean pilots, orifices, burners and parts. Permit true orifice reaming without drifting, plus burnished finish.

REAMERS



RMI Part No.	Description
G-5000	Complete Reamer Kit: #20-#90 Reamers with plastic case
Kit Parts	
RM-20	#20 Reamer
RM-30	#30 Reamer
RM-40	#40 Reamer
RM-50	#50 Reamer
RM-60	#60 Reamer
RM-70	#70 Reamer
RM-80	#80 Reamer
RM-90	#90 Reamer

Leak & Pressure Testing Equipment

LEAK CHECK AND REGULATOR TESTING EQUIPMENT

All KV multi-point and SKV universal gauge kits are supplied with a tool box, twelve 1/8" valves, six 1/4" valves, a high pressure test block and user instructions on a laminated card.

RMI Part No.	Description
KVA-KIT	KVA incorporates a GA-30 gauge w/ HSA hose swivel to connect to type VA valves
KVB-KIT	KVB incorporates a GA-30 gauge w/ HSB hose swivel to connect to type VB valves
SKVA-KIT	SKVA Incorporates a GA-35" W.C. gauge used with VA valves
SKVB-KIT	SKVB Incorporates a GA-35" W.C. gauge used with VB valves



KVA-KIT



SKVB-KIT

TGA AND TGB SINGLE POINT LEAK CHECK GAUGE

RMI Part No.	Description
TGA-CONN	TGA has a HSA female hose swivel connection and GA-30
TGB-CONN	TGB has a HSB Female hose swivel connection and GA-30



TGB-CONN

VALVES

RMI Part No.	Description
VA1-VALVE	1/8" MNPT x m.305
VA2-VALVE	1/4" MNPT x m.305
VB1-VALVE	1/8" MNPT x M. Flare
VB2-VALVE	1/4" MNPT x M. Flare



VB1-VALVE

HOSE SWIVELS

RMI Part No.	Description
19129	SealRight Quick Coupler, 1/4" QC x 1/4" FNPT
19218	Gauge Quick Coupler, 1/4" QC 90° x 1/4" FNPT
19110	Gauge Quick Coupler, 1/4" QC x 1/8" FNPT
19118	Gauge Quick Coupler, 1/4" QC x 1/4" FNPT



19110



19118



19129



19218

ADAPTERS

RMI Part No.	Description
AD-A-B	Converts hose connection with a HSA hose swivel to a VB valve
AD-B-A	Converts hose connection with a HSB hose swivel to a VA valve



AD-A-B

AD-B-A

TEST BLOCKS

RMI Part No.	Description
TBA	Test Block with type A valve
TBB	Test Block with type B valve



TBA

TBB

LOW PRESSURE TEST ADAPTORS

Flare fitting unit for testing pressure in copper tubing lines when test connections on the appliance are not accessible.



1331

TL-051

RMI Part No.	Description
1328	Test Adaptor for 3/8" O.D. tube
1331	Test Adaptor for 1/2" O.D. tube
1332	Test Adaptor for 5/8" O.D. tube
TL-051	Servel Servicemans friend

GKPT-KIT PRESSURE AND LEAK TEST KITS

For use with 1/4" Flarex 1/8" test port fittings, Tank pressure 0-300 psi, and Supply line pressure 0-30psi gauges and adapter for manometer or low pressure gauge. Six 1/8" test ports adapters are included.

RMI Part No.	Description
GKPT-KIT	High 0-300 PSI and low 0-30 PSI pressure line test kit
Kit Contains:	
GL-30	SS Liquid Filled Gauge, 1/4" Bottom Mount, 0-30 PSI
GL-300	SS Liquid Filled Gauge, 1/4" Bottom Mount, 0-300 PSI
HAN11	1/4" FNPT x Hansen QD Plug
HAN1100	1/4" MNPT x Hansen QD Socket
HAN10	1/4" MNPT x Hansen QD Plug
MEJ602	1/4" M NPTx 1/4" FNPT In-Line Test Adapter w/ 90D Vent Valve
VBI-VALVE	Test Valve, 1/8" MNPT x M. Flare
19218	Gauge Quick Coupler, 1/4" QC 90° x 1/4" NPT
ME10BTK-03	Plastic Case



PTK-5 LOW PRESSURE TEST KIT

Assembled to facilitate the pressure testing of inside gas lines with inert gas in compliance with current codes. The Kit incorporates a 1/2" NPT pipe nipple, as well as an isolated Schrader valve for pressurizing the system.

RMI Part No.	Description
PTK-5	Pressure Test kit



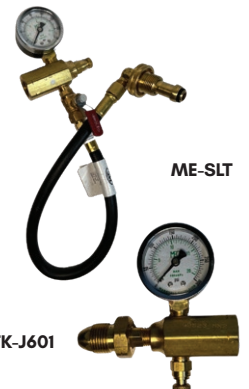
ME-SLT: SYSTEM LEAK TESTER

Designed to be inserted between the LP Gas supply tank valve POL and the POL pigtail. Handy hose for flexibility. Charge the system for 20-30 seconds close service valve, bleed down approx. 10psi. Verify the pressure has not changed (up or down) if it has trouble shoot the reason for any gain or loss.

HIGH PRESSURE TEST KIT

MPOL x FPOL test block with 0-300 PSI gauge and bleed valve.

RMI Part No.	Description
TK-J601	Basic Test Block
ME-SLT	System Tester



LEAK DETECTOR SOLUTION

Gas-Kit 5-second Leak detector solution is fast and dependable, and finds even the smallest leaks. Available in regular or low temperature for sub-freezing temperatures.

Available in 55 gallon Drums drop shipped from factory.



GASKIT-LT

RMI Part No.	Description	Case Qty	Color
GASKIT-REG	Regular (27 Deg F)- 1 Gallon	4 Gallons	Green
GASKIT-LT	Lo Temp(-10 Deg F)-1 Gallon	4 Gallons	Red
GASKIT-XL	Extra Low Temp (-50 Deg F)- 1 Gallon	4 Gallons	Pink
GASKIT-CG	For 02 (27 Deg F)- 1 Gallon	4 Gallons	Blue
GASKIT-TYPE II	Low Temp 02 (-65 deg F)- 1Gallon	4 Gallons	Lt. Blue

BRUSH, SQUEEZE & SPRAY BOTTLE

- Wide neck bottle and brush for easy application
- Pint bottle with spray nozzle
- Handy Squeeze Bottles

RMI Part No.	Range
LD-BOTTLE	Empty Pint bottle With brush
LD-SPRAY	Empty Pint bottle With Sprayer
WPI20	8 oz Empty Squeeze bottle



Pressure Gauges

STANDARD PRESSURE GAUGES



GS-100

STEEL CASE PRESSURE GAUGE

Black drawn steel case 1/4" MNPT brass inlet socket 2" dial with plate glass crystal.

RMI Part No.	Range
GS-15	0-15 lbs
GS-30	0-30 lbs
GS-60	0-60 lbs
GS-100	0-100 lbs
GS-160	0-160 lbs
GS-300	0-300 lbs
GS-400	0-400 lbs



GB-100

BRASS CASE PRESSURE GAUGE

Polished drawn Brass case 1/4" MNPT brass inlet socket 2" dial with beveled plate glass.

RMI Part No.	Range
GB-30	0-30 lbs
GB-60	0-60 lbs
GB-100	0-100 lbs
GB-300	0-300 lbs
GB-400	0-400 lbs

RMI Part No.	Range
GSS-60	0-60 lbs
GSS-150	0-150 lbs
GSS-400	0-400 lbs

NH3 ANHYDROUS STEEL PRESSURE GAUGE

Black drawn steel case 1/4" Steel inlet socket 2" dial with plate glass crystal.

BACK MOUNTED STEEL GAUGES

Back mount steel case 1/4" MNPT brass inlet socket 2" dial with plate glass crystal.

RMI Part No.	Range
GSM-100	0-100 lbs
GSM-300	0-300 lbs
GSM-400	0-400 lbs



GSM-100

1/8" INCH PRESSURE GAUGE

1/8" MNPT inlet socket, 1-1/2" dial with plate glass crystal.

RMI Part No.	Range
MGS-30	0-30 lbs bottom mount
MGSM-300	0-300 lbs rear mount



MGS-30

ME295SN-1-PRESSURE GAUGE ADAPTER

- Provides an inexpensive way to permanently install a pressure tap upstream from the first stage regulator.
- 1/8" FNPT tap allows for easy installation of pressure test monitoring devices.



ME295-SN-1

RMI Part No.	Range
ME295SN-1	Soft Nose MPOL x FPOL Adaptor with tap

DIAPHRAGM TYPE PRESSURE GAUGE

Diaphragm type 1/4" MNPT inlet socket 2-1/2" dial.

RMI Part No.	Range
GS-35WC	0-35" W.C.
GS-5	0-5 lbs



MGS-30

LIQUID FILLED PRESSURE GAUGE

Dampens pulsation and vibrations from compressors and pumps. Outlasts standard gauges-virtually indestructible.

- 2-1/2" dial
- 1/4" MNPT inlet



GL SERIES

RMI Part No.	Range	Inlet	Style
GL-300	0-300 lbs	Bottom	Stainless Steel
GL-400	0-400 lbs	Bottom	Stainless Steel
GLM-400	0-400 lbs	Center back	Metal
GLS-400	0-400 lbs	Bottom	Stainless Steel

LARGE "EASY TO READ" DURO-PRESSURE GAUGE

4-1/2" Bold Face dial Gauge features 1% accuracy, stainless steel movement, balanced micrometer pointer and standard turret type Phenol case with 1/4" MNPT bottom connection.

LARGE DURO-PRESSURE GAUGE

RMI Part No.	Description
105/300	0-300 lbs Propane Gauge
105/400	0-400 lbs Propane Gauge



105-300

LARGE STEEL PRESSURE GAUGE

RMI Part No.	Description
GSL-300	0-300 lbs Steel Gauge

PRESSURE GAUGE SNUBBER

Pressure snubber protects gauge from damaging violent surges and moderates pulsing at the gauge.



ME204

RMI Part No.	Range
ME204	1/4" x 1/4" Pressure Snubber and Filter
ME202SS	1/4" x 1/4" Pressure Snubber #54 drill orifice



Manometers

GAS-KIT WATER MANOMETER

Features

- 16" W.C. clear plastic tube,
- Magnetic holder with flexible strap
- Sliding scale
- Quality neoprene tubing



GKST-1

RMI Part No.	Description
GKST-1	Standard 16" Manometer
GKST-2	Self Totalizing Manometer
GKST-5A	Neoprene Manometer Hose (sold per foot)

ELECTRONIC MANOMETERS

Features

- Positive/Negative pressure measurements
- Auto power off
- Rubber boot with magnet
- 1 year warranty



EM152



EM201B

RMI Part No.	Description
EM152	Dual input Manometer 20"
EM720	Dual Input Manometer 60"
AC319	Soft carrying case
BF100	Brass fitting (hose barb x 1/8 NPT)

MAGNEHELIC GAUGES

The 2025-A432 kit includes:

- 2025 Magnehelic gauge
- Connections-1/8" NPT high and low pressure taps, duplicated-one pair side and one pair back
- Two 1/8" NPT plugs
- Rubber tubing and adaptors- One 9ft. length of 3/16" ID tubing, terminal tube and two pipe thread to tubing adaptors

RMI Part No.	Description
2025	0-25" W.C. Gauge only
2025-A432*	0-25" W.C. Complete kit



2025

* other ranges available by special order

SPRING GAUGE-KIT MANOMETER

Features

Kit includes 0-35" W.C. gauge, rubber hose with bell end for easy fit on orifice and plastic protective case.



TK-35WC

RMI Part No.		Description
Marshall Excelsior	Fisher	
TK-35WC	50P-2	Complete test kit
-	50P-5	Gauge and hose only
-	1D497606992	Bell end (may be used with both kits listed)
-	1E484006992	3' Hose only
BF100	-	Brass fitting (hose barb x 1/8 NPT)

DWYER DUAL RANGE FLEX-TUBE U-INCLINED MANOMETERS

Versatile and useful manometer designed for installation with the serviceman in mind. A sturdy clear plastic manometer, it offers single direct readings in two ranges: A U-Tube reads from 0" to 16" of W.C.; as an inclined gauge it reads from -.20" to 0" to 2.6" W.C.. How-to-use instructions are printed directly on the scale.

RMI Part No.	Description
96-INMAN	Flex-tube U-Inclined Manometer
Manometer Accessories	
A126	Green manometer fluid
A-120	Pink antifreeze fluid 3/4oz (-40 degrees)
A-101	Gauge oil



96-INMAN

Combustible Gas Measurement

SENSIT GOLD CGI INSTRUMENTS

- Display up to 4 gases
- Natural & Propane LEL & % Gas
- Oxygen
- Carbon Monoxide
- Weather resistant
- Internal pump
- Infrared download to printer
- Low cost, Long life sensors
- LED warning lights
- Loud Audible Alarm
- UL913 Listed
- Upgraded display



SENSIT GOLD G2

RMI Part No.	Sensing features					
	Leak Detector	%LEL Display	% Gas Display	Carbon Monoxide	Oxygen	Hydrogen Sulfide
911-00000-01		X				
911-00000-03		X			X	
911-00000-05		X		X	X	
911-00000-51	X	X	X			
911-00000-52	X	X	X	X		
911-00000-53	X	X	X		X	
911-00000-55	X	X	X	X	X	
911-00000-58	X	X	X	X	X	X
ANJ02017	Bar Hole Probe 32"					



P400

SENSIT P400 PERSONAL MONITOR

The Sensit P400 is a multi-gas detector that can detect %LEL, CO2, and O2. It can be configured with 1 to 5 sensors and has an optional Immediate Detection System (IDS) that provides early warning to changes in gas concentrations. It has an intrinsically safe design and features audible, visual, and vibration alarms.

RMI Part No.	Sensing features			
	Pump	%LEL Display	Carbon Monoxide	Oxygen
923-00000-10		X		
923-00000-16		X	X	
923-00000-30		X	X	X
925-00000-10	X	X		
925-00000-16	X	X	X	
925-00000-30	X	X	X	X

SENSIT HXG-2 LEAK DETECTOR

High sensitivity tool that can help:

- Heating, Air conditioning, and plumbing contractors quickly find leaks
- Fire and Police Departments with safety and arson investigations
- Municipalities check manholes and confined spaces
- Industry check for hazardous conditions
- Solid state sensor-highly reliable
- Ultra-sensitive, as low as 10ppm methane
- Wide range of audible tick detection
- Adjustable alarm level



HXG-2D

RMI Part No.	Sensing features
S0159-2D	HXG-2D Leak Detector
881-00013	Calibration Kit

SENSIT TKX-7 COMBUSTIBLE GAS DETECTOR

- Finds leaks quickly and economically
- Unique low power sensor
- Requires virtually no maintenance
- Uses 3 "C" size alkaline batteries
- Protective sensor cap



TKX-7

RMI Part No.	Sensing features
TKX-7	25 PPM Leak detector

SENSIT TRACK-IT III-A CGI

- Intrinsically Safe Design (Certified)
- 2-Speed Internal Pump
- Identifies Natural Gas vs Propane Gas
- Lowest Cost, Long Life Sensors
- LED Warning Lights
- Large Bright Graphic Display
- Loud Audible Alarm
- Optional 1600 Event Auto Log
- Exceptional Water Protection
- Long Battery Life
- Cost Effective as An Area Monitor
- Infrared Downloading
- Built-in Natural Gas and Propane Gas Calibration
- Stainless Steel Housing
- Meets NFPA 54 National Fuel Code for Gas Pipe Purging Requirements when equipped with TC (% volume)



TRAK-IT III-A

RMI Part No.	Sensing features			
	Leak Detector	%LEL Display	% Gas Display	Carbon Monoxide
920-00000-50	X	X	X	
920-00000-51	X	X	X	X
AJN02035	42" Plunger Bar			
ANJ02017	Bar Hole Probe 32"			



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Test Meters

DM515 DIGITAL MULTIMETER

The DM515 is a True RMS multimeter with HVAC functionality; temperature, milli and micro amps, capacitance, auto/manual ranging and 1000 VAC/VDC.

RMI Part No.	Description
DM515	Digital Multimeter
Accessories	
AC519	Soft-Pouch Carrying Case
ATL55	Test leads with Alligator clips
AF155	0.5 Amp Fuse, 3-Pack
AF160	12.5 Amp Fuse, 3-Pack



DM515

UEI DL579 MULTIMETER

The DL579 is an TRMS HVAC/R Clamp Meter. It has functions like AC/DC voltage, AC amps, AC/DC microamps, resistance, capacitance, frequency, and duty cycle. It includes test leads, a pair of alligator clips, thermocouples, a zippered pouch, backed by a 1-Year warranty.

RMI Part No.	Description
DL579	G2 Phoenix Pro 1 display Multi meter
Accessories	
AC519	Soft-Pouch Carrying Case
ATL55	Test leads with Alligator clips
AF155	0.5 Amp Fuse, 3-Pack
AF160	12.5 Amp Fuse, 3-Pack



DL579

TEST ADAPTERS

For Thermocouples - allows testing for running milli-voltage output.

RMI Part No.	Description
10-038	Thermocouple test adaptor



10-038

MULTIMETER CARRYING CASE

Empty hard carrying case for the LP gas or HVAC/R service technician to protect their multi-meter tool.

RMI Part No.	Description
AC504	Hard Carrying Case



AC504

Combustion Test Equipment

UEI RESIDENTIAL/COMMERCIAL COMBUSTION ANALYZER KIT W/ PRESSURE/PRINTER

The C163 Residential/Commercial Combustion Analyzer is easy to use and features differential pressure testing, purge pump protection for the CO sensor, wireless printing via the included printer and free Kane Wireless Printer App, as well as our combustion line standard features.

This analyzer calculates essential information for installing and maintaining gas appliances.

Includes: Analyzer, 2 Thermocouples, Printer, and Carrying Case



C163KIT

RMI Part No.	Description
C163KIT	C163 Combustion kit with pump and printer

SENSIT CARBON MONOXIDE ANALYZER

- 0-1999 PPM display
- 3-year warranty
- 2-year sensor warranty
- Auto shut off
- Comes with case, flue probe, 5' tubing, and particle filter



SENSIT CO

RMI Part No.	Description
913-00000-04	Sensit CO Flue Gas Analyzer with pump
CJ0SCO705	Complete Calibration kit
CM0139-100	Calibration Gas 100 PPM CO

SAFETY SIREN PRO SERIES WALL PLUG DETECTOR

- Detects dangerous levels of Methane and Propane Gas
- Computerized calibration helps eliminate false alarms
- Built-in self-diagnostics assures the unit is operating properly
- Easily plugs into any standard 110-120v AC electrical outlet and samples the air every 2-1/2 minutes
- Lock tab feature makes the detector tamper proof
- Advanced surface mount circuitry
- Powerful 85DB Alarm
- 5 year warranty



HS80501

RMI Part No.	Description
HS80501	LP/Methane Detector
HS80504	CO/Methane/LP/NG Alarm Detector

Rycom Line Locators



RYCOM SNAPTRACK

Built on a proven design, and with Pathfinder SAF Technology™ at its core, the SnapTRACK® offers RYCOM’s most advanced signal acquisition and filtering technology. The SnapTRACK® cable & pipe locator offers utility locators FrequencyFlex™ allowing users to adapt the system to their specific needs. Multiple active frequencies allow the user to accurately locate with a minimum of interference while maintaining the ability continue locating past faults and around conduit bends. Passive frequencies identify “live” and charged lines by their naturally occurring electromagnetic fields. The SnapTRACK® offers multiple passive frequencies -- 50Hz, 60Hz, Radio Frequency, Cathodic Protection Rectifier & CATV -- allowing line locating without the use of a transmitter.

Features:

- Multiple active frequency options
- Passive frequencies for locating “live” utilities without the use of a transmitter
- Powerful 3 watt or 10 watt tracing signal is reliable for direct connection, transmitter, and coupled induction
- Quadruple antennae array allows for push button depth, line direction, line orientation, and current measurements
- Made in the USA



SNAPTRACK

RMI Part No.	Description
0010080000	Basic Snap Track Precision Locator, No Remote

RYCOM STICK V3 LINE LOCATOR

From crowded easements, to long runs of pipe, to the most demanding of locating environments, users can depend on The Stick. Dependability is not only driven by the internal technology, but The Stick is built to last with an aluminum housing and sealed against weather. The ruggedly designed and well balanced receiver includes an LCD screen providing relative and actual signal strength, as well as a speaker for variable audio pitch. A peaking signal response allows the user to minimize interference and maintain the locate on the target conductor. The Stick cable and pipe locator offers multiple active frequencies – from 50Hz to 82kHz – ensuring flexibility to match the needs of the most complicated locating environments. Transmitter functions include transmitter induction, coupler induction and direct connection. Whether the locate is measured in feet or miles, with automatic impedance matching from 5 ohm to 25,000 ohms and 3 watts of output power, The Stick will meet the challenge.

Features:

- Multiple frequencies options available on both transmitter and receiver
- Multiple active frequencies allow accurate tracing in congested areas
- 3 watt transmitter for direct connection, transmitter and coupled induction
- Digital LCD displays on both transmitter and receiver
- Push button digital depth
- Weather proof membrane buttons
- Peak mode & Left-Right Guidance mode
- Ferrous metal detection
- Made in the U.S.A.

RMI Part No.	Description
STICK-V3	RYCOM FE Metal detector



STICK V3



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

GHS DECALS

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) is a system to which the United Nations adheres and OSHA aligns it's Hazard Communication Standard (HCS). Under these regulations, OSHA requires labels for hazardous materials, such as propane, with the responsibility falling on the propane marketer to ensure their products are labelled. Each propane container must include 6 components: A product identifier, a signal word, a pictogram, a hazard statement, a precautionary statement, and the name & contact information of the supplier. RMI offers decals customized with your customer info that meet all of the aforementioned requirements. For more information on labelling requirements for propane, reach out to our technical team.

RMI Part No.	Description	MOQ
SN-GHS-ASME6-SPEC	ASME, HCS/GHS 6" x 6"	100
SN-GHS-ASME10-SPEC	ASME, HCS/GHS 10" x 10"	100
SN-GHS-4-1-SPEC	4-in-1 DOT, HCS/GHS, NFPA, ANSI 15" x 3.25"	500
SN-GHS-SPEC	2-in-1 DOT, HCS/GHS 5.95" x 2.22"	1000

DANGER - FLAMMABLE GAS UNDER PRESSURE - LEAKING LP-GAS CAN CAUSE A FIRE OR EXPLOSION IF IGNITED - CONTACT LP-GAS SUPPLIER FOR REPAIRS OR DISPOSAL OF THIS CYLINDER OR UNUSED LP-GAS - FOR OUTDOOR USE ONLY - DO NOT USE OR STORE CYLINDER IN A BUILDING, GARAGE OR ENCLOSED AREA*

- Extremely Flammable Gas
- Heavier Than Air
- Simple Asphyxiant
- Contact with water or its presence
- Contact with Liquid will cause Freezing of Tissue
- REL: MEDIUM
- Size container, equip and keep cool under 131°F

CONSULT CORRESPONDING SDS FOR FURTHER INFORMATION AND INSTRUCTIONS. AFFIX TO ALL PORTABLE CONTAINERS USED BY COMMERCIAL CUSTOMERS.

PERSONAL PROTECTION

Goggles Gloves

NFPA HAZARD RATING

4-Severe
3-Serious
2-Moderate
1-Slight
0-Minimal

Net Wt. _____ lbs. (_____ kg)

DO NOT REMOVE, DEFACE OR OBLITERATE THIS LABEL

*EXCEPT AS AUTHORIZED BY NFPA 58

FIG. 1 POL TYPE

FIG. 2 OQC TYPE

This LP-Gas cylinder is equipped with a safety relief valve. Do not place inside any enclosed or heated area.

Customer Warning:

- Know the size of LP-gas. Under certain circumstances, you may not be able to smell the odorant. If you hear or smell leaking LP-gas, immediately get everyone away from the cylinder and call the fire department.
- Customer uses LP-gas supplier: Always the cylinder of interest on your list. Check the cylinder registration date. Use return tag to identify the cylinder.
- LP-gas heavier than air and can collect in low places while discharging. Contact with the liquid contained the cylinder will cause freeze burns to the skin. Do not allow children to tamper or play with the cylinder. When the cylinder is not connected for use, keep the valve closed off. The valve should be open.
- Do not use, store or transport cylinder where it could be exposed to high temperatures. Relief valve can open allowing a large amount of flammable gas to escape. Other warning: keep cylinder secured in an upright position with cylinder valve normal off. Self-contained outdoor cooking appliances must be listed to the cylinder of 20 lb. LP-Gas capacity or less.

When Connecting for Use:

- Use only in compliance with applicable codes. Read and follow appliance manufacturer's instructions. The cylinder contains an ODS (Overfill Prevention Device) equipped valve that can accept either a POL or OQC style coupling nut. If the appliance regulator has a male threaded coupling nut, it has left-handed threads and must be tightened by turning counter clockwise (Figure 1). If the regulator has a female threaded coupling nut, tightening the coupling nut by turning clockwise (Figure 2). Turn off all valves on equipment. Connect hoses for gas leaks with a match or open flame. Apply an approved leak detector solution at area marked in Figure 1 and Figure 2 and open valve. If bubble appears close valve and there is LP-gas return pressure under needed repair. Also, check appliance valves and connections for leaks before lighting appliance. Light appliance(s) following manufacturer's instructions. When appliance(s) is not to use, keep cylinder valve closed.

You may choose to return this Exchange Cylinder for a filled cylinder or have it re-filled by a propane retailer. Depending upon the date of manufacture, this Exchange Cylinder may require requalification under United States Department of Transportation regulations before it can be re-filled. If you wish to avoid the cost of requalification, you can return this cylinder to any cylinder exchange location. No credit will be given on residual product. For more information about requalification, contact your local propane provider.

SN-GHS-4-1-SPEC-39-343 10/17/13

SN-GHS-4-1-SPEC

PROPANE

DANGER:
EXTREMELY FLAMMABLE GAS.
CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED.
MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.
MAY CAUSE FROSTBITE.
MAY FORM EXPLOSIVE MIXTURES WITH AIR.

Do not handle until all safety precautions have been read and understood. Keep away from heat, open flames, sparks, hot surfaces. No smoking. Do not get in eyes, on skin, or on clothing. Use and store only outdoors or in a well-ventilated place. Wear protective gloves, protective clothing, and either eye or face protection. Leaking gas fire. Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Use a back flow preventive device in the piping. Close valve after each use and when empty. Use only with equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Protect from sunlight when ambient temperature exceeds 52°C (125°F). Read and follow the Safety Data Sheet (SDS) before use. CAS: 74-98-6

FIRST AID:
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
IF ON SKIN: Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention.

DO NOT REMOVE THIS PRODUCT LABEL.

SN-GHS-ASME10-SPEC-39-343

SN-GHS-ASME10-SPEC

PROPANE

DANGER: EXTREMELY FLAMMABLE GAS. CONTAINS GAS UNDER PRESSURE. MAY EXPLODE IF HEATED. MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION. MAY CAUSE FROSTBITE. MAY FORM EXPLOSIVE MIXTURES WITH AIR. Do not handle until all safety precautions have been read and understood. Keep away from heat, open flames, sparks, hot surfaces. No smoking. Do not get in eyes, on skin, or on clothing. Use and store only outdoors or in a well-ventilated place. Wear protective gloves, protective clothing, and either eye or face protection. Leaking gas fire. Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Use a back flow preventive device in the piping. Close valve after each use and when empty. Use only with equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Protect from sunlight when ambient temperature exceeds 52°C (125°F). Read and follow the Safety Data Sheet (SDS) before use. **FIRST AID: IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention. **IF ON SKIN:** Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention. CAS: 74-98-6

UN1075

FLAMMABLE GAS 2

SN-GHS-SPEC-39-343

SN-GHS-SPEC

Non-stock/special order items are not cancellable or returnable
Shop online at www.raymurray.com or call **800-628-5044**

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SIGNS & DECALS

Ray Murray, Inc. stocks a wide variety of the most commonly used signs and decals in the industry. If you don't see what you're looking for, reach out to our customer service team and we will get it made custom for you! Minimum order quantities may apply for custom orders.

LPG CYLINDER DECALS PLAIN & IMPRINTED

RMI Part No.	Description
SN-LPG	2" x 3-3/4" DOT Cyl Decal
SN-LPG-SPEC*	SN-LPG Decal with Customers name imprinted

*Minimum order-3500 pieces



SN-LPG

CURVED LPG CYLINDER DECAL

RMI Part No.	Description
SN-LPG-C	Curved DOT Cyl Decal



SN-LPG-C

CURVED WARNING LABEL DECAL

RMI Part No.	Description
SN-WARN-C	Curved Warning label Cyl Decal



SN-WARN-C

3-IN-1 HAZARD LABEL

- 3 in 1 label
- DOT 1075
- NFPA Hazard rating
- Warning ANSI/NFPA Pamphlet 48
- Vinyl decal
- Colored Red, Blue, Yellow, and Black



SN-HAZARD-1

RMI Part No.	Description
SN-HAZARD-1	4-3/4" x 6-3/4" Three -in - one Hazard Decal

LPG FORK LIFT CYLINDER DECALS "RIGHT TO KNOW"

RMI Part No.	Description
SN-OSHA	2-1/2" x 5" "Right to Know" Motor Fuel Cyl Decal



SN-OSHA

DIAMOND NFPA HAZARD DECAL

RMI Part No.	Description
SN-OSHA-MED	7-1/2" x 7-1/2" Diamond NFPA Hazard Decal
SN-OSHA-LARGE	15" x15" Diamond NFPA Hazard Decal



SN-OSHA-LARGE

PROPANE VEHICLES DECALS

RMI Part No.	Description
SN-MFV	National Decal for Propane Vehicles
SN-LPG-NYS	Propane Vehicle Decal- New York State



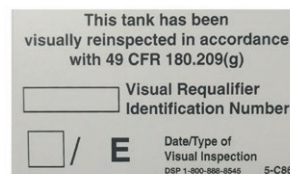
SN-MFV

VISUAL REQUALIFIER IDENTIFICATION KIT

Special Order:

Specify your RIN Number to be printed on the Decals
Date Decals must be ordered separately by monthly quarters, Quantity is 8 of each month.

RMI Part No.	Description
SN-RIN-Q1	01,02,03 Month decal
SN-RIN-Q2	04,05,06 Month decal
SN-RIN-Q3	07,08,09 Month decal
SN-RIN-Q4	10,11,12 Month Decal
SN-RIN-SPEC	Visual Inspection Decal kit
SN-RIN-SPEC-P	RIN Decal Kit, Punch-Out Style
SN-RIN-SPEC-M	Silver Mylar RIN Decal

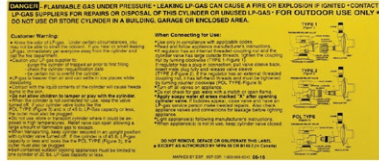


SN-RIN-SPEC

LARGE WARNING LABEL

Used on portable cylinders of 4 to 40 lbs capacity, to communicate risk to the person using on the safe handling of the cylinder.

RMI Part No.	Description
SN-WARN-1	4" x 9" Warning label



SN-WARN-1

FILLING PROCEDURE DECAL

RMI Part No.	Description
SN-FILL	15" x 22" Decal- Motor Fuel Tank Filling Procedure
SN-FILL-2	10" x 16" Decal - Complete Filling Procedures



SN-FILL-2



SN-FILL

CYLINDER EXCHANGE, FILLSTATION SIGNS & INSTRUCTIONS

RMI Part No.	Description
SN-FILL-EX1	2'x 4' Aluminum Single Face Cylinder Exchange
SN-FILL-EX2	2'x 4' Aluminum Double Face Cylinder Exchange
SN-FILL-3	2'x 3' Metal Fill Station Instructions
SN-FILL-4	2'x 4' Aluminum Double Face Filling Station
SN-FILL-5	2'x 4' Aluminum Singel Face-Filling Station
M-97-FR	Frame for 2' x 4' Aluminum Signs



SN-FILL-3



SN-FILL-5



SN-FILL-EX1

FILL STATION DECALS

RMI Part No.	Description
SN-LPG-PS	Pump Station Decal 90% Propane
SN-EMERGENCY	Emergency Shutoff Decal 3/4" letters



SN-EMERGENCY

EXCHANGE & SAFETY SIGNS & DECAL

RMI Part No.	Description
SN-EXCHANGE	12" x 16" Exchange Check List Decal
SN-SAFETY	18" x 24" Safety Check List Sign



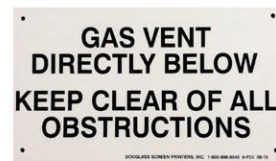
SN-EXCHANGE



SN-SAFETY

VENT BELOW WARNING SIGN

RMI Part No.	Description
SN-VENT	4" x 7" Gas Vent Directly Below Poly Warning Sign



SN-VENT

QT, NQT DECAL

RMI Part No.	Description
SN-QT	2-3/4" x 4-1/2" Decal w/ 2" Letters
SN-NQT	2-3/4" x 4-1/2" Decal w/ 2" Letters



SN-NQT



SN-QT



LIQUID/VAPOR DECALS

RMI Part No.	Description
SN-LIQUID	1" x 4" Decal
SN-VAPOR	1" x 4" Decal



SN-LIQUID



SN-VAPOR

GAS DECALS

RMI Part No.	Description
SN-GAS	1/2" x 3" Decal with 2" letter, 100 per roll



SN-GAS

LIQUEFIED PETROLEUM GAS DECALS

RMI Part No.	Description
SN-LPG-2	Liquefied Petroleum Gas Decal with 2" letters



SN-LPG-2

REFLECTIVE WARNING DECALS

RMI Part No.	Description
SN-REFLECT	4" x 36" REFLECTIVE DECAL



SN-REFLECT

PROPANE DECALS

RMI Part No.	Description
SN-PROPANE-R	1" x 6" Decal, Black on Yellow, 100 per roll
SN-PROPANE-2PSI	3/8" x 3" Decal, Black on Yellow, 10 per sheet



SN-PROPANE-2PSI



SN-PROPANE-R

REFLECTIVE RR CROSSING DECALS

RMI Part No.	Description
SN-RRL	4" x 36" REFLECTIVE DECAL
SN-RRS	8" x 12" REFLECTIVE DECAL



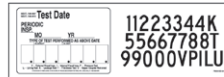
SN-RRL



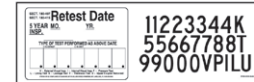
SN-RRS

TEST & RETEST DECAL

RMI Part No.	Description
SN-TEST	Test Date Inspection Decal Kit
SN-RETEST	Retest Date Inspection Decal Kit



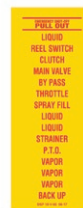
SN-TEST



SN-RETEST

TRUCK LABELS

RMI Part No.	Description
SN-LABEL	1" x 3" Truck Label kit
SN-LABEL-S	3/8" x 1-3/4" Label Kit



SN-LABEL-S



SN-LABEL

TRUCK SHIPPING PAPERS

RMI Part No.	Description
SN-SHIP	Poly 7" x 8-1/2" Bulk Truck Shipping Paper
SN-SHIP-CT	Poly 7" x 8-1/2" Cylinder Truck Shipping Paper



SN-SHIP



SN-SHIP-CT

NO SMOKING METAL SIGNS & DECALS

RMI Part No.	Description
SN-NS2	4" x 22" Aluminum Sign
SN-NSD2	5" x 22" Decal with 4" letters
SN-NSD8	3" x 14-1/2" Decal with 2" letters
SN-NSD9	2-1/2" x 10-1/2" Decal with 1-1/4" Letters
SN-SS110	10" x 14" -Danger Metal Sign
SN-SS311	20" x 28" -Danger Metal Sign



SN-NSD8



SN-SS110

NO SMOKING POLY SIGNS & DECALS

RMI Part No.	Description
SN-NSD7	7" x 17" Decal
SN-NS6	7" x 17" Poly Sign
SN-NSD5	7" x 17" Decal with "No Open Flame"
SN-NS7	7" x 17" Poly Sign with "No Open Flame"



SN-NSD7



SN-NSD5

NO SMOKING FLAMMABLE GAS SIGNS & DECALS

RMI Part No.	Description
SN-NS3	24" x 36" Aluminum Sign with 50 feet
SN-NSD3	12" x 18" Decal with 50 feet
SN-NSD3-M	12" x 18" Metal Sign with 50 feet
SN-NSDFPG	9" x 27" Decal with Flammable Propane Gas



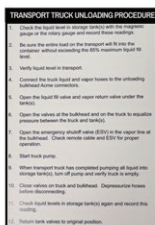
SN-NSD3



SN-NSDFPG

TRANSPORT TRUCK UNLOADING PROCEDURE SIGN/DECAL

RMI Part No.	Description
SN-UNLOAD-P	22" x 15" Poly Procedure Sign
SN-UNLOAD-D	8.5" x 11" Procedure Decal



SN-UNLOAD-P

PROPANE DECALS & PLACARDS

RMI Part No.	Description
SN-PROPANE	2-3/4" x 10-1/2" Decal with 2" Red Letters
SNL-PROPANE	5" x 18" Decal -with 4" Red Letters
SN-FLAMMABLE	10-1/2" Diamond Decal "Flammable Gas"
SN-FLAME-R1	10-1/2" Diamond Placard Poly "Flammable"
SN-FLAME-2	6" x 27" Flammable Gas Decal with 4" Letters
SN-FLAME	10-1/2" Diamond Decal "Flammable"



SN-FLAME-2



SN-FLAME-R1



SN-FLAMMABLE

DECALS, MAGNETS, MOUNTING HOLDERS, FLIP PLACARDS

RMI Part No.	Description
SN-1075	10-1/2" Diamond Decal Red with White Letters
SN-1075R	10-1/2" Diamond Sign Rigid Poly Red with White Letters
SN-MOUNT	Placard Mounting Holder
SN-MAGNET	10-1/2" Diamond Placard Vinyl Magnet
SN-1075F	Aluminum "Easy Flip" Placard contains 1075, 1005 and Blank



SN-1075



SN-1075F



SN-MOUNT

PUSH/PULL EMERGENCY SHUT OFF SIGNS



SN-PULL-V

RMI Part No.	Description
SN-PULL-V	Pull to Close Sign Vinyl Plastic
SN-PUSH-V	Push to Close Sign Vinyl Plastic



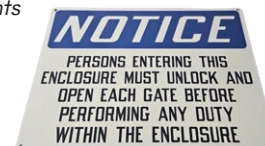
SN-PUSH-V

GATE AND RAILROAD CAR SIGNS

RMI Part No.	Description
SN-GATE-M*	Notice: Open Gates Metal sign 10" x14"

* required in all New Jersey Plants

SN-GATE-M



FLASHLIGHTS

Flashlights approved for use in hazardous areas. Waterproof with high-intensity beams - brighter than your typical light. Excellent for any work area where propane gas is present. Batteries not included.

RMI Part No.	Description
1965Y	Mitylite Class 1 Div 1 Waterproof LED Flashlight, Yellow, 134ft Range
2217	Worksafe LED Class 1 Div 1 Flashlight, Orange, 328ft Range
3315Y	Pelilite Class 1 Div 1 Waterproof LED Flashlight, Yellow, 472ft Range
2010Y	Sabrelite Class 1 Div 1 Waterproof LED Flashlight, Yellow, 525ft Range



MITYLITE

PELILITE



SABRELITE



WORKSAFE LIGHT

BEE BOPPER

RMI Part No.	Description
61011	14oz spray can, Bee Wasp, Hornet, repellent



BEE BOPPER

"HALT" DOG REPELLENT

RMI Part No.	Description
61101	1-1/2oz spray can, Halt Dog Repellent, .35% Capsacin
61106	1-1/2oz spray can, Halt II Dog Repellent, 1% Capsacin



HALT DOG REPELLENT

MONKEY GRIP GLOVES

Provides warmth, protection and comfort, good grip for handling tools, couplings and hoses. Fleece jersey lined foam insulation and tough orange vinyl outer coating with safety cuff.



23-193



23-173

RMI Part No.	Style
23-193	Winter Monkey Grip
23-173	Raised Finish Winter Monkey grip

ALPHATEC GLOVES

Comfortable PVC gloves with interior fleece lining that protect in temperatures as low as -22°F. Rough finish allows for excellent grip when wet. Ideal for bobtail delivery drivers.



23-202

RMI Part No.	Description
23-202	Alphatec Waterproof Chemical-Resistant Insulated Gloves

ACTIVARMR GLOVES

PVC-Coated cold weather insulated work gloves. High dexterity rating for maximum range of movement. Rough finish for improved grip. Cut-resistant.

RMI Part No.	Description
97-631 9	ActivArmr Winter Work Gloves, Medium
97-631	ActivArmr Winter Work Gloves, Large



97-631

WORK GLOVES

Leather or Nitrile palm continuous to thumb, and finger tips, knuckle strap, and elastic top grade leather and canvas.

RMI Part No.	Description
Z1310	Leather Palm Work Gloves
78-150	Insulator Gloves



Z1310



78-150

EMERGENCY RESPONSE KIT

Everything a technician needs to respond to propane emergencies - in one convenient toolbox! All key personnel in your company should have one of these kits at their disposal so that emergency response times are kept to a minimum.

Kit Includes:

- Heavy-Duty Steel Toolbox
- Wooden Plug Set
- Non-Sparking Mallet
- Rubber Ball & Compression Plate
- Neoprene Rope
- Protective Eye Goggles
- Protective Gloves
- High-Vis Armband
- Brass POL Plug
- 3/8" - 5/8" Flare Plug Set
- 3/8" - 5/8" Flare Cap Set
- 1/4" - 2" Sch 80 Steel Plug Set
- 1/4" - 2" Sch 80 Steel Cap Set
- 1/4" Liquid Level Gauge
- 1-3/4" F ACME x 3/4" MNPT Coupling
- 3/4" Street Elbow
- 3/4" Shutoff Valve
- Pipe Sealant Stick
- Emergency Response Instruction Pamphlets & Guide Book
- Emergency Decals



RMI Part No.	Description
ER-1	Complete Kit

STATIC GROUNDING REEL

A safe and reliable way for grounding bobtails and transports during product transfer operations. Heavy duty reel, with 50' of cable, clip for quick attachment on a mounting bracket.

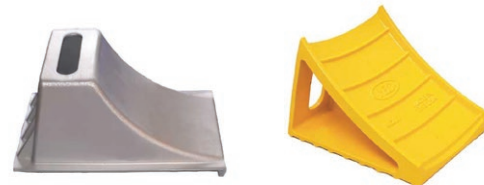
RMI Part No.	Description
SD-50	50' cable length with clip
SD-35	35' Cable Length with clip



CHOCK BLOCKS

Required equipment for parking placarded propane commercial vehicles. One required on each side of rear wheel when trucks are parked and driver is outside of vehicles or during any transfer operations.

RMI Part No.	Description	Height	Length	Width
HWCXXX	Heavy Duty Chock	8-1/4"	15-1/4"	8-1/2"
HWCVB	H.D. Mounting Bracket	-		
MWCXXX	Medium Size Chock	7"	12"	6-1/4"
MWCB	Medium Mounting Bracket	-		
LWCXXX	Small Size Chock	5"	7"	6"
HRQXXX	Rubber Chock Black	8"	10"	7"
ME200	Aluminum Chock	7"	10"	7"
ME200B	Chock block holder	7-3/4"	20"	7"



HWCXXX

ME200

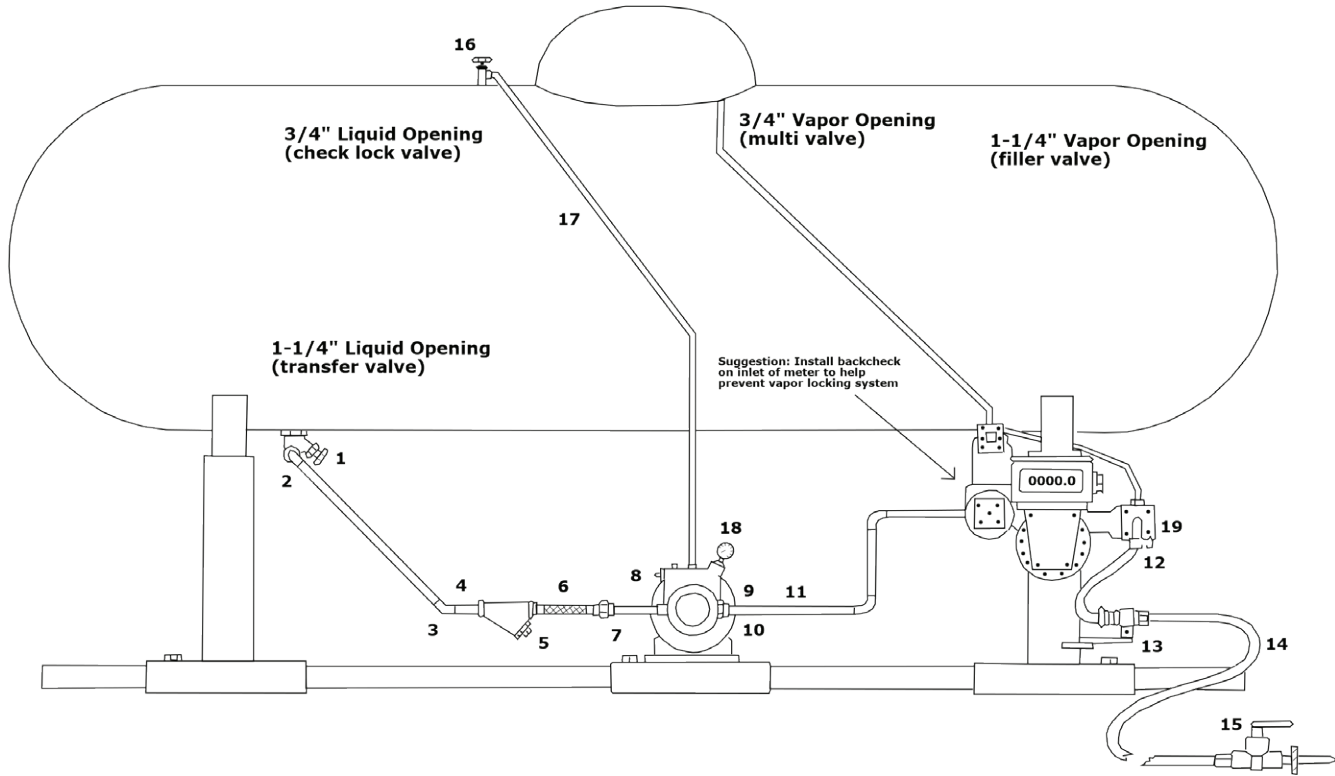


ME200B



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GENERAL DESIGN PRINCIPLES FOR FILL STATIONS

1. An adequately sized storage tank free of sediment and scale must be supported by a stable and sturdy mounting stand, mounted as high above the pump as practical. The assembly must be properly grounded.
2. Heavy duty schedule 80 pipe and fittings are required with an excess flow valve at the tank, and a strainer and a flex connector in the line to protect the piping and the pump.
3. The pump should be located under the tank with a short, direct line of adequate size to supply the pump. This inlet line should never rise up to the pump.
4. The pump and motor must be properly sized to provide the capacity desired. A bypass valve set at approximately 100 psi must be used and the bypass line must have sufficient capacity to handle flow returning to the tank.
5. Proper selection of a meter requires many considerations including capacity of the system and the meter features desired. The vapor line from the vapor eliminator on the meter to a vapor opening on the tank must be free of scale and have no dips in the pipe.
6. A sufficiently sized hose and hose valve are necessary for the capacity required and must be protected by an excess flow valve. Filler couplings and adaptors must be selected to allow the filling of various types of containers.
7. Safety considerations at the fill station should include a break-a-way coupling, fire extinguisher, and proper warning and instructional signage.

TANKS FOR FILL STATIONS

Tanks must be cleaned, free of scale and sediment, and properly purged before using for a fill station. The maximum delivery rate from a tank is about 2.5% of the tank's capacity per minute.

Tank Size (W.C.)	Nominal Length	Nominal Diameter	Liquid Openings	Top Vapor	Output Capacity
500	9'-11"	37-1/2"	1-1/4"	3/4"	12.5 GPM
1000	16'-1-1/2"	41"	1-1/4"	3/4"	25 GPM



KITS FOR PORTABLE CYLINDER AND SMALL MOTOR FUEL FILLING REQUIREMENTS

Designed to be used with Blackmer LGF1-1HP 10GPM pump and Smith DWIZM-3 and EGIZM-3

PK-11 COMPLETE VALVING KIT

Key*	RMI Part No.	Description
1	C407M10-04	1-1/4" Internal Valve, W/P341 Latch Kit 40 GPM
5	ME652S	Strainer
6	FLEX 1-12	Flex Connector
10	ME880-6/22	Excess Flow Valve
14	FH-1218	1/2" Hose w/ends 18'
15	ME791C	Hose End Valve
15	ME390	POL Filler Coupling
15	ME568	Adaptor
15	ME392	Adaptor
16	ME449	Transfer Valve
16	ME880-6/14	Excess Flow Valve
16	MEH225	Relief Valve
18	ME202	Snubber
18	GB-400	Pressure Gauge

PK-11B VALVE KIT W/ BREAK-A-WAY SAME AS PK-11 VALVE KIT, PLUS:

Key*	RMI Part No.	Description
13	ME806S-6	Break-A-Way Coupling

*Refer to Fill Station Diagram on Page 154

PF-11 FITTING AND PIPE NIPPLE KIT

Key*	RMI Part No.	Description
2	104-16	1" - 90°
2	125-02	1" X 2" Nipple
3	103-16	1" 45° Elbow
4	125-03	1" X 3" Nipple
7	109-16	1" Union
8	125-09	1" X 9" Nipple
8	150-2016	1-1/4" X 1" Concentric Swage
9	106-1612	1" X 3/4" Hex Bushing
11	124-03	3/4" X 3" Nipple
11	107-1208	3/4" X 1/2" Reducer Coupling
17	(2) 48IK	5/8" X 3/4" Flare Fitting
17	KCT12-10	Copper Tubing-Type K, 10'
17	(2) NS4I	5/8" Flare Nut

PF-11B FITTING AND PIPE NIPPLE KIT W/ BREAK-A-WAY SAME AS PF-11 FITTING KIT, PLUS:

Key*	RMI Part No.	Description
12	LPGH-3/4-3C	3/4" X 3 Ft. Hose W/ Ends
13	106-1208	3/4" X 1/2" Hex Bushing
19	108-12	3/4" Tee
19	106-1204	3/4" X 1/4" hex Bushing
19	125-06	1" X 6" Nipple
19	MEJ402S	Vent Valve

KITS FOR LARGER MOTOR FUEL FILLING REQUIREMENTS

Designed for use with Blackmer LGFIP-1.5HP 15GPM pump and Smith DWHZM-5 and ECHZM-5

PK-153 COMPLETE VALVE KIT

Key*	RMI Part No.	Description
1	C407M10-04	1-1/4" Internal Valve, W/P341 Latch Kit 40 GPM
5	ME652S	Strainer
6	FLEX 1-12	Flex Connector
10	ME880-6/22	Excess Flow Valve
14	LPGH-3/4 -15C	3/4" Hose w/ends 15'
15	ME820-6	Hose End Valve
15	ME635-6	1-3/4" Acme Coupling
15	ME210	Adaptor
15	ME390	Adaptor
15	ME516	Adaptor
16	ME449	Transfer Valve
16	ME880-6/14	Excess Flow Valve
16	MEH225	Relief Valve
18	GB-400	Pressure Gauge
19	MEJ400	Liquid Level Gauge

PK-153B VALVE KIT W/ BREAK-A-WAY SAME AS PK-153 VALVE KIT, PLUS:

Key*	RMI Part No.	Description
13	ME806S-6	Break-A-Way Coupling

*Refer to Fill Station Diagram on Page 154

***For the addition of either the Liquid Control or Neptune meter the following must be ordered separately- 3/4" union, elbows for alignment between pump and meter, 1/2" tubing (K or L) for vapor eliminator line and coupling to connect line to multivalve on top of tank.

PF-15 FITTING & PIPE NIPPLE KIT***

Key*	RMI Part No.	Description
2	104-16	1" - 90°
2	125-02	1" X 2" Nipple
4	(2) 125-03	1" X 3" Nipple
7	109-16	1" Union
8	125-09	1" X 9" Nipple
8	150-2016	1-1/4" X 1" Concentric Swage
9	106-1612	1" X 3/4" Hex Bushing
11	150-1612	1" X 3/4" Concentric Swage
17	(2) 48IK	5/8" X 3/4" Flare Fitting
17	KCT12-10	Copper Tubing-Type K, 10'
17	(2) NS4I	5/8" Flare Nut

PF-15B FITTING & PIPE NIPPLE KIT W/ BREAK-A-WAY SAME AS PF-15 FITTING KIT, PLUS:

Key*	RMI Part No.	Description
12	LPGH-3/4-3C	3/4" X 3 Ft. Hose W/ Ends
19	108-12	3/4" Tee
19	106-1204	3/4" X 1/4" hex Bushing
19	125-06	1" X 6" Nipple
19	MEJ402S	Vent Valve



BLACKMER FILL STATION

Designed for Use with D-2A Cabinet



PK-D2 FITTING PACKAGE

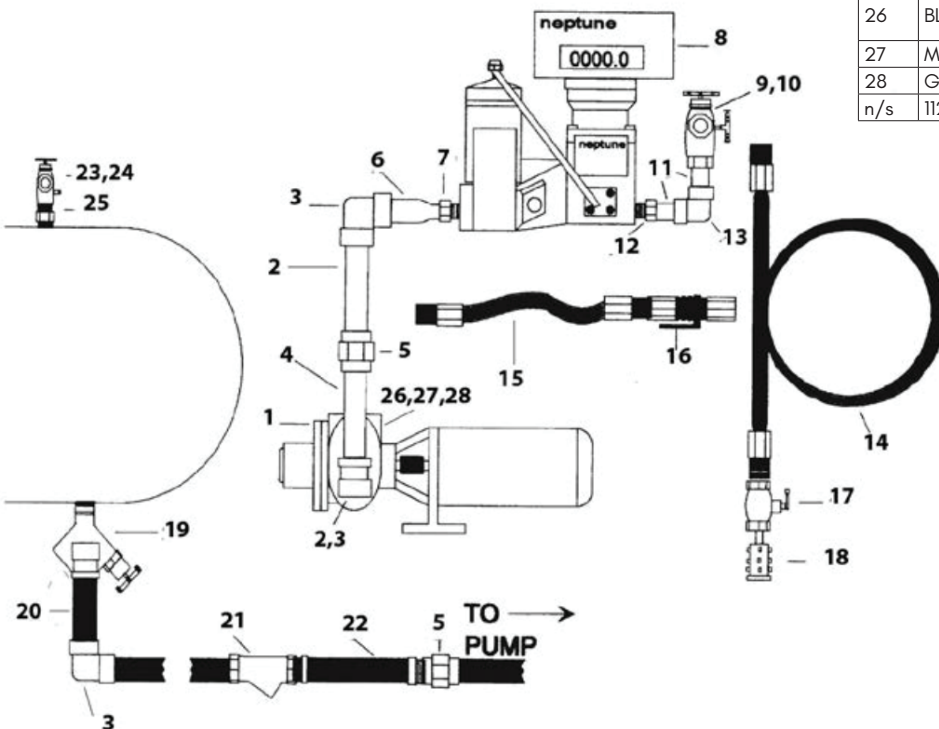
RMI Part No.	Description
C407M10-04	1-1/4" Internal Valve, w/ P341 Latch Kit 40 GPM
ME652S	Strainer
105-12	3/4" hex Plug
FLEX 1-12	Flex Connector
ME202	Snubber
GB-400	Pressure Gauge
ME870-6	3/4" Back Check
ME880-6/22	Excess Flow Valve
ME815-6	3/4" Angle Valve
MEH225	1/4" External Relief Valve
MEJ602H	1/4" Elbow w/ Relief & Bleeder
ME449	Transfer Valve
ME880-6/14	Excess Flow Valve
ME791CJ	Toggle w/Bleeder
FH-1218	1/2" Hose w/ 1/2" x 3/4" ends 18'
LPGH-3/4-3C	3/4" X 3 Ft. Hose w/ends
ME860S-6	3/4" Break-A-Way Coupling
BL-4-4LP	1/4"F x 1/4" M Street Elbow
ME353	MPOL x 3/8" FI Adaptor
ME516	POL Filler Coupling
ME393	1-5/16" Acme Adaptor
ME569	1-3/4" ACME Fill Adaptor

PF-D2 FITTING PACKAGE

RMI Part No.	Description	Quantity
104-16	1" 90°	3
109-16	1" Union	2
150-1612	1" x 3/4" Concentric Swage	1
124-00	3/4" Close Nipple	2
104-12	3/4" 90° Elbow	1
481K	5/8" x 1/2" Flare Adaptor	2
NS4I	5/8" Flare Nut	2
KCT12-20	1/2" Copper Tubing-Type K	20'
NS4E	3/8" Flare Nut	2
LCT14-20	1/4" Copper Tubing Type-L	20'
125-05	1" x 5" Nipple	2
150-2016	1-1/4" X 1" Concentric Swage	1
125-06	1" x 6" Nipple	1

BLACKMER FILL STATION COMPONENTS

Key*	RMI Part No.	Description	PK-D2	PF-D2
1	LGFIIP-1.5HP	1" Pump, 1.5 HP Motor & Switch	-	-
2	125-05	1" x 5" Nipple	-	X
3	104-16	1" 90° Elbow	-	X
4	125-06	1" x 6" Nipple	-	X
5	109-16	1" Union	-	X
6	150-1612	1" x 3/4" Concentric Swage	-	X
7	ME870-6	3/4" Back Check	X	-
8	090028-101	3/4" Non-Compensated Meter	-	-
9	ME815-6	3/4" Angle Valve	X	-
10	MEJ602H	1/4" Elbow w/Relief & Bleeder	X	-
11	124-00	3/4" Close Nipple	-	X
12	ME880-6/22	Excess Flow Valve	X	-
13	104-12	3/4" 90° Elbow	-	X
14	FH-1218	1/2" Hose w/1/2" x 3/4" ends 18'	X	-
15	LPGH-3/4-3C	3/4" x 3 Ft. Hose w/ Ends	X	-
16	ME860S-6	3/4" Break-A-Way Coupling	X	-
17	ME791CJ	Toggle w/Bleeder	X	-
18	ME516	POL Filler Coupling	X	-
19	C407M10-04	1-1/4" Internal Valve, W/ P341 Latch Kit 40 GPM	X	-
20	150-2016	1-1/4" x 1" Concentric Swage	-	X
21	ME652S	Strainer	X	-
22	FLEX 1-12	Flex Connector	X	-
23	ME449	Transfer Valve	X	-
24	MEH225	1/4" External Relief Valve	X	-
25	ME880-6/14	Excess Flow Valve	X	-
26	BL-4-4LP	1/4"F x 1/4"M Street Elbow	X	-
27	ME202	Snubber	X	-
28	GB-400	Pressure Gauge	X	-
n/s	1124	Scale	-	-



* See diagram

This fill station package is available fully assembled with an aluminum cabinet. Scale sold separately. Contact RMI Customer Service for more details.

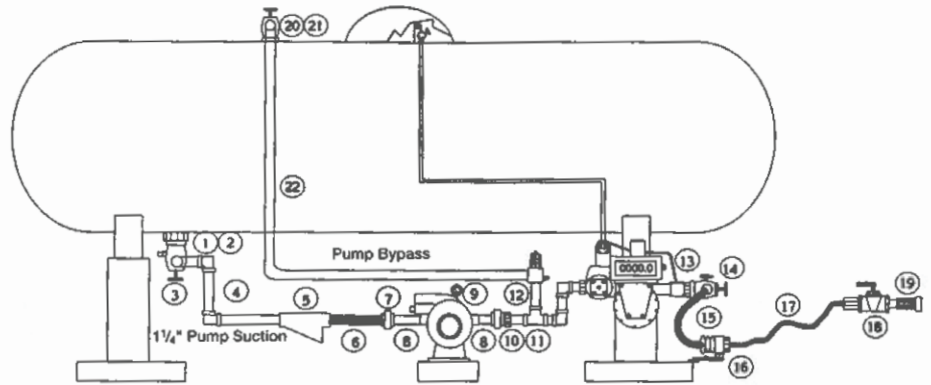
BLACKMER 1-1/4" PACKAGE



PKV-125 VALVE KIT

Key*	RMI Part No.	Description
3	C407M10-04	1-1/4" Internal Valve, w/ P341 Latch Kit 40 GPM
5	ME653S	Strainer Plus Plug
6	FLEX 1-1/4-14	Flex Connector
9	GB-400	Pressure Gauge
9	NMF20BK	Needle Valve
9	ME202S	Snubber
10	A8013D	Excess Flow Valve
17	LPGH-3/4-15C	Hose w/Ends
18	ME820-6	Snap Valve
19	ME210	Snap Valve
19	ME390	Snap Valve
19	ME516	Snap Valve
19	ME635-6	Fill Connector
20	ME880-6/14	Excess Flow Valve
21	ME449	Service Valve
21	MEH225	Hydrostatic Relief
19	MEJ400	Liquid Level Gauge

*See diagram



PKF-125 FITTINGS KIT

Key*	RMI Part No.	Description
2	126-03	1-1/4" x 3" Nipple
4	104-20 (2)	1-1/4" 90° Elbow
7	109-20 (2)	1-1/4" Union
8	126-06 (2)	1-1/4" x 6" Nipple
11	108-12	3/4" Tee
12	124-08	3/4" Nipple
13	124-03	3/4" Nipple
22	KCT12,481K (2), NS41 (2)	Copper tubing for Bypass

*See diagram

PKB-125 BREAK-A-WAY

Key*	RMI Part No.	Description
14	ME815-6	3/4" Angle Valve
14	MEJ602H	1/4" Elbow w/ Bleeder & Relief
15	LPGH-3/4-3C	Hose w/Ends
16	ME860S-6	Break-A-Way Coupling

*See diagram

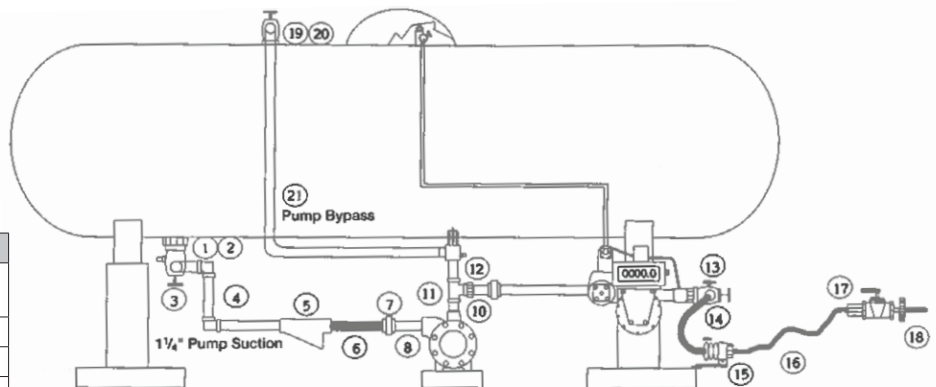
CORKEN 1-1/4" PACKAGE



PKV-C1012 VALVE KIT

Key*	RMI Part No.	Description
3	C407M10-04	1-1/4" Internal Valve, w/ P341 Latch Kit 40 GPM
5	ME653S	Strainer Plus Plug
6	FLEX 1-1/4-14	Flex Connector
9	GB-400	Pressure Gauge
9	NMF20BK	Needle Valve
9	ME202S	Snubber
12	ME880-6/22	Excess Flow Valve
16	LPGH-3/4-15C	Hose w/Ends
17	ME791CJ	Snap Valve
18	ME390	Fill Connector
19	ME880-6/14	Excess Flow Valve
21	ME449	Service Valve
21	MEH225	Hydrostatic Relief

*See diagram



PKF-C1012 FITTING KIT**

Key*	RMI Part No.	Description
2	126-03	1-1/4" x 3" Nipple
4	104-20 (2)	1-1/4" 90° Elbow
7	109-20 (2)	1-1/4" Union
8	126-06 (2)	1-1/4" x 6" Nipple
10	150-1612	1" x 3/4" Swage Nipple
11	108-12	3/4" Tee
22	KCT12,481K (2), NS41 (2)	Copper tubing for Bypass

*See diagram

**For C12, order 151-2420 Swage

PKB-C1012 BREAK-A-WAY

Key*	RMI Part No.	Description
13	ME815-6	3/4" Angle Valve
13	MEJ602H	1/4" Elbow w/Bleeder & Relief
14	LPGH-3/4-3C	Hose w/Ends
15	ME860S-6	Break-A-Way Coupling
15	106-1208	3/4" x 1/2" Bushing

*See diagram



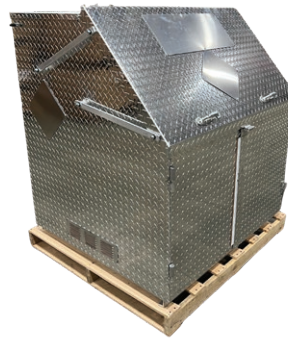
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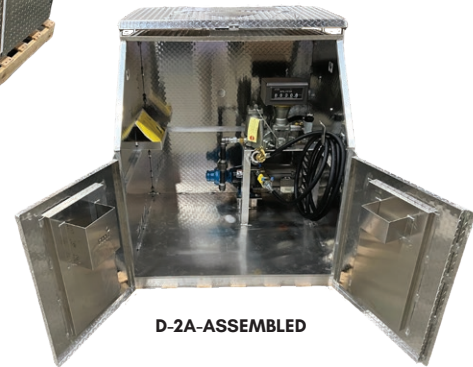
RMI ASSEMBLED FILL STATION PACKAGES

Each Standard D-2A Assembled Dispenser Includes:

- 45"D x 40"W x 52"H Diamond-Plate Aluminum
- 3-Door Lockable Cabinet
- Blackmer LGFIP Pump with 1.5HP Motor
 - (Optional) Corken C12 Pump with 2HP Motor
- 3/4" Non-Compensated Mechanical Meter w/Register
 - (Optional) Electronic Options Available
- Fisher Internal Valve with Latch
- 18' Hose with Quick Activating Valve
- MEC Breakaway Coupling for RV Filling
- Complete Fitting and Adapter Kit for All Common Cylinder Connections
- All Required Signage and Decals
- (Optional) Fairbanks 1124 Scale
- (Optional) Heavy Duty Tank Stands



D-2A



D-2A-ASSEMBLED

FULLY ASSEMBLED FILL STATIONS

Part No.	Description
D-2A-ASSEMBLED	Fill Station w/ Blackmer LGFIP Pump, 1.5HP Motor, Meter, 18' Hose, Fitting & Adapter Kit
D-2A-PACKAGE	Same as above, plus Fairbanks 1124 Scale and Heavy Duty Tank Stands
D-2AC-ASSEMBLED	Fill Station w/ Corken C12JD-SM-B Pump, 1.5HP Motor, Meter, 18' Hose, Fitting & Adapter Kit
D-2AC-PACKAGE	Same as above, plus Fairbanks 1124 Scale and Heavy Duty Tank Stands

CABINET ONLY

Part No.	Description	H	W	D	OAH	Mounting Location
D-2A	Aluminum Diamond Plate Enclosed Cabinet, 3 Doors, Securable, Holds Pump, Meter, Hose, & Scale	49.5"	50.5"	51.5"	55"	Concrete Pad or 2" Runners

EXCHANGE CABINET

Features:

- Steel Cabinets are galvanized and powder-coated for maximum corrosion resistance
- Aluminum Cabinets are lightweight for easier maneuverability
- Stainless Steel Hinges to prevent binding and staining
- Reversible door mounting for increased versatility
- Tamper resistant hardware, hinges, and heavy-duty lock receiver
- Footpads with 13/16" holes to accommodate anchoring bolts

20LBEX18



33LB LIFT TRUCK STORAGE CABINETS

Steel	Aluminum	Capacity	Dimensions	# of Shelves
33MF04	AL33MF04	4	30 X 30 X 38	2
33MF06	AL33MF06	6	30 X 30 X 53	3
33MF09	AL33MF09	9	44 X 30 X 53	3
33MF12	AL33MF12	12	44 X 30 X 68	4
33MF16	AL33MF16	16	58 X 33 X 65	4
33MF18	AL33MF18	18	90 X 30 X 53	3
33MF24	AL33MF24	24	90 X 30 X 68	4

20LB EXCHANGE CABINETS

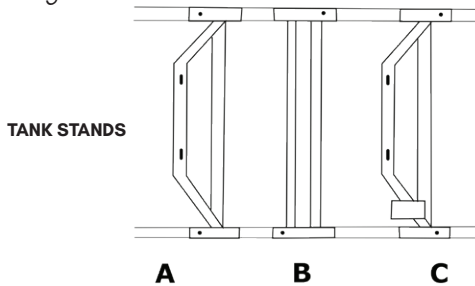
Steel	Aluminum	Capacity	Dimensions	# of Shelves
20LBEX04	AL20LBEX04	4	30 X 30 X 33	1
20LBEX06	AL20LBEX06	6	44 X 30 X 38	1
20LBEX12	AL20LBEX12	12	44 X 30 X 53	2
20LBEX18	AL20LBEX18	18	44 X 30 X 68	3
20LBEX24	AL20LBEX24	24	58 X 30 X 65	3

TANK MOUNTING STANDS

Our heavy duty stand includes 18" bracket feet for additional stability. The entire mount slides onto 2" pipe (not included).

RMI Part No.	Description	Key*
MT-TANK-2	Heavy Duty Stand 18" Tall X 40" Wide	A&C
MT-PUMP-2	Heavy Duty Pump Bracket	B

*Refer to Diagram



AUTOMATIC CYLINDER FILLING VALVE

Used on cylinder filling manifold. Shuts off gas supply when specified cylinder weight is reached. Operates on propane vapor or air. No electricity required. 1/2" FNPT inlet and outlet. For beam scales only.

RMI Part No.	Description
N201	Automatic Cylinder Filling Valve



HIGH CAPACITY DISPENSING FILTER

The ME680 LPG Dispenser Filter is designed to remove 99.9% of solid contaminants from LPG systems. These contaminants can be introduced into the system during the refining process from holding tanks as well as the delivery trucks used to transport the liquid fuel.

HIGH CAPACITY DISPENSING FILTER

RMI Part No.	Inlet/Outlet	Flow Rate*	Length	Diameter	Filter Element	Max Operating Pressure	Max Operating Temp
ME680-8	1" FNPT	35 GPM	8"	5"	20 Micron	350PSI	175°F

*Flow rate calculated @ 6.2PSI pressure differential

RMI Part No.	Description
ME680-8-ERK	Replacement Filter Element



BREAK-A-WAY COUPLINGS

The FloKill Break-A-Way Coupling from MEC flows both directions and protects against expensive loss of product or equipment damage if a pull-away occurs during a transfer operation. In the event of an excessive amount of pull force, the break-a-way coupling will separate and immediately shut off product flow in both directions.

Bracket Style	LANYARD Style	Connection FNPT	OAL	Accessory Reassembly Tool
ME860S-6	ME861S-6	3/4"	6"	MEP128-6
ME860S-8	ME861S-8	1"	6-3/4"	-
ME860S-10	ME861S-10	1-1/4"	7-3/4"	-
-	ME861S-16	2"	10-1/4"	-



FILL STATION SIGNAGE

RMI stocks a wide array of signage and decals. For a full listing of what we carry, please refer to pages 147-151. Custom signage is also available. Please call our customer service team for more info.

RMI Part No.	Description
SN-FILL-2	10" x 16" Propane Cylinder Filling Procedures Decal
SN-NSD8	3" x 14" No Smoking Decal w/ 2" Red Lettering
SN-OSHA-MED	7.5" x 7.5" NFPA Hazard Diamond Decal
SN-PROPANE	12" x 3" Propane Decal w/ 2" Red Lettering



FAIRBANKS PORTABLE SCALES

Built to stand the test of time, the Fairbanks model 1124 portable scale has a heavy-duty cast iron construction, easy to read etched bronze beam, and a large 17-3/4" x 23-1/2" platform. The scale has a 1000lb capacity, with varying pillar height options for different applications. Use the short pillar for 20lb cylinders, or the tall pillar for 100lb cylinders.

RMI Part No.	Style	Height
1124	Standard Pillar	43"
1124-S	Standard Pillar - 20#	28"
1124-L	Tall Pillar - 100#	66"



1124

COUNTERWEIGHTS

RMI Part No.	Description
1124-100	100# Counterweight - (1 lb.)
1124-200	200# Counterweight - (2 lb.)
1124-400	400# Counterweight -(4 lb.)

FILL STATION NOZZLES

- Fill Mobile & Stationary Tanks
- Light Weight and well Balanced
- Will Not disconnect From Filler Valve While Lever in Open Position
- Fine Filter Incorporated in Nozzle
- Long Swivel Nut For Fork Lift Truck Filling

RMI Part No.	Description
ZVG2T	3/4" FNPT x Euro Nozzle w/ Talker Latch
GG.20HSL	3/4" FNPT x ACME Hybrid Nozzle w/ Talker Latch
ME516 & ME791CJ	Type 1 Filler Valve 1/4" w/ Toggle Valve & Bleeder
11494005	ACME Vehicle to Euro Nozzle Adapter
11494006	Euro Vehicle to ACME Nozzle Adapter



P158 - GG20.HSL



P158 - ZVG2T



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DISPENSE GALLONS WITH EASE

RMI'S PLUG-AND-PLAY SOLUTION MAKES INSTALLATION A BREEZE!

EACH STANDARD D-2A ASSEMBLED DISPENSER INCLUDES:

- 45"D x 40"W x 52"H Diamond-Plate Aluminum 3-Door Lockable Cabinet
- Blackmer LGF1P Pump with 1.5HP Motor
 - Optional Corken C12 Pump with 2HP Motor
- 3/4" Non-Compensated Mechanical Meter w/Register
 - Electronic Options Available
- Fisher Internal Valve with Latch
- 18' Hose with Quick Activating Valve
- MEC Breakaway Coupling for RV Filling
- Complete Fitting and Adapter Kit for All Common Cylinder Connections
- All Required Signage and Decals
- (Optional) Fairbanks 1124 Scale
- (Optional) Heavy Duty Tank Stands



WHY CHOOSE RMI FOR YOUR NEXT DISPENSER SOLUTION?



Save hours of labor with our custom D-2A dispenser packages

- Pipe to the tank and wire up the electrical - leave the rest to us



Designed & assembled in-house by professionals with quality in mind

- Run with the standard build, or call in for a customized quote



Fast Turnaround

- Cabinets are inventoried locally



Competitive Pricing

- Increase your bottom line



**CONTACT YOUR RMI REP FOR
 MORE DETAILS INCLUDING
 PRICING AND CUSTOM DESIGNS**

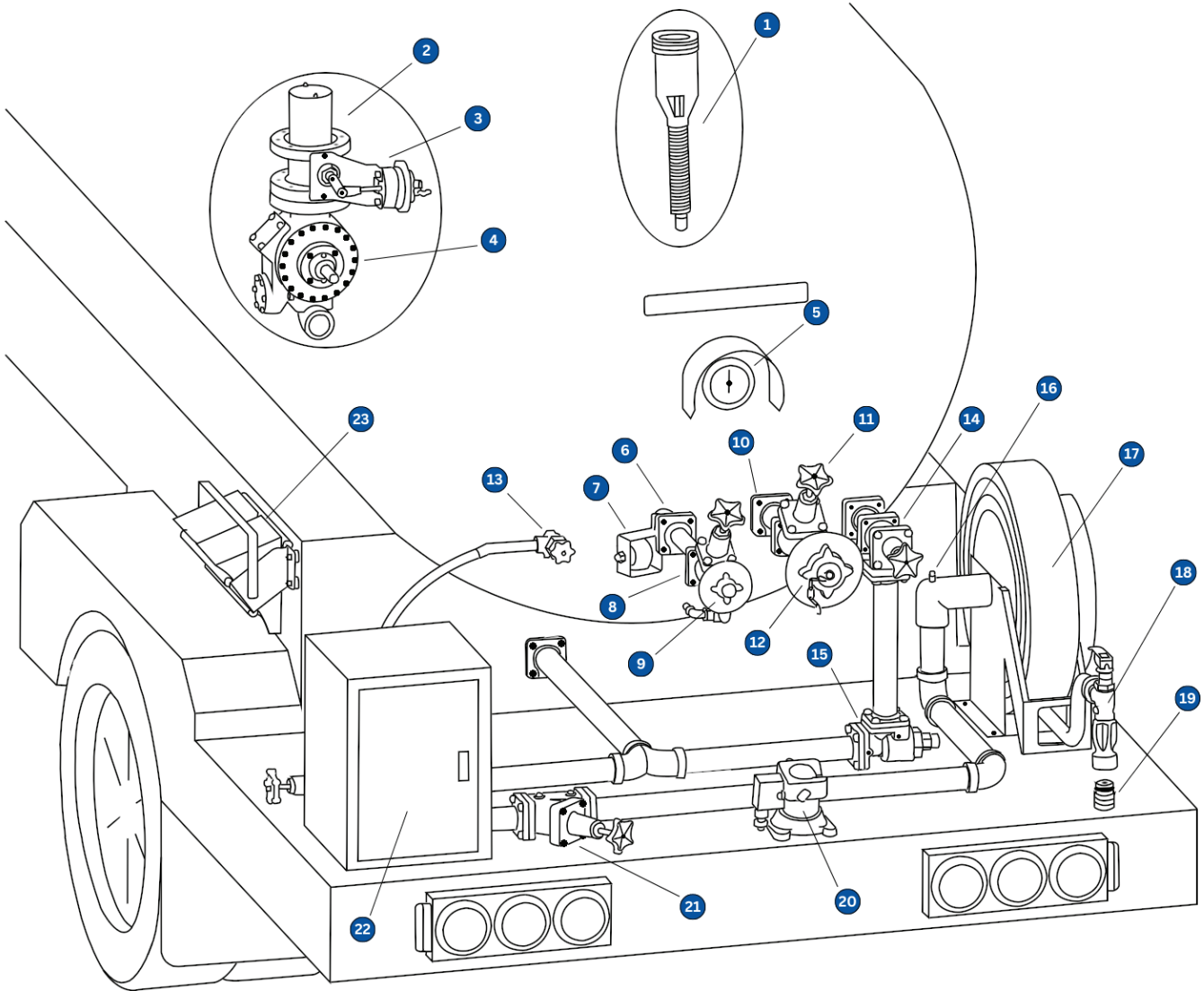
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Bobtail Diagram

ANATOMY OF A BOBTAIL - SUPPLIED BY RMI!



Non-stock/special order items are not cancellable or returnable

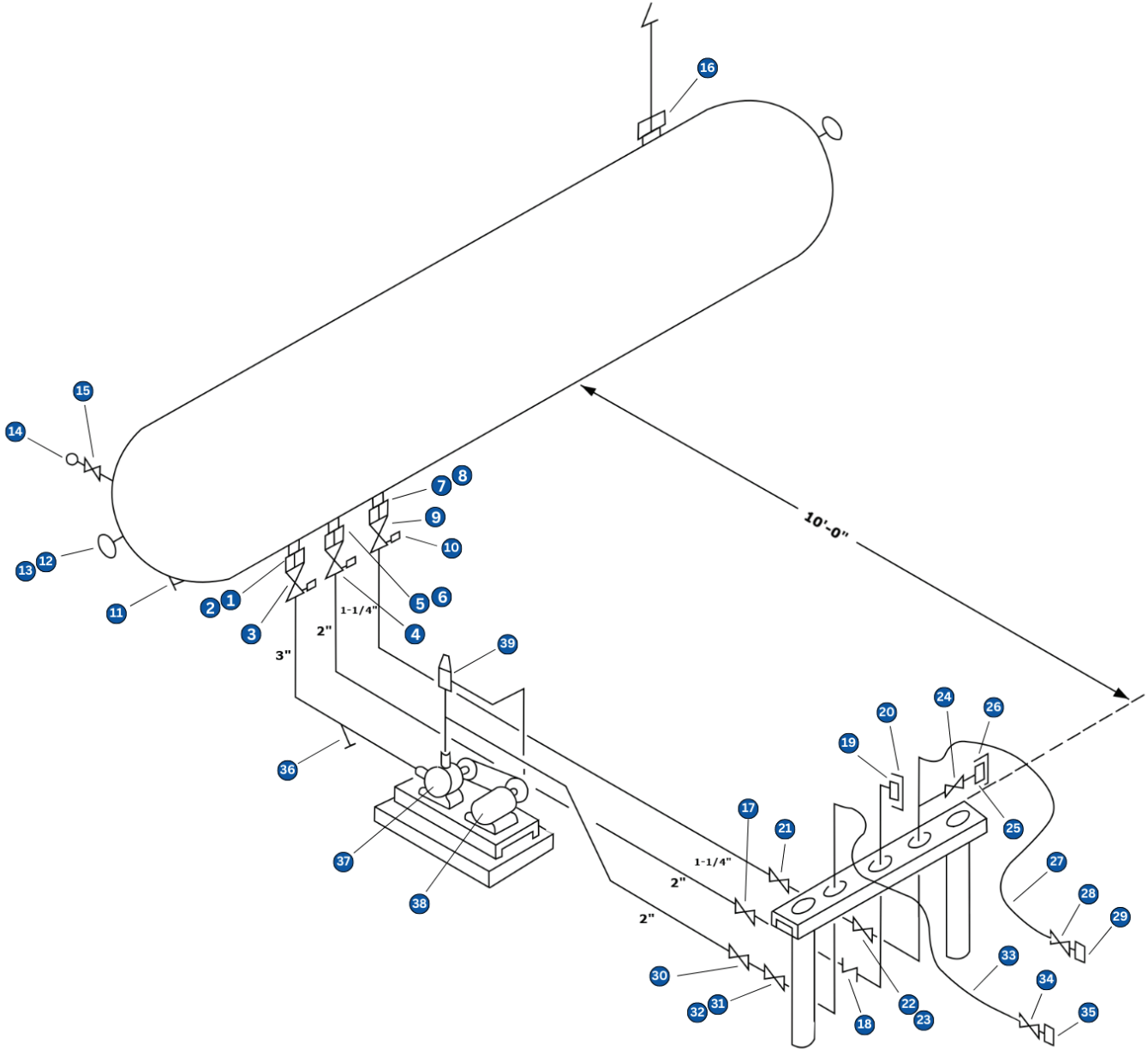
Shop online at www.raymurray.com or call **800-628-5044**

Key	Component Description	RMI Part No.	Item Description
1	Pressure Relief Valve (2)	MEV200FIR/250	MEC 2" Internal Relief Valve, 250PSI
		H722-250	Fisher 2" Internal Relief Valve, 250PSI
		MEV300FIR/250	MEC 3" Internal Relief Valve, 250PSI
		H733-250	Fisher 3" Internal Relief Valve, 250PSI
2	Internal Valve	ME990S-3DF-400	MEC 3" Double Flanged Internal Valve, 400PSI
		C483-24-40	Fisher 3" Double Flanged Internal Valve, 400PSI
3	Actuator	ME207	MEC Air-Powered Actuator for 3" Internal Valves
		P623	Fisher Air-Powered Actuator for 3" Internal Valves
4	Pump	TLGLF3	Blackmer 3" Mount Bobtail Pump
		Z3200	Corken 3" Mount Bobtail Pump
5	Gauge	ME930	MEC Glow Dial Float Gauge
		J31L	Fisher Rotary-Style Gauge
6	Internal Valve	ME990-10-85	MEC 1-1/4" Internal Valve, 85GPM
		C407-10-08	Fisher 1-1/4" Internal Valve, 80GPM
7	Actuator	ME205	MEC Air-Powered Actuator for 1-1/4" Internal Valves
		P389	Fisher Cylinder Actuator for 1-1/4" Internal Valves
8	Globe Valve	ME825-10	MEC 1-1/4" Globe Valve
		N310-10	Fisher 1-1/4" Globe Valve
9	Adapter*	ME217	1-3/4" ACME x 1-1/4" MNPT Brass Adapter
	Cap	ME229F5-1C	1-3/4" ACME Brass Cap with 5" Flange and Cable, Knob Style
10	Back Check Valve	ME870S-16	MEC 2" Steel Back Check Valve
		G102	Fisher 2" Steel Back Check Valve
11	Globe Valve	ME825-16	MEC 2" Globe Valve
		N310-16	Fisher 2" Globe Valve
12	Smart Interlock System	ME217PIB	Interlock Sensor
	Acme Adaptor	ME503-16	3-1/4" MACME x 2" MNPT Brass Adapter
	Acme Cap	ME441F8-1C	3-1/4" ACME Brass Cap with 8" Flange and Cable, Knob Style
13	Excess Flow Valve	ME880-6/22	MEC 3/4" Excess Flow Valve, 22GPM
		F101	Fisher 3/4" Excess Flow Valve, 20GPM
14	Angle Valve	ME815-16	MEC 2" Angle Valve
		N401-16	Fisher 2" Angle Valve
15	Bypass Valve	ME840-125	MEC 1-1/4" - 2" Universal Bypass Valve, 90-125PSI
		N100-16-2	Fisher 2" Bypass Valve, 50-150PSI
16	Hydrostatic Relief Valve	MEH225	MEC 1/4" Hydrostatic Relief Valve, 440PSI
		H124	Fisher 1/4" Hydrostatic Relief Valve, 450PSI
17	Hose Reel	ME9000LH-17/25	MEC Hose Reel
		EPB Series	Hannay Hose Reel
18	Hose End Valve	ME1075WS-8	1" Flanged High Flow Hose End Valve w/ Swivel
		ME800GWS	1" Threaded High Flow Hose End Valve w/ Swivel
19	Hose End Safety Adaptor	ME571H	MEC 1-3/4" High Flow Filler Hose Adapter w/ Swivel
		M570	Fisher 1-3/4" Filler Hose Adapter
20	Hose End Holster	MEP801PIH	Hose End Holster w/ Interlock Sensor
		MEP801	Hose End Holster
21	Globe Valve	ME825-16	MEC 2" Globe Valve
		N310-16	Fisher 2" Globe Valve
22	Meter	MA7	Liquid Controls 2" Flanged Temp Comp Meter, 100GPM
23	Chock Block Holder	ME200B	Chock Block Holder
24	Chock Block	ME200	Aluminum Chock Block - 7"H x 10"L x 7"W



Bulk Plant Diagram

ANATOMY OF A BULK PLANT - SUPPLIED BY RMI!



Key	Component Description	RMI Part No.	Item Description
1	Internal Valve	ME990-24-400	MEC 3" Internal Valve, 400GPM
		C477-24-46	Fisher 3" Internal Valve, 460GPM
2	Actuator	ME206	MEC Air Powered Actuator for 2" & 3" Internal Valves
		P639A	Fisher Air Powered Actuator for 2" & 3" Internal Valves
3	Globe Valve	ME825-24	MEC 3" Globe Valve
		N610-24	Fisher 3" Globe Valve
4	Globe Valve	ME825-16	MEC 2" Globe Valve
		N310-16	Fisher 2" Globe Valve
5	Internal Valve	ME990-16-260	MEC 2" Internal Valve, 260 GPM
		C477-16-25	Fisher 2" Internal Valve, 250 GPM
6	Actuator	ME206	MEC Air Powered Actuator for 2" & 3" Internal Valves
		P639A	Fisher Air Powered Actuator for 2" & 3" Internal Valves
7	Internal Valve	ME990-10-85	MEC 1-1/4" Internal Valve, 85GPM
		C407-10-08	Fisher 1-1/4" Internal Valve, 80GPM
8	Actuator	ME205	MEC Air-Powered Actuator for 1-1/4" Internal Valves
		P389	Fisher Cylinder Actuator for 1-1/4" Internal Valves
9	Globe Valve	ME825-10	MEC 1-1/4" Globe Valve
		N310-10	Fisher 1-1/4" Globe Valve
10	Hydrostatic Relief Valve	MEH225	MEC 1/4" Hydrostatic Relief Valve, 440PSI
		H124	Fisher 1/4" Hydrostatic Relief Valve, 450PSI
11	Container Thermometer	MEJ700	MEC 4" Thermometer
		J700	Fisher 4" Thermometer
12	Gauge	ME940-130	MEC Glow Dial Float Gauge Assy, 8" Dial, 130" Dia
		J31L-3L	Fisher Rotary Gauge, 109"-140" Dia
13	Flange	ME931	2-1/2" Float Gauge Mounting Flange
14	Gauge	MEJ542	0-400 PSI Bottom Mount Pressure Gauge
15	Vent Valve	MEJ415G	Liquid Vent Valve
16	Pilot-Operated Relief Valve	ME910P/250-ASME	MEC 4" Pilot-Operated Relief Valve, 250PSI
		63EGLP-250	Fisher 4" Pilot-Operated Relief Valve, 250PSI
17	Globe Valve	ME825-16	MEC 2" Globe Valve
		N310-16	Fisher 2" Globe Valve
18	Sight Flow Valve	ME875S-16	MEC 2" Sight Flow Valve
19	ACME Adapter	ME252-16	3-1/4" ACME x 2" FNPT Brass Adapter
20	ACME Cap & Cable	ME441F-1C	3-1/4" ACME Brass Cap w/ Cable

Key	Component Description	RMI Part No.	Item Description
21	Globe Valve	ME825-10	MEC 1-1/4" Globe Valve
		N310-10	Fisher 1-1/4" Globe Valve
22	Emergency Shutoff Valve	ME980-10	MEC 1-1/4" Emergency Shutoff Valve
		N551-10	Fisher 1-1/4" Emergency Shutoff Valve
23	Actuator	ME551	MEC Air Powered Actuator for ESVs
		P539A	Fisher Air Powered Actuator for ESVs
24	Globe Valve	ME825-10	MEC 1-1/4" Globe Valve
		N310-10	Fisher 1-1/4" Globe Valve
25	ACME Adapter	ME217	1-3/4" ACME x 1-1/4" MNPT Brass Adapter
26	ACME Cap & Cable	ME229F-1C	1-3/4" Brass ACME Cap w/ Cable
27	Loading Hose	1-1/4" HOSEKIT	1-1/4" Loading Hose *Built to Spec by RMI*
28	Globe Valve	ME825-10	MEC 1-1/4" Globe Valve
		N310-10	Fisher 1-1/4" Globe Valve
29	Hose Coupling	ME120	2-1/4" ACME Hose Coupling
30	Globe Valve	ME825-16	MEC 2" Globe Valve
		N310-16	Fisher 2" Globe Valve
31	Emergency Shutoff Valve	ME980-16	MEC 2" Emergency Shutoff Valve
		N551-16	Fisher 2" Emergency Shutoff Valve
32	Actuator	ME551	MEC Air Powered Actuator for ESVs
		P539A	Fisher Air Powered Actuator for ESVs
33	Breakaway Hose	CG-LPG-32-R15-3	2" x 15' Smarthose Breakaway Hose Assy
34	Globe Valve	ME825-16	MEC 2" Globe Valve
		N310-16	Fisher 2" Globe Valve
35	ACME Adapter	ME130	MEC 3-1/4" x 2" ACME Coupling
		M133	Fisher 3-1/4" x 2" ACME Coupling
36	Strainer	ME656SP	3" Strainer w/ Plug
37	Pump	LGLD3F-MNT30-M215T-10HP	Blackmer 3" Pump, Base, Drive Assy w/ 10HP 3PH Motor
		Z3500-103-215T-10HP	Corken 3" Pump, Base, Drive Assy w/ 10HP 3PH Motor
38	Motor	EM-10	Blackmer 10HP 3PH Motor - 1800RPM
		6010-1C2B1	Corken 10HP 3PH Motor - 1800RPM
39	Bypass Valve	BV-2	Blackmer 2" NPT Bypass Valve
		ZV200	Corken 2" NPT Bypass Valve



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Blackmer Cylinder Filling Pump

LGFI FILL STATION PUMP

Excellent for small fill stations, vaporizer installations, and low-capacity transfer.

- Two pump capacities available
 - 10GPM or 15GPM
- Complete kit includes explosion proof motor & switch
- Integral bypass valve and safety relief valve (circulates back to pump inlet)

LGFI-1HP

8-gallon capacity is best suited for cylinder and small motor fuel fill systems

LGFI-1.5HP

13-gallon capacity is excellent for motor fuel fill systems

RMI Part No.		Capacity (GPM)		Inlet/Outlet	Motor & Electrical Service*	Bypass Valve
Pump, Moto & Switch Assembly	Pump Only	50lb Diff.	100lb Diff.			
LGFI-1HP	LGFI	8	4.4	1"	1HP, 115/230V, 1PH	Built-In
LGFI-1.5HP	LGFI	13	8	1"	1.5HP, 115/230V, 1PH	Built-In
LGFI-1HPV**	LGFI	8	4.4	1"	1HP, 115/230V, 1PH	Built-In
LGFI-1.5HPV**	LGFI	13	8	1"	1.5HP, 115/230V, 1PH	Built-In

* Other motor services available

** "V" designates motor equipped with condensation drain



LGFI SERIES

LGRLF FILL STATION PUMP

Economical large capacity flange-mounted pump assembly for motor fuel and large cylinder fill operation. Provides greater flow capacity while maintaining high differential pressure. Features removable cavitation suppression liner for longer pump life.

RMI Part No.			Inlet/Outlet	HP	Service	Capacity (GPM)		Max. Diff. Pr.
Pump Only	Motor*	Bypass				50lb	100lb	
LGRLF-1-1/4	EMC-2	BV-3/4	1-1/4"	2"	115/230 1PH	16	14	80#
	EMCT-2			2"	230/460 3PH	16	14	80#
	EMC-1.5**			1-1/2"	115/230 1PH	15	12.5	50#
	VXM051542			1-1/2"	230/460 3PH	15	12.5	50#

* See Motors & Starters on pages 191-192 for switches and overload starters

** Can be ordered with condensation drain



LGRLF-1-14

LGL & LGLF MEDIUM CAPACITY PUMP AND BASE ASSEMBLY

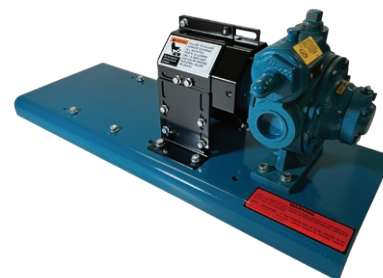
Excellent for small transfer jobs and multiple scale fill operations.

- Integral safety relief valve (circulates back to pump inlet)
- Assembly includes pump, mounting base, coupling, and guard (everything but the motor & switch)
- Cavitation suppression liner

Must specify motor frame size when ordering

RMI Part No.		Inlet/Outlet	Motor Size *	Capacity (GPM)		Approx. Max Diff. (lbs.)
Base & Pump Assembly	Pump Only			50lb	100lb	
LGL-1-1/4 -DM	LGL-1-1/4	1-1/4"	2 HP	21	18	60
			3 HP	21	18	120
LGL-1-1/2-DM	LGL-1-1/2	1-1/2"	3 HP	33	29	80

* See Motors & Starters on pages 191-192 for proper motor, switch, and bypass valve part numbers



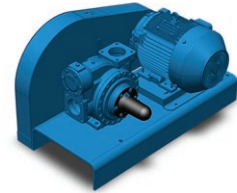
LGL-1-14-DM

Blackmer Bulk Plant Pumps & Compressors

LGL LARGE FILL SYSTEM PUMPS

High-capacity pumps for large multiple scale systems and medium liquid transfer systems for loading transports and delivery trucks.

- Integral safety relief valve
- Replaceable cylinder liner & end disc for inexpensive rebuilding
- Assemblies include pump mounting base, v-belts, guards, and sheaves (everything but motor)
- Motors available - size determined by pressure differential and GPM requirements. Sheave sizes are determined by RPM requirements.
- Cavitation suppression liner



LGL-V SERIES

RMI Part No.		Inlet*	Outlet*	Drive	Capacity @	100lb Dif.
Pump, Base & Drive Assembly	Pump Only				640 RPM	
LGL2-VB	LGLD2E	2" NPT	2" NPT	V-Belt	67 GPM	157 GPM
LGL3-VB	LGLD3E	3" NPT	3" NPT	V-Belt	133 GPM	112 GPM
LGLD4B- VB	LGL4	4" WELD	3" WELD	V-Belt	270 GPM	220 GPM



LGL2 SERIES

*Weld connection optional

EBSRAY REGENERATIVE TURBINE PUMPS

The Ebsray RC Series Regenerative Turbine Pumps are designed and precision built for high-pressure transfer of LPG, Autogas, propane, and butane. The secret to the success of these pumps is the innovative impeller design, which optimizes hydraulic performance resulting in high differential pressures even at low flow rates, a critical consideration for Autogas applications.



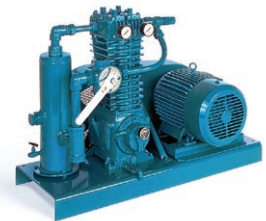
RC20 SERIES

RMI Part No.	Flow Rate (GPM)	Max Differential Pressure	Hose Qty	Inlet	Outlet
RC20	16	203	1	DN 25/1" NPT (F)	DN 25/1" NPT (F)
RC25	28	203	2	DN 25/1" NPT (F)	DN 25/1" NPT (F)
RC40	53	203		1-1/2" NPT Flanged to suit 1-1/2" ANSI Class 300 and DN40 DIN PN40	1" NPT Flanged to suit 1" ANSI Class 300 and DN25 DIN PN40

OIL-FREE GAS COMPRESSORS

High performance for liquid transfer and vapor recovery of propane, butane, and other liquefied gases.

- Design improvements promote longer service life and efficient performance
- Vapor recovery from unloading operation provides significant savings
- Durable construction and simplified parts installation make compressor field serviceable



LB SERIES

RMI Part No.		Capacity Range (GPM)	Motor Horse Power	Typical Pipe Size	
Complete Compressor Transfer Unit*	Compressor & Flywheel Only			Vapor	Liquid
LB161-LU	LB161-CO	45-95	3 - 7.5	1-1/4"	2"
LB361-LU	LB361-CO	115-205	7.5 - 15	2"	3"
LB601-LU	LB601-CO	240-365	15 - 25	2-1/2"	4"
LB942-LU	LB942-CO	360-650	20 - 50	3"	6"

*Transfer unit includes compressor, gauges, base, piping, strainer, 4-way valve, liquid trap, belt guards, and sliding base (motor not included)

COMPRESSOR REPAIR KITS

Compressor Model No.	RMI Part No.	
	Kit Top End	Kit Intermediate
LB161-LU	792229	792230
LB361-LU	793229	793230
LB601-LU	794237	794238



Blackmer Pumps for Mobile Applications

LGL SERIES TRUCK PUMPS

Excellent pump for bobtails and transports, the standard workhorse pump.

- LGLD2E has double shaft extension permitting left- or right-hand PTO
- LGLD3E has been engineered for a high flow and increased durability
- Integral safety relief valves
- Replaceable cylinder liner and end disc for fast and inexpensive rebuilding
- Cavitation suppression liner

RMI Part No.	Inlet/Outlet	Capacity - 640 RPM		Capacity - 700 RPM	
		50 lb Dif.	100 lb Dif.	50 lb Dif.	100 lb Dif.
LGLD2E	2" WELD/NPT	67 GPM	57 GPM	-	-
LGLD3E	3" WELD/NPT	133 GPM	112 GPM	160 GPM	150 GPM
LGLD4B	4" WELD/NPT	284 GPM	238 GPM	317 GPM	269 GPM



LGLD3 SERIES

TLGLF3 TRUCK PUMP

Excellent pump for the modern large capacity bobtail truck.

- 3" Direct Flange Mounting
- Double shaft extension is suitable for right- or left-hand PTO
- Pump has auxiliary 2" intake for emergency pumping
- Cavitation suppression liner

RMI Part No.	Intake	Auxiliary		Capacity, 650 RPM		Capacity, 870 RPM	
		Intake	Outlet	50 lb Dif.	100 lb Dif.	50 lb Dif.	100 lb Dif.
TLGLF3	3" Flange	2" NPT	2" NPT	93 gpm	83 gpm	120 gpm	129 gpm
300/0300	3" Flange Mounting Gasket for TGLF3						



TLGF3 SERIES

TLGLF4B TRANSPORT TRUCK PUMP

The most common transport pump on the road, ideal intake condition assures maximum pumping rate.

- 4" Direct flange mounting
- Auxiliary 3" intake for emergency unloading of another tank or truck
- Rated up to 380GPM
- Integral safety relief valve
- Double shaft extension is suitable for right or left hand
- Cavitation suppression liner

RMI Part No.	Intake	Auxiliary		Capacity, 650 RPM		Capacity, 870 RPM	
		Intake	Outlet	50 lb Dif.	100 lb Dif.	50 lb Dif.	100 lb Dif.
TLGLF4B	4" Flange	3" NPT	2" NPT	250 gpm	245 gpm	380 gpm	350 gpm
300/0400	4" Flange Mounting Gasket for TGLF3						

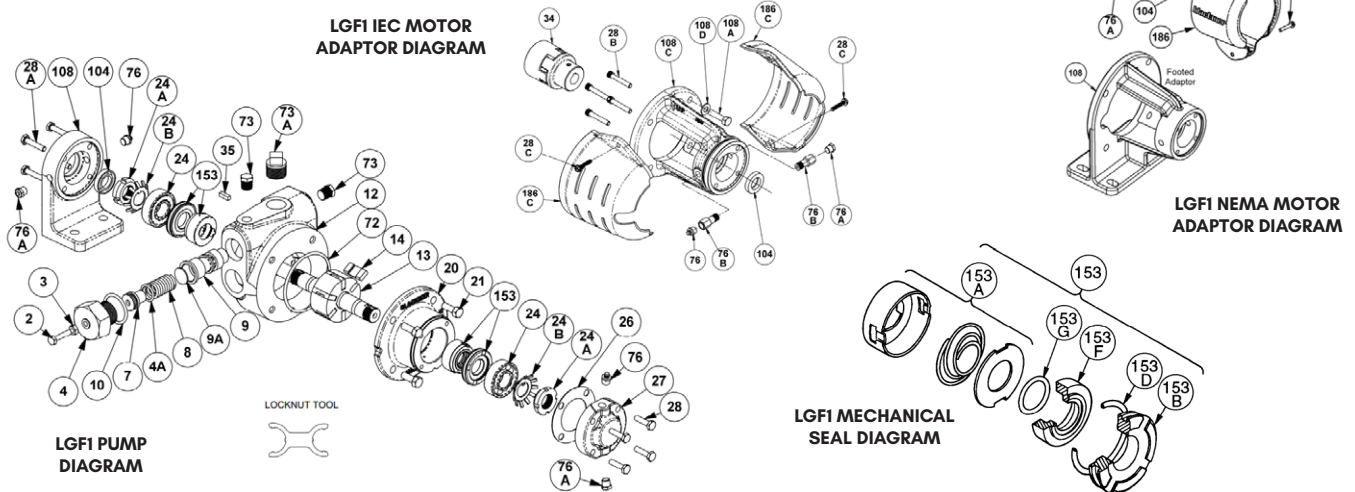


TLGLF4 SERIES



Blackmer Repair Parts

PARTS LIST FOR PUMP MODELS: LGFI, LGFIE, LGB1E, LGFIPE, LGB1PE



Ref No.	Description	Parts Per Pump	Part No.	Ref No.	Description	Parts Per Pump	Part No.
PUMP				MECHANICAL SEAL			
2	Adjusting Screw- Relief Valve	1	2 433905	153	Mechanical Seal Assembly	2	1 332920
3	Locknut - Adjusting Screw	1	2 922825	153A**	Jacket Assembly - Seal	2	**
4	Cover-R/V	1	412901	153B**	Stationary Seat (Steel)	2	**
4A	O-Ring - Spring Guide	1	1,2 711940	153D	O-Ring - Stationary Seat (Buna-N)	2	711916
7	Spring Guide R/V	1	2 422901	153F**	Seal Face (Carbon)	2	**
8	Spring - R/V	1	2 472901	153G	O-Ring - Rotating (Buna-N)	2	711939
9	Valve - R/V	1	2 452901	NEMA C-FACED MOTOR ADAPTORS			
9A	Disc - R/V	1	2 442901	28B	Motor Adaptor Mounting Screws	4	920101
10	O-Ring - R/V Cover	1	1,2 701965	28C	Guard Screw	1	920026
12	Cylinder -LGFI, LGB1	1	022914	34	Coupling Half - Pump	1	906150
	Cylinder - LGFIP, LGBIP		022915		Coupling Half - Motor 56C		906151
	Rotor & Shaft Assembly, Six Vane (includes Ref. Nos 24A & 24B)	1	262907		Coupling Half - Motor 143/145TC, 184C		906147
	Vane - Duravane (Std)	6	1,2 092913		Coupling Spider		906155
20	Head	1	032905	108	Motor Adaptor - Unfooted	1	832912
21	Capscrews -Head	4	920178	Motor Adaptor - Footed	833000		
24	Ball Bearing	2	1 903405	108A	Capscrew - Motor Adaptor	4	920331
24A	Locknut - Bearing	2	903531	186	Guard	1	804120
24B	Lockwasher - Bearing	2	1 903532	IEC MOTOR ADAPTORS			
26	Gasket - Bearing Cover	1	1 383075	28B	Motor Adaptor Mounting Screws	4	920101
27	Bearing Cover	1	043071	28C	Guard Screw	2	920026
28	Capscrews - Bearing Cover	4	920080	34	Coupling Half - Pump	1	906183
28A	Bracket Mounting Screws	4	920090		Coupling Spider		906176
35	Key - Shaft	1	1 909152		Coupling Half - Motor (IEC 90)		906186
72	O-Ring - Head	1	1 711941	76	Grease Fitting	1	317815
73	Gage Plug (1/4")	2	908198	76A	Grease Relief Fitting	1	701992
73A	Gage Plug (3/4")	1	908225	76B	Extension Coupling	2	701905
76	Grease Fitting	2	317815	104	Grease Seal	1	331934
76A	Grease Relief Fitting	2	701992	108A	Capscrew - Motor Adaptor to Motor	4	920043
104	Grease Seal	1	1 331934	108C	"Motor Adaptor (IEC90 B14A) Includes Ref. Nos. 76, 76A, & 76B"	1	832920
108	Mounting Foot - LGBI(P/E)	1	832913	108D	Washer	4	792094
	Tool - Locknut		903090	186C	Guard Half	2	804196
	Kit - RV Maintenance		899094				
	Kit - Maintenance (6-Vane)		898994				

1 Included in Maintenance Kit, 2 Included in RV Kit, ** Not available as separate repair parts

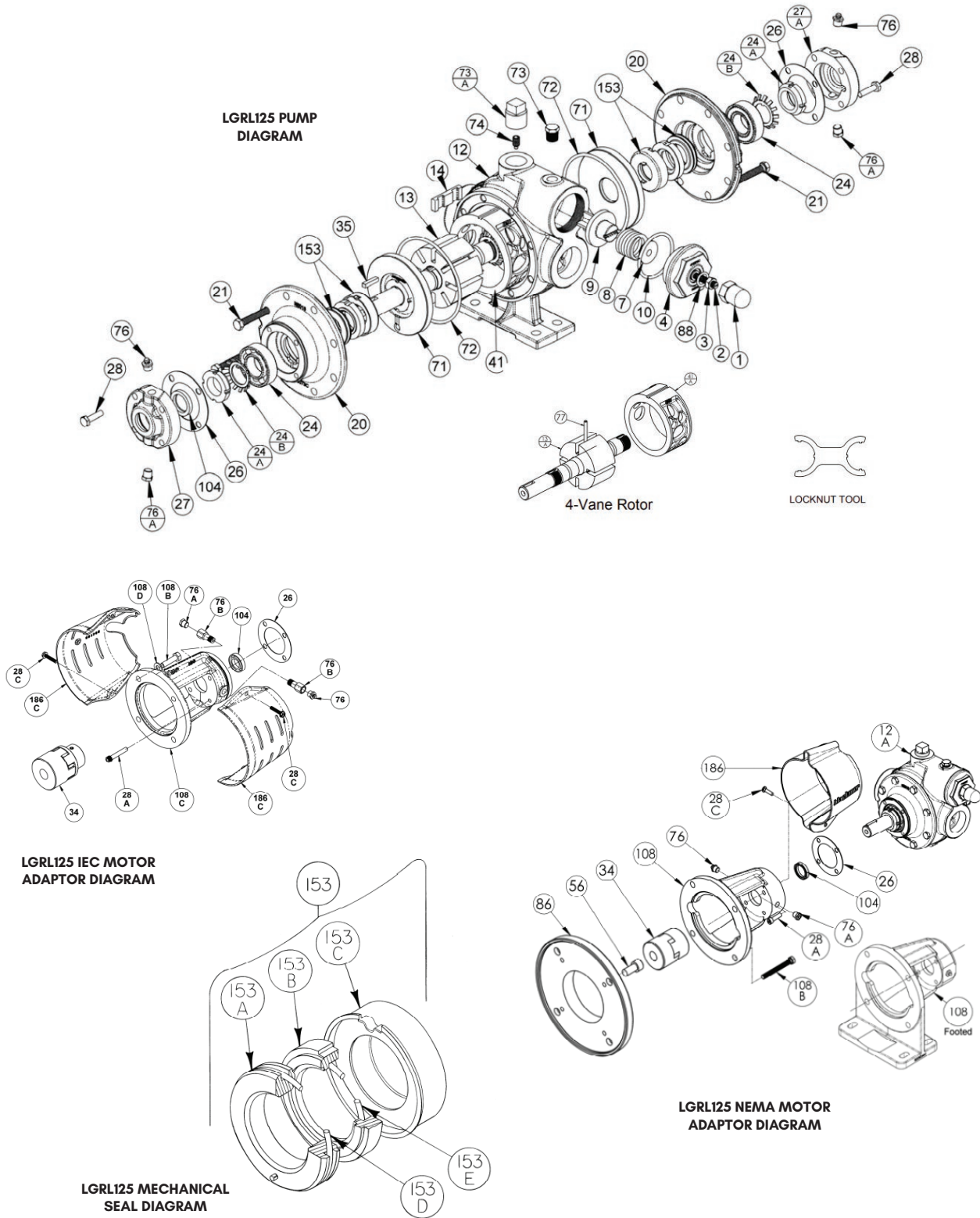


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Blackmer Repair Parts

PARTS FOR PUMP MODELS: LGRL1.25, LGL1.25, LGL1.5, LGRLF1.25A, LGLF1.25A, LGLF1.5A



Ref No.	Description	Parts Per Pump	Part No.
PUMP			
1	Cap-Relief Valve R/V	1	413200
2	Adjusting Screw - R/V	1	433909
3	Locknut-Adjusting Screw	1	922923
4	Cover- R/V	1	413076
7	Spring Guide-R/V	1	423955
8	Spring-R/V (81-125 PSI)	1	471428
9	Valve-R/V	1	453077
10	O-Ring-R/V Cover	1	1 711924
12	Casing with feet (1.25)	1	013075
	Casing with feet (1.5)		013376
13	Rotor and Shaft Assembly, Eight Vane (with Ref. Nos 24A & 24B)	1	2 262300
14	Vane-Duravane	8	1 093088
20	Head	2	033073
21	Cap screws-Head	16	920276
24	Ball Bearing	2	1 903114
24A	Locknut-Bearing	2	2 903554
24B	Lock washer-Bearing	2	1 903533
26	Gasket-Bearing Cover	2	1 383075
27	Bearing Cover-Inboard	0-1	043070
27A	Bearing Cover-Outboard	1	043071
28	Cap screws-Bearing Cover	8	920080
35	Shaft Key	1	1 909152
41	Liner - LGRL(F)1.25 (8 Vane Only)	1	2 183019
	Liner - LGL(F)1.25 (8Vane Only)		2 183020
	Liner - LGL(F)1.5 (8 Vane Only)		2 183310
71	Disc	2	1 063075
72	O-Ring-Head	2	1 701918
73	Gage Plug (1/4")	1	908198
73A	Gage Plug (3/4")	1	3 908225
74	Setscrew-Liner	1	922088
76	Grease Fitting	2	317815
76A	Grease Relief Fitting	2	701992
88	O-Ring-R/V Cap	1	1 701949
104	Grease seal	1	1 331927
	Tool -Locknut		903090
	Kit- Maintenance		898976
	Kit-Rebuild LGRL(F)1.25(A) (8 Vane)		899076
	Kit-Rebuild LGL(F)1.25(A) (8 Vane)		899077
	Kit-Rebuild LGLR(F)1.5(A) (8 Vane)		899078
4-Vane Rotor/Shaft Parts			
13A	Rotor & Shaft Assembly, Four Vane (Includes Ref. Nos. 24A & 24B)	1	263076
14	Vane - Duravane	4	093088
41A	Liner - LGRL(F)1.25 (4-Vane Only)	1	183003
	Liner - LGL(F)1.25 (4-Vane Only)		183004
	Liner - LGL(F)1.5 (4-Vane Only)		183301
77	Push Rod - LGRL(F)1.25	2	123004
	Push Rod - LGL(F)1.25		123076
	Push Rod - LGL(F)1.5		123401
	Maintenance Kit - LGRL(F)1.25A (4-Vane)		898917
	Maintenance Kit - LGL(F)1.25(A) (4-Vane)		898918
	Maintenance Kit - LGL(F)1.5(A) (4-Vane)		898919
	Rebuild Kit - LGRL(F)1.25A (4-Vane)		899017
	Rebuild Kit - LGL(F)1.25(A) (4-Vane)		899018
	Rebuild Kit - LGL(F)1.5(A) (4-Vane)		899019

Ref No.	Description	Parts Per Pump	Part No.
NEMA C FACE MOTOR ADAPTER			
12A	Casing without Feet - LG@LF1.25	1	013077
	Casing without Feet - LGLF1.5		013377
26	Gasket - Bearing Cover	1	383075
28A	Motor Adaptor Mounting Screws	4	920101
28C	Guard Screw	1	920026
34	Coupling Half - Pump	1	906147
	Coupling Spider		906155
	Coupling Half - Motor (56C)		906151
	Coupling Half - Motor (143TC, 145TC, 184C)		906147
	Coupling Half - Motor (182TC, 184TC, 215C)		906146
56	Capscrews - Adapter Ring Mounting	4	920480
76	Grease Fitting	1	317815
76A	Grease Relief Fitting	1	701992
86	Motor Adaptor Ring (182TC, 184TC, 215C)	1	832914
104	Grease Seal	1	331927
108	Motor Adaptor - Unfooted (Includes Ref. 76 & 76A)	1	832912
	Motor Adaptor - Footed (Includes Ref. 76 & 76A)		833000
108B	Capscrews - Motor Adaptor	4	920331
186	Guard	1	804120
IEC FLANGED FACE MOTOR ADAPTOR			
26	Gasket - Bearing Cover	1	383075
28A	Motor Adaptor Mounting Screws	4	920101
28C	Guard Screw	2	920026
34	Coupling Half - Pump (for IEC100/112)	1	906182
	Coupling Spider (for IEC100/112)		906178
	Coupling Half - Motor (IEC100/112)		906180
76	Grease Fitting	1	317815
76A	Grease Relief Fitting	1	701992
76B	Extension Coupling	2	701905
104	Grease Seal	1	331927
108B	Capscrew - Motor Adaptor to Motor	4	920044
108C	Motor Adaptor (IEC 100/112 B14A) Includes Ref. Nos. 76, 76A, & 76B)	1	832930
108D	Washer	4	792094
186C	Guard Half	2	804198
MECHANICAL SEAL			
153	Mechanical Seal Assembly	2	333045
153A	Stationary Seat (Hardened Steel)	2	**
153B	Seal Face (Carbon)	2	**
153C	Jacket Assembly	2	**
153D	O-Ring - Stationary (Buna-N)	2	711916
153E	O-Ring - Rotating (Buna-N)	2	711915
2	Adjusting Screw- Relief Valve	1	2 433905

¹ Included in Maintenance Kits & Rebuild Kits

² Included in Rebuild Kits

³ Ref. No. 73A: Older pumps may use a 1/4" plug (908198) or 1/2" plug (908215)

** Not available as separate replacement part

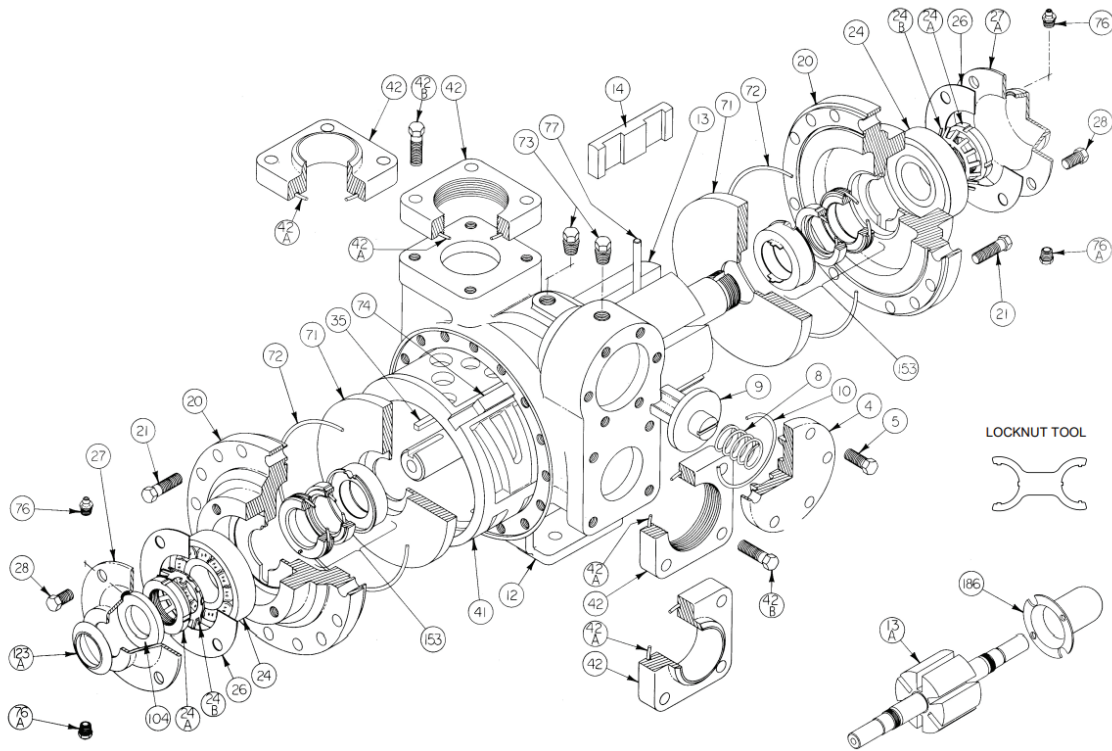


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Blackmer Repair Parts

PARTS FOR MODELS LGLD2E, LGL2E, LGLD3F, LGL3F, LGLD3E, LGL3E



Ref. No.	Description	Parts per Pump	LGL2 Part No.	LGL3 Part No.
4	Cover-Relief Valve (R/V)	1	414401	415113
5	Capscrews-R/V Cover	6	920331	920331
8	Spring-R/V	1	1 471423	1 475135
9	Valve-R/V	1	454405	455129
10	O-Ring - R/V Cover	1	1 701919	1 701925
12	Casing	1	014405	015127
13	Rotor & Shaft Asy. LGL (Includes Ref. Nos. 24A & 24B)	1	264443	265149
13A	Rotor & Shaft Asy. LGLD ⁵ (Includes Ref. Nos. 24A & 24B)	1	2 264445	2 265148
14	Vane - Duravane (Std)	6	1 091419	1 095131
20	Head	2	034416	035128
21	Capscrews-Head (Size 2)	32	920351	-
	Capscrews-Head (Size 3)	40	-	920369
24	Ball Bearing	2	1 903156	1 903166
24A	Lock-Nut Bearing	2	2 903521	2 903523
24B	Lockwasher-Bearing	2	1 903522	1 903524
26	Gasket-Bearing Cover	2	1 383940	1 385125
27	Bearing Cover (Inboard) ³	1	041431	041815
27A	Bearing Cover (Outboard) ⁴	1	041433	041817
28	Capscrews-Bearing Cover	8-12	920285	920285

Ref. No.	Description	Parts per Pump	LGL2 Part No.	LGL3 Part No.
35	Key-Shaft, 1/4" Square	1	1,7 909209	1,7 909209
41	Liner	1	2 184405	2 185111
42	Flange - NPT	2	654401	655112
	Flange - Weld		654405	655102
42A	O-Ring-Flange	2	1 702004	1 702002
42B	Capscrew-NPT Flange	8	920384	920547
	Capscrew-Weld Flange		920351	920510
71	Disc	2	1 064412	1 065112
72	O-Ring-Head	2	1 702022	1 702041
73	Gauge Plug	2	908198	908198
74	Key-Liner	1	2,8 183991	2 185191
76	Grease Fitting	2	317815	317815
76A	Grease Relief Fitting	2	701992	701992
77	Push Rod	3	1,6 123909	1,6 125110
104	Grease Seal	1	1,3 331918	1,3 331908
123A	Dirt Shield	1	1,3 701480	-
186	Shaft Protector (LGLD Models Only)	1	341601	341801
	Tool - Locknut		903091	903091
	Kit - Maintenance		898979	898981
	Kit - Rebuild		899079	899081

¹ Included in Maintenance Kit and Rebuild Kit.

² Included in Rebuild Kit

The following Applies to Double end Shaft Pumps (LGLD):

³ Use two,

⁴ Use none

⁵ Double-Ended Rotor & Shaft

⁶ 2" Push Rod is Metal 3" Is Composite

⁷ Pumps before April 2008 used Woodruff Key 909130, included in maintenance kits.

⁸ Pumps before 1995 require liner key 184407

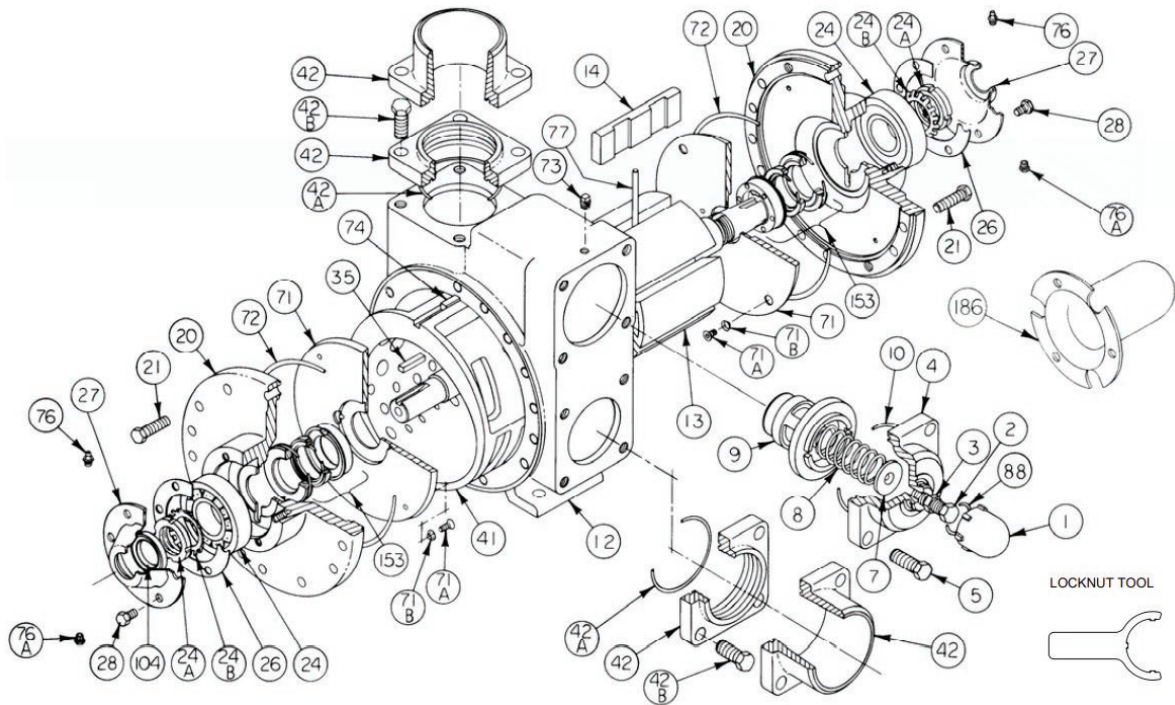


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Blackmer Repair Parts

PARTS FOR MODEL LGLD4B



Ref. No.	Description	Parts Per Pump	Part No.
1	Cap-Relief Valve (R/V)	1	413957
2	Adjusting Screw - R/V	1	436310
3	Locknut-Adjusting Screw	1	432039
4	Cover- (R/V)	1	412001
5	Capscrews-R/V Cover	4	920663
7	Spring Guide-R/V	1	426355
8	Spring - R/V	1	472039
9	Valve-R/V	1	452001
10	O-Ring-R/V Cover	1	701946
12	Casing	1	012019
13	Rotor and Shaft Assembly, Dbl. End (Includes Ref. No. 24A & 24B)	1	262041
14	Vane-Duravane	6	092019
20	Head	2	032041
21	Capscrews-Head	28	920532
24	Ball Bearing	2	903166
24A	Locknut-Bearing	2	903541
24B	Lockwasher-Bearing	2	903542
26	Gasket - Bearing Cover	2	385125
27	Bearing Cover-LGLD4B	2	041815
28	Capscrews-Bearing Cover	12	920285
35	Key-Shaft	1	909183

Ref. No.	Description	Parts Per Pump	Part No.
41	Liner	1	2182000
42	Flange-3" NPT	1-2	652012
42	Flange-3" Weld		652007
42	Flange-4" Weld		652005
42A	O-Ring- NPT, Weld Flange	2	701937
42B	Capscrew-NPT Flange	8	920663
42B	Capscrew-weld Flange		920640
71	Disc	2	062039
71A	Machine Screw-Disc	8	920015
71B	Lock washer-Machine Screw	8	909634
72	O-Ring - Head	2	702039
73	Gauge Plug	2	908198
74	Key - Liner	1	2182040
76	Grease Fitting	2	317815
76A	Grease Relief Fitting	2	701992
77	Push Rod - Composite - LGLD4B	3	122009
88	O-Ring - R/V Cap	1	701926
104	Grease Seal - LGLD4B	2	331908
186	Shaft Protector	1	341801
	Tool-Locknut		903092
	Kit-Maintenance		898922
	Kit-Rebuild		899022

¹ Included in Maintenance Kit and Rebuild Kit

² Included in Rebuild Kit

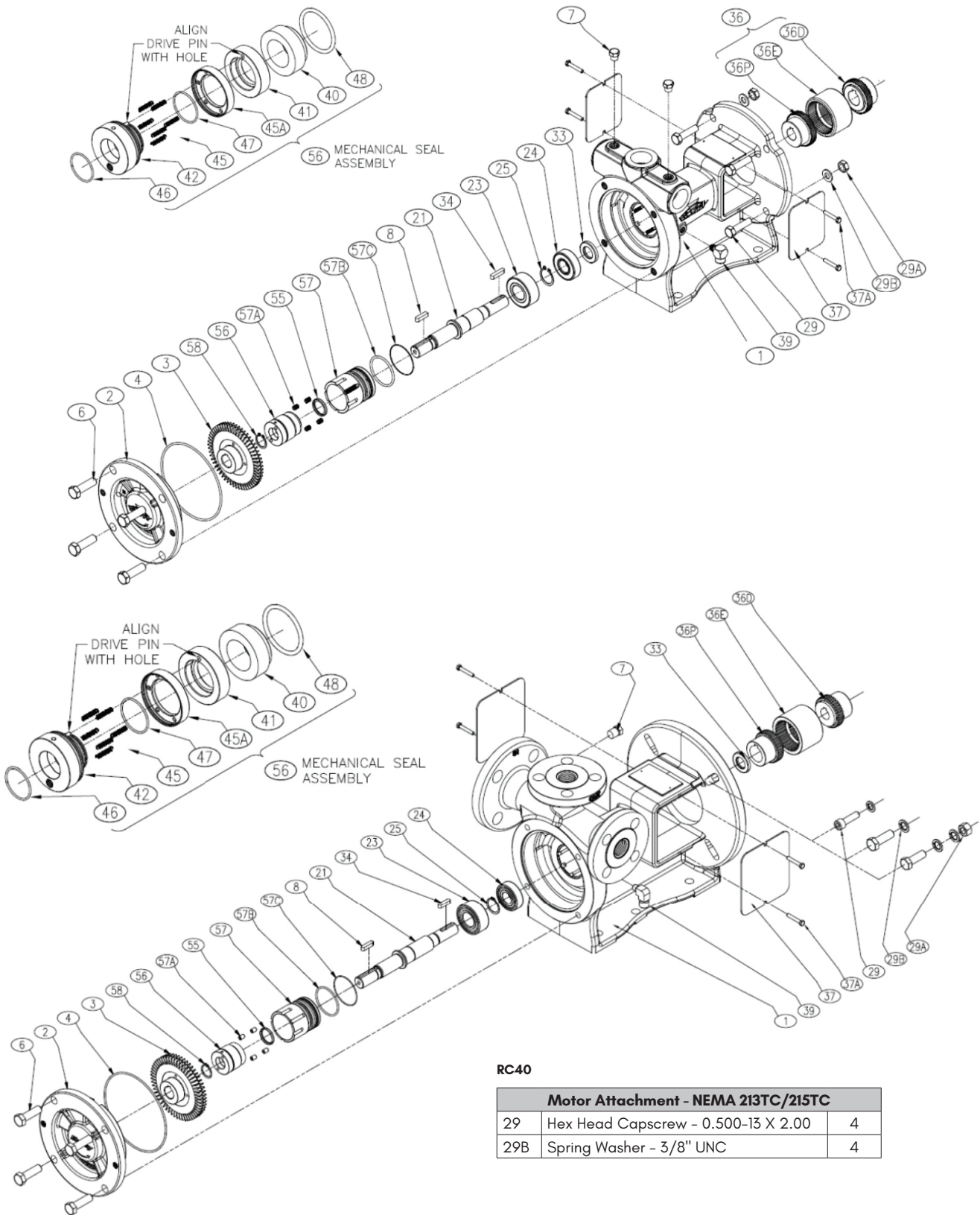


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Blackmer Repair Parts

PARTS LIST - EBSRAY MODELS: RC20, RC25 & RC40



RC40

Motor Attachment - NEMA 213TC/215TC		
29	Hex Head Capscrew - 0.500-13 X 2.00	4
29B	Spring Washer - 3/8" UNC	4

Blackmer Repair Parts

PARTS LIST - EBSRAY MODELS: RC20, RC25 & RC40

Ref.No	Description	Parts Per Pump	RC20	RC25	RC40
1	Body-Nema	1	EBSC317002-1031	EBSC3160031031	EBSC319001-1037
2	Cover	1	EBSc317200-1031	EBSC316200-1031	EBSC319200-1037
3	Impeller	1	EBSC317301-1042	EBSC316301-1042	EBSC319301-1042
4	O-Ring - Cover	1	1 EBSD249-4029		2 EBSD252-4029
6	Hex Head Capscrew, M12-1.75X40	4	BLK908198		
7	Plug - Guage Tap	2			
8	Key - Impeller End, Steel 6X6X20	1			
21	Shaft	1	2 EBSC316350-2152	2 EBSC319350-2152	
23	Ball Bearing - Impeller End	1	2 EBSB072		
24	Ball Bearing - Motor Head	1	2 EBSB073		
25	Circlip - Bearing	1	2 EBS8177-025S		
35	Dust Seal - Bearing	1	EBSZ044-4011		
34	Key- Pump Shaft, Steel 6X6X20	1			
36	Coupling Assembly-0.875 Motor Shaft, NEMA 140TC, 184C	1	EBSL575-028-019-087		
	Coupling Assembly-1.125 Motor Shaft, Nema 180TC, 215C	1	EBSL575-028-019-306		EBSL575-038-019-306
	Coupling Assembly-1.375 Motor Shaft, NEMA 213TC, 215TC	1			EBSL575-038-019-297
	#36D Half Coupling-0.875 Motor Shaft	0-1			
	#36D Half Coupling-1.125 Motor Shaft	0-1			
	#36D Half Coupling-1.375 Motor Shaft	0-1			
	#36E Coupling Element	1			
#36P Half Coupling-Pump	1				
37	Coupling Guard	2	EBSC316700-3081		EBSC319700-3081
37A	Hex Head Capscrew-Coupling Guard, M5-0.8X30	4			
39	Seal Drain Elbow	1	EBS-8312-012S		
55	Lip Seal - Secondary Seal	1	2 EBSZ043-4015		
56	Mechanical Seal Assembly	1	1,2 EBSL756-28-111-05		
40	Seal Seat	1	EBSC316610-4114		
41	Rotating Seal Face	1	EBSC316626-4036		
42	Seal Sleeve	1	EBSC316651-2162		
45	Seal Spring	6	EBSC753001-2223		
45A	Spring Retainer	1	EBSC316690-2162		
46	O-Ring - Shaft	1	EBSD020-4029		
47	O-Ring - Seal Sleeve	1	EBSD020-4029		
48	O-Ring - Seal Seat	1	EBSD218-4029		
57	Cartridge - Mechanical Seal	1	2 EBSC316676-1035		
57A	Oval Point Setscrew, 1/4-28x0.375	4			
57B	O-Ring - Cartridge Primary	1	1,2 EBSD224-4029		
57C	O-Ring - Cartridge Secondary	1	1,2 EBSD032-4029		
58	Circlip - Mechanical Seal	1	2 EBS8177-020S		
	Mechanical Seal Kit, Repair (Marked by 1)	1	EBSK756-28-111		
	Quill Assembly, (Marked by 2)	1	EBSL316378		EBSL319378

*When ordering spare parts, **Always** quote the pump Serial Number located on the nameplate of the pump.

1 Included in Maintenance Kit and Rebuild Kit.

2 Included in Rebuild Kit

RC20/RC25

Motor Attachment - NEMA 140TC, 184C		
29	Hex Head Capscrew-0.375-16 X 1.50	4
29B	Spring Lock Washer - 0.375	4
Motor Attachment - NEMA 180TC, 215C		
29	Hex Head Capscrew - 0.500-13 X 2.00	4
29B	Spring Washer =, 3/8" UNC	4

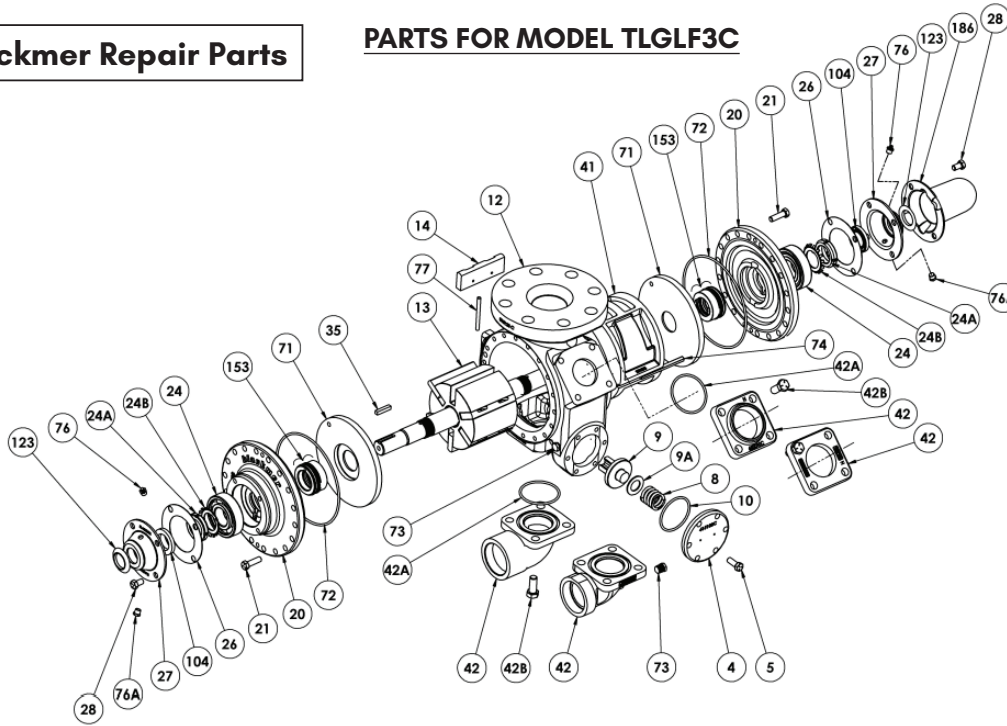


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Blackmer Repair Parts

PARTS FOR MODEL TLGLF3C



Ref. No.	Description	Parts Per Pump	Part No.
4	Cover-Relief Valve (R/V)	1	415108
5	Capscrew-R/V Cover	6	920331
8	Spring-R/V	1	1 471428
9	Valve-R/V	1	4 451460
9A	Relief Valve Shim, .035"	0-1	332907
	Relief Valve Shim, .075"		332937
10	O-Ring - R/V Cover	1	1 701919
12	Casing	1	015128
13	Rotor & Shaft Assembly ⁵	1	2 265147
14	Vane - Duravane	6	1 095132
20	Head	2	035132
21	Capscrew-Head	36	920351
24	Ball Bearing	2	1 903156
24A	Locknut-Bearing	2	2 903521
24B	Lockwasher -Bearing	2	1 903522
26	Gasket-Bearing Cover	2	1 383940
27	Bearing Cover	2	041431
28	Capscrews-Bearing Cover	8	920285
35	Key - Shaft Current, .25 Sq.	1	1 909209
	Key - Shaft Obs, Woodruff		1 909130
41	Liner	1	2 185101
42	Flange - 2" NPT	1-2	652010
	Flange -2" Slip-on Weld		652024
	Flange Elbow - 2" NPT		6 655100
	Flange Elbow - 2" Socket Weld		6 655109
	Blank Flange for Auxiliary Inlet		652036
	Flange - 2" NPT Stainless		655200
	Flange - 2" Socket Weld EL Stainless		6 655209
Flange - 2" Slip-on Weld Stainless	655224		

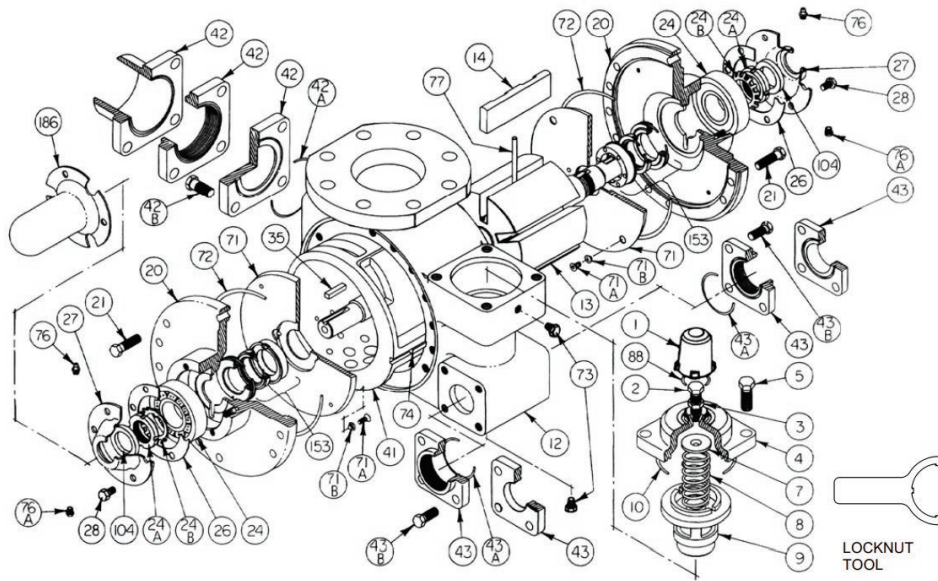
Ref. No.	Description	Parts Per Pump	Part No.
42A	O-Ring-Flange 2-5/8" x 2-7/8" (current)	2	1,3 702004
	O-Ring-Flange 2-1/2" x 2-3/4" (older pumps)		1 701919
42B	Capscrews - Flanges	4-8	920491
	Socket Capscrew - Elbow Flanges		920494
71	Disc.	2	1 065121
72	O-Ring -Head	2	1 711923
73	Gauge Plug	2	908198
74	Key-Liner	1	2 185193
76	Grease Fitting	2	317815
76A	Grease Relief Fitting	2	701992
77	Push Rod	3	1 121608
104	Grease Seal	2	1 331918
123	Dirt Shield	2	1 701480
186	Shaft Protector	1	341601
	Tool - Locknut		903091
	Kit - Maintenance		898980
	Kit - Maintenance with R/V		899225
	Kit - Rebuild		899080
	Kit - Rebuild with R/V		899125

¹ Included in Maintenance Kit and Rebuild Kit
² Included in Rebuild Kit
³ Larger O-Ring introduced October 2002

⁴ Additional parts included in kits with R/V
⁵ Includes Ref. No. 24A & 24B
⁶ Socket Head Capscrew Specific

Blackmer Repair Parts

PARTS FOR MODEL TLGLF4B



Ref. No.	Description	Parts Per Pump	Part No.
1	Cap-Relief Valve (R/V)	1	413957
2	Adjusting Screw - R/V	1	436310
3	Locknut- Adjusting Screw	1	432039
4	Cover-(R/V)	1	412001
5	Capscrews-R/V Cover	4	920663
7	Spring Guide-R/V	1	426355
8	Spring - R/V	1	472039
9	Valve-R/V	1	452001
10	O-Ring-R/V Cover	1	701946
12	Casing	1	012041
13	Rotor & Shaft Assembly (Includes Ref. No. 24A & 24B)	1	262041
14	Vane - Duravane	6	092019
20	Head	2	032041
21	Capscrews-Head	28	920532
24	Ball Bearing	2	903166
24A	Locknut-Bearing	2	903541
24B	Lockwasher-Bearing	2	903542
26	Gasket-Bearing Cover	2	385125
27	Bearing Cover	2	041815
28	Capscrews-Bearing Cover	12	920285
35	Key-Shaft	1	909183
41	Liner	1	182000
Auxiliary Inlet Options			
42	Flange - 3" NPT	1	652012
	Flange - 3" Weld		652030
	Flange - 4" Weld		652005
	Flange - 3" Weld		652007
	Flange - Blank		652000
42A	O-Ring Aux. Inlet Flanges	1	701937
42B	Capscrew - 2", 3" NPT Flange	4	920663
	Capscrew - 3", 4" Weld Flange; Blank Flange		920640

Ref. No.	Description	Parts Per Pump	Part No.
Twin Discharge Port Options			
43	Flange - 2" NPT	2	652010
	Flange - 2" Slip-on Weld		652024
43A	O-Ring - 2" Discharge Flanges	2	702004
43B	Capscrews - Discharge Flange	8	920491
71	Disc	2	062039
71A	Machine Screw - Disc	8	920015
71B	Lock washer-Machine screw	8	909634
72	O-Ring - Head	2	702039
73	Gauge Plug	2	908198
74	Key - Liner	1	182040
76	Grease Fitting	2	317815
76A	Grease Relief Fitting	2	701992
77	Push Rod - Composite	3	122009
88	O-Ring-R/V Cap	1	701926
104	Grease Seal	2	331908
186	Shaft Protector	1	341801
	Tool - Locknut		903092
	Kit - Maintenance		898922
	Kit - Rebuild		899022

¹ Included in Maintenance and Rebuild Kit
² Included in Rebuild Kit



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Corken Cylinder Filling Pumps

CORO-FLO CYLINDER FILLING PUMPS

Regenerative turbine pumps. Ductile Iron casing, balance type mechanical seal, and free floating bronze impeller provide years of service and quiet operation

C Model Close Coupled Series

- C10 Pump - is ideal for the one scale bottle filling operation. Fills 20# cylinder in 30 seconds Fills 100# cylinder in 2.5 minutes, and fuels through a meter at 7 GPM.
- C12 Pump - is for those who want to do it faster. Especially recommended for motor fueling and "batch" fork lift filling. Fills 20# cylinder in 15 seconds, 100# cylinders in 2 minutes. Perfect for motor fueling through a meter at 15 GPM.

C MODEL CLOSE COUPLED SERIES

RMI Part No.		Capacity- GPM		Inlet	Outlet	Max PSID	H.P. Rating	Motor Phase
Pump, Starter & Bypass	Pump & Starter	50 PSID	75 PSID					
C10JD-SM-B	C10JD-SM	6.5	2.5	1-1/4"	1"	75	2	1
C12JD-SM-B	C12JD-SM	15	11	1-1/2"	1"	85	2	1
C13JD-SM-B	C13JD-SM	22	17	1-1/2"	1"	100	2	1
C14HD*		32	25	1-1/2"	1"	100	3	1

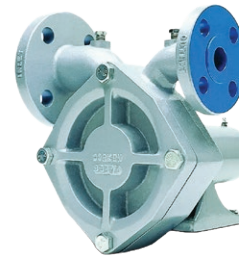
*Starter Not Included

F SERIES CORO-FLO CYLINDER FILLING PUMP

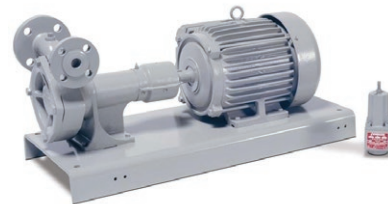
RMI Part No.		Capacity- GPM		Inlet	Outlet	Max PSID
Pump, Baseplate & Coupling	Pump Only	50 PSID	75 PSID			
F10CD-101	F10CD	6.5 W/ 1HP	2.5 W/ 1 HP	1-1/4"	1"	90
F12CD-101	F12CD	15 W/ 2HP	11 W/ 2 HP	1-1/2"	1"	115
F14CD-101	F14CD	31 W/ 3HP	25 W/ 3 HP	1-1/2"	1"	125
F13CD-101	F13CD	21 W/ 3HP	17 W/ 3HP	1-1/2"	1"	125



C SERIES



F SERIES



HDPFF150

Corken Autogas Pumps

AUTOGAS PUMPS

The Corken AutoGas pump achieves new levels of performance with higher flow at high differential pressures, non-pulsating and quiet transfer longer pump life and a design that is easy to repair. The pump is also versatile enough to be used in applications such as cylinder filling, vaporizer feeding, or bulk transfer.

- Ideal for dual hose dispensers and multiple dispensers
- ANSI Flanges 1-1/2" inlet x 1" outlet
- Continuous Duty Capacity
- Self-aligning, free-floating impeller

High Differential Pressure Packages

Prepackaged pump assemblies with motor and bypass valve

Options

TECH TIP: Variable frequency drives allow the use of 3-phase motors on single phase electric service. Can also be used instead of a starter with 3-phase service.

PUMP PACKAGES

RMI Part No.		GPM	Diff. Pressure	Motor HP
Pump on Base	Pump Only			
FF075CD6A-101-215T	FF075CD6A	22.5	145	7.5
FF150CD6A-101-215T	FF150CD6A	33.8	145*	10

*200psig maximum differential pressure with 20HP motor

HIGH DIFFERENTIAL PRESSURE PACKAGES

RMI Part No.	Description
HDPFF075-3P75	Pump, Base Plate, Bypass, and 7.5HP 3PH MOTOR
HDPFF150-3P10	Pump, Base Plate, Bypass, and 10HP 3PH MOTOR

OPTIONS

RMI Part No.	Description
4204-1	10HP Variable Frequency Drive for use with 5HP motor
4204	15HP Variable Frequency Drive for use with 7.5HP motor
4204-2	20HP Variable Frequency Drive for use with 10HP motor



Corken Bulk Plant & Truck Pumps

CORO-VANE BULK FILL PUMPS

- Sliding vane design with internal safety valve
- Large diameter non-metallic pins are not speed sensitive to allow for higher RPM operation
- High Tech materials used on cam and blades to extend life of pump
- Easy maintenance

RMI Part No.		Inlet/Outlet	Capacity @ 50 PSID	
Pump & Base	Pump Only		GPM @ 640 RPM	GPM @ 780 RPM
Z2000-103	Z2000	2" NPT	69	82
Z3500-103	Z3500*	3" NPT	143	177
Z4500-103	Z4500	4" x 3" FLNG	309	382

*Easy retrofit with 1021 or other 3" pump



Z3500-103

CORO-VANE FLANGE MOUNTED TRUCK AND TRANSPORT PUMPS

- Reversible side plates
- Anti-cavitation cam
- Low impact high strength drivers
- Needle roller bearing rated for up to 4,000 lbs.

RMI Part No.	Inlet	Outlet	Capacity @ 50 PSIG	
			GPM @ 640 RPM	GPM @ 780 RPM
Z3200	3" Flange	2" NPT	95	112
Z4200	4" Flange	Dual 2"	278	369

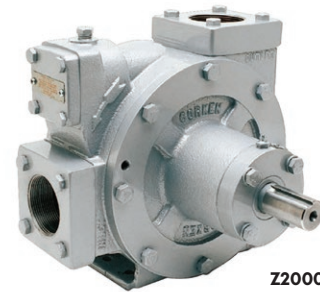


Z SERIES
FLANGE MOUNT

CORO-VANE BASE MOUNTED TRUCK PUMP

- Double Shaft Extension for LH or RH PTO
- Hydraulic Actuated Blades

RMI Part No.	Inlet	Outlet	Capacity @ 50 PSIG
Z2000	2" NPT Flange	2"	40-85 GPM



Z2000

DRY CYLINDER COMPRESSORS

- Designed for liquid transfer and residual vapor recovery
- Contamination-free, oil-free delivery
- Fully engineered design

RMI Part No.		Capacity		Motor HP	RPM	Standard Pipe Size	
Complete Bulk Plant Transfer Unit*	Compressor & Fly Wheel Only	GPM	CFM			Vapor	Liquid
91M3FBA-107	91M3FBA	50	8.3	5	600	1"	1-1/4"
291M3FBA-107	291M3FBA	88	16	7.5	780	1-1/4"	2"
491M3FBA-107	491M3FBA	198	36	15	825	2"	3"
691M3FBA-107	691M3FBA	330	60	25	822	3"	4"

*Transfer unit includes compressor, gauges, base, piping, strainer, 4-way valve, liquid trap, belt guards, and sliding base. Motor is not included



COMPRESSOR

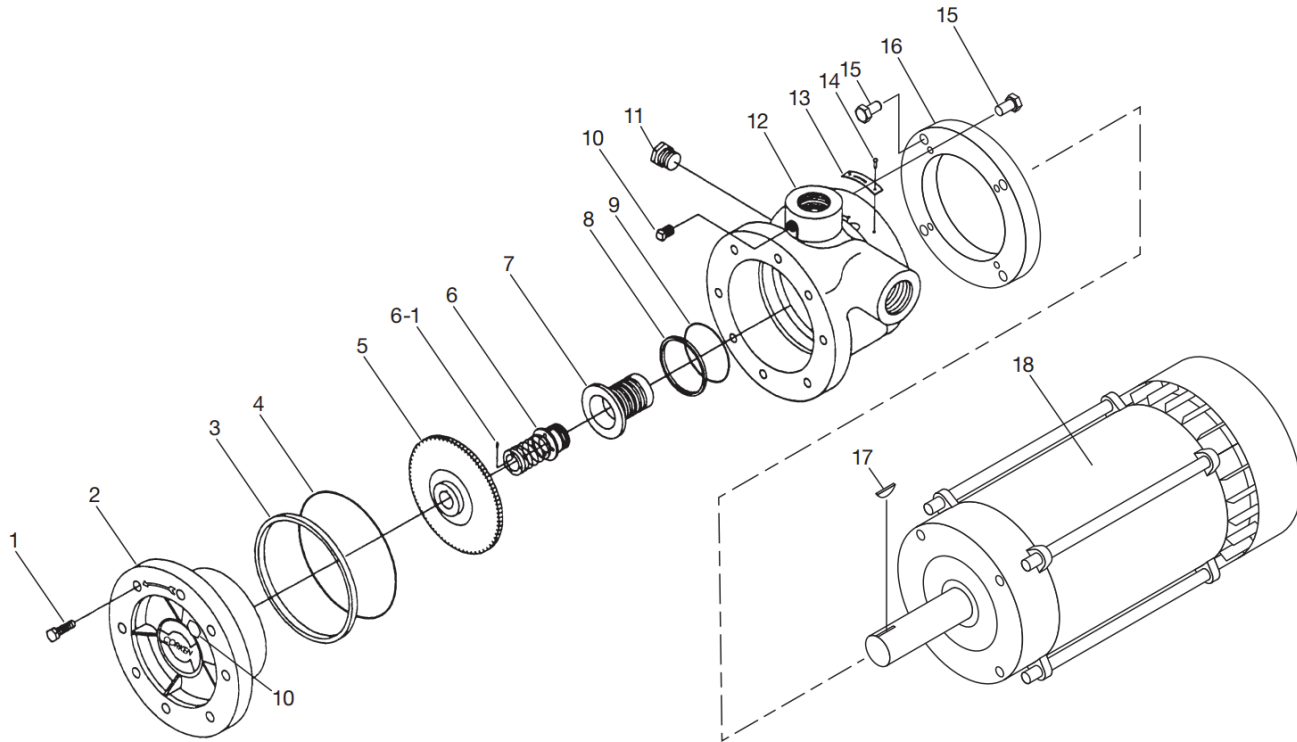


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Corken Repair Parts

PARTS FOR C10, C12, C13, C14, & C16 MODEL PUMPS



Ref No.	RMI Part No.	Description	Qty.
1	7001-03INC100A	Hex Head Cap Screw	8
2	1001-0	Cover - Model 10	1
	1001-2	Cover - Model 12	1
	1001-3	Cover - Model 13	1
	1001-4	Cover - Model 14	1
	1001-6	Cover - Model 16	1
3	1014 ¹	Case clearance shim (.002" red)	As Req.
	1014-1 ₁	Case clearance shim (.003" green)	As Req.
4	2-246A ₁	Case O-Ring (non-teflon)	1
5	1003-0 ₂	Impeller, Bronze - Model 10	1
	1003-2 ₂	Impeller, Bronze - Model 12	1
	1003-3 ₂	Impeller, Bronze - Model 13	1
	1003-4 ₂	Impeller, Bronze - Model 14	1
	1003-6 ₂	Impeller, Bronze - Model 16	1
6	113-CXA6	Seal Assembly (Buna-N O-Rings)	1
6-1	1009 ₁	Seal Pin	1
7	1004-1 ₃	Seal Housing without Pin (steel)	1
	1004-1X ₄	Seal Housing with Pin (steel)	1
8	1013	Housing Adjustment Shim (.010")	As Req.
	1013-1	Housing Adjustment Shim (.020")	As Req.
9	2-224A ₁	Housing O-Ring (Buna-N)	1

Ref No.	RMI Part No.	Description	Qty.
10	3442	Pipe Plug, 1/4" NPT	1
11	3444	Pipe Plug, 3/4" NPT	1
12	1002-0	Case - Model 10	1
	1002-2	Case - Model 12	1
	1002-3	Case - Model 13	1
	1002-4	Case - Model 14	1
	1002-6	Case - Model 16	1
13	1914-1	Nameplate	1
14	7012-006SF019E	Phillips Head Screw 6-32 X 1/4"	2
15	7002-037NC087A	Socket Head Cap Screw	8
16	1015	Adapter Ring	1
17	2497 ₁	Woodruff Key, Steel	1
	2497-1 ₁	Woodruff Key, Stainless Steel	1
18	2557	Motor, 3HP - Models 14 & 16 (3 Phase)	1
	4261	Motor, 2HP - Models 10, 12, & 13	1
	4261-1	Motor, 1HP - Models 10 & 12	1
	4885	Motor, 3HP - Models 14 & 16 (Single Phase)	1

- ¹ Included with seal assembly/repair kit 113-CXA6
- ² For a ductile iron impeller, add a 1 to the end of the part number
- ³ Pin is not required for Buna-N, Neoprene, and Viton O-Rings
- ⁴ Pin is required for PTFE and Kalrez O-Rings

CAUTION: Always relieve pressure in the unit before attempting any repairs.

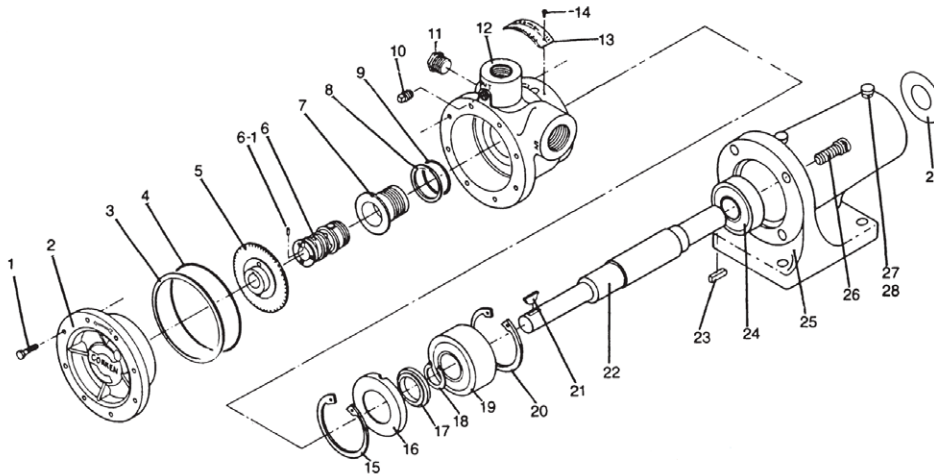


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Corken Repair Parts

PARTS FOR F10, F12, F13, F14, F16, F17, F18, & F19 MODEL PUMPS



MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	PTFE
G	Ethylene Propylene
K	Kalrez

Ref No.	RMI Part No.	Description	Qty.
1	7001-03INC100A	Hex Head Cap Screw	8
2	1001-0	Cover - model 10	1
	1001-2	Cover - model 12	1
	1001-3	Cover - model 13	1
	1001-4	Cover - model 14	1
	1001-6	Cover - model 16	1
	1001-7	Cover - model 17	1
	1001-8	Cover - model 18	1
	1001-9	Cover - model 19	1
3	1014 ₂	Case Clearance Shim (.002" red)	As Req.
	1014-1 ₂	Case Clearance Shim (.003" green)	As Req.
4	2-246 _{1 2}	Case O-Ring (non-PTFE)	1
	2-247E ₂	Case O-Ring PTFE	1
5	1003-0 ₃	Impeller, bronze - model 10	1
	1003-2 ₃	Impeller, bronze - model 12	1
	1003-3 ₃	Impeller, bronze - model 13	1
	1003-4 ₃	Impeller, bronze - model 14	1
	1003-61	Impeller, ductile iron - models 16 & 17	1
	1003-81	Impeller, ductile iron - model 18	1
	1003-91	Impeller, ductile iron - model 19	1
6	113-CX _{6 1}	Seal Assembly, aluminum sleeve	1
	113CX _{6A 1}	Seal Assembly, stainless steel sleeve	1
6-1	1009 ₂	Seal Pin	1
7	1004-1 ₄	Seal Housing, no pin, steel	1
	1004-11 ₄	Seal Housing, no pin, stainless steel	1
	1004-1X ₅	Seal Housing, with pin, steel (Kalrez)	1
	1004-11X ₅	Seal Housing, with pin, stainless steel (Kalrez)	1
	1004-21X ₅	Seal Housing, with pin, stainless steel (PTFE)	1
8	1013	Housing Adjustment Shim (.010")	As Req.
	1013-1	Housing Adjustment Shim (.020")	As Req.

Ref No.	RMI Part No.	Description	Qty.
9	2-224 _{1 2}	Housing O-Ring	1
10	3442	Pipe Plug, 1/4" NPT	1
11	3444	Pipe Plug, 3/4" NPT	1
12	1002-0	Case - model 10	1
	1002-2	Case - model 12	1
	1002-3	Case - model 13	1
	1002-4	Case - model 14	1
	1002-6	Case - model 16	1
	1002-7	Case - model 17	1
	1002-8	Case - model 18	1
	1002-9	Case - model 19	1
	13	1914-1	Nameplate
14	7012-006SF019E	Phillips Head Screw 6-32 X 1/4"	2
15	5002-281	Bearing Retainer Ring	1
16	1238	Bearing Cap	1
17	1006	Grease Seal	1
18	5102-118	Bearing Retainer Ring	1
19	2758	Ball Bearing	1
20	5000-281	Bearing Retaineer Ring	1
21	2497 ₂	#5 Woodruff Key, steel	1
	2497-1 ₂	#5 Woodruff Key, stainless steel	1
22	1234	Shaft, steel	1
	1234-X ₆	Shaft Assembly, steel	1
	1234-1	Shaft, stainless steel	1
	1234-1X ₆	Shaft Assembly, stainless steel	1
23	3226 ₂	Key	1
24	2759	Ball Bearing	1
25	1010-2	Frame	1
26	7002-037NC087A	Socket Head Screw	4
27	2158	Grease Zerk	2
28	2159	Lubricap	2
29	3227	Bearing Plate	1

¹ _ denotes material code. See material code chart for details
² Included with seal assembly/repair kit
³ Add a 1 to the part number for ductile iron or a 2 for stainless steel

⁴ Pin is not required for Buna-N, Neoprene, or Viton O-rings
⁵ Pin is required for PTFE and Kalrez O-Rings
⁶ Shaft assembly comes with bearing pressed on the shaft and includes part numbers 2758, 2759, & 5102-118

CAUTION: Always relieve pressure in the unit before attempting any repairs.

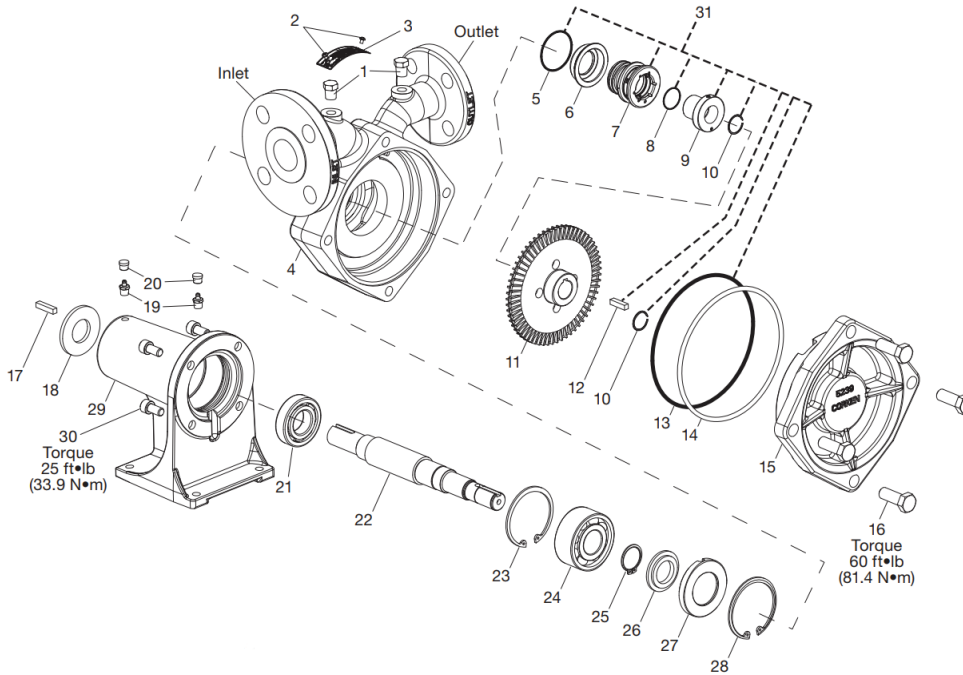


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Corken Repair Parts

PARTS FOR FF060, FF075, & FF150 MODEL CORO-FLO PUMPS



Ref No.	RMI Part No.	Description	Qty.
1	3442	1/4" Pipe Plug	2
2	7012-0065F019E	Nameplate Screw	2
3	1914-1	Nameplate	1
4	5238-060	060 Case - ANSI Flange (FF)	1
	5238-75	075 Case - ANSI Flange (FF)	1
	5238	150 Case - ANSI Flange (FF)	1
	5238-061	060 Case - DIN Flange (FD)	1
	5238-751	075 Case - DIN Flange (FD)	1
	5238-1	150 Case - DIN Flange (FD)	1
5	2-133_1 2	Seal Housing O-Ring	1
6	5244-1X	Seal Housing Assembly	1
7	Not Sold Separately 2	Seal Sub Assembly	1
8	2-108_1 2	Seal Sleeve O-Ring	1
9	Not Sold Separately 2	Seal Sleeve Assembly	1
10	2760-883	7/8" Retainer Ring	1
11	5240-060	060 Impeller (Bronze)	1
	5240-75	075 Impeller (Bronze)	1
	5240	150 Impeller (Bronze)	1
	5240-061	060 Impeller (Stainless Steel)	1
	5240-751	075 Impeller (Stainless Steel)	1
	5240-1	150 Impeller (Stainless Steel)	1
	5240-062	060 Impeller (Steel)	1
	5240-752	075 Impeller (Steel)	1
	5240-2	150 Impeller (Steel)	1

Ref No.	RMI Part No.	Description	Qty.
12	42443	Impeller Key	1
13	2-260_1 2	Case O-Ring	1
14	5248 3	Case Clearance Shim	1
15	5239-060	060-Cover	1
	5239-75	075-Cover	1
	5239	150-Cover	1
16	7301-140MC040A	M14-2 X 40mm Hex Head Bolt	4
17	3226	Shaft Key	1
18	3227	Bearing Plate	1
19	2158	Grease Zerk	2
20	2159	Lubricap	2
21	2759	Single Row Ball Bearing	1
22	5241-1	Shaft	1
23	5000-281	Retainer Ring	1
24	2758	Double Row Ball Bearing	1
25	5102-118	Retainer Ring	1
26	1006	Grease Seal	1
27	1238	Bearing Cap	1
28	5002-281	Retainer Ring	1
29	1010-3	Mounting Frame	1
30	7302-100MC020A	M10-1.5 X 22mm Allen Head Bolt	4
31	3189-1X_6 1	Seal Assembly	1

MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
G	Ethylene Propylene
K	Kalrez

1 _ denotes material code

2 Included in seal assembly 3189-1X_6 1

3 Only required for models prior to serial number prefix YU

CAUTION: Always relieve pressure in the unit before attempting any repairs.

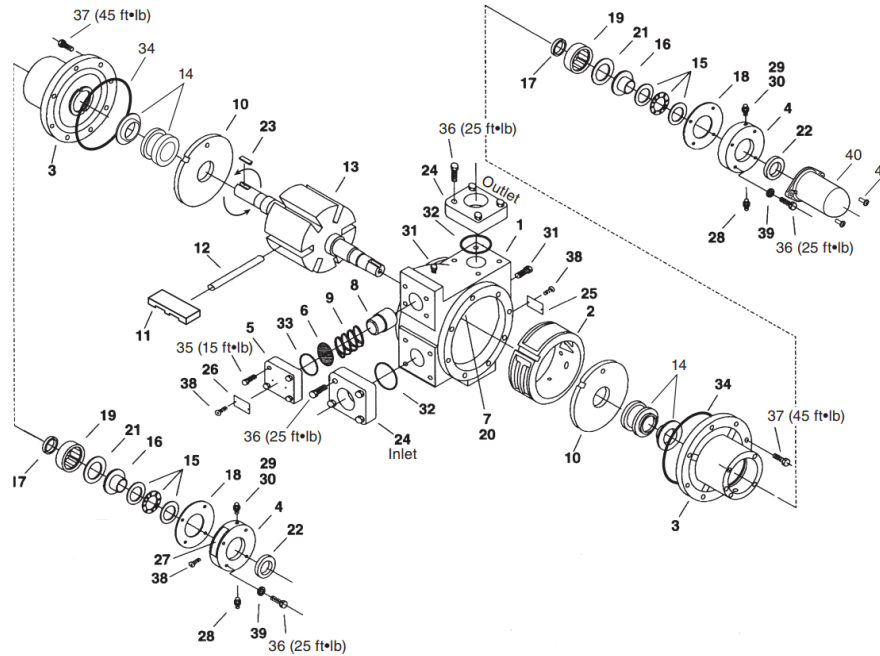


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Corken Repair Parts

PARTS FOR Z2000 MODEL PUMPS



MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	Teflon

Ref No.	RMI Part No.	Description	Qty.
1	4413	Case	1
2	4414 ₂	Cam	1
3	4416	Head	2
4	4417	Bearing Cap	2
5	1174-3	Relief Valve Cap	1
6	4282	Shim (Z2000, ZH2000)	1
7	4424	Cam Key	1
8	4425	Relief Valve	1
9	4426	Relief Valve Spring (Z2000, ZH2000)	1
10	4427 ₂	Sideplate	1
11	4428 _{1 2 3}	Vane	6
12	4262-X _{1 2}	Vane Driver (Push Rod)	3
13	4430-X2R	Rotor-Shaft Assembly	1
14	4431-X _{2 1 2 4}	Mechanical Seal Assembly - cast iron	2
	4431-X _{6 4}	Mechanical Seal Assembly - silicon carbide	2
15	4432 _{1 2}	Thrust Bearing Assembly	2
16	4435 _{1 2}	Bearing Race Mounting Ring	2
17	4438	Grease Seal	2
18	4439 _{1 2}	Bearing Cap Shim (.002) Red	As Req.
	4439-1 _{1 2}	Bearing Cap Shim (.010) Brown	As Req.
	4439-2 _{1 2}	Bearing Cap Shim (.020) Yellow	As Req.
19	2754-X _{1 2}	Bearing	2
20	3253	Cam Key Pin	2

Ref No.	RMI Part No.	Description	Qty.
21	2760-244	Retainer Ring	2
22	4441 _{1 2}	Grease Seal	2
23	2270 _{1 2}	Shaft Key- 1/4" X 9/16"	2
24	4479-2	Flange -2" NPT	2
	4479-2S	Flange -2" Welded	2
25	2649	Nameplate	1
26	4248	Relief Valve Nameplate (Z2000, ZH2000)	1
27	1359	Lubrication Instructions Plate	2
28	1343	1/8" NPT Relief Fitting	4
29	2158	1/8" NPT Grease Zerk	2
30	2159	Lubricap	2
31	3442	1/4" NPT Pipe Plug	2
32	2-231 _{1 2 4}	O-Ring - Flange	2
33	2-224 _{1 2 4}	O-Ring - Relief Valve Cap	1
34	2-261 ₄	O-Ring Case	2
35	7001-031-NC125A	Bolt - Hexagon Head	4
36	7001-037-NC150A	Bolt - Hexagon Head	16
37	7001-043-NC125A	Bolt - Hexagon Head	16
38	7012-006-SF025E	Screw	8
39	7206-037A	Lockwasher	8
40	4985	Shaft Protector	1
41	7012-010SF050E	Screw	2
	3193-X16	Repair Kit	1
	3194-X16	Rebuild Kit	1

¹ Included in repair kit

² Included in rebuild kit

³ Slots in vanes must face TOWARDS the direction of rotation

⁴ _ denotes material code

CAUTION: Always relieve pressure in the unit before attempting any repairs.

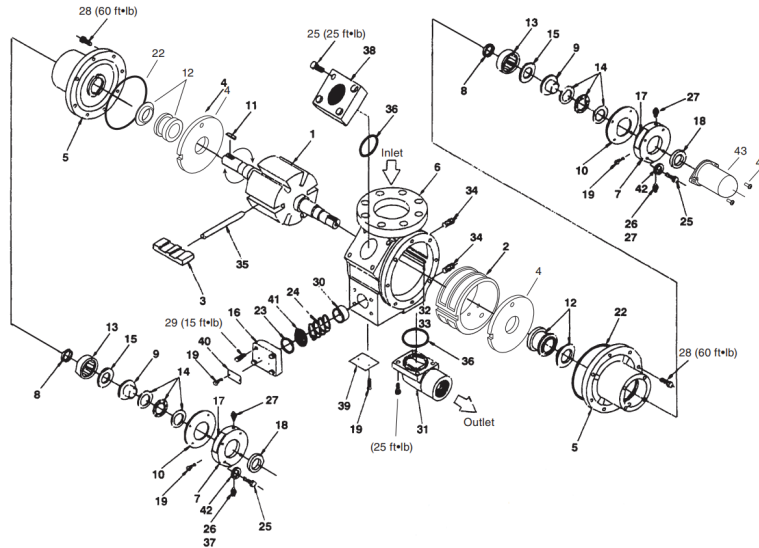


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Corken Repair Parts

PARTS FOR Z3200 MODEL PUMPS



MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	Teflon

Ref No.	RMI Part No.	Description	Qty.
1	4995-X2R	Rotor Shaft Assembly	1
2	4242 ₂	Cam	1
3	4232 _{1 2 4}	Vane	6
2	4231 ₂	Sideplate	2
5	4488	Head	2
6	4239	Case	1
7	4417	Bearing Cap	2
8	4438	Grease Seal	2
9	4435 _{1 2}	Mounting Ring	2
10	4439 _{1 2}	Bearing Shim (.002) Red	As Req.
	4439-1 _{1 2}	Bearing Shim (.010) Brown	As Req.
	4439-2 _{1 2}	Bearing Shim (.020) Yellow	As Req.
11	2270 _{1 2}	Shaft Key	2
12	4431-X _{2 1 2 3}	Mechanical Seal Assy - cast iron	2
	4431-X ₆	Mechanical Seal Assy - silicon carbide	2
13	2754 ₂	Bearing Outer Race	2
14	4432 _{1 2}	Thrust Bearing Assembly	2
15	2760-244	Retainer Ring	2
16	1174-2	Relief Valve Cap	1
17	1359	Lubrication Instruction Plate	2
18	4441 _{1 2}	Grease Seal	2
19	7012-006SF019E	Screw	8
22	2-262_ ₃	O-Ring - Case	2
23	2-224_ _{1 2 3}	O-Ring - Relief Valve Cap	1
24	1240	Relief Valve Spring	1
25	7001-037NC150A	Bolt 3/8" X 1-1/2" Hex Head	16
26	2158	1/8" NPT Grease Zerk	2
27	1343	1/8" NPT Relief Fitting	4
28	7001-050NC150A	Bolt - 1/2"-13 X 1-1/2" Hex Head	16

Ref No.	RMI Part No.	Description	Qty.
29	7001-031INC125A	Bolt - 5/16" -16 X 1-1/4" Hex Head	4
30	1241	Relief Valve	1
31	1172-1.5	Outlet Flange - 1.5" NPT	1
	1172-1.5S	Outlet Flange - 1.5" WF	1
	1172-2	Outlet Flange - 2" NPT	1
	1172-2S	Outlet Flange - 2" WF	1
	1947	Outlet Flange - 1.5" NPT ELL	1
	4243	Outlet Flange - 2" NPT ELL	1
5520	Outlet Flange - 2" steel WF	1	
32	4241	Cam Key	1
33	3253	Cam Key Pin	1
34	3442	1/4" NPT Pipe Plug	1
35	4262-X _{1 2}	Vane Driver	3
36	2-234_ _{1 2 3}	O-Ring-Flange	1
37	2159	Lubricap	2
38	1172-1.5	Aux. Inlet Flange -1.5" NPT	1
	1172 - 1.5S	Aux. Inlet Flange -1.5" WF	1
	1172-2	Aux. Inlet Flange -2" NPT	1
	1172-2S	Aux. Inlet Flange -2" WF	1
	1920-3	Aux. Inlet Flange - Blind	1
4243	Aux. Inlet Flange -2 NPT ELL	1	
39	2649	Nameplate	1
40	4248	Relief Valve Nameplate	1
41	4242	Relief Valve Shim	As Req.
42	7206-037A	3/8" Lockwasher	8
43	4985	Shaft Protector	1
44	7012-010SF050E	Screw	2
	3195-X16	Repair Kit	1
	3196-X16	Rebuild Kit	1

₁ Included in repair kit
₂ Included in rebuild kit
₃ _ denotes material code

₄ Slots in vanes must face
TOWARDS the direction of
rotation

CAUTION: Always relieve pressure in the unit before attempting any repairs.

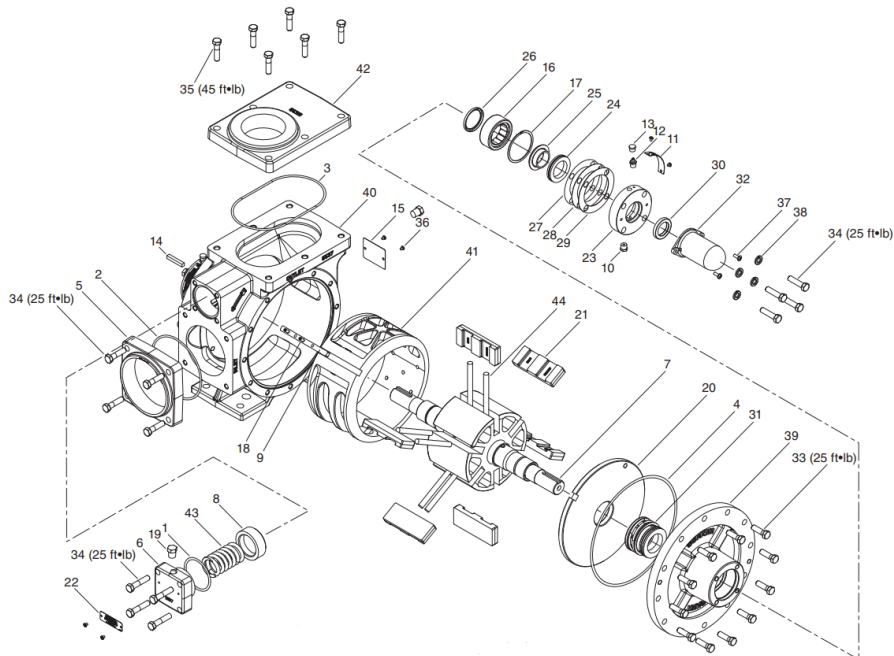


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Corken Repair Parts

PARTS FOR Z3500 MODEL PUMPS



MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	Teflon

Ref No.	RMI Part No.	Description	Qty.
1	2-228_1 2 3	O-Ring	1
2	2-245_3	O-Ring	1
3	2-259_3	O-Ring	1
4	2-268_3	O-Ring	2
5	1206-3	Inlet Flange - 3" NPT	1
	1206-4	Inlet Flange - 4" NPT	1
	1206-3S	Inlet Flange - 3" WF	1
	1206-4S	Inlet Flange - 4" WF	1
6	1207-2	Relief Valve Cap	1
7	1208-1X6R	Rotor Shaft Assembly	1
8	1224	Relief Valve	1
9	1309	Cam Key	1
10	1343	Grease Relief Fitting	4
11	1359	Lubrication Plate	2
12	2158	Grease Zerk	2
13	2159	Lubricap	2
14	2270_1 2	Shaft Key - 1/4"	1
15	2649	Nameplate	1
16	2754-X_2	Roller Bearing	2
17	2760-244	Retainer Ring	2
18	3253	Cam Key Pin	2
19	3442	Pipe Plug - 1/4" NPT	2
20	3935_2	Sideplate	2
21	3936_1 2 4	Vane	6
22	4248	Relief Valve Warning Tag	1
23	4417	Bearing Cap	2
24	4432_1 2	Thrust Bearing Assembly	2

Ref No.	RMI Part No.	Description	Qty.
25	4435_1 2	Thrust Bearing Mounting Ring	2
26	4438	Grease Seal/Oil Seal	2
27	4439_1 2	Bearing Cap Shim - 0.002"	2
28	4439-1_1 2	Bearing Cap Shim - 0.010"	2
29	4439-2_1 2	Bearing Cap Shim - 0.020"	2
30	4441_1 2	Grease Seal	2
31	6660-X_2_3	Mechanical Seal Assembly - Cast Iron	2
	6660-X_6_3	Mechanical Seal Assembly - Silicon Carbide	2
32	4985	Coro-Vane Shaft Cover	1
33	7001-037NC125A	Hex Head Bolt	24
34	7001-037NC150A	Hex Head Bolt	16
35	7001-043NC150A	Hex Head Bolt	6
36	7012-006SF019E	Screw	9
37	7012-010SF050E	Screw	2
38	7206-037A	Lockwasher - 0.375"	8
39	5534	Head	2
40	5537	Case	1
41	5539_2	Cam	1
	5538	Outlet Flange - 3" NPT Elongated	1
42	5538-3S	Outlet Flange - 3" WF Elongated	1
43	5548	Spring	1
44	5554-X_1 2	Vane Driver	6
	3195-X26	Repair Kit	1
	3196-X26	Rebuild Kit	1

¹ Included in repair kit

² Included in rebuild kit

³ _ denotes material code

⁴ Slots in vanes must face TOWARDS the direction of rotation

CAUTION: Always relieve pressure in the unit before attempting any repairs.

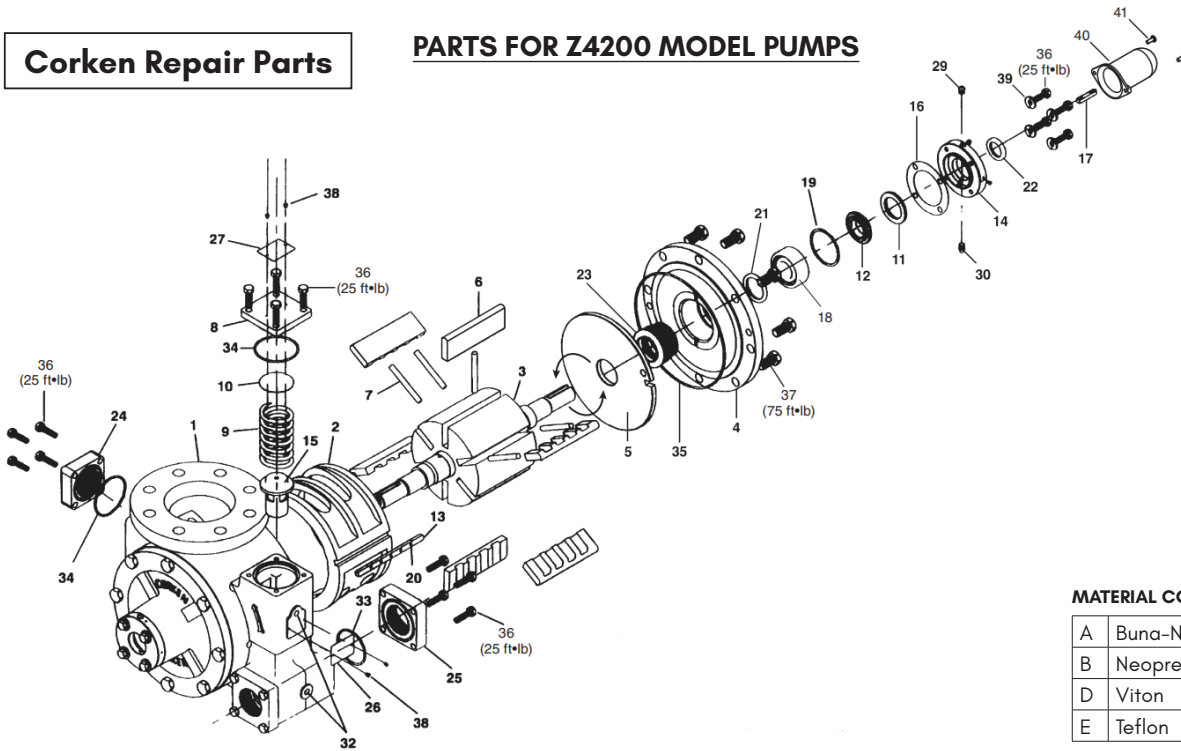


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Corken Repair Parts

PARTS FOR Z4200 MODEL PUMPS



MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	Teflon

Ref No.	RMI Part No.	Description	Qty.
1	4442	Case	1
2	4443 ₂	Cam	1
3	4444-X2R	Rotor-Shaft Assembly	1
4	4445	Head	2
5	4446 ₂	Sideplate	2
6	4448 _{1 2 4}	Vane	6
7	4449-X _{1 2}	Vane Driver	5
8	4450	Relief Valve Cap	1
9	4451	Relief Valve Spring	1
10	4452	Shim	1
11	4453 _{1 2}	Thrust Bearing Assembly	2
12	4454 _{1 2}	Bearing Race Mounting Ring	2
13	4455	Cam Key	1
14	4456	Bearing Cap	2
15	4457	Relief Valve	1
	4458	Bearing Cap Shim (.002) Red	As Req.
16	4458-1 _{1 2}	Bearing Cap Shim (.010) Brown	
	4458-2 _{1 2}	Bearing Cap Shim (.020) Yellow	
17	4459 _{1 2}	Shaft Key - 5/16 x 1-3/4	1
18	4460-X _{1 2}	Roller Bearing	2
19	2760-283	Retainer Ring	2
20	3253	Cam Key Pin	5
21	4462	Grease Seal	2
22	4463 _{1 2}	Grease Seal	2
23	4464-X _{2 1 2 3}	Mechanical Seal Assy - Cast Iron	2
	4464-X ₆	Mechanical Seal Assy - Silicon Carbide	2
24	1172-2	Aux. Inlet Flange - 2" NPT	1
	1172-2S	Aux. Inlet Flange - 2" WF	1
	1920-3	Aux. Inlet Flange - Blind	1

Ref No.	RMI Part No.	Description	Qty.
25	4479-2 ₅	Discharge Flange - 2" NPT	2
	4981-2	Discharge Flange - 2" NPT	2
26	2649	Nameplate	1
27	4248	Relief Valve Nameplate	1
28	1359	Lubrication Instruction Plate	2
29	1343	1/8" NPT Relief Fitting	2
30	2158	1/8" NPT Grease Zerk	2
31	2159	Lubricap	2
32	3442	1/4" NPT Pipe Plug	2
33	2-231 _{1 2 3}	O-Ring - Discharge Flange	2
34	2-234 _{1 2 3}	O-Ring - Aux. Inlet Flange	1
35	2-270 ₃	O-Ring - Case	2
36	7001-037NC150A	Bolt - Hex Head	24
37	7001-062NC125A	Bolt - Hex Head	16
38	7012-006SF019E	Screw	8
39	7206-037A	Lockwasher	8
40	4985	Shaft Protector	1
41	7012-010SF050E	Screw	2
	3197-X16	Repair Kit	1
	3198-X16	Rebuild Kit	1

- ¹ Included in repair kit
- ² Included in rebuild kit
- ³ _ denotes material code
- ⁴ Slots in vanes must face TOWARDS the direction of rotation
- ⁵ For units built prior to January 1998

CAUTION: Always relieve pressure in the unit before attempting any repairs.

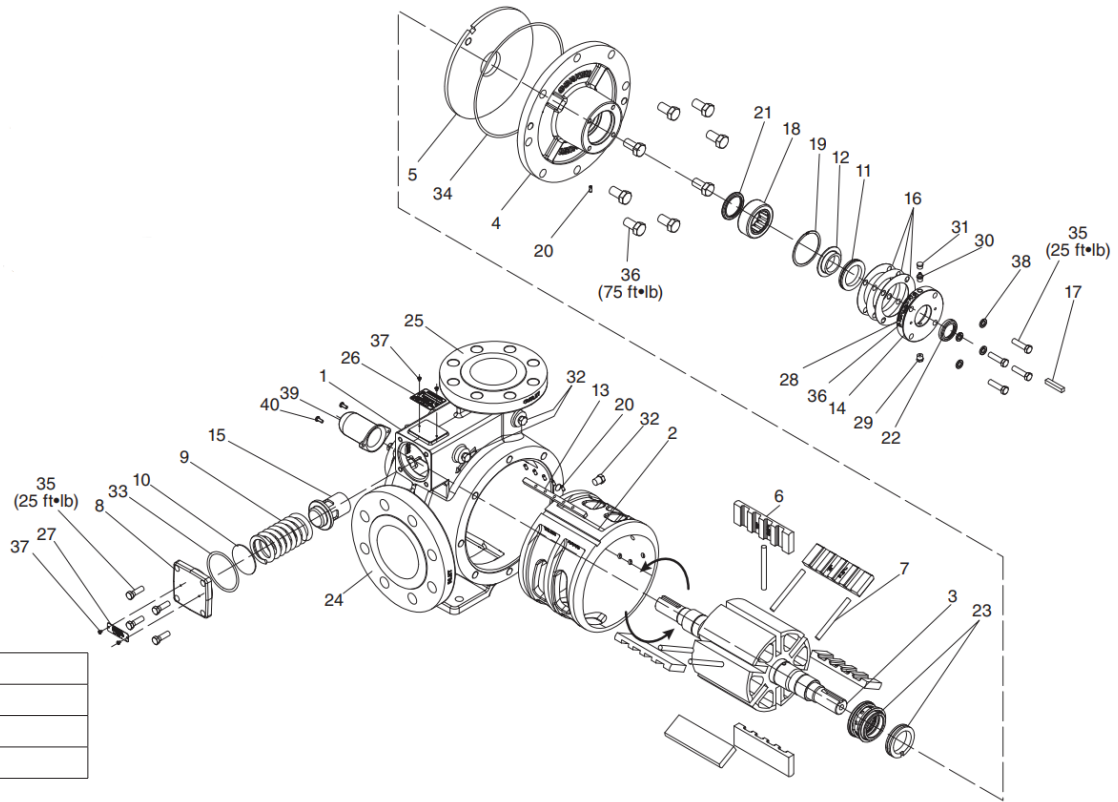


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Shop online at www.raymurray.com or call **800-628-5044**

Corken Repair Parts

PARTS FOR Z4500 MODEL PUMPS



MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	Teflon

Ref No.	RMI Part No.	Description	Q	Ref No.	RMI Part No.	Description	Qty.
1	5522	Case	1	23	4464-X_2_3	Mechanical Seal Assy - Cast Iron	2
2	4443_1_2	Cam	1	23	4464-X_6_1_3	Mechanical Seal Assy - Silicon Carbide	2
3	4444-X2R	Rotor-Shaft Assembly	1				
4	4445	Head	2	24	----	Inlet Flange - 4" ANSI	1
5	4446_1_2	Sideplate	2	25	----	Outlet Flange - 3" ANSI	1
6	4448_1_4	Vane	6	26	2649	Nameplate	1
7	4449-X_1	Vane Driver	5	27	4248	Relief Valve Nameplate	1
8	4450	Relief Valve Cap	1	28	1359	Lubrication Instruction Plate	2
9	4451	Relief Valve Spring	1	29	1343	1/8" NPT Relief Fitting	2
10	4452	Shim	1	30	2158	1/8" NPT Grease Zerk	2
11	4453_1	Thrust Bearing Assembly	2	31	2159	Lubricap	2
12	4454_1	Bearing Race Mounting Ring	2	32	3442	1/4" NPT Pipe Plug	2
13	4455	Cam Key	1	33	2-234_1_3	O-Ring - Relief Valve	1
14	4456	Bearing Cap	2	34	2-270_3	O-Ring - Case	2
15	4457	Relief Valve	1	35	7001-037NC150A	Bolt - Hex Head	16
16	4458_1	Bearing Cap Shim (.002) Red	As Req	36	7001-062NC125A	Bolt - Hex Head	16
	4458-1_1	Bearing Cap Shim (.010) Brown		37	7012-006SF019E	Screw	8
	4458-2_1	Bearing Cap Ship (.020) Yellow		38	7206-037A	Lockwasher	8
17	4459_1	Shaft Key - 5/16 x 1-3/4	1	39	4985	Shaft Cover	1
18	4460-X_1	Roller Bearing	2	40	7012-010SF050E	Screw	2
19	2760-283	Retainer Ring	2		3197-X16	Repair Kit	1
20	3253	Cam Key Pin	5		3198-X16	Rebuild Kit	1
21	4462	Grease Seal	2				
22	4463_1	Grease Seal	2				

1 Included in repair kit

2 Included in rebuild kit

3 _ denotes material code

4 Slots in vanes must face TOWARDS the direction of rotation

CAUTION: Always relieve pressure in the unit before attempting any repairs.



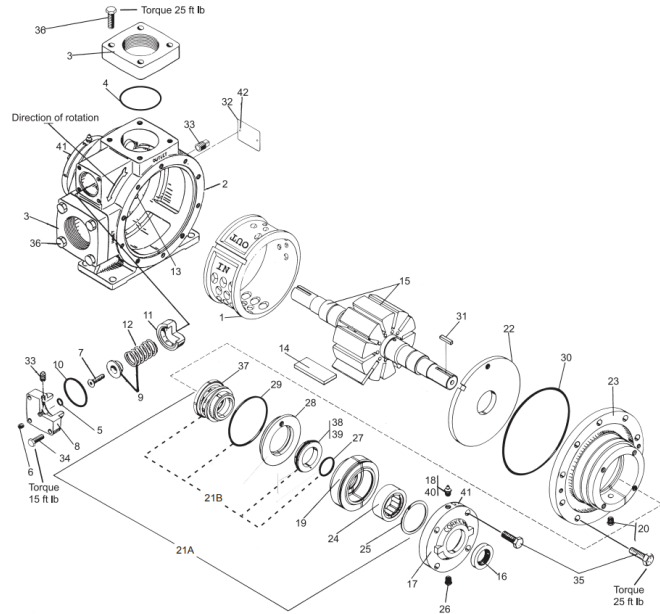
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Corken Repair Parts

PARTS FOR FF060, FF075, & FF150 MODEL CORO-FLO PUMPS

Ref No.	RMI Part No.	Description	Qty.
1	1162-2	Cam (521)	1
1	1201-2	Cam (1021)	1
2	2832	Case (521)	1
	2841	Case (1021)	1
3	1172-2.5	Flange - 2-1/2" (521)	1
	1172-2	Flange - 2" (521)	1
	1206-34	Flange - 3" (1021)	2
4	2-234_1 3	Flange O-Ring (521)	2
	2-245_2 3	Flange O-Ring - 3" (1021)	2
5	2-112_1 2 3	Adjusting Screw O-Ring	1
6	2590	Flush Plug - 1/8" NPT	1
7	2252	Relief Valve Adjusting Screw	1
8	1174	Valve Cap (521)	1
	1207	Valve Cap (1021)	1
9	1242-X	Relief Valve Spring & Guide (521)	1
	1227	Relief Valve Spring & Guide (1021)	1
10	2-224_1 3	Relief Valve Cap O-Ring (521)	1
	2-228_2 3	Relief Valve Cap O-Ring (1021)	1
11	1241	Relief Valve (521)	1
	1224	Relief Valve (1021)	1
12	1242	Relief Valve Spring (521)	1
	1226	Relief Valve Spring (1021)	1
13	1170	Cam Key (521)	1
	1309	Cam Key (1021)	1
14	1168-7_1	Blade (521)	10
	1308-9_2	Blade (1021)	10
15	1166-1X1R	Rotor & Shaft Assy (521)	1
	1208-1X1R	Rotor & Shaft Assy (1021)	1
16	1358_2	Grease Seal	2
17	1164-1	Bearing Cap	2
18	2158	Grease Zerk - 1/8" NPT	2
19	1769	Bearing Housing	2
20	1343	Seal Vent Relief Fitting - 1/8" NPT	2
21A	1769-X_6 3 4	Complete Seal Assy Kit	2
21B	1769-XR_6 1 2 3 5	Seal Assy Field Repl Kit	2
22	1163-2_1	Sideplate (521)	2
	1209-1_2	Sideplate (1021)	2
23	1161-4	Head (521)	2
	1205-4	Head (1021)	2
24	2754-X_1 2	Roller Bearing - Complete	2
	2755	Bearing Inner Race	2
	2754	Bearing Outer Race	2
25	2760-244	Retainer Ring	2
26	1343	Grease Relief Fitting - 1/8" NPT	2
27	2-128A	Shaft O-Ring - Buna-N	2
28	1882	Seat Adapter Plate	2



Ref No.	RMI Part No.	Description	Qty.
29	2-240_3	Adapter Plate O-Ring	2
30	2-261_1 3	Case O-Ring (521)	2
	2-268_2 3	Case O-Ring (1021)	2
31	2270	Key - 1/4"	2
32	2949	Nameplate	1
33	3442	Plug - 1/4" NPT	1
34	7001-031NC125A	Hex Head Bolt - 5/16-18 x 1-1/4 (521)	4
	7001-037NC125A	Hex Head Bolt - 3/8-16 x 1-1/4 (1021)	4
35	7001-037NC125A	Hex Head Bolt - 3/8-16 x 1-1/4 (521)	28
	7001-037NC125A	Hex Head Bolt - 3/8-16 x 1-1/4 (1021)	32
36	7001-037NC150A	Hex Head Bolt - 3/8-16 x 1-1/2	8
37	---- 6	Retainer	2
38	---- 6	Seal Seat	2
39	2-227_1 3	Seal Seat O-Ring	2
40	2159	Lubricap #2	2
41	1359	Lubrication Instruction Tag	2
42	7003-004DR0198	Round Head Drive Screw - 4 x 3/16	2
	2904-X26	Repair Kit (521)	1
	2906-X26	Repair kit (1021)	1

- ¹ Included in 521 repair kit
- ² Included in 1021 repair kit
- ³ _ denotes material code
- ⁴ Includes Bearing Housing, Seat Adaptor Plate, Bearings, Retainer Rings, Seal, & O-Rings
- ⁵ Includes Seal & O-Rings
- ⁶ Not sold separately. Included in 1769-X_6 & 1769-XR_6

MATERIAL CODE

A	Buna-N
B	Neoprene
D	Viton
E	Teflon

CAUTION: Always relieve pressure in the unit before attempting any repairs.



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Smith Pumps

SMITH D SERIES CYLINDER FILLING PUMPS

Economical pump for low-volume filling applications.

- Built-in bypass (set @ 90PSID)
- Built-in strainer
- Superseal mechanical seal



D SERIES

RMI Part No.			Capacity		Inlet / Outlet	Motor
Pump Motor, & Switch	Pump Only	Motor Only	40 PSID	70 PSID		
DWIZM-3	DW-IZ	EM-1-3	8.5	7	3/4"	1HP, 1PH 115/230V
DWHZM-5	DW-HZ	EM- 1.5-3	13.5	12	1"	1.5HP, 1PH 115/230V

SMITH E SERIES PUMPS

Economical cylinder pump for low-volume liquid transfer. Can be used with internal combustion engines for portable liquid transfer applications. Can be used with built-in bypass or utilize separate external bypass.

- Built-in Bypass (Set @ 90PSID)
- Built-in Strainer
- Superseal Mechanical Seal

RMI Part No.			Capacity		Inlet / Outlet	Motor
Pump, Motor, & Switch	Pump Only	Motor Only	40 PSID	70 PSID		
EGIZM-1-3DR	EG-IZ	EM-1-3B	8.5	7	3/4"	1HP 1PH
EGIZ-7H	EG-IZ	GAS-7H	8.5	7	3/4"	3.5HP Honda
ECHZM-5DR	EC-HZ	EM-5B	13.5	12	1"	1.5HP 1PH
ECHZ-5	EC-HZ	EM-1.5-3	13.5	12	1"	3.5HP Honda



E SERIES

SMITH MEDIUM & LARGE CAPACITY PUMPS

Higher capacity pumps for multiple cylinder or truck filling applications.

- Balanced 3-Gear Design
- Superseal Technology
- No Lubrication Required
- Direct Coupled - No Belts

RMI Part No.		Capacity		Inlet / Outlet	Motor
Pump & Baseplate	Pump Only	40 PSID	70 PSID		
MC1044Z-B	MC1044Z	17	14	1-1/2"	2 HP
MC1044HZ-B	MC1044HZ	30	25	1-1/2"	3 HP
MC2Z-B	MC2Z	42	35	2-1/2"	5 HP
MC2OZ-B	MC2OZ	48	38	2-1/2"	7.5 HP
MC3Z-B	MC3Z	84	70	2-1/2"	7.5 HP



MC SERIES

SMITH AUTOGAS PUMPS

- Developed for Autogas vehicles requiring higher than normal differential pressure
- Balanced loading design with hardened gears
- Superseal is standard
- 3/4" inlet and outlet allows for economical installation
- 1HP and 1.5HP motors only require single phase power

RMI Part No.		Capacity		Inlet / Outlet	Motor
Pump Only	Motor Only	40 PSID	70 PSID		
GC-IZL	EM-1.5-3B	8.5	7	3/4"	1.5HP 1PH



GC SERIES

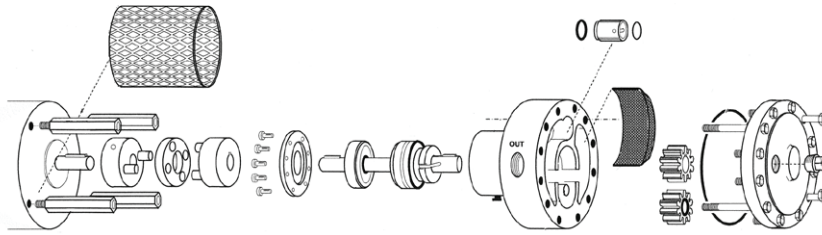


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SPARE PARTS

**Must specify serial number when ordering parts*



Description	Pump Model						
	DW-1Z	DW-HZ	EG-1Z	EC-HZ	GC-1ZL	MC-1044Z	MC-1044HZ
Shaft Seal Assembly	E-100Z	E-100HZ	E-100Z	E-100HZ	MC-100Z	MC-101Z	MC-101Z
Drive Gear	EG-5	EC-5H	EG-5	EG-5H	649-5LZ	1044-89-8	1044-89-6
Idler Gear W/Bushing	EG-6	EC-6H	EG-6H	EG-6H	649-6LZ	1044-90-8	T-6
By-Pass Valve Cartridge	E-20 ASSY	E-20 ASSY	E-20 ASSY	E-20 ASSY	-	-	-
Strainer Screen	D-21	D-21	E-21	E-22	-	-	-
Cover O-Ring	6230-14	6230-14	6230-28	6230-28	-	-	-
Shaft Bushing	-	-	-	-	649-11	TS-11	TS-11
O-Ring for Shaft Bearing	-	-	-	-	-	6227-19	6227-19
Complete Drive Coupling*	VC-20	VC-20	VC-20	VC-30	VC-20	-	-
Coupling Insert	FD-20	FD-20	FD-20	FD-30	FD-20	-	-

**Must provide bore size.*

SMITH PUMP & SEAL ASSEMBLY EXCHANGE PROGRAM

Contact RMI Customer Service for details on our exchange program for Smith pumps and seal assemblies. When replacing a Smith pump, you may return the old unit for credit against a factory rebuilt unit with one (1) year warranty.

Order the Following	Return the Following for Credit
Exchange Pump Part Number	Core Part Number
DW1Z-EX (DW-1Z)	DW1Z-RTV
DWXZ-EX (DW-HZ)	DWXZ-RTV
EG1Z-EX (EG-1Z)	EG1Z-RTV
ECHZ-EX (EC-HZ)	ECHZ-RTV
MC1044Z-EX (MC-1044Z)	MC1044Z-RTV
MC1044HZ-EX (MC-1044HZ)	MC1044HZ-RTV
MC2Z-EX (MC27)	MC2Z-RTV
MC2QZ-EX (MC2QZ)	MC2QZ-RTV
MC3Z-EX (MC3Z)	MC3Z-RTV
MCAT3R-EX (MCAT3XR)	MCAT3R-RTV
MCAT3L-EX (MCAT-3LX)	MCAT3L-RTV
Seal Kits	
E100Z-EX	E100Z-RTV
E100HZ-EX	E100HZ-RTV

Liquefied Gas Pump Design and Manufacture

cylinder filling, autogas, bulk transfer, and general plant operations

smithpumps.com

UL Listed, EU/UK Compliant, ISO 9001 QMS certified

SERVING THE WORLD SINCE 1938

Motors & Starters

VARIABLE FREQUENCY DRIVES

A variable frequency drive (VFD) is a type of motor controller that drives an electric motor by varying the frequency and voltage of its power supply. The VFD also has the capacity to control ramp-up and ramp-down of the motor during start or stop, respectively. If you currently have single phase power, using a VFD gives the option to purchase a three phase motor which is considerably less cost than a single phase motor.

- Converts single phase power to three phase power
- Takes the place of a manual or magnetic starter for the pump
- Improves the efficiency of the motor and reduces power use
- Slows motor start-up, preventing surges and prolonging motor life
- Provides overload protection for the motor



VFD

RMI Part No.	Description
4204-2	20HP VFD for 10 HP 1 Phase Motor
4204-6X1	VFD 3HP 230V W/NEMA 3R

EXPLOSION PROOF SWITCHES & STARTERS FOR PROPANE INSTALLATIONS

Starter choice must be matched to motor horsepower, voltage, and power phase.

- **Standard on-off switch** with explosion proof box for motors with low ampere electric service (does not provide over-load protection)
- **Manual starter** provides overload starter protection, explosion proof enclosure with lever lock and pad lock feature. Economical control for medium ampere electrical service range
- **Magnetic starter** provides starter protection, explosion proof enclosure and magnetic circuit contacts. Excellent control for larger motor

SINGLE PHASE SERVICE

Motor HP	Switch, On-Off		Manual Starter		Magnetic Starter	
	115V	230V	115V	230V	115V	230V
1	XS-52C	XS-52C	609-AHX	609-AHX	509-AHXD	509-AHXA
1.5	-	-	609-BHX	609-AHX	509-BHXD	509-AHXA
2	-	-	609-BHX	609-AHX	509-BHXD	509-AHXA
3	-	-	609-XHX	609-BHX	509-XHXD	509-BHXA
5	-	-	-	609-XHX	-	509-XHXA



XS-52C

THREE PHASE SERVICE

Motor HP	Switch, On-Off		Manual Starter		Magnetic Starter	
	230V	460V	230V	460V	230V	460V
1-1.5	XS-58C	XS-52C	-	-	-	-
2	-	-	609-AHW	609-AHW	509-AHA	509-AHB
3	-	-	609-AHW	609-AHW	509-AHA	509-AHB
5	-	-	609-BHW	609-AHW	509-BHA	509-AHB
7.5	-	-	609-BHW	609-BHW	509-BHA	509-BHB
10	-	-	-	609-BHW	509-CHA	509-BHB
15	-	-	-	-	509-CHA	509-CHB



Motors & Starters

MOTORS

1 PHASE - C FACE 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
EMC-1	1	56C	5/8"	115/230	11.2	5.6
EMC - 1.5	1.5	56C	5/8"	115/230	12	6
EMC-2	2	184C	7/8"	115-208/230	22	11.6
EMC-3	3	215C	1-1/8"	115/230	30	15
EMSC-5	5	184TC	1-1/8"	230		21

3 PHASE - C FACE 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
EMCT-1	1	56C	5/8"	208-230/460	3.6	1.8
VXM051542	1.5	56C	5/8"	208-230/460	4.6	2.3
EMCT-2	2	56C	5/8"	230/460	6	3
EMCT-3	3	182TC	1-1/8"	230/460	8.2	4.1
EMC-5	5	184TC	1-1/8"	230/460	13.6	6.8
EMCT-7.5	7.5	213TC	1-3/8"	203/460	20.2	10
EMCT-10	10	215TC	1-3/8"	230/460	26	13

C FACE 3600 RPM FOR CORKEN C MODEL PUMPS

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
2556	1	C10/C12	1	208-230/460	12	6
42361	1.5	C12/C13	1	208-230/460	20	10
2557	2	C14	1	230/460	4	8

1 PHASE RIGID BASE 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
EMS-1	1	143T	5/8"	115/230	14	7
EMS-1.5	1.5	184	7/8"	115/230	19	9.5
EMS-2	2	182T	1-1/8"	115/230	22	11
EMS-3	3	215	1-1/8"	115/230	30	15
EMS-5	5	215	1-1/8"	115/230		26

1 PHASE RIGID BASE 3450 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
EMSF-1	1	56	5/8"	115/230	12	6
EMSF-1.5	1.5	145T	7/8"	115-208/230	23	11.5
EMSF-2	2	184T	1-1/8"	115/230	29	14.5
EMSF-3	3	184T	1-1/8"	230	30	28

3 PHASE RIGID BASE 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
EM-1	1	143T	5/8"	208-230/460	3.6	1.8
EM-1.5	1.5	145T	7/8"	230/460	4.4	2.2
EM-2	2	145T	7/8"	230/460	5.8	2.9
EM-3	3	182T	1-1/8"	230/460	8.4	4.2
EM-5	5	184T	1-1/8"	230/460	13.4	6.7
EM-7.5	7.5	213T	1-3/8"	230/460	17.2	8.6
EM-10	10	215T	1-3/8"	230/460	24	12
EM-15	15	254T	1-5/8"	230/460	36	18
EM-20	20	256T	1-5/8"	230/460	48	24
EM-25	25	284T	1-7/8"	230/460	61	30.5
EM-30	30	286T	1-7/8"	230/460	72	36

3 PHASE RIGID BASE 3600 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	AMP Rating	
					115V	230V
EMF-1	1	143T	5/8"	208-230/460	3.6	1.8
EMF-2	2	145T	7/8"	230/460	4.8	2.4
EMF-3	3	145T	7/8"	230/460	7.2	3.6
EMF-5	5	184T	1-1/8"	230/460	11.8	5.9
EMF-7.5	7.5	213T	1-1/8"	230/460	16.8	8.4
EMF-10	10	215T	1-3/8"	230/460	23.6	11.8



Bypass Valves

BLACKMER BYPASS VALVES

Blackmer® BV Series bypass valves have no small, easily plugged, sensing passages; and with only two moving parts, their operation is simple and reliable. They open precisely at the pre-set spring pressure, and they close smoothly and quietly.

In operation, Blackmer valves provide exceptionally close pressure control, even under widely varying bypass flow conditions. The Blackmer valve maintains a virtually constant pressure of 100 psi (6.89 bar) even as the volume being bypassed rises from 10 GPM to 100 GPM.



BV SERIES

RMI Part No.	Body Size	Pump Size	PSI Setting*	PSI Range*	Cap. (GPM)
BV-3/4	3/4" NPT	1-1/4" to 1-1/2"	95	70-100	50
BV-1	1" NPT	1-1/4" to 1-1/2"	95	70-100	50
BV-1-1/4	1-1/4" NPT	1-1/2" to 2"	115	90-125	125
BV- 1-1/2	1-1/2" NPT	2" to 3"	115	90-125	125
BV-2	2" NPT	3" to 4"	95	90-125	225

*Other pressure ranges and settings are available

CORKEN BYPASS VALVES

Dual purpose automatic priming and differential bypass valve. Allows vapor to return to the tank, keeping the line primed.

RMI Part No.	Description	Cap. (GPM)	Standard Spring Setting
B166-.75	3/4" Bypass Valve	30	50-150 PSI
B166-1	1" Bypass Valve	40	50-150 PSI
T166-1.25	1-1/4" Bypass Valve	80	50-150 PSI
T166-1.5	1-1/2" Bypass Valve	100	50-150 PSI



B166

CORKEN 2" HIGH CAPACITY BYPASS VALVE

A low-pressure build-up bypass valve designed for applications that require protection for positive displacement pumps. It is ideal for capacities up to 250 gpm (56.8 m³/hr). The model ZV200 has a continuous internal bleed that helps operate systems containing an "air" or "electric" operated internal valve.

RMI Part No.	Description	Cap. (GPM)	Standard Spring Setting
ZV200	2" Bypass	180-250	91-125 PSI

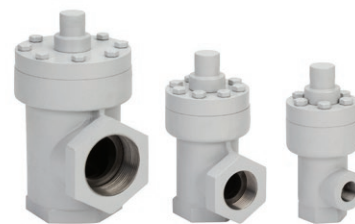


ZV200

SMITH BYPASS VALVES

Chatter-free due to unique guide-piston design. Stainless steel piston and spring. All valves have 25-125 PSIG range.

RMI Part No.	Inlet / Outlet	Capacity (GPM)
WW-120	1/2"	10
WW-340	3/4"	15
WW-100	1"	35
WW-114	1-1/4"	50
WW-112	1-1/2"	100
WW-200	2"	150
WW-212	2-1/2"	250



SMITH BYPASS VALVES



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Shop online at www.raymurray.com or call **800-628-5044**

Bypass Valves

FISHER N110 SERIES STRAIGHT BYPASS VALVES FOR SMALL PUMPS

Intended for bypass service on smaller pumps (5 to 40 GPM) used on stationary tanks or delivery trucks.

RMI Part No.	Pump Size	Pressure Setting, PSI	Pressure Range, PSI
N110-06-1	3/4"	50	25-75
N110-06-2	3/4"	115	75-150
N110-08-1	1"	50	25-75
N110-08-2	1"	115	75-150



FISHER N100 SERIES ANGLE BYPASS VALVES FOR LARGE PUMPS

Gives rapid, stable liquid transfer and reduces dangerous pressure pulsations. Includes 1/4" tapping for gauge or relief valve.

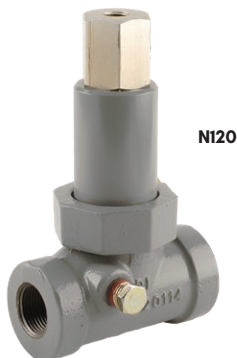
RMI Part No.	Pump Size	Pressure Setting, PSI	Pressure Range, PSI
N100A-08-2	1"	115	50-150
N100A-10-2	1-1/4"	115	50-150
N100A-12-2	1-1/2"	115	50-150
N100-16-1	2"	50	25-75
N100-16-2	2"	115	50-150



FISHER N120 SERIES BACK PRESSURE VALVES

Valve is installed after the meter and remains closed until vapor is forced back to the tank through the vapor eliminator so that vapor cannot form within the meter during liquid delivery. Intended for smaller pumps used for cylinder filling installations.

RMI Part No.	Size	Diff. Press. Setting, (PSI)	Diff. Press. Range (PSI)
N120-06-3	3/4"	12	10-20
N120-08-3	1"	12	10-20



FISHER MR98H RELIEF VALVES FOR LIQUID SERVICE

The MR98H is a self-operated relief valve for use on relief and back pressure applications involving large liquid propane pumping systems and vaporizers. Internal pressure registration eliminates the need for a control line.

RMI Part No.	Body Size	Relief Setting Range	Relief Pressure Setting
MR98H-17*	1/2" FNPT	25-75 PSIG	50 PSIG
MR98H-18*	1/2" FNPT	70-140 PSIG	100 PSIG
MR98H-22**	3/4" FNPT	70-140 PSIG	100 PSIG
MR98H-30**	1" FNPT	70-140 PSIG	100 PSIG

* Metal diaphragm & seat

** Composition diaphragm & seat



Bypass Valves

MARSHALL EXCELSIOR BYPASS VALVES FOR DISPENSING APPLICATIONS

Intended for use in small cylinder filling applications as a bypass and primer valve for turbine style dispensing pumps. These bypass valves feature a special "check ball" mechanism that helps eliminate vapor from liquid while keeping the pump flooded and properly primed.

RMI Part No.	Description	Standard Spring Setting
ME840-6-150	3/4" FNPT High Flow Bypass Valve	50-150 PSI
ME840-6-225	3/4" FNPT High Flow Bypass Valve	100-225 PSI
ME840-8-150	1" FNPT High Flow Bypass Valve	50-150 PSI
ME840-8-225	1" FNPT High Flow Bypass Valve	100-225 PSI

*Alternate Spring Ranges Available



ME840-6-150

MARSHALL EXCELSIOR HIGH FLOW 3" BYPASS VALVES FOR PLANT APPLICATIONS

Specifically designed for plant systems where maximum bypass flow is necessary to protect the pump from rapid pressure changes or over pressurization. Perfectly suited for 4" base mount pumps or larger pump applications.

RMI Part No.	Description	Standard Spring Setting
ME840-24-100	3" FNPT High Flow Bypass Valve	50-100 PSI
ME840-24-200	3" FNPT High Flow Bypass Valve	100-200 PSI
ME840-24-3F-100	3" - 300# Flanged High Flow Bypass Valve	50-100 PSI
ME840-24-3F-200	3" - 300# Flanged High Flow Bypass Valve	100-200 PSI

*Alternate Spring Ranges Available



ME840-24-3F

MARSHALL EXCELSIOR HIGH FLOW BYPASS VALVES FOR BOBTAIL & PLANT APPLICATIONS

These bypass valves are specifically designed to protect truck and plant pumps from damage due to excessive pressure. They feature wide open flow channels with an orifice weep hole chamber to prevent the valve from slamming open/closed. The weep hole chamber also helps prevent valve seat chatter by allowing constant pressure communication between both the upstream and downstream side of the seat.

BYPASS VALVES - NPT FLANGE CONFIGURATION

RMI Part No.		Description	Standard Spring Range	Flange Type
WCC A216 Steel	CF8M Stainless Steel			
ME840-10-125	ME840SS-10-125	1 1/4" FNPT High Flow Bypass Valve	90-125 PSI	O-Ring Seal
ME840C-10-125	ME840SSC-10-125	1 1/4" FNPT Classic Flow Bypass Valve		
MW840-12-125	ME840SS-12-125	1 1/2" FNPT High Flow Bypass Valve	90-125 PSI	O-Ring Seal
ME840C-12-125	ME840SSC-12-125	1 1/2" FNPT Classic Flow Bypass Valve		
ME840-16-125	ME840SS-16-125	2" FNPT High Flow Bypass Valve	90-125 PSI	O-Ring Seal
ME840C-16-125	ME840SSC-16-125	2" FNPT Classic Flow Bypass Valve		
ME840-125	ME840SS-125	1 1/4" - 2" Universal High Flow Bypass w/o Flanges	90-125 PSI	Flat Face
ME840C-125	ME840SSC-125	1 1/4" - 2" Universal High Flow w/o Flanges		

*Alternate Spring Ranges Available



ME840-16-125

BYPASS VALVES - SOCKET WELD FLANGE CONFIGURATION

RMI Part No.		Description	Standard Spring Range	Flange Type
WCC A216 Steel	CF8M Stainless Steel			
ME841-10-125	ME841SS-10-125	1 1/4" Weld Flange High Flow Bypass Valve	90-125 PSI	O-Ring Seal
ME841C-10-125	ME841SSC-10-125	1 1/4" Weld Flange Classic Flow Bypass Valve		
ME841-12-125	ME841SSC-12-125	1 1/2" Weld Flange High Flow Bypass Valve	90-125 PSI	O-Ring Seal
ME841C-12-125	ME841SSC-12-125	1 1/2" Weld Flange Classic Flow Bypass Valve		
ME841-16-125	ME841SS-16-125	2" Weld Flange High Flow Bypass Valve	90-125 PSI	O-Ring Seal
ME841C-16-125	ME841SSC-16-125	2" Weld Flange Classic Flow Bypass		

*Alternate Spring Ranges Available

FLANGE KITS

RMI Part No.	Description
ME841-10F	1 1/4" Socket Weld Flange Kit
MEP840-10	1 1/4" Threaded 90° Flange Kit
MEP841-10	1 1/4" Socket Weld 90° Flange
MEP841-12F	1 1/2" Socket Weld Flange Kit
MEP840-12	1 1/2" Threaded 90° Flange Kit
MEP841-12F	1 1/2" Socket Weld 90° Flange
ME841-16F	2" Socket Weld Flange Kit
MEP840-16	2" Threaded 90° Flange Kit
MEP841-16	2" Socket weld 90° Flange



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Bypass Valves

MARSHALL EXCELSIOR VERSA-FILL HIGH FLOW BYPASS VALVES FOR BOBTAIL APPLICATIONS

Versa-Fill bypass valves are designed to protect pumps from damage due to excessive pressure while providing flow, adjustability, versatility and performance of the pumping system.

Versa-Fill has three settings and functions: normal bypass, auxiliary suction evacuation/self-load and small cylinder/forklift-filling.

VERSA-FILL™ BYPASS VALVES - NPT FLANGE CONFIGURATIONS

RMI Part No.		Description	Poppet Type	Standard Spring Range
WCC A216 Steel	CF8M Stainless Steel			
ME845-125	ME845SS-125	1-1/4" - 2" Versa-Fill Bypass Valve w/0 Flnges	Standard/High Flow	90-125 PSI
ME845C-125	ME845SSC-125		Classic Flow	
ME845-10-125	ME845SS-10-125	1-1/4" FNPT Versa-Fill Bypass Valve	Standard/High Flow	
ME845C-10-125	ME845SSC-10-125		Classic Flow	
ME845-12-125	ME845SS-12-125	1-1/2" FNPT Versa-Fill Bypass Valve	Standard/High Flow	
ME845C-12-125	ME845SSC-12-125		Classic Flow	
ME845-16-125	ME845SS-16-125	2" FNPT Versa-Fill Bypass Valve	Standard/High Flow	
ME845C-16-125	ME845SSC-16-125		Classic Flow	

*Alternate Spring Ranges Available

VERSA-FILL™ BYPASS VALVES - WELD FLANGE CONFIGURATIONS

RMI Part No.		Description	Standard Spring Range
WCC A216 Steel	CF8M Stainless Steel		
ME846-10-125	ME846SS-10-125	1-1/4" Weld Flange High Flow Versa-Fill Bypass Valve	90-125 PSI
ME846-12-125	ME846SS-12-125	1-1/2" Weld Flange High Flow Versa-Fill Bypass Valve	
ME846-16-125	ME846SS-16-125	2" Weld Flange High Flow Versa-Fill Bypass Valve	
ME846C-10-125	ME846SSC-10-125	1-1/4" Weld Flange Classic Flow Versa-Fill Bypass Valve	
ME846C-12-125	ME846SSC-12-125	1-1/2" Weld Flange High Flow Versa-Fill Bypass Valve	
ME846C-16-125	ME846SSC-16-125	2" Weld Flange High Flow Versa-Fill Bypass Valve	



ME845 SERIES

*Alternate Spring Ranges Available

MARSHALL EXCELSIOR BACKPRESSURE REGULATORS/RELIEF VALVES

Marshall Excelsior liquid service valves are direct operated relief valves for use on relief and backpressure applications involving large LPG pumping systems and vaporizers.

RMI Part No.	Inlet / Outlet Size	Outlet Range (PSIG)	Relief Pressure Setting (PSIG)	Relief Capacity	
				10 PSI Over Set Point	50 PSI Over Set Point
MEGR-198H/22	3/4"	70-140	100	49	93
MEGR-198H/30	1"	70-140	100	49	93
MEGR-198H-31	1"	130-200	175	52	109



MEGR-198H

Neptune Meters & Registers



FILL STATION METERS

- 1" Size with 3/4" FNPT flanges
- Aluminum design - 40% lighter than ductile iron meters
- Available with ATC temperature control
- Smooth performance at low flow and high operating pressures

RMI Part No.	Inlet / Outlet	Capacity	ATC	Register	Weight (Lbs.)
400051-001	3/4"	3-18 gpm	No	631 Non Print	24
400051-002	3/4"	3-18 gpm	Yes	631 Non Print	29
400051-801	3/4"	3-18 gpm	No	833 Print	41



400051 SERIES

DISPENSER METERS WITH ELECTRONIC REGISTERS

RMI Part No.	Inlet / Outlet	Register	ATC
RL100-208AMMBS	3/4"	E1000	No
RL100-10MOMMFSSO	3/4"	MIDCOM LT	No
RL100-10MOMMESO	3/4"	MIDCOM LT	Yes

BULK PLANT & TRUCK METERS

Neptune 1-1/2" and 2" liquid meter for bulk plants and trucks. Standard meter comes with ticket print register and ATC - Temperature compensating unit. The 2" Type 4D MT meter for Liquefied Propane Gas features a flanged outlet with ductile iron companion flange for easy installation and removal.

1-1/2" LIQUID METER TYPE 4D

RMI Part No.	Inlet / Outlet	Capacity	ATC	Register	Weight (Lbs.)
RL150-21RG0DIM5	1-1/2"	12-60 GPM	Yes	Print	133 Lbs.

2" LIQUID METER TYPE 4D

RMI Part No.	Inlet / Outlet	Capacity	ATC	Register	Weight (Lbs.)
400069-101	2"	20-100 GPM	Yes	Print	137 Lbs.



400069 SERIES

REGISTERS

RMI Part No.	Model	Size	Meter Register Type
880010-000	831	1-1/4", 1-1/2", 2"	Direct Read
880030-000	833	1", 1-1/4", 1-1/2", 2"	Ticket Printing
100498-009*	631	3/4"	Code AEAAD
100498-016	631	1"	Code AAAAD
100553-201	631		Mask

* Old style long shaft



600 SERIES



E4000



800 SERIES



Neptune Meters & Registers



FACTORY AUTHORIZED PUMP AND WARRANTY METER REPAIR SERVICE

Blackmer/Neptune/Corken/Liquid Controls

Register Repair Service

Repair: Expert repair of your old register with an average turn-around time of 4 days. Temperature compensators repaired and updated. Calibration after repair must be handled by the customer.

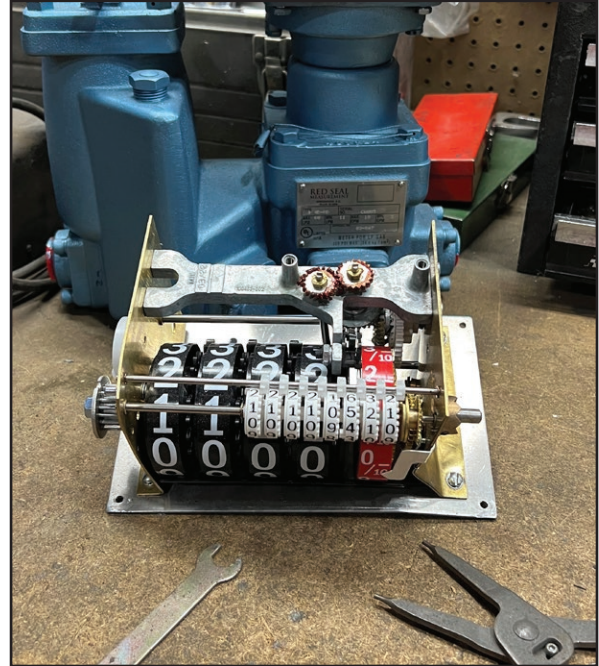
Neptune Register Exchange Program: Receive a rebuilt register – return the old register. Pay a standard exchange fee only. Upon placing an order for a rebuilt register, RMI will invoice for parts below:

RMI Part No.	Description
833EX	Neptune Register Exchange
833CORE	Register Core – returned by customer

When the customer register is returned, the account will be credited for RMI part # 833CORE.

Note: Customer is responsible for shipping costs in & out.

Parts: Full stock of parts for the repair of pumps, meters, registers, compressors, and valves (Blackmer/Neptune/Corken/Liquid Controls/MEC/Fisher)

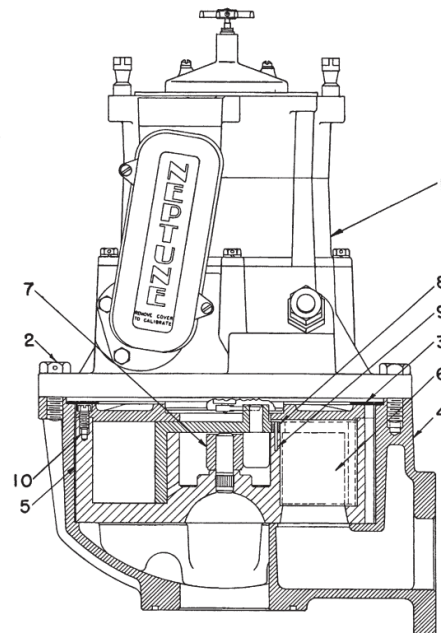


PARTS BREAKDOWN

FLOWMETER WITH TEMPERATURE COMPENSATOR - TYPES 4-MT & 4D-MT

Key	Part Description	RMI Part No.		
		1-1/4"	1-1/2"	2"
1	LP-Gas Temperature Compensator	See Note		
2	Cap Screw, Main case	795-003	795-003	795-003
	Cap Screw, Main Case (with seal hole)	795-011	795-011	795-011
2A	Lockwasher, 7/16 Bolt (not shown)	41012-002	41012-002	-
3	Gasket	4862-008	4862-008	84806-000
4	Main Casing with Locating Pin	83477-701	84978-702	400072-701
5	Measuring Chamber Complete	C43260-101	C83271-101	45806-101
6	Diaphragm	43271-000	83277-000	42312-001
7	Roller, Control	43275-000	43275-000	42316-001
8	Pin Seal	42792-000	42792-000	42546-000
9	Dowel Stud Seal Pin	-	-	5411-001
10	Screw Measuring Chamber	-	-	88638-000

Note: Please see page 200 for Temperature Compensator Diagram



Neptune Meters & Registers

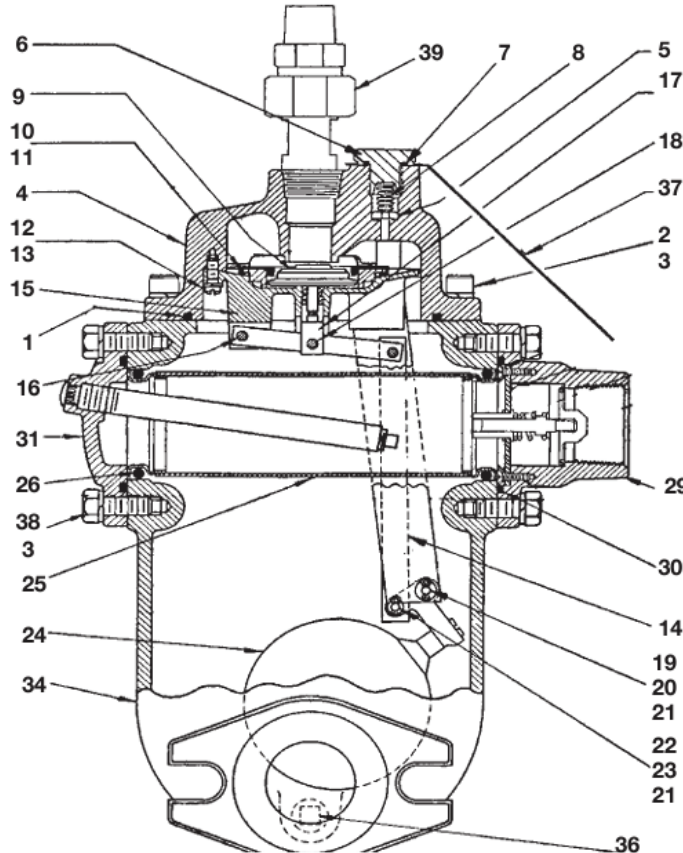


VAPOR RELEASE AND STRAINER

Key	Part Description	RMI Part No.	
		1-1/4" & 1-1/2"	2"
1	Gasket O-Ring	100139-022	100139-022
2	Screw, 3/8-16 x 1, Socket Hd.	008325-014	008325-014
3	Lockwasher, 3/8 Steel	045828-001	041012-002
	Mounting Cover with Float	083481-701	-
4	Cover Assembly Vapor Release	400077-701	400077-701
5	Valve Assembly Bypass	100237-001	100237-001
6	Screw and Plate Assembly	100333-001	004853-008
7	O-Ring, 1/16 sect x 11/16 ID	100138-006	100138-006
8	Spring Compression	100024-003	100024-003
9	Main Valve Complete	89274-006	89274-006
10	Sleeve, Valve	082446-005	082446-005
11	Piston, Seal	83179-000	83179-000
12	Lockwasher, No. 10 steel	041211-000	041211-000
13	Screw, 10-32 x 5/8 fil hd steel	041221-002	041221-002
	Lower Valve Housing Complete	086797-001	083457-000
14	Link Assembly	100334-001	080002-002
15	Valve Housing with Extensions	082455-000	-
16	Rivet, valve Lever	040819-002	040819-002
17	Stem, Valve	083127-001	083127-001
18	Pin, Valve Stem	042941-000	042941-000
19	Pin, Float Lever (Long)	040820-003	040820-003

Key	Part Description	RMI Part No.	
		1-1/4" & 1-1/2"	2"
20	Washer, Float Lever Pin (Long)	040491-000	040491-000
21	Cotter Pin, 1/16 dia. X 1/2, Brass	041402-000	041402-000
22	Pin, Float Lever (Short)	082633-000	082633-000
23	Washer, Float Lever Pin (Short)	041989-000	041989-000
24	Float Complete	82476-001	82476-001
25	Strainer and Gasket Assembly (80-mesh)	101433-704	101405-004
26	Gasket, O-Ring	100139-032	100139-038
29	Inlet Check Valve Complete (soft seat)*	84983-704	84813-702
30	Gasket, O-Ring	100139-010	100139-018
31	Strainer Cover (with thermometer well)	083485-702	400078-001
	Strainer Cover (without thermometer well)	083486-705	-
33	Cap Screw, 7/16-14 x 1-3/8, Hex Hd Steel	-	000795-003
34	Body, Vapor Release and Strainer	083495-701	400086-701
35	Lockwasher, 7/16 Steel	-	041012-002
36	Plug, Drain	100075-003	-
37	Caution Tag	100322-001	100322-001
38	Cap Screw, 3/8-16 x 1, Hex Hd Steel (without seal hole)	100067-053	-
	(with seal hole)	100068-027	-
39	Valve, Vapor Return Check (straight type)	84828-000	84828-000

*See page 200 for soft seat parts list



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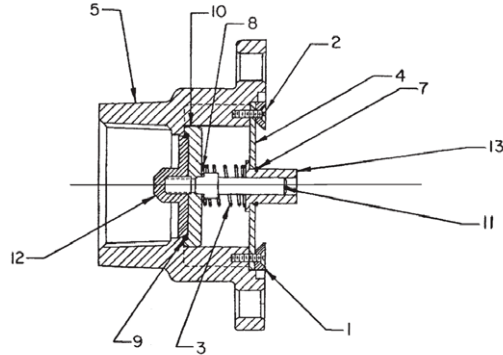
Neptune Meters & Registers



PARTS BREAKDOWN

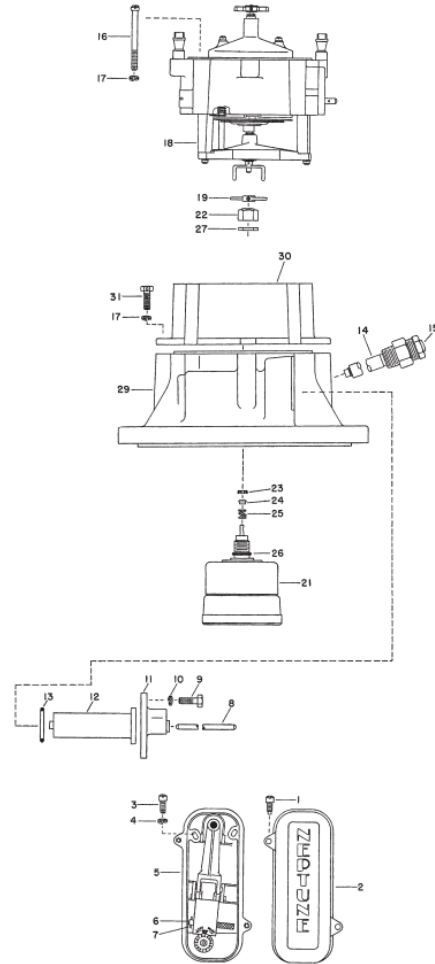
SOFT SEAT INLET CHECK VALVE

Key	Part Description	RMI Part No.	
		1-1/4" & 1-1/2"	2"
1	Ring Retaining	83441-000	84817-000
2	Screw	83442-000	-
3	Spring	83492-000	83492-000
4	Strap, Inlet Check	83493-003	84816-001
5	Inlet Flange	84984-005	84814-003
7	Ring, Retaining, Truarc	86071-000	86071-000
8	Washer Lock	041117-000	041117-000
9	"O" Ring	100146-003	100139-032
10	Holder, Disk	100423-002	100374-002
11	Shaft, Inlet Check	100896-001	100896-001
12	Retainer, Disk	100897-001	100898-001
13	Bearing	100899-001	100899-001



TEMPERATURE COMPENSATOR, TYPE 1 STYLE 2

Key	Part Description	RMI Part No.		
		1-1/4"	1-1/2"	2"
1	Screw, Cover (10-32 special)	9287-003	9287-003	9287-003
2	Cover, Mounting Plate and Lever Arm Assy.	86665-000	86665-000	86665-000
3	Screw, 10 - 32X 5/8, fill hd steel	41221-002	41221-002	41221-002
4	Lockwasher, No. 10 Steel	41211-000	41211-000	41211-000
5	Mounting Plate & Lever Arm Assy. (4D-MT)	86649-003	86649-003	86649-003
	Mounting Plate & Lever Arm Assy.(4-MT)	-	-	87650-001
6	Pin, Lever Arm Lock	86661-001	86661-001	86661-001
7	Cotter Pin, 1/16" dia. X 3/8" Brass	86973-000	86973-000	86973-000
8	Pin, Thermostat	86648-000	86648-000	86648-000
9	Screw, 1/4" dia. X 3/8" Brass	83784-000	83784-000	83784-000
10	Lockwasher, 1/4" steel	41117-000	41117-000	88721-000
11	Cover, Thermostat	86647-001	86647-001	400010-701
12	Thermostat (Bellows)	86646-000	86646-000	86646-000
13	Gasket, O-Ring, Thermostat Cover	100139-005	100139-005	100139-005
14	Thermometer Well Complete	1001906	1001906	1001906
15	Cover, Thermometer Well	600443-001	600443-001	600443-001
16	Screw, 1/4-20 X 2-1/2, fil hd steel	8302-107	8302-107	8302-107
17	Lockwasher, 1/4" steel small	88721-000	88721-000	88721-000
18	Adaptor Unit Complete	86602-705	86602-705	86602-705
19	Driving Arm with Setscrew	82976-001	82976-001	82976-001
21	Gear Train Complete			
	3.75 Reduction US Gal	-	-	83502-000
	9.93 Reduction Liters	-	-	80862-055
	9.375 reduction US Gal	-	84981-000	-
	11.6 Reduction IMP Gal	-	083280-51	-
	14.06 Reduction US Gal	83501-000	-	-
	25.4181 Reduction Liters	-	083280-052	-
	36.41 Reduction Liters	82710-54	-	-
22	Nut and Bushing Assembly, Stuffing Box	83536-000	83536-000	83536-000
23	Seal U-Cup Shaft	100025-002	100025-002	100025-002
24	Expander, Seal	83539-000	83539-000	83539-000
25	Spring, Stuffing Box	83540-000	83540-000	83540-000
26	Gasket, O-Ring	100138-003	100138-003	100138-003
27	Nut, Clamp	34-000	34-000	34-000
28	Housing, Compensator	86601-701	86601-701	-
29	Main Case Cover with Locking Pin	400081-002	400081-002	400081-002
30	Spacer	-	-	1002043
31	Screw, 1/4-20 x 1-1/8 Socket Hex Hd steel	-	-	1002044

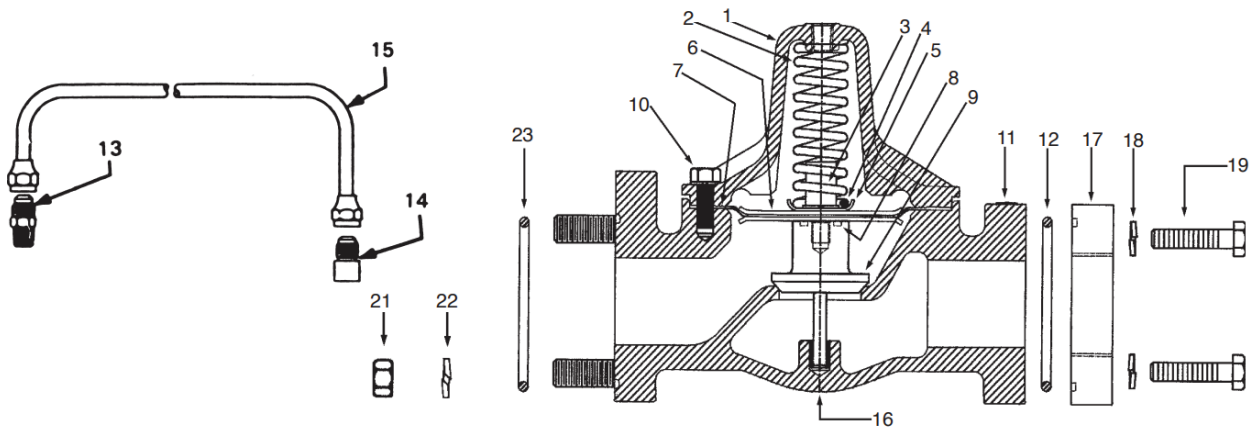


Neptune Meters & Registers



DIFFERENTIAL VALVE

Key	Part Description	RMI Part No.	
		1-1/4" & 1-1/2"	2"
1	Cover	400000-001	400000-001
2	Spring Valve	083775-000	083775-000
	Diaphragm Complete	1001569	1001569
3	Screw, Diaphragm	083774-002	083774-002
4	Lockwasher, 7/16 steel	041012-002	041012-002
5	Retainer Spring	083773-000	083773-000
6	Retainer Diaphragm	083772-002	083772-002
7	Diaphragm	1000624	1000624
8	Gasket, O-Ring	100139-001	100139-001
9	Valve Stem Assembled	083927-002	083927-002
10	Screw, 3/8 - 16 x 1-1/4, hex hd steel	100067-051	100067-0512
	Screw, 3/8 - 16 x 1-1/4, hex hd steel (with seal hole)	100068-050	100068-050
10A	Lockwasher, 3/8 steel (not shown)	045828-001	045828-001
11	Body, stud	1931-000	1931-000
12	Gasket, O-Ring 1/8 x 3-3/4	100139-018	100139-018
13	Fitting, Straight, 3/8 flared tube (male half)	084826-000	084826-000
14	Fitting, Elbow, 3/8 flared tube (male half)	084825-001	084825-001
15	Tube, Connecting with Nuts	084823-000	084823-000
	Tube, Connecting with Nuts (Angle Configuration)	084821-000	084821-000
16	Bushing	008343-001	008343-001
17	Flange, 2" NPT	086814-001	086814-001
	Flange, 1-1/2" NPT	086814-002	086814-002
18	Lockwasher	41012-002	41012-002
19	Screw	100071-101	100071-101
20	Vent line Check Valve (not shown)	84828-000	84828-000
21	Nut 5/8-11	041224-000	041224-000
22	Lockwasher	041395-000	041395-000
23	Gasket, O-Ring	100139-013	100139-013



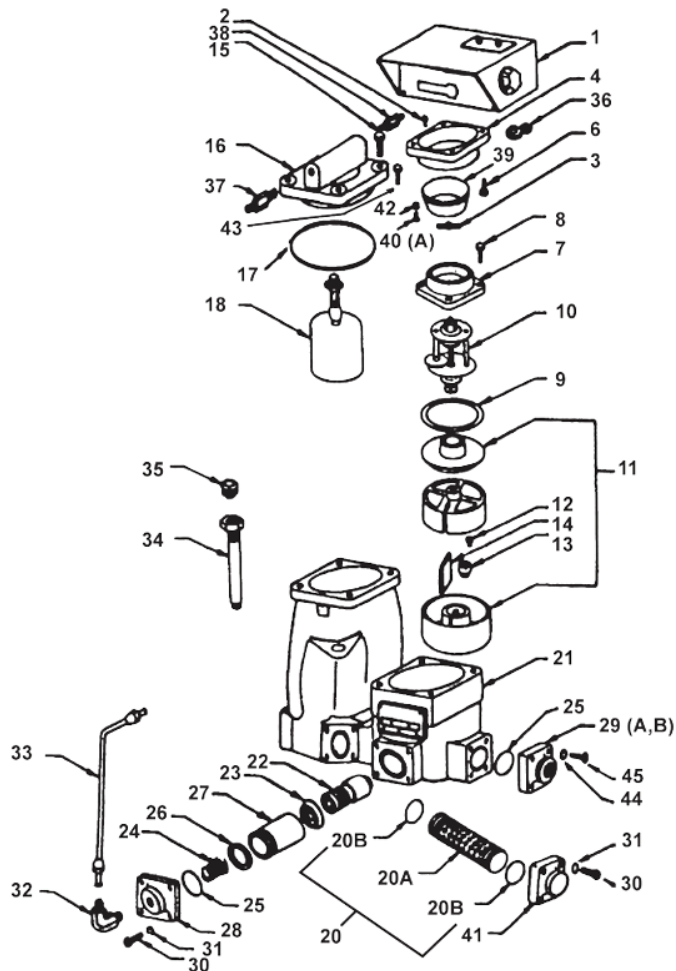
Neptune Meters & Registers

3/4" - 1" 4D & 4D-MD DIAGRAM



Key	Part Description	RMI Part No.
1	Register Complete, 600 Series, Gallon ATC	100498-018
	Register Complete, 600 Series, Gallon Non-ATC	100498-016
2	Screw, 10-32 x 3/8 Fil Hd	000733-001
3	Star Conn with set screw	82976-001
4	Adaptor, 600 Series Register	100729-001
6	Bolt, 1/4-28 x 1/2 hex hd	
	drilled	100062-023
	undrilled	100061-023
7	Main Case Cover Assembly	400024-701
8	Cap Screw, 7/16-14 x 1-3/16	
	drilled	040237-005
	undrilled	040237-004
9	Gasket Main Case, Viton	601522-001
10	Gear Train Complete	
	116.87 reduction (600; 10 liter)	080905-013
	43.5 reduction (600; US gallons) - Large Spindle	08095-017
11	Measuring Chamber Complete with Piston	101748-001
12	Pin, Seal	042792-000
13	Roller, Control	042086-000
14	Diaphragm	42791-000
15	Cap Screw, 3/8-016 x 1 hex hd	
	drilled	100071-025
	undrilled	100071-024
16	Cover, Vapor Release (See Note 1)	400021-701
17	Gasket, O-Ring	100139-012
18	Vapor Release Float Assembly (See Note 1)	87188-001
20	Strainer Kit, 80 Mesh	101752-701
20A	Strainer, 14 x 80 Mesh	101738-001
20B	O-Ring, 1/8 x 1" Buna	100139-041
21	Main Case Assembly	400027-701
	Pin, Measuring Chamber Locating Kit, Valve	100370-022 100028-001
22	Piston, Differential Valve	100160-005
22B	O-Ring (Not Shown, See Note 2)	100139-044
23	U Cup Valve	100025-009YY
24	Spring	100024-001
25	O-Ring, Cover	100139-007
26	O-Ring, Sleeve Sealing	100139-006
27	Sleeve, Valve	100127-003
28	Cover, Differential Valve	400020-702
29A	Flange, Inlet or Outlet, 3/4" NPT	600057-000Y
28B	Flange, Inlet or Outlet, 1" NPT	600057-001
30	Screw, 5/16 18 x 7/8 hex hd steel	
	drilled	008325-046
31	Lockwasher, 5/16	041482-000
-	Tubing Kit, Vapor Release	100017-011

Key	Part Description	RMI Part No.
32	Elbow, Male 1/4-90° (Flared Tube Fitting)	087195-001
33	Tube Assy, Vapor Release	87196-001
34	Thermometer Well	1001906Y
35	Cover, Thermometer Well	600443-001YY
36	Change Gears (give dia. and number of teeth)	See Note 3
37	Connector, Male 1/4 (flared tube fitting)	100135-002
38	Connector, Male 3/8 Flared	084826-000
39	Register Cup	000138-031
40	Screw, 1/4-20 Hex Hd	100059-024
41	Strainer Cover Assy	400025-701
42	Sleeve, Screw	100737-001
43	Screw, 10-32 x 3/8 Fil Hd	000733-001
44	Lockwasher, 5/16 Hi Collar	041482-000
45	Screw 5/16 -18 x 1 Hex. Soc Head	008325-044



Note 1: Index numbers 16 & 18 can be purchased as one item under cover assembly part number 400026-701

Note 2: Item number 22B goes in new O-Ring groove in part number 601342-001 in meters shipped after March 2013

Note 3: Ref Form TSG-310 (I)

Liquid Controls



LIQUID CONTROLS MA & MSA SERIES METERS

Liquid Controls positive displacement MA and MSA series class 10 and class 12 meters are the industry standard for safe and accurate transfer of LPG and NH₃ gases and liquids.

MA4, MA5, and MA7 meters are designed for LP gas and NH₃ truck and bulk loading applications. MA15 and MSA30 meters have larger capacities and are designed for bulk plant metering. All meters are custom built to your specifications – please use the nomenclature guide below to size and select your desired unit.

TECH TIP: RMI's technical service team is available to assist with sizing and selecting meters for your desired application. Please call us at 800-628-5044 for assistance!

Product Series	Flange Size (In)	Min Flow (GPM)	Max Flow (GPM)	Max Pressure (PSI)
MA4	1	5	30	350
MA5	1-1/2	12	60	350
MA7	2	20	100	350
MA15	3	20	100	350
MSA30	3	35	350	300

EXAMPLE PART # **M A 7 K Y 10 - LCR.IQ-I**

Meter	Case	Pressure	Size (GPM)	Accessory Combination	Additional Accessories	Class	Registration
M		A	7	K	T	10	LCR.IQ-I
M = Meter	Blank = Non-Steel	A = 350PSI (MA) or 300PSI (MSA)	5 = 60 GPM	A = Meter + Register	Blank = No Accessory	10 = LPG	MECH-NP = Mechanical w/o Pulsar
	S = Steel		7 = 100 GPM	C = Meter + Register + Strainer + Air Eliminator			T = Temp Compensator
		15 = 200 GPM	G = Meter + Register + Strainer + Air Eliminator + Printer	X = Differential Valve	Y = Differential Valve + Temp Compensator	LR = Less Mechanical Register	
		30 = 350 GPM	K = Meter + Register + Strainer + Air Eliminator + Preset Valve			LRG = Less Mechanical Register & Gear Plate	
			P = Meter Only (No Register or Gear Plate)			POD = Pulse Output Device	
			S = Meter Only POD (No Register)	LCR.IQ-I = LCR.IQ w/ Internal Pulsar	LCR.IQ-E = LCR.IQ w/ External Pulsar (POD)		
					LCR2-I = LCR-II w/ Internal Pulsar	LCR2-E = LCR-II w/ External Pulsar (POD)	



MA4 W LCR IQ



MA5 W LCR II



MA7 W LCR IQ



MA15 W LCR IQ



MSA30 WO REGISTER



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Liquid Controls



REGISTERS

RMI Part No.	Description
D3311	Print Counter
D1111	Non-Print Counter
LCR2-I-GN	Digital Print Counter
LCR.IQ-I	Digital Print Counter



D1111



D3311



LCR-II



LCR-IQ

FLANGES, ADAPTOR KITS, & ACCESSORIES

RMI Part No.	Description	Material/Seal/Connection
1" Flange - MA4		
501529	Flange Assy, MA4	Steel/Buna/1"NPT
A2141	Flange Assy, MA5 & MA7	Steel/Buna - 1.5 NPT
A2144	Flange Assy, MA5 & MA7	Steel/Buna - 1.5 BSPT
A2178	Flange Assy, MA5 & MA7	Stainless Steel/Buna - 1-1/2" Weld
2" Flanges - MA5, MA7, & MA15		
A2241	Flange Assy, MA5 & MA7	Steel/Buna-2"NPT
A2262	Flange Assy, MA5 & MA7	Steel/Buna-2"BSPT
A2289	Flange Assy, MA5 & MA7	Steel/Buna-2" Weld
A2252	Flange Assy, MA5 & MA7	Stainless Steel/Buna-2" Weld
3" Flanges - MA15		
A3221	Flange Assy. MA15	Steel/Buna-3" NPT
A3242	Flange Assy. MA15	Steel/Buna-3" BSPT
A3281	Flange Assy. MA15	Steel/Buna-3" Weld
3" x 2" Adaptor Kit - MA15		
A3245*	Flange Adapter, MA15 3"X2"	Meter HSG To Diff Valve
3" Flanged Strainer / Vapor Eliminator Kit - MSA30		
A3375-B	Strainer / Vapor Eliminator	100 Mesh w/ Ltd Bleed Tee, Buna
3" Flanged Differential Valve - MSA30		
511-SERIES	Cast Steel Differential Valve	300#, Buna, SS Pilot & Fittings
D3311	Print Counter	Print Counter
D3311	Print Counter	Print Counter
D3311	Print Counter	Print Counter

Liquid Controls

PARTS BREAKDOWN - CLASS 10 MA4, MA5, MA7, & MA15 METERS FOR LPG



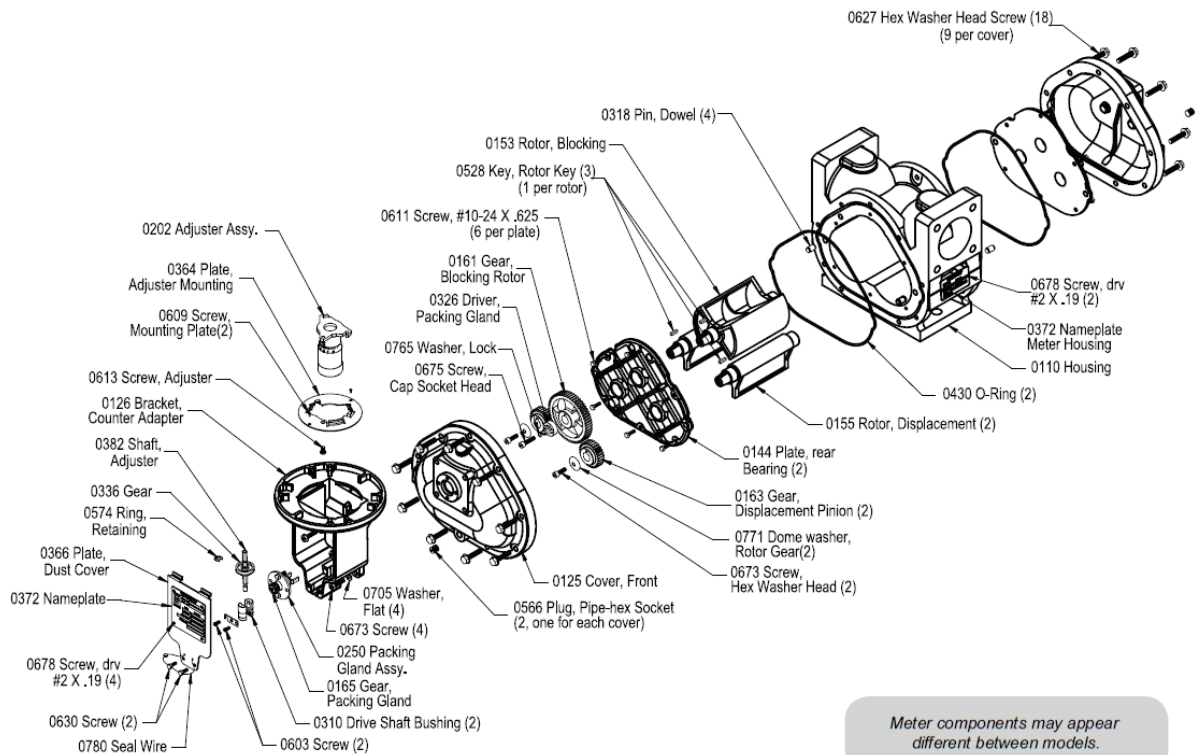
Key	Part Description	RMI Part No.			
		MA4	MA5	MA7	MA15
0310	Drive Shaft Bushing (2) ²	417862	417862	417862	417862
0603	Screw (2)	06845	06845	06845	06845
0780	Seal Wire ¹	48864	48864	48864	48864
0630	Screw (2)	09093	09093	09093	09093
0678	Screw, drv #2 X .19 (4)	00376	00306	00306	00306
0372	Nameplate	49444	49444	49444	49444
0366	Plate, Dust Cover	49390	49390	49390	49390
0574	Ring, Retaining ²	02188	02188	02188	02188
0336	Gear ²	40122	40122	40122	40122
0382	Shaft, Adjuster ²	48287	48287	48287	48287
0126	Bracket, Counter Adapter	494341	494341	494341	494341
0613	Screw, Adjuster	-	-	-	07063
0609	Screw, Mounting Plate (2)	-	-	-	00362
0364	Plate, Adjuster Mounting	-	-	-	42660
0202	Adjuster Assy	49403	49403	49403	49403
0675	Screw, Cap Socket Head	09336	-	07483	07483
0765	Washer, Lock	09337	-	06174	06174
0326	Driver, Packing Gland	501140	-	48756	48756
0161	Gear, Blocking Rotor	48090	48090	47646	47419
0611	Screw, #10-24 X .625 (6 per plate) ^{1 3}	09079	09079	09079	09079
0528	Key, Rotor Key (3) (1 per rotor)	48345	-	48332	501030
0153	Rotor, Blocking	48079	48079	48306	501026
0318	Pin, Dowel (4)	40665	40665	40665	40864
0627	Hex Washer Head Screw (18) (9 per cover) ¹	09080	09080	09080	09080

Key	Part Description	RMI Part No.			
		MA4	MA5	MA7	MA15
0678	Screw, drv #2 X .19 (2)	00306	00306	00306	00306
0372	Nameplate Meter Housing	49444	49444	49444	49444
0110	Housing	48270	48271	49445	48914
0430	O-Ring (2)	09123	09278	09258	09200
0155	Rotor, Displacement (2)	48078	48078	501311	50128
0144	Plate, Rear Bearing (2)	47670	47671	47668	49420
0163	Gear, Displacement Pinion (2)	48089	48089	47647	47420
0771	Dome Washer, Rotor Gear (2)	48319	48319	48348	48348
0673	Screw, Hex Washer Head (2) ¹	09110	09110	09027	09084
0125	Cover, Front	48273	48273	48302	501034
0566	Plug, Pipe-Hex Socket (2, one for each cover)	06790	06790	06790	06790
0705	Washer, Flat (4)	06743	06743	06743	06743
0673	Screw (4) ¹	09084	09084	09084	09084
0250	Packing Gland Assy	49561	49561	49561	48616
0165	Gear Packing Gland	501150	48283	48283	48283
	Meter Hardware Kit	501653	501653	501654	501655
	Meter Seal Kit	501312	501312	501315	501318
	Drive Shaft Kit	501664	501664	501664	501664
	Bearing Plate Hardware Kit	501661	501661	501661	501661

¹ Included in Meter Hardware Kit

² Included in Drive Shaft Kit

³ Included in Bearing Plate Hardware Kit



Meter components may appear different between models.

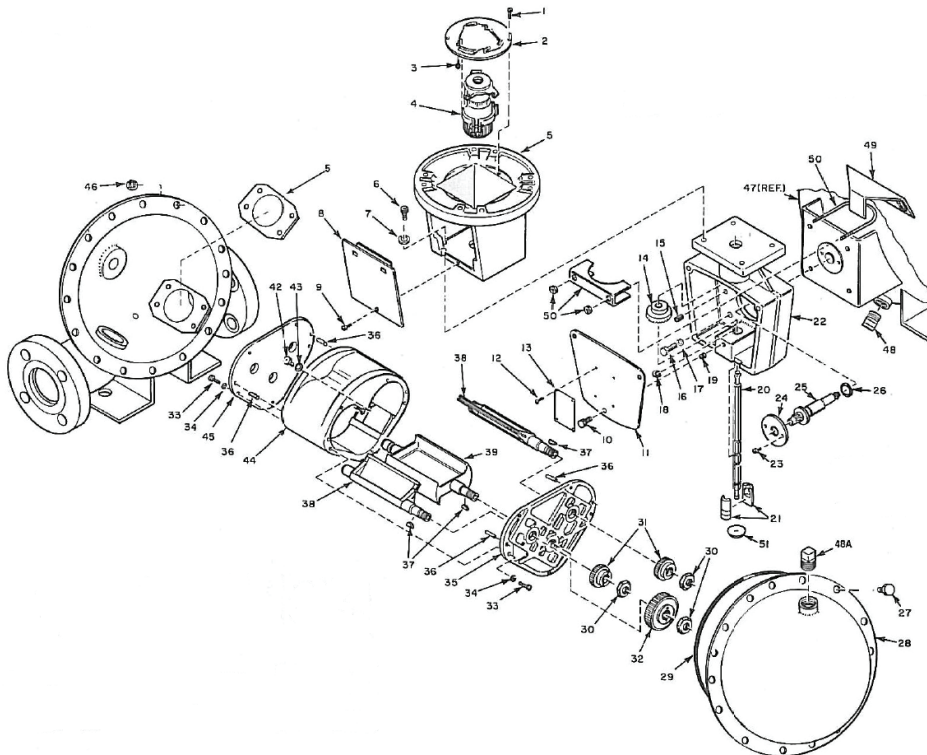
Liquid Controls



PARTS BREAKDOWN - CLASS 10 MSA30 METERS FOR LPG

Key	Part Description	RMI Part No.
1	Adjuster Plate Bolt (2)	00362
2	Adjuster Adapter Plate	42660
3	Adjuster Mounting Bolt	07063
4	Adjuster Assembly	42600
5	Adjuster Adapter	44074
6	Adjuster Adapter Bolt (4)	06754
7	Adjuster Adapter Washer (4)	06081
8	Adjuster Cover Assembly	46129
9	Adjuster Cover Bolt	04494
10	Dust Cover Bolt (3)	06255
11	Dust Cover Plate	46126
12	Name Plate Screw (4)	00306
13	Name Plate	40136
14	Adjuster Shaft Drive Gear, 2:1	40818
15	Locator Pin (2)	04295
16	Support Weldment Screw (4)	06788
17	Support Weldment Washer (4)	06019
18	Adjuster Drive Retainer (2)	02188
19	Set Screw	06148
20	Adjuster Drive Shaft	46824
21	Adjuster Drive Bushing (2)	41786
22	Packing Gland Housing	46823
23	Packing Gland Screw (4)	06840
24	Packing Gland Seal Plate	42799
25	Packing Gland Assy (Viton 2:1 Ratio)	46904

Key	Part Description	RMI Part No.
26	Packing Gland O-Ring	04294
27	Cover Bolt (20)	07305
28	Upper Rear Hemisphere	46810
29	Cover O-Ring	07176
30	Rotor Nut (3)	43817
31	Displacement Rotor Gear (2)	43816
32	Blocking Rotor Gear	43815
33	Bearing Plate Screw (16)	04646
34	Bearing Plate Washer (16)	04644
35	Front Bearing Plate	44117
36	Bearing Plate Dowel (4)	40099
37	Rotor Shaft Key (3)	04506
38	Displacement Rotor Gear (2)	40714
39	Blocking Rotor	46807
42	Meter Retaining Screw (4)	04444
43	Meter Retaining Washer (4)	06054
44	Housing	46800
45	Rear Bearing Plate	44117
46	Cover Nut (20)	06707
47	Lower Front Hemisphere	46811
48	Weldment Pipe Plug	06969
49	Housing Support	46803
50	Support Clamp	07143
51	Expansion Plug	07224
52	Meter Mounting Gasket	46835



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Shop online at www.raymurray.com or call **800-628-5044**

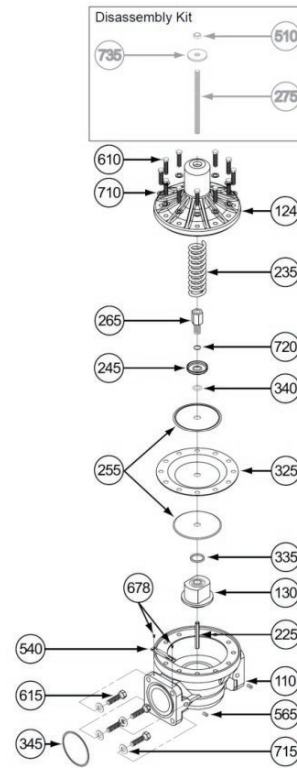
Liquid Controls



A2843 DIFFERENTIAL VALVE

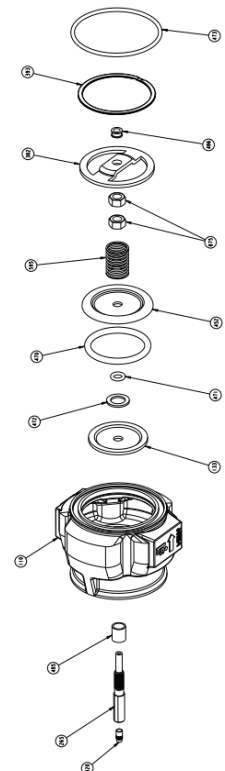
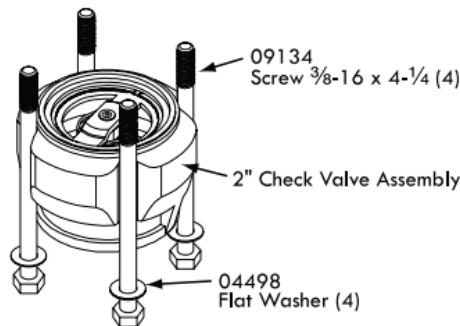
Key	Part Description	RMI Part No.
110	Valve Housing Assembly	47096
124	Valve Cover	47302
130	Piston	49947
225	Piston Guide Shaft*	Not Sold Separately
235	Spring	47305
245	Spring Retainer	47307
255	Back-Up Plate (2)	47308
265	Stand Off	47309
275	Rod Assembly	47098
325	Diaphragm	502078
335	O-Ring	06856
340	O-Ring	07900
345	O-Ring	07838
510	Nut	06055
540	Nameplate	Not Sold Separately
565	Pipe Plug (4)	04759
610	Screw (12)	04655
615	Screw (4)	06851
678	Screw (2)	00306S
710	Flat Washer (12)	09360
715	Flat Washer (2)	04498
720	Lock Washer	06070
735	Flat Washer	06663

* Part of 47096 Housing Assembly



A2885 INLET CHECK VALVE

Key	Part Description	RMI Part No.
486	Bearing	Not Sold Separately
473	Buna-N O-Ring	06854
393	Spiral Retaining Spring	09137
382	Valve Spring Holder	48337
595	Compression Spring	09138
875	Self Locking Nut (2)	09143
452	O-Ring Retainer	47974
470	Buna-N O-Ring	09131
471	Buna-N O-Ring	09140
472	Spacer	47295
133	Piston	47975
265	Valve Stem	Not Sold Separately
485	Bushing	07867
110	Check Valve Housing	47973
920	Valve Core	Not Sold Separately

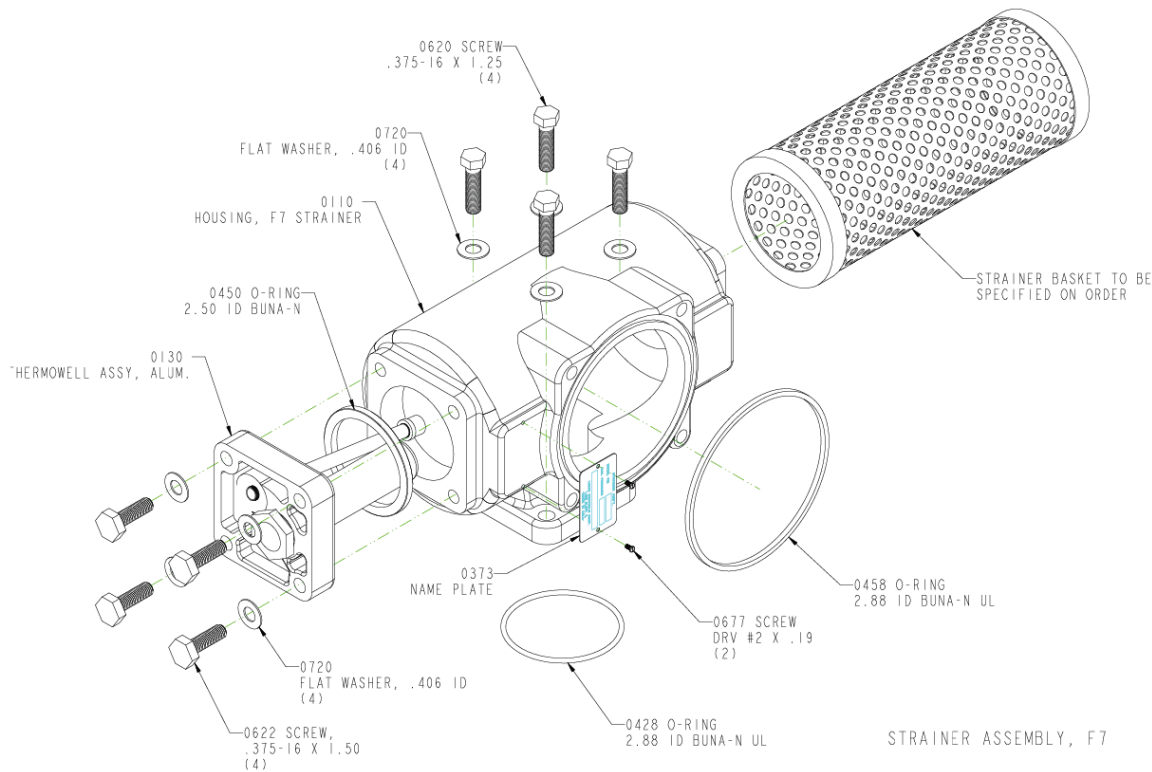


Liquid Controls



STRAINER ASSEMBLY

Key	Part Description	Strainer Part #		
		A2340	A3340	A3366A
		RMI Part No.		
0110	Housing, Aluminum	48297	48497	49426
0130	Cover, Strainer	42152	42987	49423
0200	Strainer Manual	48404	48404	48404
0373	Nameplate, Strainer	48419	48419	48419
0428	O-Ring	06854	04474	04474
0450	O-Ring	09338	06798	09201
0458	O-Ring	09335	09335	09335
0620	Hex Head Cap Screw (8)	04444	06057	07292
0677	Drive Screw (2)	00306	00306	00306
0720	Flat Washer (8)	04498	04685	09204
	Strainer Basket - 40 Mesh	A2430	A3430	A3430
	Strainer Basket - 80 Mesh	A2431	A3431	A3431
	Strainer Basket - 100 Mesh	A2432	A3432	A3432
	Strainer Basket - 200 Mesh	A2439	A3439	A3439



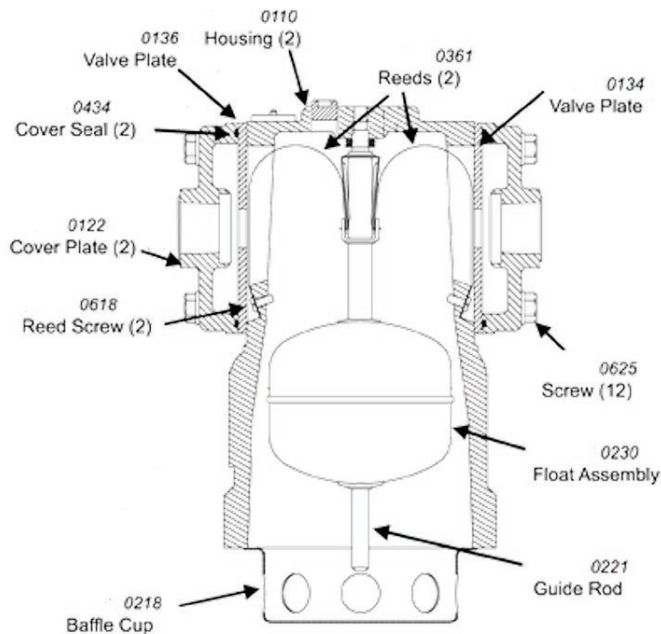
Liquid Controls



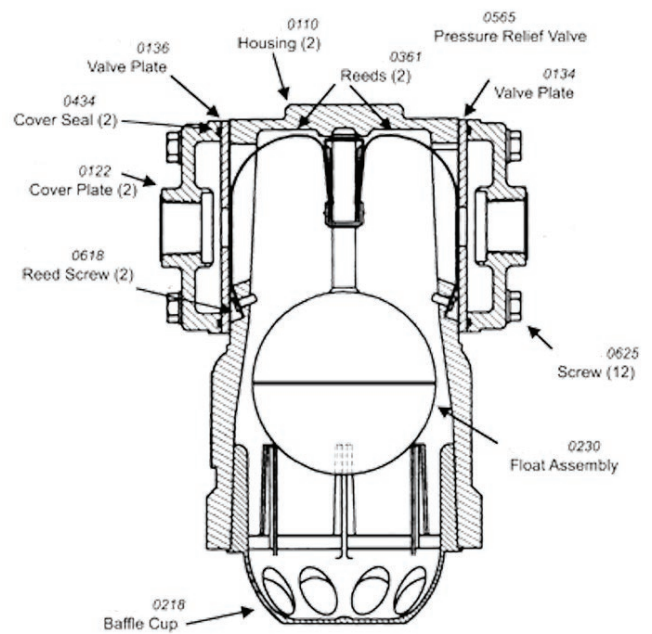
AIR & VAPOR ELIMINATORS

Key	Part Description	Eliminator Part #	
		A8180	A8340A
		RMI Part No.	
0136	Valve Plate	43778	42824
0110	Housing, Air Eliminator	49490	49672
0361	Reeds (2)	48571	48571
0565	Pressure Relief Valve (A8340A)	-	H124
0565	Pipe Plug (A8180)*	06790	-
0134	Valve Plate	43778	42822
0625	Hex Head Screw (12)	09080	09080
0230	Float & Reed Assy	501024	501040
0221	Guide Rod	45794	-
0218	Baffle Cup	48421	48421
0618	Reed Screw (2)	06797	06797
0122	Outlet Cover, Air Eliminator (2)	48329	48329
0434	Outlet Cover Seal Ring (2)	42823	42823
0200	Manual*	48406	48406
0540	Nameplate*	49751	49751
0641	Hex Head Screw (4)*	06851	06851
0678	Screw (2)*	00306	00306
0711	Flat Washer (4)*	04498	04498
0810	Thread Protector (2)*	09169	09169

* Not Shown



A8180



A8340A



Mid:Com



MID:COM E:COUNT ELECTRONIC REGISTER

The E:Count improves the accuracy and efficiency of any mechanical meter by replacing hundreds of moving parts with a very low maintenance, solid state electronic counter. E:Counts are primarily used on bulk delivery trucks and can be mounted on or connected to any type of meter.



ECOUNT

MID:COM E:COUNT LT ELECTRONIC COUNTER

E:Count LT is a 12 Volt, single product counter designed for stationary applications such as flammable liquid dispensers, and bulk plants, as well as industrial applications such as batching, blending and inventory control. The standard features allow this product to be used for many demanding applications.



ECOUNT LT

MID:COM 8000 COMPUTER

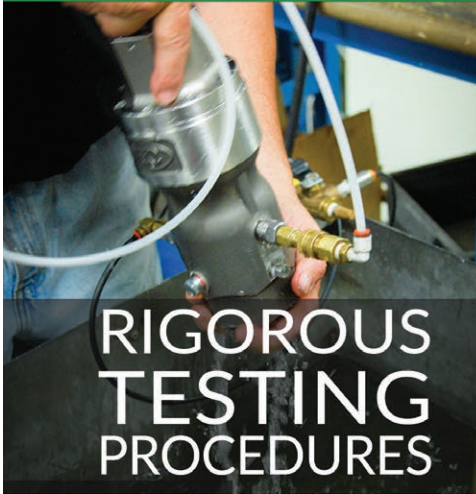
The MID:COM 8000 is the ultimate, rugged, easy-to-use cab mounted computer, printer, and data transfer system. Using the SD data card, the driver has access to 50,000 complete customer records. An easy-to-follow menu guides the driver through the delivery process. The most popular software providers offer an interface that provides automatic posting from the data card to your accounts receivables.



8000



INNOVATION MADE SIMPLE



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MEC

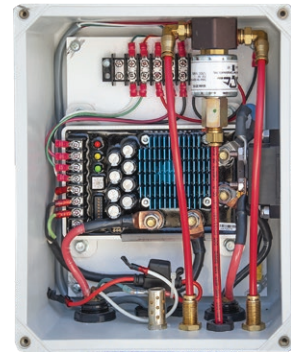
EXCELA-WYND HOSE REEL

The new ME9000 Series Excelsa-Wynd Hose reel provides increased delivery efficiency and safety while reducing down time, comp claim injuries and driver fatigue. Other advantages include:

- 17" w x 25" dia spool
- Holds up to 150' - 1" hose
- Auto-wind hose return system
- Variable Speed Controller - maintains consistent walking speed
- Adjustable speed to suit driver preference or seasonal conditions
- Auto-push feature takes the starting hose pull effort of the driver
- Premium construction & materials for increased service life and minimal downtime
- Gimbal roller assembly significantly reduces pulling effort, even on hard 90° side pulls
- Internal gear drive eliminates chain
- Designed for minimal maintenance & ease of serviceability
- Integrated design makes your truck look great!



ME9000LH-17-25



VSC9000

RMI Part No.	Description
ME9000LH-17/25	Excelsa-Wynd™ Hose Reel with LH Type "D" Excelsa-Flange™ Inlet
VSC9000*	MEC/BASE Engineering Variable Speed Control System
ME9000WSDA	Weather Shield-Diamond Plate Aluminum Bright Polished Finish
ME9000WSSA	Weather Shield - Smooth Aluminum Silver Powder Coat Finish

*Required for installation - free voucher included with Hose Reel purchase



REEL W SMOOTH WEATHER SHIELD



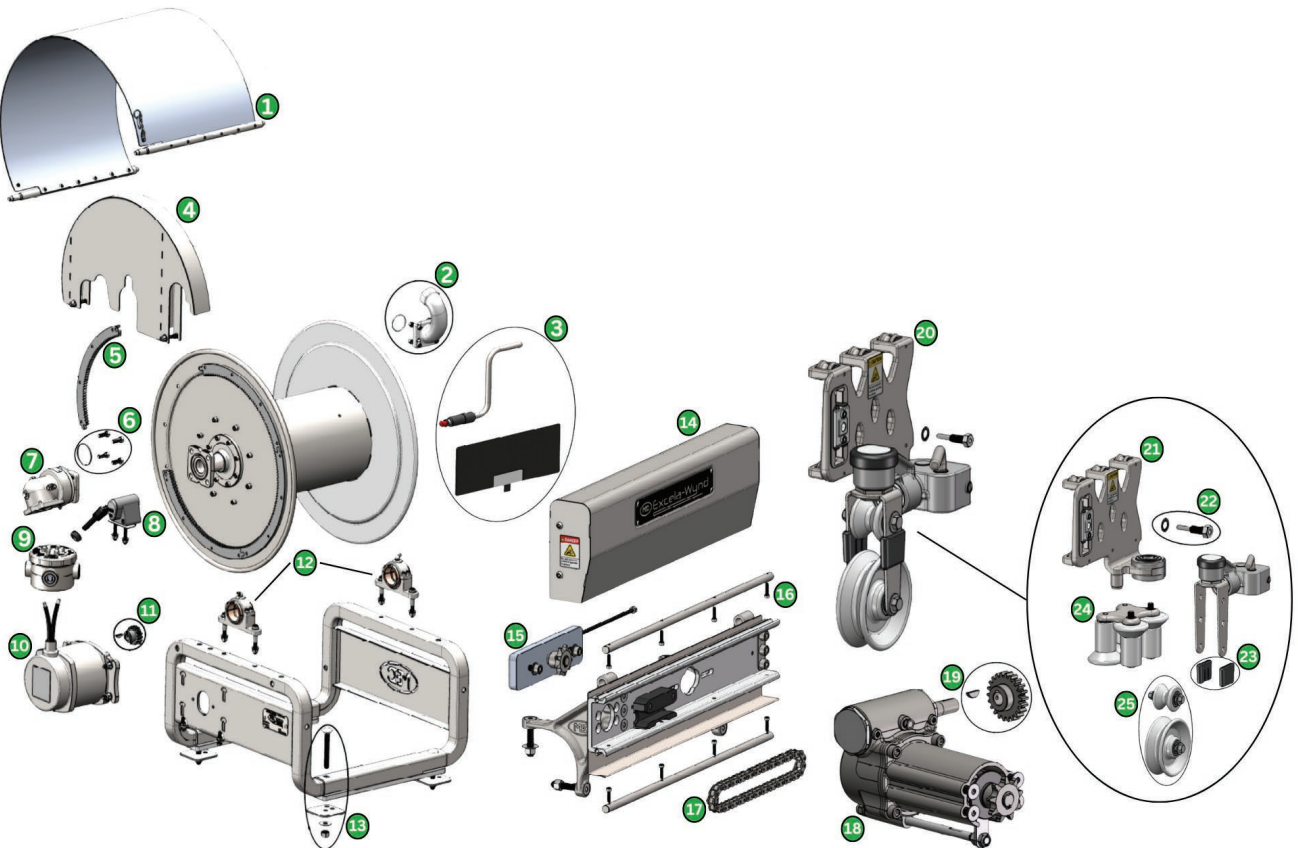
REEL W DIAMOND PLATE WEATHER SHIELD

MEC

ME9000 PARTS BREAKDOWN

Key	Description	RMI Part No.
1	Weather Shield - Plain	ME9000WSSA
1	Weather Shield - Diamond Plate	ME9000WSDA
2	LH Offset Riser Kit w/ Hardware	ME9000107
3	Manual Crank Kit	ME9000965
4	Gear Guard Kit w/ Hardware	ME9000950
5	Gear Segment Kit w/ Hardware (4)	ME9000105
6	Swivel Mounting Kit	ME854SSX-SK
7	Excelsa-Flange Swivel	ME854SSH-4B-4B
8	Sensor Kit w/ Hardware	ME9000945
9	Junction Box Kit	ME9000-JBA
10	Motor Kit w/ Hardware	ME9000500
11	Motor Gear Kit	ME9000007-16T
12	Split Bearing Kit (2)	ME9000990
13	Frame Mounting Hardware Kit	ME9000919

Key	Description	RMI Part No.
14	Level-Wind Cover w/ Hardware	ME9000955
15	Idler Sprocket Kit w/ Hardware	ME9000925
16	Bearing Rod Kit	ME9000308
17	Level-Wind Chain Kit	ME9000970
18	Gear Box Kit w/ Hardware	ME9000930
19	Level-Wind Gear - 22 Tooth	ME9000337
20	Level-Wind Carriage & Gimbal Kit	ME9000999
21	Carriage Kit	ME9000927
22	Connecting Pin Kit	ME9000960
23	Hose Guard Set	ME9000422
24	Guide Roller Set	ME9000928
25	Gimbal Roller Set w/ Hardware	ME9000413





HANNAY REELS

Tech Note: Ray Murray, Inc. is a master distributor for Hannay Reels. Shown below are the standard reels used in the propane industry, however RMI has access to a wide variety of custom options for reels used across a variety of other industries. For specs and assistance in sizing and selecting your reel, please contact RMI's technical team.



EPB SERIES



EPBGMBSERIES



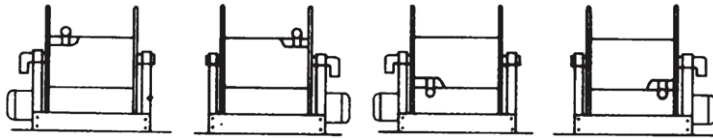
EPBGMTSERIES

ORDERING & REEL SELECTION

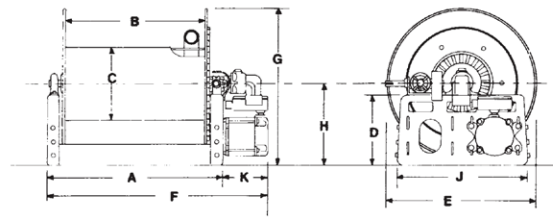
When ordering, the following items must be specified:

- Complete series and model number
- Location of inlet/outlet and rewind motor when facing hose connection
- Construction type: painted steel (standard), stainless steel (SS prefix), or aluminum (SB prefix) construction
- Voltage for electric rewind motor
- 90° or straight swivel joint
- Size and thread of outlet riser

HOSE REEL DIMENSIONAL DRAWING



LEFT TOP REWIND RIGHT TOP REWIND LEFT BOTTOM REWIND RIGHT BOTTOM REWIND



Standard Electric Reel	Guide-Master Bottom Mount	Guide-Master Top Mount	RMI Part No.	Hose Capacity (FT)			Reel Dimensions (IN)								
				ID	3/4"	1"	Dimensions E, F, & G are overall envelope dimensions								
				OD	1-9/32"	1-9/16"	A	B	C	E	F	G	H	J	K
EPB	EPBGMBS	EPBGMT	28-23-24	225	140	25 1/2	20	10 1/2	23	32	23	12	19	6 1/2	
			30-23-24	250	150	27 1/2	22	10 1/2	23	34	23	12	19	6 1/2	
			32-33-24	275	175	29 1/2	24	10 1/2	23	36	23	12	19	6 1/2	
			22-28-29	275	200	19 1/2	13 1/2	10 1/2	28	26	30	14 3/4	26 1/2	6 1/2	
			22-25-26	210	130	19 1/2	13 1/2	10 1/2	25	26	27	15	25	6 1/2	
			24-25-26	230	150	21	15 1/2	10 1/2	24	24 1/8	27	15	25	6 1/2	
			26-25-26	275	175	23	17 1/2	10 1/2	25	30	27	15	25	6 1/2	
			22-33-34	250	150	19	13 1/2	10 1/2	31 3/4	26 5/8	33 5/8	17 3/4	31	6 1/2	
			18-33-34	210	130	15	9 1/2	10 1/2	31 3/4	22 5/8	33 5/8	17 3/4	31	6 1/2	

HOSE REEL GUIDES



The Guidemaster helps unwind and rewind hose faster, easier, and with less damage to the hose.

The FH-3 speeds handling & reduces hose wear. For factory installation, specify FH-3 assembly and indicate position on the reel. As an accessory, indicate length of the roller and distance between mounting holes.

RMI Part No.	Description	Size Available
GM-X-EP	Guidemaster only	All
GM-X-EP-B*	Includes Bottom Mount Bracket	All
GM-X-EP-T*	Includes Top Mount Bracket	All
FH-3*	Roller and Spool Assembly	All

* Specify reel frame dimensions and RMI Model Number for proper match

STATIC GROUNDING REELS

- Safe & reliable for grounding bobtails & transports
- Heavy duty reel for extended life & durability



HGR-100-100

RMI Part No.	Cable Length	Diameter	Height	Width
HGR-50-50	50'	1/8"	17-1/2"	14-1/2"
HGR-100-100	100'	1/8"	17-1/2"	16-3/4"

Hannay



CUSTOM HOSE REEL ORDERING FORM

To specify Hannay reels, fill out this simple form and send it to RMI. You can photocopy this page or download and print from hannay.com. For more information on custom applications not found in our catalog, contact the RMI Customer Care team at 800-628-5044.

1. Who is the reel for?

Contact		Date / /	
Company		Position	
Street Address			
City	State	Zip	Country
Phone ()	Fax ()	Email	

2. What is the reel for?

HOSE (check one): Storage only Live Single hose Live Dual hose

Inside diameter:	Hose length:	Bend radius:	Flat hose dimensions:
Outside diameter:	Hose weight:	Coupling spacing:	

Type of product handled live application (check one):

<input type="radio"/> Liquid (specify):	<input type="radio"/> Temperature:	<input type="radio"/> Oxygen/Acetylene:	<input type="radio"/> Other (specify):
<input type="radio"/> Gases (specify):	<input type="radio"/> Pressure:	<input type="radio"/> Hydraulic fluid (specify):	

Fluid path type (check one): Steel (standard) Aluminum Stainless Steel Other

Reel inlet type (check one): Swivel joint 90° (standard) Straight

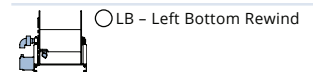
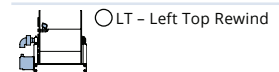
Reel outlet type (riser): Size:

Thread (check one):	<input type="radio"/> National Pipe Thread (NPT)	<input type="radio"/> Joint Industry Committee (JIC)	<input type="radio"/> Other (specify):
	<input type="radio"/> National Standard Thread (NST)	<input type="radio"/> British Standard Pipe (BSP)	

Indicate your custom specifications

4. Specifying Location of Components

Optional Location of Components: Location of the inlet, outlet riser, and rewind mechanism can be varied to meet your requirements and **must be specified on your order**. Unless otherwise specified, most reels will be shipped as **Right Top Rewind** with the inlet, outlet riser, and rewind mechanism on the operator's right.



Note: Use component location initials as suffix after model number (ie: EPB24-25-26 **LT**)

3. What features does the reel need? Check type of rewind:

MANUAL REWIND

Disc rewind (hand over hand) Gear-driven crank Direct crank (permanent or removable) Chain-driven crank

POWER REWIND

Spring Air Electric (voltage): Hydraulic

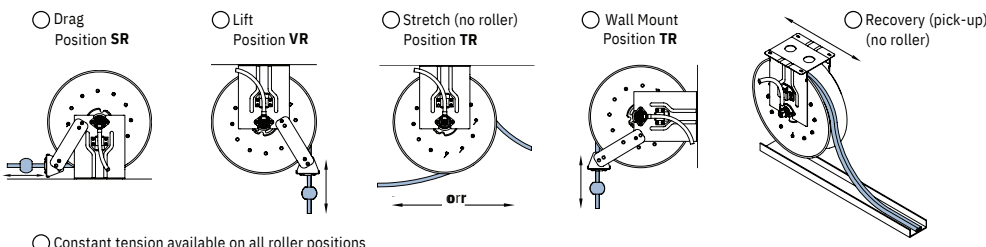
Type of installation (check one): Floor Wall Overhead Vehicle

Temperature Range:	Environment:
Accessories (if any):	Hose Stop: <input type="radio"/> Yes <input type="radio"/> No

Roller Assemblies:

Finish: Painted steel (standard) Aluminum Polished Unpolished Stainless steel Polished Unpolished

Check type of installation and roller position for spring reels:



5. Please note size and/or weight limitations for your installation

SPECIFICATIONS

Depth: _____

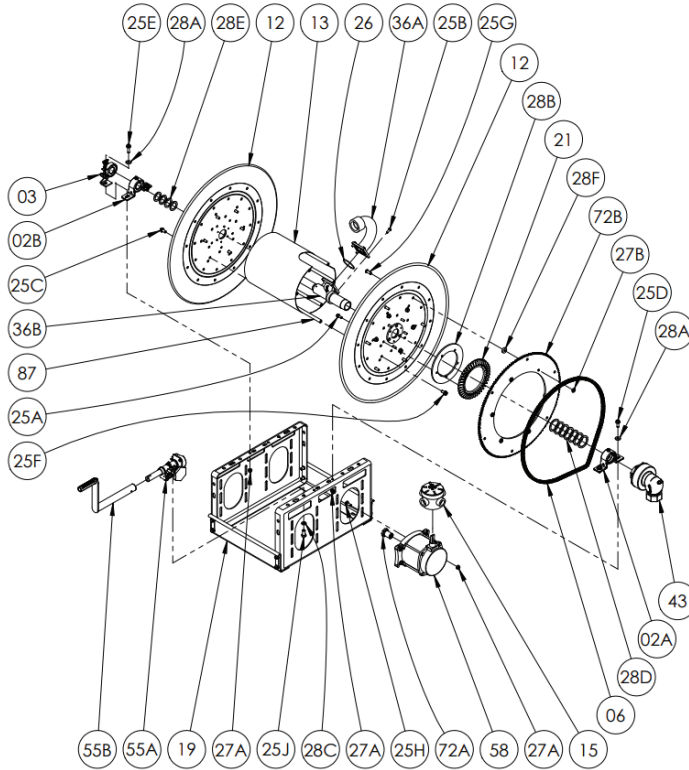
Height: _____

Width: _____

Weight: _____



EPB SERIES HOSE REEL PARTS LIST



Key	Description	RMI Part No.	Hannay Part No.	Qty Req.
02A	1-1/2" Pipe-Size Split Bronze Bearing	9902.1612	9902.1612	1
02B	1" Pipe-Size Bronze Bearing	9902.1630	9902.1630	1
03	Band Brake Assembly w/ L-Bracket	9947.0099	9947.0099	1
06	Chain, #40 ¹	40C10	9912.0008	As Req'd.
12	Disc Assembly ¹	Specify Model		2
13	Drum, 10-1/2" Dia. 14 GA Steel ¹	9905.3131	9905.3131	1
15	Red Dot 5-Port Round Junction Box	JBXXXX	9917.0061	1
19	Pressed Frame Assembly ¹	Specify Model		1
21	H-26 Ring Gear	9914.0372	9914.0372	1
25A	5/16"-18 x 3/4" Spinlock Bolt	9904.2101	9904.2101	5
25B	5/16"-18 x 3/4" Hex Head Cap Screw	9904.1101	9904.1101	4
25C	3/8"-16 x 3/4" Spinlock Bolt	9904.2201	9904.2201	6
25D	3/8"-16 x 1" Spinlock Bolt	9904.2202	9904.2202	3 or 4
25E	3/8"-16 x 1-1/4" Spinlock Bolt	9904.2203	9904.2203	1
25F	3/8"-16 x 3/4" Spinlock Bolt	9904.2201	9904.2201	6
25F	3/8"-16 x 1-1/2" Hex Head Cap Screw ²	9904.1204	9904.1204	6
25G	3/8"-16 x 1" Button Socket Cap Screw	9945.0058	9945.0058	6
25H	3/8"-16 x 1" Steel Carriage Bolt w/ Nut	9904.0200	9904.0200	4
25J	1/2"-13 x 1" Hex Head Bolt	9904.1402	9904.1402	2
26	2-5/8" (BUNA) O-Ring for 1-1/2" Riser	9965.0028	9965.0028	1
27A	3/8"-16 Spinlock Nut	9904.6200	9904.6200	8
27B	3/8"-16 Hex Head Nut	9904.5200	9904.5200	6

Key	Description	RMI Part No.	Hannay Part No.	Qty Req.
28A	3/8" Flat Washer	9954.0007	9954.0007	4
28B	Special 1/4" Thick Aluminum Backing Plate for H-26	9914.0581	9914.0581	1
28C	1/2" Split Lock Washer	9954.0030	9954.0030	2
28D	1-1/2" Hub Spacer Washer - Plated	9954.0022	9954.0022	As Req'd.
28E	1" Hub Spacer Washer - Plated	9954.0021	9954.0021	As Req'd.
28F	EH-765 Special Spacer for Disc Sprocket	9954.0017	9954.0017	6
28G	3/8" Lock Washer, Internal Tooth ²	9954.0095	9954.0095	6
29	Woodruff Key #9 (3/16" x 3/4") ²	HR-27	9916.0080	2
36A	1-1/2" Iron Pipe Riser, only w/ O-Ring	9901.3760	9901.3760	1
36B	1-1/2" Flange Iron Pipe Hub, only ¹	9901.3640	9901.3640	1
43	1-1/2" 90 Degree Fx F Steel 350 PSI Swivel Joint	SMAC-1-1/2	9930.0531	1
55A	Manual Rewind Assembly w/ H-27	9914.0200	9914.0200	1
55B	H-18 Steel Hand Crank - E-Coated	9914.0011	9914.0011	1
58	12V DC Flange 2/3 HP 500 RPM Explosion Proof Motor	9915.0010	9915.0010	1
72A	9T40 Sprocket, 1-5/16" Long	9910.0917	9910.0917	1
72B	134T40 Disc Sprocket - 21.62" Dia.	9910.3125	9910.3125	1
72B	104T40 Disc Sprocket - 16.85" Dia. ²	9910.3121	9910.3121	1
87	Anodized Aluminum Threaded Spacer Pipe	Specify Model		6

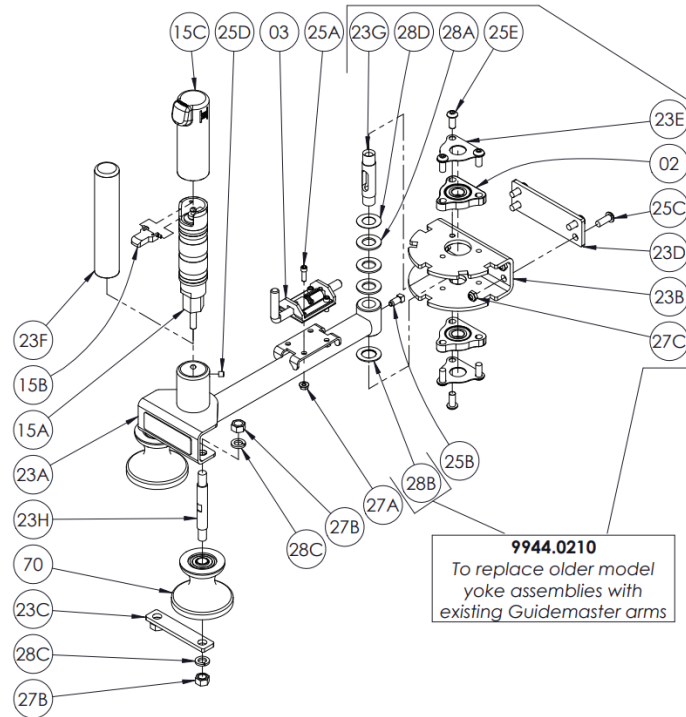
¹ Model # must be specified when placing order

² Not shown on diagram

Hannay



GM-X GUIDEMASTER PARTS LIST



Key	Description	RMI Part No.	Hannay Part No.	Qty Req.
-	GM-X Guidemaster® w/ EPS-1 Switch & Cover	GM-X-EP	9944.0200	-
-	GM-X Guidemaster® (Less EPS-1 Switch)	9944.0205	9944.0205	-
-	GM-X Full Yoke Assembly	9944.0210	9944.0210	-
02	Yoke Bearing w/ Housing	9945.0072	9945.0072	2
03	Pinlock Assembly w/ Hardware	9945.1003	9945.1003	1
15A	EPS-1 Explosion-Proof Switch w/ Weather-Resistant Cover	EPS-1	9917.0200	1
15B	Black Switch Lever for EPS-1	9917.0212	9917.0212	1
15C	Switch Cover for EPS-1 - Gray EPDM	9917.0211	9917.0211	1
23A	GM-X Guidemaster® Tubular Weldment Arm	9944.0207	9944.0207	1
23B	Mounting Yoke	GM-605	9945.0002	1
23C	Bottom Roller Plate	9945.1004	9945.1004	1
23D	Channel Mounting Spacer (2" x 6" x 1/4" Thick)	9945.0070	9945.0070	1
23E	Stainless Steel Cover Plate for Yoke Bearing	9945.0071	9945.0071	2
23F	GM-X Grip Handle - for use w/out EPS-1 Switch	9945.0046	9945.0046	1
23G	SST Pivot Pin w/ Square Head Screw	GM-613	9945.0025	1
23H	Roller Mounting Pin w/ Nuts and Washers	9945.1005	9945.1005	2
25A	SST Socket Head Cap Screw	9945.0054	9945.0054	4
25B	Square Head Set Screw w/ 1/4" Dog Point	9945.0053	9945.0053	1
25C	Button Socket Cap Screw	9945.0058	9945.0058	4
25D	Allen Set Screw (SST) w/ Nylok	9958.0006	9958.0006	2
25E	Button Socket Cap Screw w/ Nylok	9945.0010	9945.0010	6
27A	Small Flange Spinlock Nut	9904.6000	9904.6000	4
27B	Hex Nut	9954.0036	9954.0036	4
27C	Stainless Steel Thin Nylon Lock Nut	9960.0099	9960.0099	4
28A	Stainless Steel Washer	9954.0041	9954.0041	3
28B	Bronze Thrust Washer	9954.0039	9954.0039	1
28C	1/2" Split Lock Washer	9954.0030	9954.0030	4
28D	Stainless Steel Washer	9954.0040	9954.0040	1
70	GM-X Hourglass Roller w/ Bearings	GMX-609	9945.1000	2

Note: To ensure accuracy when ordering replacement parts - please specify the model and serial number of the reel



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Hannay



HOSE REEL CONTROL SWITCH COVERS

- Made with durable UV stable black low temperature EPDM material
- Includes security lanyard to help prevent loss of the cap
- Fits Hannay Guidemaster and red DOT EPS switches
- Control switch can be operated through cover without removing



MEP-GMC1



MEP-RDC1

RMI Part No.	Description
MEP-GMC1	Hose Reel Control Switch Cover for Guidemaster Control Arm
MEP-RDC1	Hose Reel Control Switch Cover for Red DOT EPS

COMMON PARTS

RMI Part No.	Hannay Part No.	Description
Motors, Sprockets, Chain		
9910.0919	9910.0919	9T40 Sprocket 1-3/4" Long
11T35A	9910.1116	11 Tooth Sprocket; 3/4"
11T35D	9910.1117	11 Tooth Sprocket; 1-1/16"
11T35B	9910.1118	11 Tooth Sprocket; 1-5/16"
11T35C	9910.1119	11 Tooth Sprocket; 1-3/4"
35C10	9912.0001	#35 Chain 10' W/ Connect Link
40C10	9912.0002	#40 Chain 10' W/Conn Link
HR-35	9912.0010	Connecting Link
9912.0013	9912.0013	Half Link For #35 Chain
001XXX	9915.0003	12V-Flanged Exp. Pr. Motor
002XXX	9915.0013	12V Base Explosion Proof Motor
9918.1123	9918.1123	#6 Am Gast Air Motor
9918.2600	9918.2600	Hydraulic Motor
Switches & Electrical		
EXPB-2A	9917.0001	(12/24 Volt DC) Switch W/ Box
9917.0004	9917.0004	Rubber Capped Switch
90018	9917.0006	Switch Less Cap
83280	9917.0008	Rubber Cap; 90018 & ESP-1
800T-XD1	9917.0014	Internal Switch, EEXPB-2A
9917.0020	9917.0020	40 Amp Breakers
CDLM-50	9917.0021	50 Amp Circuit Breaker
CDLM-70	9917.0022	70 Amp Circuit Breaker
9917.0024	9917.0024	CB-2 Circuit Breaker Bracket
9917.0025	9917.0025	12 V Solenoid Standard Duty
S-12V	9917.0027	12V Solenoid 4 Wire Terminal
JBC-1	9917.0060	Junction Box Complete
Swivel Joints, Risers, & Hub Assemblies		
9929.8525	9929.8525	1" 90 FxF 304 S.S.1000 PSI Swivel
9929.8552	9929.8552	1" 90 FxF 4000 Psi Viton Swivel
SMAC-1-1/2	9930.0531	1-1/2" 90° FxF Full Circle Swivel
3115627	-	Thixogrease Hp Lubricant 14Oz

RMI Part No.	Hannay Part No.	Description
Roller Assemblies, Cable Guides, Hose Stops		
HS-3	9922.0011	Hose Stop
HS-45	9922.0012	Hose Stop
9939.0062	9939.0062	Assembly C Roller
9939.0069	9939.0069	Assembly B Roller
9939.0070	9939.0070	FH-3 Dbl Cavtive Roller Assy
9939.1062	9939.1062	Assy C Roller
FH-301	9940.0005	Spool
EH-650	9940.0076	Mounting Block
Bearings		
HR-25	9902.1400	1" Self-Aligning Bearing
HR-23	9902.1500	1" Ball Bearing Insert
996XXX	9902.1700	1-1/2" Bronze Insert
FH-303-15	9940.0007	Nylon Trunion Bearing - 1-1/2"
FH-303-2	9940.0008	Trunion Bearing - 2" Diameter
Rewind Assemblies, Brakes, Ratchets		
9921.0013	9921.0013	Super A Spring
9947.0035	9947.0035	Comet Brake
9947.0090	9947.0090	Comet Brake Assy(Bearing Mtd)
Old-Style Guidemaster Parts (While Supplies Last)		
9917.0207	9917.0207	Switch Bracket For GM-700
GM-608	9945.0026	Ball Bearing For GM-609 Spool
9945.0033	9945.0033	304 SS Gm Angle Brackets Only
9945.0036	9945.0036	GM Bottom-Wind Brackets (Pair)

Swivels

FULL CIRCLE HOSE SWIVELS

- Stainless Steel Housing
- Compact Design
- UL Standard: 567
- Field Repairable
- 350 PSIG Working Pressure
- Full Port



JO-1FC

RMI Part No.	Size	Diameter	Length
JO-34C	3/4"	2-1/2"	3-3/8"
JO-1FC	1"	2-1/2"	3-3/8"
JO-1SK/RK	Repair Kit for 3/4" & 1"		

FULL CIRCLE SWIVELS

- Zero maintenance design
- Pre-tapped for relief valve
- Field repairable
- UL Listed

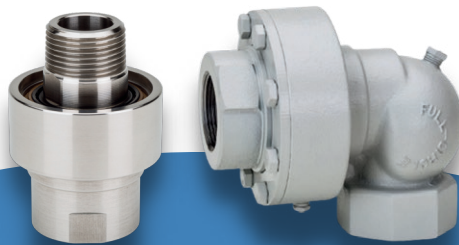


SMAC-112

RMI Part No.	Size	Description
SMAC-190LN	1"	90° Swivel
SMAC-114	1-1/4"	90° Swivel
SMAC-112	1-1/2"	90° Swivel
SMAC-200	2"	90° Swivel
SMAC-1STLN	1"	Straight Swivel
SMAC-114STLN	1-1/4"	Straight Swivel
SMAC-112ST	1-1/2"	Straight Swivel
SMAC-200ST	2"	Straight Swivel



The Leading Manufacturer of Swivels for Liquefied Gas Transfer For Over Three Decades



fullcircleswivels.com

UL Listed, EU/UK Compliant, ISO 9001 QMS certified

SAFE. RELIABLE. SEAMLESS.



MARSHALL E-Z TURN SWIVELS

- All stainless steel construction for maximum durability and corrosion resistance
- Large bearing surface for increased strength and durability
- 360° rotation under maximum working pressure of 400psig
- UL Listed Seal pack design allows for extremely long life with no maintenance required
- Straight through bore for unobstructed flow characteristics

RMI Part No.	Inlet (FNPT)	Outlet (MNPT)
ME850SS-6	3/4"	3/4"
ME850SS-6/8	3/4"	1"
ME850SS-8	1"	1"
ME850SS-8/6	1"	3/4"
ME850SS-10/8	1-1/4"	1"



ME850SS-8



MEC Smart Interlock Systems

SMART INTERLOCK TECHNOLOGY

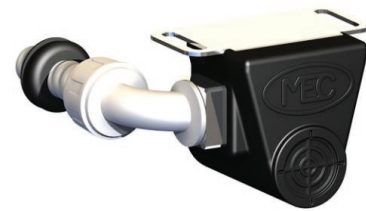
Designed to prevent a vehicle from being operated while the hose end delivery valve, loading line, or wheel chocks are in use. The smart interlock technology connects directly to the vehicle's transmission or braking system to restrict movement.

SMART INTERLOCK TECHNOLOGY

RMI Part No.	Description	Temp Range	Accessories
ME200PIB	Sensor Bracket Assy for ME200	-20° to 160°F	ME200EXT (Standoff Ext Kit)
ME200PIBK	Sensor Bracket Assy w/ ME200	-20° to 160°F	
ME217PIB	Sensor Bracket Assy for ME217 Series	-20° to 160°F	
ME503PIB	Sensor Bracket Assy for ME503-16 & ME252-16	-20° to 160°F	
ME807PIB	Sensor Bracket Assy for ME807 Series	-20° to 160°F	
ME808PIB	Sensor Bracket Assy for ME808 Series	-20° to 160°F	MEP801PC/20 (20' Prox Cable)
ME868PIB	Sensor Bracket Assy for ME868 Series	-20° to 160°F	
MEP801PIH	Sensor Assy w/ MEP801 Valve Holster	-20° to 160°F	
MEP802PIH	Valve Holster w/ Prox Sensor & Weather Hood	-20° to 160°F	MEP801PC/30 (30' Prox Cable)
MEP804PIH	Quick-Jaw Valve Holster w/ Prox Sensor	-20° to 160°F	
MEP801PIK	Interlock Retrofit Kit for MEP801 Valve Holster	-20° to 160°F	
MEP801PIKL	Low Temp Interlock Retrofit Kit for MEP801	-50° to 160°F	
ME890PIB	Universal Sensor Bracket Assy for Enclosures	-20° to 160°F	



ME200PIBK



ME890PIB

SMART INTERLOCK WIRING HARNESS KITS

RMI Part No.	# of Relays	Cable Length
MEP801PCK/20	1	20'
MEP801PCK/30	1	30'
MEP802PCK/20	2	20'
MEP802PCK/30	2	30'
MEP803PCK/30	3	30'



MEP801PIK

*Additional cables required for 802 and 803 series kits

Propane Technologies Remote Shutoff System

- Easy to use & install
- Transmitter operates up to 300ft from Bobtail
- 2nd channel allows for operation of throttle, hose reel control, or query feature



3300-FGL

BREAKGUARD PASSIVE SHUTOFF SYSTEM

- Easy to use & install
- Meets DOT requirements
- Automatically shuts off the flow of gas without human intervention
- Off truck remote can close internal valve during unloading process
- Works with any hose, even where a facility hose is utilized

BOBTAILS

RMI Part No.	Description
3300-FGL	Remote Shutoff for Rego Flowmatic
3300-FTGL	Shutoff for Flomatic w/ 2 Transmitters
3300-FGLB	Remote Shutoff for Pneumatic Internal Transmitters

REPLACEMENT PARTS & ACCESSORIES

RMI Part No.	Description
VAP327G	Replacement Transmitter
K02-004	Solenoid Valve w/ Bracket
VAP338BR	2nd Channel Relay Kit

BREAKGUARD PASSIVE SHUTOFF SYSTEM

RMI Part No.	Description
3300-PA	Breakguard Passive Shutoff System
3300-PA-VELCRO	Replacement Velcro

BASE Engineering Shut-Off Systems



BASE ENGINEERING BOBTAIL REMOTE SHUTOFF SYSTEMS

- US DOT and Transport Canada Compliant
- Compact polycarbonate receiver units are easily installed using pre-wired electrical harness
- Max operating range of 1000ft
- Runs for 300 hours of continuous operation and warns you when batteries are low
- Uses state of the art encryption technology to ensure an interference free, fail-safe signal
- Lightning fast response time - everything stops so you stay safe
- Receivers are energized only during operation and have built-in fail-safe feature, activating E-Stop with any loss of receiver power



MULTI-FUNCTION RECIEVER

SINGLE FUNCTION RECIEVER

RMI Part No.	Description
ASKWD100F	1 Function System for Rego Flowmatic
ASKWD100A	1 Function System for Pneumatic Internal Valve
ASKWD200F	2 Function System for Rego Flowmatic
ASKWD200A	2 Function System for Pneumatic Internal Valve
Replacement Transmitters	
ASKW100TX	1 Function Transmitter
ASKW200TX	2 Function Transmitter
Accessories	
IT-POUCH	Protective Window Pouch

DRIVER AUTHORIZATION SYSTEMS

Driver authorization systems are designed for commercial vehicles and prevent unauthorized engine start or movement.

System Includes:

- Keypad Unit with hidden enclosure screws
- Sealed parking brake low pressure switch with DOT quick-connect T fitting
- Sealed Engine kill relay
- Complete wiring harness

RMI Part No.	Description
DAS1000-AB	Security System for vehicle with air switch
DAS1000-AT	Security System for vehicle with automatic transmission
DAS1000-IG	Security System for any vehicle



DAS1000

TRANSPORT LEAK DETECTION SYSTEM

Leak detection systems to be used on transports to comply with DOT requirements for passive shut off. The system continually monitors the off-loading procedures for a rapid change in discharge pressure.

RMI Part No.	Description
LDS60	Transport Leak Detection System
LDS100	System w/ Engine Shutdown
LDS200-AQRF	System w/ Query Function



LDS60



LDS200AQRF

BULK PLANT WIRELESS SHUTDOWN SYSTEM

Bulk plant wireless emergency shutdown allows for the addition of additional shutdown locations without the need to run additional pneumatic tubing. System can be ordered with solenoid factory installed in receiver.

RMI Part No.	Description
ASKFAX200-AC	Battery Operated wireless emergency bulk plant shutdown



ASKFAX200-AC



HANDHELD E-STOP



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Bulk Tank Gauges & Thermometers



MEC ACCU-MAX FLOAT GAUGES

Designed to measure liquid levels in horizontal DOT and stationary ASME tanks. All gauges feature an easy-to-read glow in the dark dial. DOT type features an integral spring-loaded float arm for maximum life in mobile applications.

NOTE: Additional custom sizes available - contact RMI customer service for quotes.

RMI Part No.	Type	Dial Size	Tank Diameter
ME930-72	DOT	4"	72"
ME930-79	DOT	4"	79"
ME930-82	DOT	4"	82"
ME930-84	DOT	4"	84"
ME930-86	DOT	4"	86"
ME940-105	ASME	8"	105"
ME940-108	ASME	8"	108"
ME940-114	ASME	8"	114"
ME940-130	ASME	8"	130"

REPLACEMENT PARTS FOR FLOAT GAUGES

RMI Part No.	Description
ME930-905	4" Glow Dial
ME930C-905	4" Non-Glow Dial
ME940-905	8" Glow Dial
ME940C-905	8" Non-Glow Dial
ME930-240	4" Dial Glass
ME930-211	4" Dial Seal
ME930-222	4" Dial Mounting Bracket
ME940-210	8" Dial Glass
ME940-211	8" Dial Seal
ME940-206	8" Dial Mounting Bracket
ME930-212	Spiral Gasket
ME930-244	Dial Screw
ME930-243	Dial Nut
ME930-223	Mounting Stud
ME930-224	Mounting Nut



GLOW DIAL



ME930 SERIES

MOUNTING FLANGES

RMI Part No.	Description
ME931	2-1/2" MNPT Mounting Flange
ME932	Socket-Weld Mounting Flange
MEP930WG	Mounting Flange Installation Tool

MEC ACCU-MAX+ DIGITAL DIAL SYSTEM

Features:

- Tilt compensation for maximum accuracy on all grades
- Estimated gallon tier (liter) display
- Bright easy to read positive LCD display
- 10 selectable LCD backlight color options
- Sealed easy access connection
- Fully programmable with Accu-Max+ configuration kit
- Reverse compatibility to all MEC Accu-Max Series DOT float gauges
- Ability to push display information to PC3 handheld remote



ACCU-MAX+ DIAL

DIGITAL DIAL OPTIONS

RMI Part No.	Type	Style	Dial Size	Tank Diameter
ME930DD-905	DOT	Accu-Max+ Digital Dial Only	4"	N/A
ME930DD-72	DOT	Float Gauge w/Accu-Max+ Digital Dial	4"	72"
ME930DD-79	DOT		4"	79"
ME930DD-84	DOT		4"	84"

ACCESSORIES

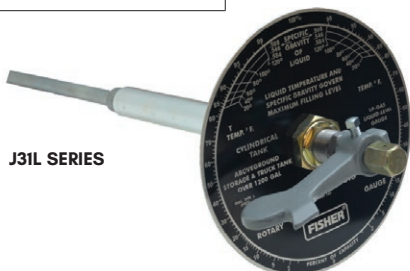
RMI Part No.	Description
ME930DD-PCM	Potted Universal Power Conditioning Module
ME930DD-DH20	Dial Harness w/ 15' Air Pressure Switch Cable, 20'
ME930DD-DH30	Dial Harness w/ 15' Air Pressure Switch Cable, 30'
ME930DD-DH40	Dial Harness w/ 15' Air Pressure Switch Cable, 40'
ME930DD-DH50	Dial Harness w/ 15' Air Pressure Switch Cable, 50'
ME930DD-PH15	15' Vehicle Power Harness w/ 3' Data Connector Cable
ME930DD-PSA1004	Air Pressure Switch Assembly w/ 3/8" Inline Connector Tee
ME930DD-CK	Accu-Max+ Configuration Kit

Bulk Tank Gauges & Thermometers

FISHER ROTARY GAUGES

The J31 Series can be used on stationary or mobile tanks over 1200 gallons to visually indicate the amount of LP-Gas or anhydrous ammonia (NH₃) in the container. The gauge is operated by opening the small bleed orifice when the tube is in the vapor space of the tank. Moving the pointer on the dial causes the end of the tube to move until it contacts liquid in the container, at which time discharge from the bleed orifice turns from vapor to liquid giving the volume percentage of liquid in the tank. 1" NPT container connection. Shipped in straight length, can be bent to fit a range of tank sizes.

RMI Part No.	Description / Length (Tank I.D.)
J31L-1	Fisher Rotary Gauge, 68"
J31L-2	Fisher Rotary Gauge, 69"-92"
J31L-3	Fisher Rotary Gauge, 93"-108"
J31L-3L	Fisher Rotary Gauge, 109"-140"
P323	Dial Face
T10971000A2	Cap & Seat Assembly
T1095106562	O-Ring
T1095606162	Packing



J31L SERIES

ROCHESTER ELIMINATOR

The Eliminator[®] direct-reading float gauge is a direct replacement for 1" NPT rotary-type gauges in LP and NH₃ storage tanks. These gauges are designed for larger tanks up to 84" in diameter. The Eliminator[®] is not intended for use in filling tanks - its use is restricted to tanks with fixed liquid level gauges, used to determine when the maximum fill level has been reached. The eliminator can be used in mobile applications up to 72".

RMI Part No.	Description
6293-R8400*	4" Dial Face, End Mount for 1" FNPT

* Must specify tank diameter when ordering



6293 SERIES

COMBINATION VALVES

Designed for installation on bulk storage containers, the valve combines a pressure gauge and a liquid level gauge.

RMI Part No.	Container Connection	Material	Vent Valve	Gauge
ME830	3/4"	Ductile	Yes	No
MEJ415	3/4"	Steel	No	No
MEJ415G	3/4"	Steel	Yes	Yes
J415	3/4"	Steel	No	No
J415-1	3/4"	Steel	Yes	Yes



J415



MEJ415G

THERMOMETERS

RMI Part No.	Dial Diameter	Probe Length	Connection
MEJ700	2"	4"	1/2" NPT
MEJ701	2"	6"	
MEJ702	3"	4"	
MEJ703	3"	6"	
J700	2"	4"	
J701	2"	6"	
T-Well	Thermometer Well		



J700

TANK CAR THERMOMETER

-30° to +120° Range, 12" Long. Chain not included. Organic liquid filled.

RMI Part No.	Description
T-10B	Thermometer Only
T-10C	Thermometer with Steel Armor



T-10C



Flex Connectors

STAINLESS STEEL FLEXIBLE CONNECTORS

Double braided, stainless steel for liquid propane. Prevents piping damage from vibration, thermal expansion, and misalignment not exceeding 3/4" offset. 350 PSI working pressure.

THREADED CONNECTORS

RMI Part No.	Size	Length
FLEX 1/2-12	1/2"	12"
FLEX 3/4-12	3/4"	12"
FLEX 1-12	1"	12"
FLEX 1-1/4-14	1-1/4"	14"
FLEX 1-1/2-18	1-1/2"	18"
FLEX 2-18	2"	18"
FLEX 3-24	2"	24"
FLEX 3-18	3"	18"
FLEX 3-24	3"	24"



THREADED

CONNECTORS W/ UNIONS

RMI Part No.	Size	Length
FLEX 1-12-U	1"	12"
FLEX 1-1/4-14-U	1-1/4"	14"
FLEX 2-18-U	2"	18"
FLEX 3-18-U	3"	18"



UNION END

CONNECTORS W/ 300# FLANGES

RMI Part No.	Size	Length
FLEX 1-1/4F-12	1-1/4"	12"
FLEX 1-1/4F-18	1-1/4"	18"
FLEX 2F-12	2"	12"
FLEX 2F-18	2"	18"
FLEX 3F-18	3"	18"
FLEX 3F-24	3"	24"
FLEX 4F-12	4"	12"
FLEX 4F-18	4"	18"



FLANGED

FLEXIBLE HOSE CONNECTORS

RMI will fabricate to order flex connectors with crimped male pipe thread ends and pressure test to D.O.T. specifications. Just order the hose kit you need and specify O.A.L.

RMI Part No.		Hose & Thread	Minimum Length
SS Braided Hose	STD. LPG Hose		
-	3/4 HOSEKIT-TESTED	3/4"	7-1/4"
-	1 HOSEKIT-TESTED	1"	8-1/4"
1-1/4 HOSEKIT-SB-TESTED	1-1/4 HOSEKIT-TESTED	1-1/4"	9-1/2"
1-1/2 HOSEKIT-SB-TESTED	1-1/2 HOSEKIT-TESTED	1-1/2"	10"
2 HOSEKIT-SB-TESTED	2 HOSEKIT-TESTED	2"	12"



Globe, Angle, & Ball Valves

FISHER™

FISHER GLOBE & ANGLE VALVES

Features:

- Heavy-Duty Ductile Iron for either LPG or Anhydrous Ammonia
- PTFE Chevron Packings for sealing against leakage
- 1/4" plugged port opening (for use of relief valves, bleeder valve or gauges)
- Valves range in size from 1/2" 2" FNPT
- Ball bearing valve disc construction on 1-1/4" and larger sizes
- Strong connection to the stem to protect the disc under backflow conditions



N310 SERIES



N410 SERIES

RMI Part No.		Size (FNPT)
Globe Valve	Angle Valve	
N301-04	N401-04	1/2"
N301-06	N401-06	3/4"
N301-08	N401-08	1"
N310-10	N410-10	1-1/4"
N310-12	N410-12	1-1/2"
N310-16	N410-16	2"
N350 & N450 Economy Series		
N350-04	N450-04	1/2"
N350-06	N450-06	3/4"

MEC GLOBE & ANGLE VALVES

MEC MARSHALLEXCELSIOR
innovation made simple

Features:

- All stainless steel internal components with rotating seat disc design & V-Cup PTFE packing stem seals
- Double stem seal design ensures leak free operation
- Double lead stem thread ensures quick and efficient operation
- Durable ductile iron valve body with automotive grade powder coated finish
- 1-1/4" & larger globe valves have 35° seat angle for maximum product flow
- 1-1/4" & larger globe valves designed ergonomically correct for bobtail, transport, and bulk plant applications
- 1-3/4", 2-1/4" & 3-1/4" acme threads available on globe valves
- Rated for 400 WOG
- Operating temperature -40° to + Fahrenheit



ME815-2F



ME825-16

RMI Part No.		Size	Side Port (QTY 2)
Angle Valve	Globe Valve		
ME815-4	ME825-4	1/2" FNPT	1/4"
ME815-6	ME825-16	3/4" FNPT	1/4"
ME815-8	ME825-8	1" FNPT	1/4"
ME815-10	ME825-10	1-1/4" FNPT	1/4"
ME815-12	ME825-12	1-1/2" FNPT	1/4"
ME815-16	ME825-16	2" FNPT	1/4"
-	ME824-16	2" FNPT	1/4"
ME815-2F	ME825-2F	2"-300LB FLANGED	1/4"
ME815-24	ME825-24	3" FNPT	1/4"
ME815-3F	ME825-3F	3"-300LB FLANGED	1/4"

NOTE: Additional seal trims available. To order, add "V" after the prefix part number for FKM or "T" for PTFE. i.e. ME815V-10 or ME815T-10.

ACCESSORIES

RMI Part No.	Description
ME829	E-Z Turn Knob
ME815-16LHK	Push-To-Turn Locking Handwheel Kit

Globe, Angle, & Ball Valves



MEC EXCELA-FLANGE HIGH FLOW GLOBE & ANGLE VALVES

The ME813, ME819, & ME823 series valves feature Excela-Flange 4-bolt inlet/outlet design that can be easily adapted to both NPT thread or socket weld type A companion flanges (ME840 & ME841 Series). This system allows installers the ability to eliminate unnecessary connections as well as leak points by integrating a 4-bolt flange union at the valve inlet/outlet connections.

RMI Part No.		Flange	Inlet	Outlet
Angle	Globe			
ME813-10	ME823-10	Double	4-Bolt Type B Flange	4-Bolt Type B Flange
ME813-16	ME823-16	Double		
-	ME819-10	Single		1-1/4" FNPT
-	ME819-16	Single		2" FNPT

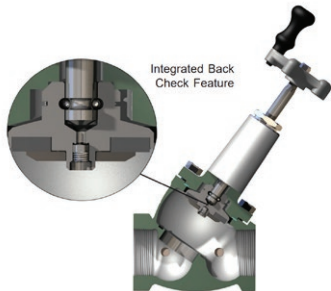
NOTE: Additional configurations available, please contact RMI customer service for more info

MEC PILOT & INTEGRATED BACK CHECK GLOBE & ANGLE VALVES

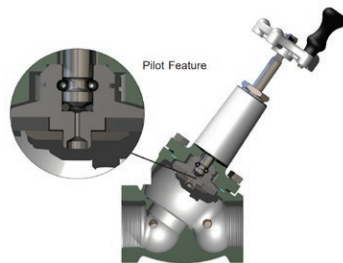
Pilot Feature: (P) This valve model incorporates a pilot orifice feature to facilitate pressure equalization in sections of system piping that have bidirectional flow or high differential pressures. This prevents backpressure build-up which greatly reduces the opening torque required and prevents premature wear of the valve seat.

Integrated Back Check Feature: (IBC) These valve models incorporate an integrated backcheck feature to allow trapped downstream pressure to automatically bypass to the upstream side of the valve. These valves are designed for systems with flow in one direction, creating a loop system that prevents the product from relieving to the atmosphere, making for a lower emission environmentally friendly option.

RMI Part No.				Size (FNPT)	Port (FNPT)
Angle		Globe			
IBC	Pilot	IBC	Pilot		
ME815IBC-16	ME815P-16	ME825IBC-16	ME825P-16	2"	2x 1/4"
-	-	ME824IBC-16	ME824P-16	2"	2x 1/2"



INTEGRATED BACK CHECK



PILOT FEATURE



ME813 SERIES



ME819 SERIES

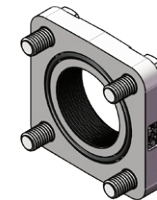
MEC FLANGE KITS

Features:

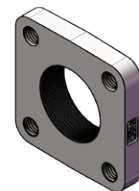
- Available in 1-1/4" - 2" FNPT or Socket Weld configurations
- 400WOG Rating
- Cuts installation and maintenance labor time
- Type "A" flanges include bolts and o-ring

RMI Part No.	Size	Flange Type
ME842-10-107	1-1/4" FNPT	B
ME843-10-107	1-1/4" SW	B
ME842-12-107	1-1/2" FNPT	B
ME843-12-107	1-1/2" SW	B
ME842-16-107	2" FNPT	B
ME843-16-107	2" SW	B
ME840-10F	1-1/4" FNPT	A
ME841-10F	1-1/4" SW	A
ME840-12F	1-1/2" FNPT	A
ME841-12F	1-1/2" SW	A
ME840-16F	2" FNPT	A
ME841-16F	2" SW	A

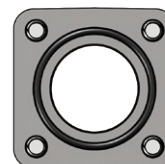
NOTE: Flanges are also available in Stainless Steel - add SS after part # prefix (i.e. ME841SS-16F)



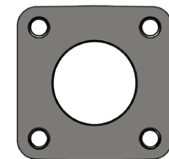
TYPE "A"



TYPE "B"



O-RING SEAL



FLANGE - TYPE B

FLANGE - TYPE A

FLANGE - TYPE B

Globe, Angle, & Ball Valves



JOMAR FULL-PORT BRASS BALL VALVES

Features:

- Forged brass body with chrome plated ball
- AGA & UL Listed
- 500 PSI WOG - 1" - 2" sizes
- 600 PSI WOG - 1/4" - 3/4" sizes

RMI Part No.	Thread Size	Port Diameter	Valve Length
100-701	1/4"	3/8"	1-13/16"
100-702	3/8"	3/8"	1-7/8"
100-703	1/2"	1/2"	2-7/16"
100-704	3/4"	3/4"	2-11/16"
100-705	1"	1"	3-5/16"
100-706	1-1/4"	1-1/4"	3-13/16"
100-707	1-1/2"	1-1/2"	4-3/16"
100-708	2"	2"	5"
100-710	3"	3"	7.08"



100-704

JOMAR BRASS SINGLE UNION END BALL VALVES

- Forged brass body
- 3/8" - 1" have 1/8" tap
- 1-1/4" - 2" have 1/4" tap
- FM and CSA approved

RMI Part No.	Thread Size	Port Diameter	Valve Length
160-102	3/8"	0.39	2.93
160-103	1/2"	0.59	3.17
160-104	3/4"	0.79	3.52
160-105	1"	1.00	4.19
160-106	1-1/4"	1.26	5.01
160-107	1-1/2"	1.57	5.57
160-108	2"	2.00	6.31



160-104

JOMAR CARBON STEEL UNION END BALL VALVES

Jomar valves feature full port flow, Teflon seats, Buna-N seals, and union ends for easy installation and low service and maintenance costs. Carbon steel body with forged carbon steel union ends. UL listed, LP-Gas 250 PSI, 400 PSI W.O.G.

RMI Part No.	Thread Size	Length
100-991	1/4"	3.543
100-992	3/8"	3.543
100-993	1/2"	3.543
100-994	3/4"	3.701
100-995	1"	4.252
100-996	1-1/4"	4.567
100-997	1-1/2"	5.197
100-998	2"	5.669



100-995

JOMAR CARBON STEEL FLANGED BALL VALVES

Features:

- Full Port
- Carbon Steel Body
- PTFE Seats API607(Fire Tite)
- Wrench operator
- 316 Stainless Ball and Stem
- Fire safe stem and body graphite seals
- Air tested seat leakage: 85 PSI
- Locking device comes standard
- Available up to 8"
- 150# Flanged Valves are available

RMI Part No.	Thread Size	Length
600-228	2"	8.50"
600-230	3"	11.10"
600-231	4"	12.00"

*Larger sizes available as special order - call RMI customer service for more info.



600-228

Globe, Angle, & Ball Valves



JOMAR STAINLESS STEEL FULL PORT BALL VALVES

Features:

- Stainless Steel full port ball valve
- 316 SS ball and stem
- 1000 psig pressure rating
- UL listed

RMI Part No.	Flange Size	Port Diameter	Length
100-961	1/4"	0.43	2.21
100-962	3/8"	0.43	2.21
100-963	1/2"	0.56	2.60
100-964	3/4"	0.61	2.99
100-965	1"	1.00	3.54
100-966	1-1/4"	1.25	3.94
100-967	1-1/2"	1.50	4.41
100-968	2"	1.97	5.00



100-964

JOMAR STAINLESS STEEL 3-WAY BALL VALVES

- Self-Adjusting Stem Packing
- ISO 5211 Mounting Pad
- Locking Device May Be Locked in Open or Closed Position
- Four Seat Standard
- Temperature Range: -20°F to 450°F
- Blow-out Proof Stem
- 1000 WOG

RMI Part No.	Thread Size	Length
A850L-14	1/4"	2.83
A850L-38	3/8"	2.83
A850L-12	1/2"	3.33
A850L-34	3/4"	3.94
A850L-1	1"	4.45
A850L-114	1-1/4"	4.94
A850L-112	1-1/2"	5.91
A850L-2	2"	6.85



A850L-34

JOMAR 3-PIECE FULL PORT BALL VALVES

316 SS Body, ball and stem, pressure rated to 1000 psig, UL listed for flammable liquids, propane, natural gas and anhydrous ammonia with locking handle.

NOTE: Carbon steel w/ threaded or socket weld ends are available in 1/2" - 2" sizes - call RMI customer service for more info.

RMI Part No.	Thread Size	Length
501-301	1/4"	2.36
501-302	3/8"	2.36
501-303	1/2"	2.76
501-304	3/4"	3.03
501-305	1"	3.62
501-306	1-1/4"	4.13
501-307	1-1/2"	4.72
501-308	2"	5.43
501-310	3"	7.52
501-311	4"	8.5



500-301



APOLLO 3-WAY STAINLESS STEEL VALVES

The Apollo 76-600 Series is a standard port, threaded 3-way stainless steel ball valve.

- Reinforced Seats
- Meets NACE MR0175 (2000) & MR0103 (2012)
- Blowout-Proof Stem Design
- Adjustable Packing Gland
- Investment Cast Body
- NSF/ANSI/CAN 61, Annex G

RMI Part No.	Size
76-60101A	1/4"
76-60201A	3/8"
76-60301A	1/2"
76-60401A	3/4"
76-60501A	1"
76-60701A	1-1/2"
76-60801A	2"



76-60101A

Globe, Angle, & Ball Valves



APOLLO FULL PORT BRASS BALL VALVES

- 600 PSI WOG
- UL Listed
- Teflon packing and bearing
- Blow-out proof stem
- Chromium plated ball
- Cast bronze construction
- Large port opening



80-103

RMI Part No.	Thread Size	Port Diameter	Valve Length
80-101	1/4"	3/8"	2-1/16"
80-102	3/8"	3/8"	2-1/16"
80-103	1/2"	1/2"	2-1/4"
80-104	3/4"	11/16"	3"
80-105	1"	7/8"	3-3/8"
80-106	1-1/4"	1"	4"
80-107	1-1/2"	1-1/4"	4-3/8"
80-108	2"	1-1/2"	4-11/16"
80-100	3"	2-1/2"	6-3/4"

APOLLO FULL PORT BALL VALVES WITH SPRING RETURN HANDLE

- Excellent for bleed lines and blow offs
- Stainless steel lever components
- Brass valves are rated for 600psig
- Stainless valves are rated for 200psig up to 1" and 1500psig 1-1/4" - 2"



71-503-01



76-503-01

RMI Part No.		Size	Valve Length
Brass	Stainless		
71-501-01	76-501-01	1/4"	2.25
71-502-01	76-502-01	3/8"	2.25
71-503-01	76-503-01	1/2"	2.25
71-504-01	76-504-01	3/4"	3.00
71-505-01	76-505-01	1"	3.37
71-506-01	76-506-01	1-1/4"	4.00
71-507-01	76-507-01	1-1/2"	4.37
71-508-01	76-508-01	2"	5.50

APOLLO 300LB FLANGED FULL PORT BALL VALVES

Features:

- Full-port body
- Antistatic grounded stem
- Slot vent for thermal expansion
- Two-position locking device

Note: Other sizes, flange ratings, and materials are available, contact RMI customer service for more information.

RMI Part No.	Flange Size	Port Diameter	Length
88A-908-01	2"	2.00	8.50
88A-900-01	3"	3.00	11.12
88A-90A-01	4"	4.00	12.00



88A SERIES

commercial products

don't just buy products, buy solutions

- 100% factory tested
- made in America
- world's most trusted ball valve

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customer service 704.841.6000
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Internal Valves

FISHER™

FISHER THREADED INTERNAL VALVES

Fisher offers the widest variety of threaded internal valves in the industry. While their most frequent use is in the liquid and vapor openings of bobtail and transport trucks, the valves can also be used in stationary storage tanks, complying with NFPA 58 requirements. Designed as primary shutoff valves, the units are designed with several features that help control product discharge.

All UL-listed internal valves are suitable for LPG or Anhydrous Ammonia (NH₃) service. Special construction is available for other compressed gases. All threaded internal valves have a compact, one-piece body design. They can be actuated manually, by cable control, or with an air cylinder.

Specifications:

Pressure Rating: 400 psig WOG

Temperature: Up to 150°F

Body: Ductile Iron (C471/C477)
Cast Steel (C402/C407)

Seat Discs: Synthetic Rubber

Shaft & Stem: Stainless Steel



C407

C407 1-1/4" NPT valve is excellent for the main valve on small capacity pumping systems, in-line installations, and vapor lines on bobtail trucks that gives compliance with MC331 specifications.

C477

C477 2" and 3" valves with straight through flow (one outlet) is the most economical unit in the series. It can be used on bobtail, transport, stationary tank and in-line installations.

C471

C471 internal valve with two outlets, bottom and side. The side outlet permits installing horizontal piping immediately adjacent to the tank. The C471 is used primarily on bobtails and transports.

C486

C486 Series (Flange-by-NPT) - Available in 3 in. end connections. This unit was designed with an integrally cast inlet flange to quickly bolt to existing installations that historically required a valve to be threaded into a flange. Outlet is standard 3 in. FNPT.

Connection Inlet X Outlet	RMI Part No.		Closing Flow (GPM)		Vapor Capacity	
	Straight Body	Tee Body	Half Coupling	Full Coupling	25 PSIG	100 PSIG
1-1/4" MNPT X 1-1/4" FNPT	C407-10-04	-	40	25	7,400	12,700
	C407-10-05	-	50	35	9,600	16,400
	C407-10-08	-	80	65	15,800	27,600
2" MNPT X 2" FNPT	C477-16-10	C471-16-10	105	60	26,100	45,000
	C477-16-15	C471-16-15	150	80	39,400	69,000
	C477-16-25	C471-16-25	250	130	-	-
3" MNPT X 3" FNPT	C477-24-16	C471-24-16	160	120	41,100	71,000
	C477-24-26	C471-24-26	265	230	71,800	127,000
	C477-24-37	C471-24-37	375	320	99,000	178,000
	C477-24-46	C471-24-46	460	380	-	-
3" CL300 RF X 3" FNPT	C486-24-16	-	160	120	41,100	71,000
	C486-24-26	-	265	230	71,800	127,000
	C486-24-37	-	375	320	99,000	178,000
	C486-24-46	-	460	380	-	-



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Internal Valves

FISHER™

FISHER FLANGED INTERNAL VALVES

Flanged valves provide a sturdy and compact means of directly mounting a pump or piping connection. Special stud bolts, weakened with a groove on the outside diameter, are furnished with the valves to permit the pump or piping to shear off in the event of an accident, leaving the valve intact. A built-in excess flow valve reduces the chance of uncontrolled product discharge when flow exceeds the rated flow capacity. All flanged valves have an internal screen for pump protection that can be easily removed if the valve is used primarily for filling the tank. They also contain PTFE packing to resist stub shaft leakage. These valves can be activated manually, by cable control, or by air cylinder.

Flanged Valve Specifications

Pressure Rating: 400 psig WOG

Temperature: Up to 150°F

Body: Cast Steel (C483/C484-24)
Stainless Steel (C404-32)

Packing: PTFE

Seat Discs: Synthetic Rubber

Stub Shaft and Stem: Stainless Steel

Gaskets: Non-asbestos spiral wound graphite



C483-24



C484-24



C404-32

C483-24

A double-flange unit designed for special bobtail truck applications where the pump must be lowered to clear the truck frame or other obstacles. A special shear section in the body permits the lower section of the valve to shear off in the event of an accident, leaving the critical shutoff parts within the tank.

C484-24

A single-flange unit widely used on bobtail and transport trucks for a compact means of direct pump connection to the valve outlet. Another application for the Type C484-24 is on in-line installations.

C404-32

Used widely on transport trucks and large storage tanks, the 4 in. / DN 100 flanged unit comes standard with all stainless steel construction for maximum protection against rust and corrosion. For easy field maintenance, the seat ring is field replaceable.

NOTE: The Type C404-32 is the only internal valve that cannot be opened and closed by the Type P650 cable control.

RMI Part No.					Tank Connection	Outlet Connection	UL. Rated Closing Flow* GPM
Single Flange Manual Operated	Double Flange Manual Operated	Cable Operation	Single Flange Air Operation	Manual Operation			
C484-24-16	C483-24-16	-	-	-	3" 300lb. ANSI RF Mod. Flange (4-13/16" dia. Bore)	3" 300 lb. ANSI RF Flange	160
C484-24-25	C483-24-26	-	-	-			250/265
C484-24-40	C483-24-40	-	-	-			400
-	-	C404-32-400	C404A-32-400	C404M-32-400	4" 300 lb. ANSI RF Mod. Flange (5-7/8" dia. Bore)	4" 300 lb. ANSI RF Flange	400*
-	-	C404-32-600	C404A-32-600	C404M-32-600			600*
-	-	C404-32-800	C404A-32-800	C404M-32-800			800*

*Closing flow vertical-down

STUDS, NUTS, AND GASKETS

Valve Model	Flange Size	RMI Part No.			
		Tank Gasket Valve/Tank	Bottom Gasket Pump/Valve	Studs	Nuts
C404/C484-24	3"	T13603T0012	1P77699152	1P790832983 (8)	1A368124112 (16)
C403/C483-24	3"	T13603T0012	300/0300	1N946228982 (16)	1A368124112 (16)
C404-32	4"	1P110799152	1P877699152	T1118131032 (8)	1A368124112 (16)



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Internal Valves



MEC THREADED INTERNAL VALVES

ME990

The ME990 Series internal valves are intended for use on bobtails, transport trucks, and storage tanks in directional or bi-directional flow applications. Can be equipped with manual latch, pneumatic, or rotary actuator devices.

ME991

The ME991 Series internal valves feature the Excelsa-Flange 4-bolt outlet flange design that can be easily adapted to both NTP thread or socket weld Type B companion flanges ranging from 1-1/4" to 2" in diameter. This system reduces potential leak points and makes installation a breeze.

ME992

The ME992 Series Tee Body internal valves feature an additional side outlet, allowing for horizontal piping configurations without the need for extra pipe fittings.

RMI Part No.				Valve Type	Tank Connection	Outlet Connection
Valve Only	Valve w/ Pneumatic Actuator	Valve w/ Rotary Actuator	Valve w/ Manual Latch			
ME990-10-"X"	ME990A-10-"X"	ME990AR-10-"X"	ME990M-10-"X"	Standard	1-1/4" MNPT	1-1/4" FNPT
ME991-10-"X"	ME991A-10-"X"	ME991AR-10-"X"	ME991M-10-"X"	Excelsa-Flange	1-1/4" MNPT	Type A Flange
ME992-10-"X"	ME992A-10-"X"	ME992AR-10-"X"	ME992M-10-"X"	Tee Body	1-1/4" MNPT	1-1/4" FNPT
ME990-10/12-"X"	ME990A-10/12-"X"	ME990AR-10/12-"X"	ME990M-10/12-"X"	Standard	1-1/4" MNPT	1-1/2" FNPT
ME992-12-"X"	ME992A-12-"X"	ME992AR-12-"X"	ME992M-12-"X"	Tee Body	1-1/2" MNPT	1-1/2" FNPT
ME990-16-"X"*	ME990A-16-"X"	ME990AR-16-"X"	ME990M-16-"X"	Standard	2" MNPT	2" FNPT
ME992-16-"X"*	ME992A-16-"X"	ME992AR-16-"X"	ME992M-16-"X"	Tee Body	2" MNPT	2" FNPT
ME990-24-"X"*	ME990A-24-"X"	ME990AR-24-"X"	ME990M-24-"X"	Standard	3" MNPT	3" FNPT
ME992-16-"X"*	ME992A-16-"X"	ME992AR-16-"X"	ME992M-16-"X"	Tee Body	2" MNPT	3" FNPT

* Available in Stainless Steel - Add "SS" to prefix (i.e. ME990SS)

AVAILABLE CLOSING FLOW RATES (GPM)

"X"	1-1/4"	1-1/2"	2"	3"
35	X			
50		X		
55	X			
65		X		
85	X	X		
110		X	X	
120		X		
160			X	
175				X
250				X
260			X	
300				X
375				X
400				X
475				X
500				X



ME990-24



ME991-10



ME992-12



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Internal Valves



MEC FLANGED INTERNAL VALVES

Marshall Excelsior manufactures a variety of sizes and configurations of flanged internal valves for use on bobtail delivery trucks, transport trucks, and large storage tanks. All valve models are equipped with a break-away feature in the cast body which permits the pump or piping to shear off in the event of side impact, leaving the valve poppet intact and protecting the tank from catastrophic product loss.



ME990-3DFO SERIES OFFSET INTERNAL VALVES

These valves prevent pump installation interference with truck frame rails, cross members, PTO covers, drive shafts, and other common obstacles when remounting bobtail vessels onto new chassis. The offset valve is equipped standard with three separate packing gland locations to prevent interference while mounting the valve actuator no matter how you choose to mount the valve.

RMI Part No.				Valve Type	Tank Connection	Outlet Connection
Valve Only	Valve w/ Pneumatic Actuator	Valve w/ Rotary Actuator	Valve w/ Manual Latch			
ME990S-2F-16-"X"*	ME990SA-2F-16-"X"	ME990SAR-2F-16-"X"	-	Single Flange	2" 300# Modified Flange	2" FNPT
ME990S-2DFM-"X"*	ME990SA-2DFM-"X"	ME990SAR-2DFM-"X"	-	Double Flange	2" 300# Modified Flange	2" 300# Modified Flange
ME991-16-"X"*	ME991A-16-"X"	ME991AR-16-"X"	ME991M-16-"X"	Single Flange	2" MNPT	2" 300# Flange
ME992S-2F-16-"X"*	ME992SA-2F-16-"X"	ME992SAR-2F-16-"X"	-	Tee Body	2" 300# Modified Flange	2" FNPT (2)
ME993S-16-"X"	ME993SA-16-"X"	ME993SAR-16-"X"	-	Tee Body	2" 300# Modified Flange	2" 300# Modified Flange (2)
ME990-3F-"X"	ME990A-3F-"X"	-	-	Single Flange	-	3" 300# Flange
ME990S-3F-24-"X"*	ME990SA-3F-24-"X"	ME990SAR-3F-24-"X"	-	Single Flange	3" 300# Modified Flange	3" FNPT
ME990S-3DF-"X"*	ME990SA-3DF-"X"	ME990SAR-3DF-"X"	-	Double Flange	3" 300# Flange	3" 300# Flange
ME990S-3DFM-"X"*	ME990SA-3DFM-"X"	ME990SAR-3DFM-"X"	-	Double Flange	3" 300# Modified Flange	3" 300# Modified Flange
ME990S-3DFO-"X"*	ME990SA-3DFO-"X"	ME990SAR-3DFO-"X"	-	DF Offset	3" 300# Flange	3" 300# Flange
ME991-24-"X"*	ME991A-24-"X"	ME991AR-24-"X"	ME991M-24-"X"	Single Flange	3" MNPT	3" 300# Flange
ME992S-3F-24-"X"*	ME992SA-3F-24-"X"	ME992SAR-3F-24-"X"	-	Tee Body	3" 300# Modified Flange	3" FNPT (2)
ME993S-24-"X"	ME993SA-24-"X"	ME993SAR-24-"X"	-	Tee Body	3" 300# Modified Flange	3" 300# Modified Flange (2)
ME990-4F-"X"	ME990A-4F-"X"	ME990AR-4F-"X"	ME990M-4F-"X"	Single Flange	-	4" 300# Flange
-	-	ME990SAR-4DFM-"X"*	-	Double Flange	4" 300# Modified Flange	4" 300# Modified Flange

* Available in Stainless Steel - Add "SS" to prefix (i.e. ME990SS)

AVAILABLE CLOSING FLOW RATES (GPM)

"X"	2"	3"	4" SF	4" DF
110	X			
160	X			
175		X		
250		X		
260	X			
300		X		
375		X	X	X
400		X		
475		X		
500		X	X	X
650			X	X
800				X
850			X	
900				X
1000				X
1250			X	
1500			X	

STUDS, NUTS, AND GASKETS

Internal Valve Series	RMI Part No.			
	Top Gasket Valve/Tank	Bottom Gasket Pump/Valve	Studs	Nuts
ME990-2F-16, ME992S-2F-16	ME980SK-16-103	-	ME990-2F-16-103	ME980SK-16-102
ME991-16	-	ME980SK-16-103	ME990-2F-16-103	ME980SK-16-102
ME990-3F-24, ME992S-3F-24	ME904S-3F-027	-	ME904SK-01	ME990-152
ME991-24	-	ME904S-3F-027	ME904SK-01	ME904SK-02
ME990-3F	ME990-3DF-153	ME990-3F-109	ME990-3F-110-01	(8) ME990-152, (8) ME904SK-02
ME990-4F	ME990-4F-153	ME990-4F-172	ME990-4F-151	(8) ME990-152, (8) ME904SK-02
ME990S-2DFM	ME980SK-16-103	ME980SK-16-103	ME980-2F-16-103	ME980SK-16-102
ME990S-3DF, ME990S-3DFO	ME990-3DF-153	ME904S-3F-027	ME990-151	ME904SK-02
ME990S-3DFM	ME904S-3F-027	ME904S-3F-027	ME990-151	ME904SK-02
ME990SAR-4DFM	ME990-4DFM-129	ME990-4DFM-129	ME990-151	ME904SK-02



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Emergency Shutoff Valves

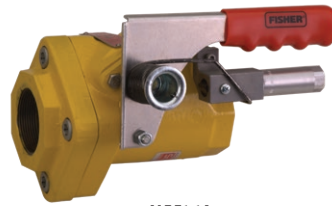
FISHER™

FISHER SNAPPY JOE EMERGENCY SHUTOFF VALVES FOR BULK PLANTS

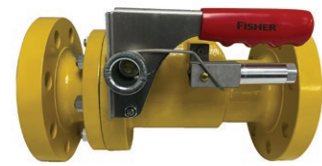
Snappy Joe Type N551 Emergency Shutoff Valves (ESVs) are designed for in-line installations, usually near a bulkhead. The valves provide a means of shutting off gas in the event of a hose rupture or piping break at the transfer area to avoid a large-scale loss of LPG. The valves can be manually opened and closed at the installed location or closed remotely by either cable or air. A remote operating actuator is also available.

BULK PLANT EMERGENCY SHUTOFF VALVES

RMI Part No.	Inlet/Outlet	Flow Rate @ 2PSI Diff.
N551-10	1-1/4" FNPT	110 GPM
N551-16	2" FNPT	190 GPM
N551-24	3" FNPT	580 GPM
N551-24F	3" 300# Flange	850 GPM



N551-16



N551-24F

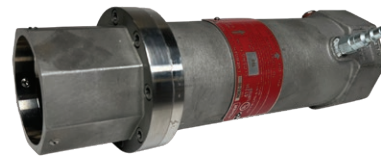
N551 REPLACEMENT PARTS

RMI Part No.	Description
P551	External Closing Spring Kit for Type N550/N551 with Cable Release Latch Block
P551A	External Closing Spring Kit for Type N550/N551 ESV With Type P327A Pneumatic Release Latch
T20677T0012	Handle For N551/N550 Alum

FISHER SNAPPY JOE EMERGENCY SHUTOFF VALVES FOR RAILROAD TANK CARS

Snappy Joe Emergency Shutoff Valves (ESVs) are designed for railcar protection and attach to the shutoff valves on railroad tank cars. Typically three ESVs are used - two on the liquid lines and one on the vapor line. NFPA 58 regulations call for ESV protection on both sides of the transfer hose or piping. Types N562 and N563 are UL® listed for service in Propane and Anhydrous Ammonia. Its Nitrile (NBR) elastomer is UL approved to -40°F / -40°C.

RMI Part No.	Elastomer	UL Listed	Inlet	Outlet	Closing Flow
N562-16	Nitrile	Yes	2" FNPT	2" FNPT	200 GPM
N562-18				2-1/4" M.ACME	
N562-26				3-1/4" M.ACME	
N563-16				2" FNPT	
N563-26	3-1/4" M.ACME	No	2" FNPT	2" FNPT	413 GPM
N862_-16	2-1/4" M.ACME				
N862_-18	3-1/4" M.ACME				
N862_-26	2" FNPT				
N863_-16	E = EPDM K = Kalrez N = Neoprene T = Teflon V = Viton	No	2" FNPT	2" FNPT	200 GPM
N863_-26				3-1/4" M.ACME	
N863_-16	E = EPDM K = Kalrez N = Neoprene T = Teflon V = Viton	No	2" FNPT	2" FNPT	413 GPM
N863_-26				3-1/4" M.ACME	



N562-16

Emergency Shutoff Valves



MEC EMERGENCY SHUTOFF VALVES FOR BULK PLANTS

- MEC Emergency Shutoff Valves for Bulk Plants
Powder-coated ductile iron body with cast hexagonal ends for maximum durability and ease of installation
- Integral swing-away check valve with soft seat to promote maximum product flow and minimize product loss in the event of a line failure
- All stainless steel internal component construction provides maximum corrosion resistance
- Provides clear visual indication if valve is open or closed
- UL listed for use with LP Gas and Anhydrous Ammonia - 400 PSI WOG
- Integral fusible element for automatic closure when exposed to fire
- Durable PTFE packing gland and resilient seals provide long-lasting service life



ME980-10



ME980-16-2F

Pneumatic Latch	RMI Part No.			Inlet/Outlet	OAL
	Cable Latch	w/ Pneumatic Actuator	w/ Rotary Actuator		
ME980-6	ME980C-6	-	-	3/4" FNPT	4-3/4"
ME980-8	ME980C-8	-	-	1" FNPT	4-3/4"
ME980-10	ME980C-10	ME980A-10	ME980AR-10	1-1/4" FNPT	5-3/8"
ME980-12	ME980C-12	ME980A-12	ME980AR-12	1-1/2" FNPT	5-3/8"
ME980-16	ME980C-16	ME980A-16	ME980AR-16	2" FNPT	6-7/8"
ME980-16-2F	ME980C-16-2F	ME980A-16-2F	ME980AR-16-2F	2" 300# Flange	11-7/8"
ME980-24	ME980C-24	ME980A-24	ME980AR-24	3" FNPT	9-5/8"
ME980-24-3F	ME980C-24-3F	ME980A-24-3F	ME980AR-24-3F	3" 300# Flange	14-1/8"
ME980-24-4F	ME980C-24-4F	ME980A-24-4F	ME980AR-24-4F	4" 300# Flange	14-1/4"

REPAIR KITS

Valve Size	RMI Part No.	
	Seal Repair Kit	Complete Repair Kit
3/4" - 1"	ME980-6SRK	ME980-6K
1-1/4"	ME980-10SRK	ME980-10K
1-1/2"	ME980-12SRK	ME980-12K
2"	ME980-16SRK	ME980-16K
3"-4"	ME980-24SRK	ME980-24K

ACCESSORIES

RMI Part No.	Description
ME980SK-16	Stud/Nut Kit for 2" Flanged ESVs
ME980SK-24	Stud/Nut Kit for 3" & 4" Flanged ESVs

MEC EXCELERATOR HIGH FLOW RAILCAR EMERGENCY SHUTOFF VALVES

Excelerator Railcar ESVs are designed to provide rapid and positive shutdown of gas lines should a downstream rupture or piping break occur during product transfer. They feature a built-in fusible element at the valve opening hub to ensure the ESV will automatically close when exposed to heat between 212°F and 250°F. Additionally, the Excelerator railcar ESVs are equipped with a poppet design similar to the MEC internal safety valves that provides an integral excess flow feature.

REPAIR KITS

RMI Part No.	Description	Closing Flow
ME983-16-150	High Flow Railecar ESV 2" FNPT X 2" FNPT	150 GPM*
ME983-16-250	High Flow Railecar ESV 2" FNPT X 2" FNPT	250 GPM
ME983-16-500	High Flow Railecar ESV 2" FNPT X 2" FNPT	500 GPM
ME983-16	High Flow Railecar ESV 2" FNPT X 2" FNPT	-

RMI Part No.	Description
ME983-SRK	Seal Repair Kit - Nitrile
ME983-VRK	Complete Valve Repair Kit - Nitrile
ME983-121	Replacement QD Nipple



ME983-16

* Recommended for vapor service - approx. closing flow 71,000 SCFH

Note: To order with Viton (V), Kalrez (K), or Neoprene (N) seals, add appropriate designator to part# prefix (i.e. ME983V-16)



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Actuators & Pneumatic Accessories

BRAKE CHAMBER STYLE ACTUATORS

These actuators are intended to be used at remote locations or operated directly off the air brake system in bobtail or transport applications. The actuator's smooth-acting cam opens the internal valve lever when air, nitrogen, or carbon dioxide is applied to the line. When pressure to the line is released, the internal valve automatically closes.

ROTARY STYLE ACTUATORS

These actuators are designed to maximize the life of the internal valve by eliminating side pressure on the valve's packing stem. The low-temp factory seals allow these actuators to be used with air, nitrogen, carbon dioxide, or LP-Gas vapor.

TECH TIP: All actuators include a thermal plug which melts between 208°F and 220°F, releasing pressure and closing the valve.

INTERNAL VALVE ACTUATORS

Internal Valve	RMI Part No.			
	Brake Chamber Style		Rotary Style	
	Fisher	MEC	Fisher	MEC
1-1/4" Threaded	-	ME205	P731	ME225
3" Threaded & All 2"	P639A	ME206	P714	ME226
3" Single Flange	P613	ME207SF	P713	ME226
3" Double Flange	P623	ME207	P723	ME227
4" Single Flange	P614A	ME208SF	P739	ME228

ESV ACTUATORS

RMI Part No.			
Brake Chamber Style		Rotary Style	
Fisher	MEC	Fisher	MEC
P539A	ME551	-	ME552



P389

ADDITIONAL INTERNAL VALVE ACTUATORS

RMI Part No.	Description
P389	Fisher Cylinder Style Actuator for 1-1/4" Internal Valves
ME205R	MEC Brake Chamber Style Actuator for RegO 1-1/4" Internal Valves



C483 WITH P723



ME551

MECH OPERATOR

RMI Part No.	Number of Levers
40397A	1
40397B	2
40397C	3
20040A001	Adjusting Bolt Assy



40397C

INTERNAL VALVE FILTERS

RMI Part No.	Description
750804	3/8" M.FL x 1/4" MPT
ME709	1/4" FPT x 1/4" MPT



750804



ME709

PNEUMATIC TUBING & FITTINGS

POLY TUBING

RMI Part No.	Description
020064	100' Coil 1/4" Tubing
020064-500	500' Coil 1/4" Tubing
020064-1000	1000' Coil 1/4" Tubing

BRASS DOT TUBE FITTINGS

RMI Part No.	Description
AQ62DOT4	1/4" Tube X Tube Union
AQ64DOT4	1/4" Tube Tee
AQ68DOT4X2	1/8" MNPT X 1/4" Tube Adaptor
AQ68DOT4X4	1/4" MNPT X 1/4" Tube Adaptor
AQ69DOT4X2	1/8" MNPT X 1/4" Tube Elbow
AQ69DOT4X4	1/4" MNPT X 1/4" Tube Elbow
AQ72DOT4X2	1/8" MNPT X 1/4" Tube Branch Tee
AQ72DOT4X4	1/4" MNPT X 1/4" Tube Branch Tee



020064



AQ64DOT4

Actuators & Pneumatic Accessories

CABLE & LATCH RELEASES

CABLE & LATCH RELEASES FOR INTERNAL VALVES

RMI Part No.		Description
Fisher	MEC	
Cable Style Remote Releases		
-	MEP980PN-100	Pneumatic Control/E-Stop Kit
P134	-	Fuse Link - 212°F
P650	MEP650	Open/Close Release w/ 50' Cable
P651	MEP651	Cable Release Only
P163A	-	25' Auxiliary Release
P164A	-	50' Auxiliary Release
P315	-	Remote release for 4" Internal Valves
P314	-	40' Cable for P315
Latch-Style Remote Releases		
P341	ME990-10-902	Release for 1-1/4" Internal Valves
P342	-	Bi-Directional Release for 1-1/4" Internal Valves
P340	MEP990-24	Manual Latch for 2" & 3" Internal Valves
P313	MEP990-4F	Latch Release for 4" Internal Valves



MEP650



P315



P341

CABLE RELEASES FOR ESVS

RMI Part No.		Description
Fisher	MEC	
-	ME980-905-25	25' Cable Release
P164B	ME980-905-50	50' Cable Release
P164C	ME980-905	Release Only- No cable
P327D	ME980-904K	Pneumatic Release
Additional ESV Accessories		
MINI-1		3-Way Pneumatic Valve
SN-PULL-V		Pull to Close Sign
SN-PUSH-V		Push to Close Sign

PNEUMATIC REGULATORS

Regulators for use in pneumatic systems. 0-100 PSIG delivery pressure, dual gauges.

RMI Part No.	Description
REB-4-3	CO ₂ Regulator
REB-7-3	N ₂ Regulator

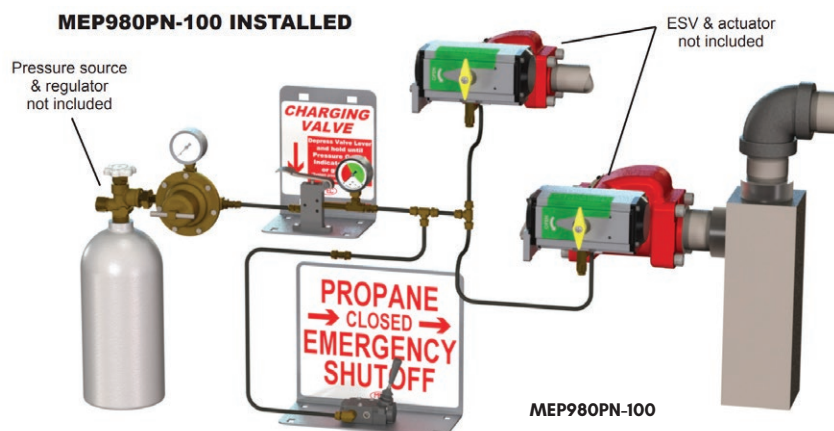


REB-4-3

MEC REMOTE VALVE KIT

Used in conjunction with pneumatic controlled emergency shutoff valves or internal valves to remotely open and close using compressed gas. Each kit includes all necessary components for connecting and charging a pneumatic control system complete with brackets, mounting hardware, and necessary placarding in a variety of orientations for fast & reliable remote system shutdown.

RMI Part No.	Description
MEP980PN-100	MEC Complete Pneumatic Controls / E-Stop Kit w/ Placards & 100' Poly Tubing
MEP980PN-105	Compression Tube Extension Adapter - 1/8" MNPT x 1/4" CC
MEP980PN-106	Compression Tube Extension Tee - 1/4" CC
MEP980PN-113	Tubing Extension 1/4" x 100 ft roll



Back Check Valves, Flow Indicators, & Strainers

BACK CHECK VALVES

Back check valves provide flow protection to container openings or liquid lines where flow is intended for one direction. The valve is normally closed until pressure activates the valve when flow is directed into piping or containers causing the back check to open. When flow stops or reverses, the check returns to the closed position. MEC's back check valves feature a dual-purpose removable o-ring for optional metal-to-metal seating.

FISHER BACK CHECK VALVES

RMI Part No.		Outlet	Inlet	Seat	Propane Flow GPM
Brass	Steel				
G100	-	3/4" MNPT	3/4" FNPT	Metal	21
G101	-	1-1/4" MNPT	1-1/4" FNPT		55
G102	G112	2" MNPT	2" FNPT		150
G109	-	2" MNPT	2" FNPT		150
-	G104	3" MNPT	3" FNPT	Soft	250
-	G105	2" MNPT	2" MNPT & 1-1/4" FNPT		137.5
-	G106	3" FNPT	2" MNPT		254
-	G107	3" MNPT	3" MNPT & 2" FNPT		254



G105

MEC BACK CHECK VALVES

RMI Part No.			Outlet	Inlet	Seat	Propane Flow GPM
Brass	Steel	Stainless				
ME870-6	ME870S-6	ME870SS-6	3/4" MNPT	3/4" FNPT	Removable Soft Seat	24
ME870-10	ME870S-10	ME870SS-10	1-1/4" MNPT	1-1/4" FNPT		61
ME870-12	-	-	1-1/2" MNPT	1-1/2" FNPT		112
ME870-16	ME870S-16	ME870SS-16	2" MNPT	2" FNPT		187
-	ME872S-16	-	2" MNPT	2" MNPT	187	
-	ME870S-24	-	3" MNPT	3" FNPT	449	
-	ME872S-24	-	3" MNPT	3" MNPT & 2" FNPT	449	
-	ME870SBN-10	-	1-1/4" MNPT	1-1/4" FNPT	Bonded Soft Seat	61
-	ME870SBN-16	-	2" MNPT	2" FNPT		187
-	ME872SBN-16	-	2" MNPT	2" MNPT		187
-	ME870SBN-24	-	3" MNPT	3" FNPT		449
-	ME872SBN-24	-	3" MNPT	3" MNPT & 2" FNPT	449	



ME870S-16

FISHER SWING CHECK VALVES

The G200 Series swing check valves are specifically intended for heavy-duty in-line service at the bulk plant's transfer area. The G200 series permits flow in one direction only.



G200

RMI Part No.		Inlet/Outlet	Propane Flow GPM
Flow Indicator	Standard		
G201-10	G200-10	1-1/4" FNPT	190
G201-16	G200-16	2" FNPT	350
G201-24	G200-24	3" FNPT	800

MEC SWING CHECK VALVES

The ME981 series swing check valves provide a soft seat back check valve to prevent reverse product flow. The large, easy-read flow indicator gives operators a visual inspection point for monitoring liquid flow conditions.

RMI Part No.		
Flow Indicator	Standard	Inlet/Outlet
ME981-10	ME982-10	1-1/4" FNPT
ME981-16	ME982-16	2" FNPT
ME981-16-2F	ME982-16-2F	2" 300# Flange
ME981-24	ME982-24	3" FNPT
ME981-24-3F	ME982-24-3F	3" 300# Flange
ME981-24-4F	ME982-24-4F	4" 300# Flange



ME981-10

Back Check Valves, Flow Indicators, & Strainers

SVC SERIES SWING CHECK VALVES

- Economical
- Horizontal Swing Type
- Bronze Construction
- 600 PSIG



SVC100

RMI Part No.	Size	Length
SVC050	1/2"	2.63"
SVC075	3/4"	3.13"
SVC100	1"	3.75"
SVC125	1-1/4"	4.75"
SVC150	1-1/2"	4.94"
SVC200	2"	5.81"

MEC SIGHT FLOW INDICATORS

Enables visual inspection of liquid flow conditions. Includes integral swing check serving as back check valve. May be used as an emergency shutoff valve. 400 PSI WOG.

RMI Part No.	Inlet/Outlet
ME875S-16	2" FNPT
ME874S-16	Type B Flange
ME875S-24	3" FNPT
ME875S-3F	3" 300# Flange



ME875S-3F

Note: Standard valves use Nitrile seat material. All models also available with Neoprene (N) or Viton (V). Add delimiter to end of part # prefix to order i.e. ME875SV-24.

OPW ENGINEERING VISI-FLO SIGHT FLOW INDICATORS

Features:

- Cast Bronze Body
- 400 psi Working Pressure
- Low Pressure Drop
- Does NOT Have a Back Check



VISI-FLO VALVE

RMI Part No.	Description	Length
1532-0240	3/4" Sight Flow	4-1/8"
1532-0250	1" Sight Flow	4-1/8"
1532-0260	1-1/4" Sight Flow	5-1/4"
1500RK-0100B	Repair Kit*	3/4" & 1"
1500RK-0200B		1-1/4"

* Includes top and bottom seals, glass, gaskets and instructions

MEC Y-STRAINERS

Features:

- Durable ductile iron body with automotive grade powder coat finish
- Rated 600 PSI / WOG
- Optional factory installed plug*
- Designed for LP-Gas or NH₃

STRAINERS

RMI Part No.			Blow-Off Plug Size	Inlet/Outlet
20 Mesh Screen	40 Mesh Screen	80 Mesh Screen		
ME650S/20	ME650S	ME650S/80	1/2"	1/2" FNPT
ME651S/20	ME651S	ME651S/80	1/2"	3/4" FNPT
ME652S/20	ME652S	ME652S/80	3/4"	1" FNPT
ME653S/20	ME653S	ME653S/80	3/4"	1-1/4" FNPT
-	ME654S	-	1"	1-1/2" FNPT
ME655S/20	ME655S	ME655S/80	1"	2" FNPT
-	ME655S-2F	-	1"	2"-300 LB Flange
-	ME656S	ME656S/80	1-1/4"	3" FNPT
-	ME656S-3F	-	1-1/4"	3"-300 LB Flange
-	ME656S-4F	-	1-1/4"	4"-300 LB Flange

*To add a factory installed plug use a "P" after the prefix number i.e. ME650SP/20



ME656S-3F-901



ME656S-3F

REPLACEMENT SCREENS

Valve Size	RMI Part No.		
	20 Mesh Screen	40 Mesh Screen	80 Mesh Screen
1/2"	ME650-03/20	ME650-03	ME650-03/80
3/4"			
1"	ME652-03/20	ME652-03	ME652-03/80
1-1/4"	ME653-02/20	ME653-02	ME653-02/80
1-1/2"	-	ME654-03	-
2"	ME655-03/20	ME655-03	ME655-03/80
3"	-	ME656-03	ME656-03/80



Excess Flow Valves

EXCESS FLOW VALVES

Excess flow check valves are designed to close upon excessive discharge of liquid or vapor resulting from a break in the piping system. When the flow rate exceeds the valve setting, the valve closes and remains closed until the system pressure equalizes. If the flow does not exceed the setting the valve will not close. Careful consideration should be given to valve selection.



2137 & 2139 SERIES



2723 SERIES



2884D



A3500 SERIES



A8013 SERIES



F100 SERIES

Application/ Service	RMI Part No.		Inlet	Outlet	Liquid GPM Closing Rate
	Brass	Steel			
Portable Service, Hose (Torches, burners, etc.)	F110	-	Male POL	9/16" -18 UNF LH	0.7
	F183	-	Male POL	9/16" -18 UNF LH	1.5
	F173	-	Male POL	1/4" MNPT	0.7
	F181	-	Male POL	1/4" MNPT	1.5
	F110A	-	Soft Nose Male POL	9/16" -18 UNF LH	0.7
	F173A	-	Soft Nose Male POL	1/4" MNPT	0.7
In-Line	F138	-	1/4" MNPT	1/4" FNPT	1.8
	F202	-	Male POL	1/2" SAE Flare	1.9
	ME355EX18	-	Male POL	1/2" SAE Flare	1.8
	ME356EX18	-	Male POL	5/8" SAE Flare	1.8
	ME354EX18	-	Male POL	1/2" MNPT	1.8
	ME880-4/1.8	-	1/4" MNPT	1/4" FNPT	1.8
Tanks & In- Line	F170	-	3/4" MNPT	3/4" FNPT	6.6
	F100	-	3/4" MNPT	3/4" FNPT	8.4
	F101	-	3/4" MNPT	3/4" FNPT	20
	F102	-	1-1/4" MNPT	1-1/4" FNPT	33
	F105	-	1-1/4" MNPT	1-1/4" FNPT	55
	F106	-	2" MNPT	2" FNPT	85
	F107	-	2" MNPT	2" FNPT	100
	ME880-6/4.6	ME880S-6/4.6	3/4" MNPT	3/4" FNPT	4.6
	ME880-6/14	ME880S-6/14	3/4" MNPT	3/4" FNPT	14
	ME880-6/17	ME880S-6/17	3/4" MNPT	3/4" FNPT	17
	ME880-6/22	ME880S-6/22	3/4" MNPT	3/4" FNPT	22
	ME880-6/28	ME880-6/28	3/4" MNPT	3/4" FNPT	28
	ME880-10/32	ME880S-10/32	1-1/4" MNPT	1-1/4" FNPT	32
	ME880-10/42	ME880S-10/42	1-1/4" MNPT	1-1/4" FNPT	42
	-	A8013D	1-1/4" MNPT	3/4" MNPT	39
	-	A8013DA	1-1/4" MNPT	1" MNPT	44
	-	A8013DB	1-1/4" MNPT	1-1/4" MNPT	55
	-	A8525	1-1/4" MNPT	1-1/4" MNPT	35
	7574	-	1-1/2" MNPT	1-1/2" FNPT	90
	ME880-16/80	ME880S-16/80	2" MNPT	2" FNPT	80
	ME880-16/105	ME880S-16/105	2" MNPT	2" FNPT	105
	ME880-16/114	ME880S-16/114	2" MNPT	2" FNPT	114
	-	ME880S-24/265	3" MNPT	3" FNPT	265
-	ME880S-24/350	3" MNPT	3" FNPT	350	



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Excess flow check valves are designed to close upon excessive discharge of liquid or vapor resulting from a break in the piping system. When the flow rate exceeds the valve setting, the valve closes and remains closed until the system pressure equalizes. If the flow does not exceed the setting the valve will not close. Careful consideration should be given to valve selection.



F130 & 1519 SERIES

F134 SERIES

F173 SERIES

F190 SERIES

ME350 SERIES

Application/ Service	RMI Part No.		Inlet	Outlet	Liquid GPM Closing Rate
	Brass	Steel			
In-Line	F130	-	1" FNPT	1 FNPT	25
	F131	-	1-1/2" FNPT	1-1/2 FNPT	60
	F132	-	2" FNPT	2 FNPT	95
	F133	-	2" FNPT	2 FNPT	155
	-	A1519A4	2" FNPT	2 FNPT	100
	-	A1519B4	2" FNPT	2" FNPT	133
	1519C4	-	2" FNPT	2" FNPT	170
	-	A1519A6	3" FNPT	3" FNPT	225
	2139	-	3" M X 2" F	3" M X 2" F	125
	2139A	-	3" M X 2" F	3" M X 2" F	160
Tanks	F134	-	1-1/2" MNPT x 1" FNPT	1" FNPT	28
	F135	-	2-1/4" MNPT x 1-1/2" FNPT	1-1/2" FNPT	60
	-	F190	2 MNPT	2" MNPT x 1-1/4 FNPT	80
	-	ME882S-16/80	2" MNPT	2" MNPT	80
	-	F191	2" MNPT	2" MNPT x 1-1/4" FNPT	105
	-	ME882S-16/105	2" MNPT	2" MNPT	105
	-	ME882S-16/114	2" MNPT	2" MNPT	114
	-	A7537P4F	2" MNPT	2" MNPT X 1-1/4" FNPT	150
	-	A2137	2" M X 1-1/4" F	2" M X 1-1/4" F	50
	-	A2137A	2" MNPT X 1-1/4" FNPT	2" MNPT X 1-1/4" FNPT	70
	-	A3500L4	2" MNPT	-	75
	-	A3500N4	2" MNPT	-	125
	-	A3500P4	2" MNPT	-	150
	-	40KI	3" MNPT	2" FNPT	172
	-	F194	3" MNPT	2" MNPT	165
	-	F195	3" MNPT	2" MNPT	260
	-	ME880S-24/265	3" MNPT	3" MNPT	265
	-	ME880S-24/350	3" MNPT	3" MNPT	350
	-	F198	3 MNPT	"3 MNPT X 2 FNPT"	165
	-	ME882S-24/265	3" MNPT	3" MNPT X 2" FNPT	265
	-	F199	3" MNPT	3" MNPT X 2" FNPT	260
	-	ME882S-24/350	3" MNPT	3" MNPT X 2" FNPT	350
	-	A3500R6	3" MNPT	-	150
-	A3500T6	3" MNPT	-	200	
-	A3500V6	3" MNPT	-	250	



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Shop online at www.raymurray.com or call **800-628-5044**

Relief Valves

THREADED TRUCK RELIEF VALVES

Designed for use with mobile LPG & NH₃ storage containers as a primary pressure relief for bobtail and transport trailer installations.

RMI Part No.	Tank Connection	Relief Setting	LPG	NH ₃	Rain Cap	Installation Wrench	Seal Material
H722-250	2" MNPT	250	YES	YES	P297	P304	Nitrile
H722-265		265	YES	YES			Nitrile
H722-275		275	YES	YES			Nitrile
MEV200FIR/250 ⁴		250	YES	NO ⁴	MEV200FIR-09	MEP200FIR	Nitrile
MEV200FIR/265		265	YES	YES			Nitrile
MEV200FIREP/265 ¹		265	NO	YES			EPR/EPDM
MEV200FIRV/250		250	YES	NO			FKM
MEV200FIRV/265		265	YES	NO			FKM
MEV200FIRK/250 ¹		250	YES	YES			FFKM ³
MEV200FIRK/265 ¹		265	YES	YES			FFKM ³
MEV200FIRNP/250		250	NO	YES			NEOPRENE
MEV200FIRNP/265		265	NO	YES			NEOPRENE
H733-250	3" MNPT	250	YES	YES			P298
H733-265		265	YES	YES	Nitrile		
MEV300FIR/250 ⁴		250	YES	NO ⁴	MEV300FIR-09	MEP300FIR	Nitrile
MEV300FIR/265		265	YES	YES			Nitrile
MEV300FIREP/265 ¹		265	NO	YES			EPR/EPDM
MEV300FIRK/250 ¹		250	YES	YES			FFKM ³
MEV300FIRK/265 ¹		265	YES	YES			FFKM ³
MEV300FIRV/250		250	YES	NO			FKM
MEV300FIRV/265		265	YES	NO			FKM
MEV300FIRNP/250 ¹		250	NO	YES			NEOPRENE
MEV300FIRNP/265 ¹		265	NO	YES			NEOPRENE



H733



MEV200FIR

1 - FFKM, Neoprene and EPR/EPDM not UL Listed

3 - Recommended for LPG and NH₃ Dual service Applications

4 - For NH₃ and "HN" after the prefix for hydrogenated nitrile part number - i.e. MEV200FIRNH/250

FLANGED TRUCK RELIEF VALVES

RMI Part No.	Tank Connection	Relief Setting	LPG	NH ₃	Rain Cap	Seal Material	
H733F3-250	3" 300# Flange	250	YES	YES	P298	Nitrile	
H733F3-265		265	YES	YES			
MEV300FIR-3F/250		250	YES	NO ⁴	MEV300FIR-09		FKM
MEV300FIR-3F/265		265	YES	YES			
MEV300FIRV-3F/250		250	YES	NO		FFKM ³	
MEV300FIRV-3F/265		265	YES	NO			
MEV300FIRK-3F/250		250	YES	YES			
MEV300FIRK-3F/265		265	YES	YES			



H733F3



MEV300FIR-3F

Relief Valves

STORAGE TANK RELIEF VALVES

RMI Part No.	Tank Connection	Relief Setting	Material	LPG	NH ₃	Rain Cap	Pipeaway Adaptor	Seal Material	
H284-225	2" MNPT	225	Brass	YES	NO	AN1011	PI04-24	Nitrile	
H284-250		250	Brass	YES	NO				
H5114-250		250	Stainless	YES	YES				
H5114-265		265	Stainless	YES	YES				
MEV200SIR/125		125	Brass	YES	NO	MEV200SIR-106	MEPI04-24		FKM
MEV200SIR/250		250	Brass	YES	NO				
MEV200SSIR/250		250	Stainless	YES	YES				
MEV200SIR/265		265	Brass	YES	NO				
MEV200SSIR/265		265	Stainless	YES	YES				
MEV200SIRV/125		125	Brass	YES	NO				
MEV200SIRV/250		250	Brass	YES	NO				
MEV200SSIRV/250		250	Stainless	YES	YES				
MEV200SIRV/265		265	Brass	YES	NO				
MEV200SSIRV/265		265	Stainless	YES	YES				
MEV200SIRK/125*		125	Brass	YES	NO				
MEV200SIRK/250*		250	Brass	YES	NO				
MEV200SSIRK/250*		250	Stainless	YES	YES				
MEV200SIRK/265*		265	Brass	YES	NO				
MEV200SSIRK/265*		265	Stainless	YES	YES				



H284



MEV200SSIR

FISHER 63EGLP PILOT OPERATED RELIEF VALVE

The Fisher Type 63EGLP is the evolutionary leap forward in bulk plant pressure relief combining safety, durability, and serviceability into one superior package. Dual pilot technology allows for the removal of a pilot for service while the 63EGLP continues to protect the tank's contents. Greater relief capacity and surface-area protection reduces the number of valves required compared to traditional quadport relief valves.

RMI Part No.	Connection	Discharge Set Pressure PSIG	Replacment Pilot	Listing/ Approval	Flow Rate, SCFM
63EGLP-16-250	2" NPT	250	6358EBLP-250	UL and ASME Sect VIII, Div.1	10,540
63EGLP-250	4" 300# Flange	250	6358EBLP-250	UL and ASME Sect VIII, Div.1	38.794

NUMBER OF VALVES REQUIRED

Tank Size	63EGLP	63EGLP-16	Quadport
30,000 Gal	1	2 or 3	1
45,000 Gal	1	3	2
60,000 Gal	2	4	2
90,000 Gal	2	5	2
120,000 Gal	2	6	3



63EGLP-16



63EGLP



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Relief Valves



MEC ME910P PILOT OPERATED RELIEF VALVE

Designed for use with large LP-Gas and NH₃ stationary storage container applications with 4" - 300# ANSI flanged openings. The pilot valve-controlled relief mechanism allows for precision start to discharge set points in conjunction with the high flow angled seat design for high relief flow capacity in a simplified design which eliminates the need for traditional external pressure relief valves. The dual pilot valve design allows for the change of either pilot valve without taking the storage container out of service, significantly reducing cost of future service and replacement. The relief port is designed with a 4" FNPT threaded outlet, allowing convenient discharge pipeaway if necessary.

RMI Part No.	Flange Size	Discharge Set Pressure PSIG	Replacement Pilots		Listing/Approval	Required Installation Accessories		Flow Rate, SCFM
			Left	Right		Gasket	Stud/Nut Kit	
ME910P/250-ASME	4" - 300#	250	ME910PK/250-1-ASME	ME910PK/250-2-ASME	ASME Sect VIII, Div.1	ME904S-4F-027	ME904SK	44,278

ACCESSORIES

RMI Part No.	Description
MEP910C	Replacement Weather Cap
MEP990-4DFM/3DFM	4" to 3" 300# Flange Reducer



MEP990-4DFM

NUMBER OF VALVES REQUIRED

Tank Size	ME910P	Quadport
30,000 Gal	1	1
45,000 Gal	1	2
60,000 Gal	1	2
90,000 Gal	2	2
120,000 Gal	2	3



ME910P

Note: Relief capacity calculations are based on surface area of tank, which may vary by manufacturer.

MEC QUAD-PORT RELIEF VALVE MANIFOLDS

Features:

- Ductile Iron Body
- All Stainless Steel Internal Components
- Durable Teflon V-Pack Stem Seals
- Large Diameter Port Selection Handle and Port Indicator
- Molded Rubber Weather Guard for Manifold Rotary Gear
- Available with 250 PSIG and 265 PSIG Relief Valve Set Pressures
- Integral Break-Away Feature leaves seal and seat intact
- Supplied with Weep Hole Deflector and Hex Socket Plugs
- 3-1/2" - 8 Outlet Thread accepts 3" MPT Pipeaways

RMI Part No.	Relief Setting	Application		300# Flange Size	Relief Valve		Flow Rating SCFM	Accessory Stud/Nut Kit
		LPG	NH ₃		# of Valves	Valve P/N		
ME903S-3F/250VM	250 PSIG	YES	NO	3"	3	MEV250VM/250	20,400	ME904SK
ME903S-3F/250CN*	250 PSIG	YES	YES	3"	3	MEV250CN/250	20,400	
ME903S-4F/250VM	250 PSIG	YES	NO	4"	3	MEV250VM/250	20,400	
ME903S-4F/250CN*	250 PSIG	YES	YES	4"	3	MEV250CN/250	20,400	
ME904S-3F/250VM	250 PSIG	YES	NO	3"	4	MEV250VM/250	27,740	
ME904S-3F/250CN*	250 PSIG	YES	YES	3"	4	MEV250CN/250	27,740	
ME904S-4F/250VM	250 PSIG	YES	NO	4"	4	MEV250VM/250	27,740	
ME904S-4F/250CN*	250 PSIG	YES	YES	4"	4	MEV250CN/250	27,740	
ME903S-3F/265VM	265 PSIG	YES	NO	3"	3	MEV250VM/265	20,555	
ME903S-3F/265CN*	265 PSIG	YES	YES	3"	3	MEV250CN/265	20,555	
ME903S-4F/265VM	265 PSIG	YES	NO	4"	3	MEV250VM/265	20,555	
ME903S-4F/265CN*	265 PSIG	YES	YES	4"	3	MEV250CN/265	20,555	
ME904S-3F/265VM	265 PSIG	YES	NO	3"	4	MEV250VM/265	28,550	
ME904S-3F/265CN*	265 PSIG	YES	YES	3"	4	MEV250CN/265	28,550	
ME903S-4F/265VM	265 PSIG	YES	NO	4"	4	MEV250VM/265	28,550	
ME903S-4F/265CN*	265 PSIG	YES	YES	4"	4	MEV250CN/265	28,550	



ME904S

*Relief Valve seat material not UL listed

Relief Valves

MEC MINI QUAD-PORT RELIEF VALVE MANIFOLDS

Features:

- Heavy Duty Ductile Iron Body
- All Stainless Steel Internal Components
- Durable Teflon V-Pack Stem Seals
- Large Diameter Port Selection Handle and Port Indicator
- Molded Rubber Weather Guard for Manifold Rotary Gear with Port Plug
- Available with 250 PSIG and 265 PSIG Relief Valve Set Pressures
- Vapor Equalizing Feature for Easy Port to Port Rotation
- Includes Tank Stabilizer Nut for Maximum Strength at Container Connection

RMI Part No.	Relief Setting	Application		Connection	Relief Valve		Flow Rating
		LPG	NH ₃		# of Valves	Valve P/N	
ME902S-16B/250	250 PSIG	YES	NO	2" MNPT	2	MEV125B/250	5,115 (1)
ME902S-16/250	250 PSIG	NO	YES	2" MNPT	2	MEV125/250	5,115 (1)
ME902S-16/265	265 PSIG	NO	YES	2" MNPT	2	MEV125/265	5,855 (1)
ME903S-16B/250	250 PSIG	YES	NO	2" MNPT	3	MEV125B/250	9,320 (2)
ME903S-16/250	250 PSIG	NO	YES	2" MNPT	3	MEV125/250	9,320 (2)
ME903S-16/265	265 PSIG	NO	YES	2" MNPT	3	MEV125/265	10,795 (2)
ME904S-16B/250	250 PSIG	YES	NO	2" MNPT	4	MEV125B/250	12,481 (3)
ME904S-16/250	250 PSIG	NO	YES	2" MNPT	4	MEV125/250	12,481 (3)
ME904S-16/265	265 PSIG	NO	YES	2" MNPT	4	MEV125/265	13,630 (3)

ACCESSORIES

RMI Part No.	Description
MEPI78	Pipeaway Adapter for MEV125 Series
MEPI78K	Pipeaway Adapter Kit for ME904S-16
MEPI23	Installation/Removal Tool for MEV125 Series



ME904S-16



Relief Valves

HYDROSTATIC RELIEF VALVES

TECH TIP: Relief valves should be replaced based on the recommended service life from the manufacturer. It is recommended that all relief valves be regularly inspected for visible damage, dirt, corrosion, missing rain caps, paint inside outlet, tampering, etc. If any of the preceding is evident or questionable, the valve may need to be replaced immediately.

RMI Part No.	Type	Thread Size	Material	Relief Setting PSIG	Pipeaway Adaptor	Rain Cap
H120-35	Hydrostatic	1/4" MNPT	Brass	35	-	P206
H120-60			Brass	60	-	P206
H120-120			Brass	120	-	P206
H120-150			Brass	150	-	P206
H120-175			Brass	175	-	P206
H120-200			Brass	200	-	P206
H120-225			Brass	225	-	P206
H120-275			Brass	275	-	P206
H120-350			Brass	350	-	P206
H124(1)			Brass	450	-	P206
MEH225			Brass	440	-	P206
MEH225SS/350			Stainless	350	-	MEH501-437
MEH225SS/400			Stainless	400	-	MEH501-437
MEH225SS			Stainless	440	-	MEH501-437
MEH25/450			Brass	450	MEP173	MEH501-812
MEH25K/450			Brass	450	MEP173	MEH501-812
MEH25V/450			Brass	450	MEP173	MEH501-812
MEJ602H			Brass	440	-	-
H144(1)			Brass	450	-	P206
MEH50/460				1/2" MNPT	Brass	460
H174(1)		1/2" MNPT	Brass	450	-	P206
MEH75/460		3/4" MNPT	Brass	460	MEP174	MEH501-1.062
H110-250(1)	ASME	1/4" MNPT	Brass	250	-	P206
H125-250			Brass	250	-	-
H135-250(1)		1/2" MNPT	Brass	250	P174	-
H150-250			Brass	250	-	-
H160-250(1)		3/4" MNPT	Brass	250	-	-
H185-250(1)			Brass	250	-	P145
H185-275(1)			Brass	275	-	-
H110-312(1)			1/4" MNPT	Brass	312	-
H135-312(1)		1/2" MNPT	Brass	312	P174	-
H160-312		3/4" MNPT	Brass	312	-	-



H120.JPG



MEH25-450

1. Listed under UL® Section 132.
2. DOT cylinder water capacity 500 lbs. / 227 kg, approved by Bureau of Explosives and CGA.

Relief Valves

RELIEF VALVE ACCESSORIES

Universal Rain Caps

Fits all standard relief valves. Has new sealed elastomer band with ozone and ultra-violet inhibitors.

UNIVERSAL RELIEF VALVE COVERS

RMI Part No.	Cap ID	Cap Height	Fits
MEH501-437	0.437"	3/8"	MEH225, MEH225SS Series
MEH501-812	0.812"	1"	MEH225/450
MEH501-1.062	1.062"	3/4"	MEH50/460, MEH75/460
MEH501-1.5	1.500"	1"	-
MEH501-1.75	1.750"	1"	-
MEH501-2.25	2.250"	1"	-
MEV250-013*	3.974"	1/2"	MEV250 Series



MEH501

Breakaway Pipeaway Adaptor

Designed to be installed between semi-internal pressure relief valves and vent stacks or at a point in plant plumbing where breakaway protection is needed.

BREAKAWAY PIPEAWAY ADAPTOR

RMI Part No.	Size	Material
MEPI04-24	3" NPT	Steel



MEPI04-24

Anthes Weather Caps

Economical steel cap closes tightly due to high hinge & counter balance. Stainless steel bushing & case hardened bolt protect against rust.

ANTHES WEATHER CAPS

RMI Part No.	Pipe Size
AN11001	3/4"
AN11002	1"
AN11003	1-1/4"
AN11004	1-1/2"
AN11006	2"
AN11007	2-1/2"
AN11011	3"
AN11015	4"

Plastigage Weather Caps

Sturdy aluminum base and tough, durable plastic cover resists corrosion for long life.

PLASTIGAGE WEATHER CAPS

RMI Part No.	Pipe Size
HWC0100	1"
HWC0200	2"
HWC0300	3"
HWC0400	4"



WEATHER CAP



Algas/SDI



ALGAS-SDI DIRECT FIRED VAPORIZERS

Requiring no electricity, the Direct Fired vaporizer utilizes LPG itself as its source of energy and provides a constant supply of LPG, regardless of the LPG composition. Algas-SDI's line of Direct Fired vaporizers is designed and constructed to withstand the harshest of conditions. The units include time tested and proven components and a heavy gauge, powder coated steel cabinet, making them exceptionally rugged and ready for all conditions and applications. ASME / UL / CE

RMI Part No.	Capacity		Dimensions			Liquid Inlet	Vapor Inlet	Weight (Lbs.)
	GPH	MMBTU /HR	Depth	Width	Height			
40/40H	40	3.64	22	21	41	3/4"	1"	155
80/40H	80	7.28	35	21	41	3/4"	1"	220
120/60H	120	10.92	35	21	50	3/4"	1"	275
160H	160	14.5	20	30	70	3/4"	1"	450
320H	320	29.1	34	30	74	2"	2"	900
480H	480	43.6	49	30	74	2"	2"	1350
640H	640	58.2	63	30	74	2"	2"	1800
800H	800	72.8	78	30	74	2"	2"	2250

REPAIR KITS

RMI Part No.	Description
40631	40/40H Master Rebuild Kit
40633	80/40H Master Rebuild Kit
40634	120/60H Master Rebuild Kit
40480	160H Master Rebuild Kit
3-0034	40/40H Repair Kit
3-0035	80/40H Repair Kit
41040	120/60H Repair Kit
3-0014	40/40H Pilot Orifice & Thermocouple
3-0013	80/40H Pilot Orifice & Thermocouple
41041	120/60H Pilot Orifice & Thermocouple
34812	160H Pilot Orifice
42015	40/40H, 80/40H, & 120/60H Tubing Kit
40466	160H Tubing Kit



DIRECT FIRED VAPORIZER



TORREXX



TXLSVWI

TORREXX ELECTRIC VAPORIZER

TORREXX™ defines the industrial standard for dry electric LPG vaporizers. Heater control is through the use of solid state relays or a robust contactor (depending on the capacity of the model). In the event of a "high liquid level occurrence," the proprietary Liqui-Safe Valve™ prevents liquid LPG from passing downstream of the vaporizer. The valve provides visual indication of activation. This allows easy troubleshooting and assures the end-user the device is functioning properly.

RMI Part No.	Vaporization Gallon/Hr.	Capacity BTU/Hr.	Liquid Inlet	Vapor Outlet	Dimensions			Weight (Lbs.)
					D	W	H	
TX25	12.5	1.14 MM	3/4" FNPT	1" FNPT	11-1/4"	9-1/8"	41"	50
TX50	25	2.28 MM	3/4" FNPT	1" FNPT	11-1/4"	9-1/8"	41"	65
TX100	50	4.55 MM	3/4" FNPT	1" FNPT	11-1/4"	9-1/8"	41"	70
TX160	80	7.28 MM	3/4" FNPT	1" FNPT	11-1/4"	9-1/8"	41"	110
TX240	120	10.93 MM	3/4" FNPT	1" FNPT	11-1/4"	9-1/8"	41"	140
TX320	160	14.57 MM	3/4" FNPT	1" FNPT	11-1/4"	9-1/8"	41"	160

ACCESSORIES

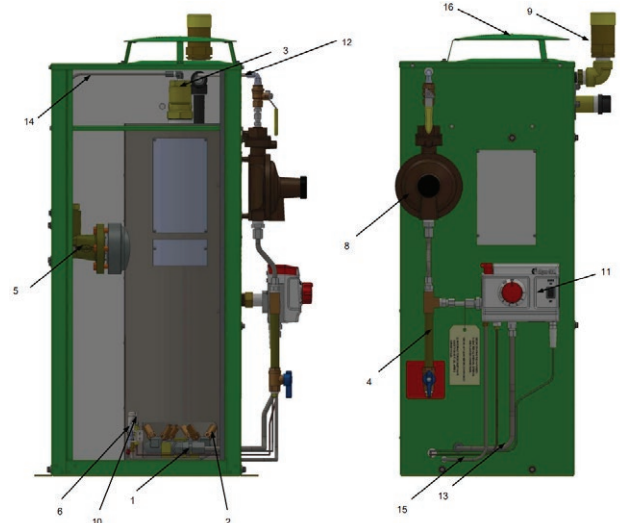
RMI Part No.	Description
41051	Economy Operation Valve
36923	Valve & Strainer Package
20437	Stand - 12" Rise
5010-3003	Drain Valve Kit
64004	Balancing Orifice
34877	Pipe-Away Adapter
TXLSVWI	Liqui-SAFE Valve Wrench

Algas/SDI

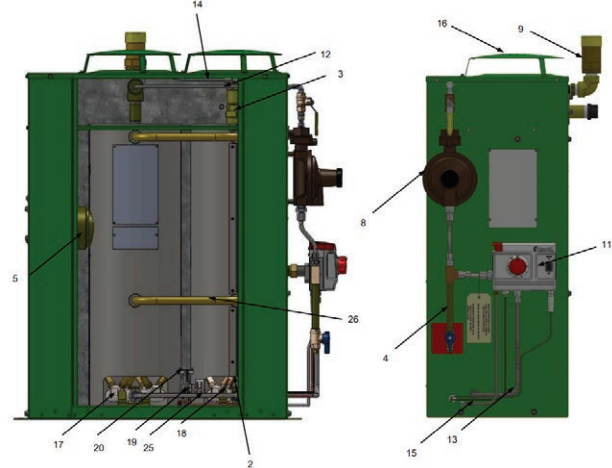


PARTS FOR ALGAS DIRECT FIRED VAPORIZERS

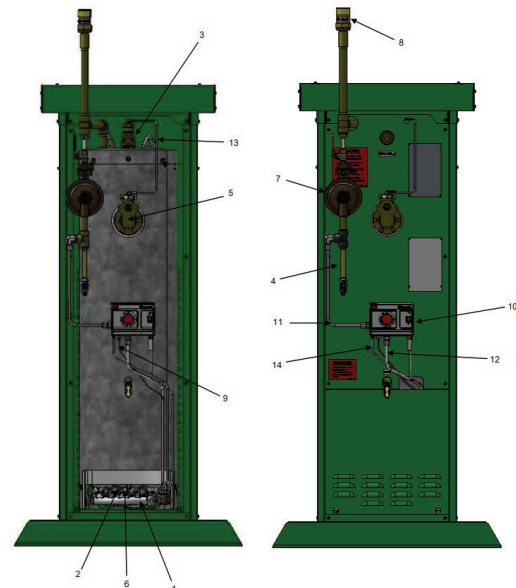
Key	Description	40/40H	80/40H & 120/60H	160H-800H
1	Burner Manifold	1502-4020	-	41091
2	Burner tip #69 burner jet orifice	34447	34447	41092
3	Capacity control valve 1"	1508-4001	1508-4001	1508-4001
4	Drip leg kit	40403	40403	40450
5	Liquid inlet valve	40455	40455	40455
6	Pilot assembly with thermocouple	40774-6	-	40449
7	Pilot flame Guide	1502-5010	-	-
8	Regulator, Burner Supply	34800	34800	34800
9	Relief valve, 3/4" NPT UL/CE/ASME	34876	34876	34876
10	Thermocouple	37050-6	37050-6	THE0001-00-3
11	Thermostat/Thermowell w/9VDC igniter	41073-6	41073-6	41082
12	Tube kit, burner regulator supply	40542	40542	-
13	Tube kit, burner supply	42012	42012	40475
14	Tube kit, capacity control	42013	42013	40467
15	Tube kit, pilot supply	42014	42014	40469
16	Vent cap assembly	40995	40995	-
17	Burner manifold left	-	1501-4020	-
18	Burner manifold right	-	1501-4021	-
19	Pilot assembly with thermocouple	-	40768-6	-
20	Pilot flame guide	-	1501-5086	-
21	Piston, Capacity control valve (Not Shown)	1508-5005	1508-5005	1508-5005
22	Repair kit, Capacity control valve (Not Shown)	40764-12	40764-12	40764-12
23	Repair kit, Liquid Inlet valve (Not Shown)	40764-12	40764-12	40764-12
24	Strainer w/ Magnet, 3/4" NPT (Not Shown)	40776	40776	40776
25	Tube kit, burner manifold connector	-	3-0783	-
26	Tube, heat exchanger connector	-	3-0792	-
27	Tube kit, thermostat supply	-	-	40408



40/40 DIAGRAM



80/40 & 120/60 DIAGRAM



160H DIAGRAM



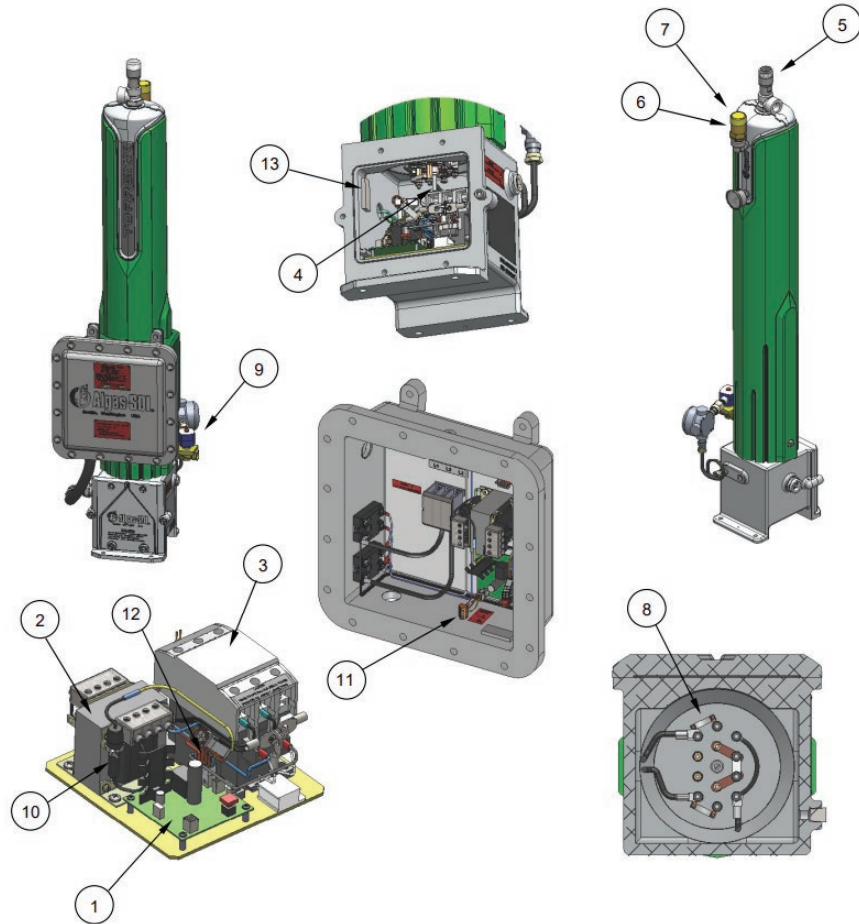
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Shop online at www.raymurray.com or call **800-628-5044**

Algas/SDI



TORREXX PARTS



Key	Description	RMI Part No.	Models
1	Temperature Control Board	40888	All
2	Transformer	52605-01	120V Models
		40947	208V Models
		40948	220/240V Models
		40949	380/400/415V Models
		40950	440/480V Models
3	Contactora	43630	All
4	Thermocouple	41141	TX25, TX50, TX100
		41142	TX160
		41143	TX240 w/ Contactor
		41144	TX320 w/ Contactor
		41146	TX240 w/ Mercury Relay
		41147	TX320 w/ Mercury Relay
5	Liqui-SAFE Valve	5001-3003	All
6	Pressure Relief Valve	34876	All
7	Rain Cap for Relief Valve	35379	All
8	Fusible Link	33139-12	All
9	Inlet Solenoid	36111	All
10	Transformer Fuse	50280-2	All
11	Thermocouple Transition Harness	53823	All
12	Main Wire Harness	53820	All
13	Corrosion Inhibiting Tape	42024	All

TORREXX REPAIR KITS

RMI Part No.	Description
40869	Economy Valve Maintenance Kit
40287	Inlet Solenoid Kit
40421	Liqui-SAFE Valve O-Ring Kit

Algas/SDI



ZIMMER ELECTRIC VAPORIZER

The ZIMMER is a dry-electric LPG or Propane vaporizer that adds energy to vaporize liquid fuel when the amount of energy available from the natural environment is insufficient for vaporization.

- Trouble Free Vaporizer
- 98% Thermal Efficiency
- Multiple Mounting Options
- Various Voltage Configurations
- 20 Gallon Per Hour
- UL listed
- Class 1 Div 1 Group D
- Can utilize 100# and 420# Cylinders



ZIMMER VAPORIZER

ACCESSORIES

VAPORIZERS

RMI Part No.	Description	Capacity BTU/hr
Z40P-V1-R3	20 GPH Electric Vaporizer	1.8 MM
Z100P-V1-R4	50 GPH Electric Vaporizer	4.5 MM
Z150P-V1-R4	75 GPH Electric Vaporizer	6.8 MM

RMI Part No.	Description
80887	Tank Mounting Kit
80888	Tank Mounting Valve & Regulator Kit
80885	Wall Mount Kit
80892	Strainer & Pipe Kit for Wall Mount

AQUAVAIRE VERTICAL GAS FIRED WATERBATH VAPORIZERS

Algas-SDI AQUAVAIRE vaporizers set the industry standard with their proven long-term reliability in all weather conditions. These rugged, but refined, gas fired waterbath vaporizers take the beating of continuous or occasional use whether it be at an industrial facility or at a ski resort in the mountains.



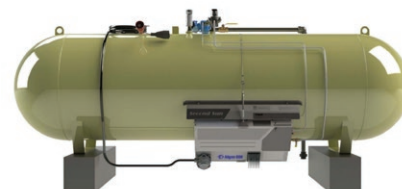
AQUAVAIRE VAPORIZER

RMI Part No.	Vaporization Gallon/Hr.	Capacity BTU/Hr.	Liquid Inlet	Vapor Outlet	Electrical Data			Dimensions			Weight (Lbs.)
					Phase	Voltage	Amps	D	W	H	
Q320V	320	29,120,000	3/4" NPT	2" NPT	1	120	8.9	69"	27"	70"	1150
Q480V	480	43,680,000	3/4" NPT	2" NPT	1	120	8.9	72"	27"	79"	1350
Q640V	640	58,240,000	3/4" NPT	2" NPT	1	120	10.4	74"	39"	75"	2100
Q800V	800	72,800,000	1" NPT	2" NPT	1/3	120/240	9.1/4.8	74"	39"	88"	2300
Q960V	960	87,360,000	1" NPT	2" NPT	1/3	120/240	11.5/6.2	74"	39"	88"	2400
Q1120V	1120	101,580,000	1" NPT	2" NPT	1/3	120/240	14.5/8.3	92"	55"	83"	7100
Q1375V	1375	125,520,000	1" NPT	2" NPT	1/3	120/240	15.0/8.5	92"	55"	83"	7200

SECOND SUN TANK HEATER

Second Sun™ is a flameless catalytic tank heater designed to safely and efficiently augment natural vaporization in propane and LPG storage tanks.

- Add up to 2MM BTUH to tank capacity
- Containers can be stationary or portable
- Flameless Catalytic Heater
- Integrated over pressure and over temperature safeties
- Two Temperature Safety Switches, Upper and Lower



SECOND SUN TANK HEATER

SECOND SUN Tank Heaters are not for use in multiple tank installations, standby or back-up loads and/or installations for larger loads that should be served by a vaporizer.

RMI Part No.	Description	Tank Size
SS10P-IEC-V1	10,000 BTU/hr. Tank Heater	500-1,000
SS30P-IEC-V1	30,000 BTU/hr. Tank Heater	1,000-12,000



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Ransome

RANSOME
MANUFACTURING

RANSOME DIRECT FIRED VAPORIZERS

- Mechanical liquid inlet valve provides positive control of LP-Gas liquid level on all RH 50, 80 and RH 120 sizes. Larger sizes use reliable float switch and electric inlet valve to prevent liquid carryover
- Millivolt-powered gas control system maintains consistent vapor temperature under changing load conditions
- Gas control valve is located inside the protective dry cabinet with the regulator mounted on the exterior providing for total ventilation
- Precision operating temperature switch, factory-set and sealed against tampering, incorporates precious metal contacts for extended service life
- Two-stage pressure regulation provides accurate burner gas burner pressures and performance regardless of changes in inlet pressure



DIRECT FIRED VAPORIZER

RMI Part No.	W/Electric Relight	Capacity GPH @ 0°F.	Capacity BTU/Hr.	Dimensions			Liquid Inlet	Vapor Inlet	Weight (Lbs.)
				Depth	Width	Height			
RH50	RH50-E	50	4,580,000	20.5"	16.6"	31"	3/4"	1"	205
RH80	RH80-E	80	7,340,000	20.5"	16.6"	41"	3/4"	1"	245
RH120	RH120-E	120	11,000,000	20.5"	16.6"	48.5"	3/4"	1"	285
RH200	RH200-E	200	18,340,000	20.5"	16.6"	67.5"	1"	1"	380
RH400	RH400-E	400	36,680,000	26.3"	34"	64"	1"	2"	920
RH600	RH600-E	600	54,900,000	26.5"	42"	69.5"	1"	2"	1300
RH800	RH800-E	800	73,200,000	26.5"	56"	69.5"	1"	2"	2050
RH1000	RH100-E	1000	91,500,000	26.5"	70"	69.5"	1"	2"	2500

EMERGENCY SHUTOFF OPTIONS

"ESV" Options Models	RMI Part No.
RH50-200	XESV0200
RH400	XESV0400
RH600	XESV0600
RH800	XESV0800
RH1000	XESV1000

Units available to accept 3/4" or 1" ESV, add on to part number. Example (RH80-ESV)

ELECTRIC PILOT RELIGHTER

"E"Option Models	RMI Part No.
RH50-120	XE0120
RH200	XE0200
RH400	XE0400
RH600	XE0600
RH800	XE0800
RH1000	XE1000

RANSOME WATERBATH VAPORIZERS

- Mechanical liquid inlet valve provides positive control of LP-Gas liquid level on all RW 100 units. RW180 thru RW900, use a reliable float switch and electric inlet valve to prevent liquid carryover
- Millivolt-powered gas control system maintains proper water bath temperature under changing load conditions
- Gas control valve is located inside the protective dry cabinet with the regulator mounted on the exterior providing for total ventilation
- Precision operating temperature switch, factory-set and tamper resistant, incorporates precious metal contacts for extended service life
- ASME code vaporizing tubes with integral heat exchange vanes and internal water chamber provide efficient vaporization with minimum burner input
- Integral circulating pumps enhance heat transfer and temperature control capabilities



WATERBATH VAPORIZER

RMI Part No.	W/Electric Relight	Capacity GPH	Capacity BTU/Hr.	Dimensions			Liquid Inlet	Vapor Outlet	Weight (Lbs.)
				Depth	Width	Height			
RW100	RW100-E	100	9,170,000	20.5"	14"	48.5"	3/4"	1"	450
RW180	RW180-E	180	16,500,000	20.5"	14"	67.5"	3/4"	1"	750
RW360	RW360-E	360	33,010,000	21.5"	28"	69"	1"	2"	1390
RW540	RW540-E	540	49,510,000	21.5"	42"	69"	1"	2"	1950
RW720	RW720-E	720	66,020,000	21.5"	56"	69"	1"	2"	2510



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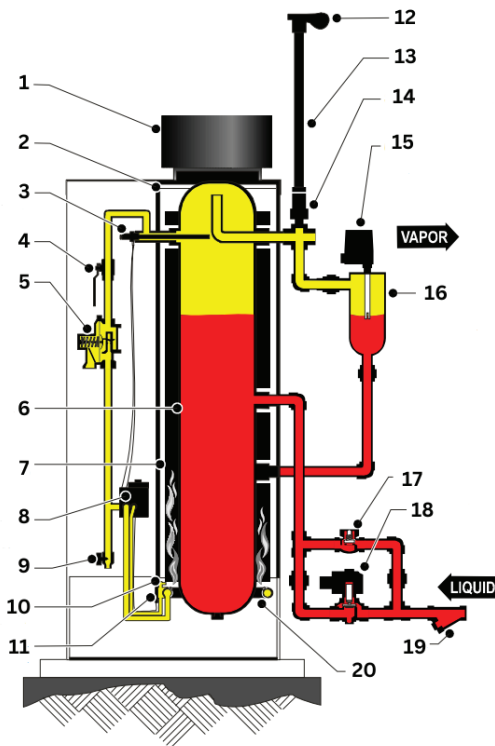
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Ransome

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DIRECT FIRED PARTS LIST

Key	Part Description	RMI Part No.							
		RH50	RH80	RH120	RH200	RH400	RH600	RH800	RH1000
1	Vent Cap	36H05	36H05	36H20	36H20	36H20	36H20	36H20	36H20
2	Doughnut Gasket	KMB	KMB	KMB	KMB	KMB	KMB	KMB	KMB
3	Vapor Temp Switch	KF-120F	KF-120F	KF-120F	KF-120F	KF-120F	KF-120F	KF-120F	KF-120F
4	Shutoff Valve	80	80	80	80	80	80	80	80
5	Twin Stg Burner Gas Regulator	R632A-HCF	R632A-HCF	R632A-HCF	R632A-HCF	R632A-JFF	-	-	-
5A	1st Stg Burner Gas Regulator	-	-	-	-	-	R622H-HGJ	R622H-HGJ	R622H-JGJ
5B	2nd Stg Burner Gas Regulator	-	-	-	-	-	R622-CFFXA	R622-CFFXA	HSRL-BFC
6	Vaporizer Tube	10H05	10H08	10H12	10H20	10H20	10H20	10H20	10H20
7	Insulation	KRS (2)	KRS (3)	KRS (4)	KRS (5)	KRS (5)	KRS (5)	KRS (5)	KRS (5)
8	Burner Gas Control Valve	WR-36C03U333	WR-36C03U333	WR-36C03U333	WR-36C03U333	WR-36C03U333	WR-36C03U333	WR-36C03U333	WR-36C03U333
9	LP Gas Drain	1370	1370	1370	1370	1370	1370	1370	1370
10	Pilot Assembly	JC-KIT	JC-KIT	JC-KIT	JC-KIT	JC-KIT	JC-KIT	JC-KIT	JC-KIT
11	Thermal Generator	HW-Q313A	HW-Q313A	HW-Q313A	HW-Q313A	HW-Q313A	HW-Q313A	HW-Q313A	HW-Q313A
12	Rain Cap	RC125	RC125	RC125	RC125	RC125	RC125	RC125	RC125
13	Pipe-Away	MEPS-431	MEPS-431	MEPS-431	MEPS-431	MEPS-431	MEPS-431	MEPS-431	MEPS-431
14	Safety Relief Valve	H185250	H185250	H185250	H185250	H185250	H185250	H185250	H185250
15	Ultrasonic Level Switch	-	-	-	SOR1	SOR1	SOR1	SOR1	SOR1
16	Chamber	-	-	-	ISH10	ISH10	ISH10	ISH10	ISH10
17	Back Check Valve	-	-	-	BCU10	BCU10	BCU10	BCU10	BCU10
18	Inlet Valve	13H00	13H00	13H00	210G027	210G027	210G027	210G027	210G027
19	"Y" Strainer	-	-	-	774	774	774	774	774
20	Burner Ring	12H20-63	12H20-65	12H20-69	12H20	12H20	12H20	12H20	12H20



RH200-RH1000 SHOWN

Featuring: RH Series Direct-Fired LP-Gas Vaporizers



With Ransome Manufacturing's full line of gas plant components, you can tailor Ransome equipment to your requirements without compromise. We have over 65 standard production models in our line of vaporizers, vaporizers/mixers and Modulating Proportioning mixers. Standard capacities range from 4½ million to over 1 billion BTU/hr (50 to 11,800 gallons of propane per hour). Two or more units can be combined in parallel to handle any conceivable requirement. Ransome Manufacturing, the only and complete source for LP Gas Backup Equipment worldwide.



**With over 80 years in the industry...
...you can Rely on Ransome!**



RANSOME
MANUFACTURING

www.ransomemfg.com

Separators, Filters, and Additives

FILTAIRE OIL DEMISTER

Traps heavy ends commonly present in LPG vapor. The FILTAIRE can be easily installed in either new or existing system with minimal piping changes.

- Permanent filter element to remove contaminants from LPG vapor
- Designed to ASME pressure vessel code
- Unit comes standard with a pressure gauge and drain assembly with plug
- ASME, CRN, and CE marked



FILTAIRE

RMI Part No.	Capacity @ 20 PSIG	Size
20536-ASME	102	1-1/2" NPT
20540-ASME	230	2" NPT
20538-ASME	635	4" 300# Flange

HIGH CAPACITY LPG FILTER

Features:

- High-grade forged aluminum body construction
- Durable powder coated exterior
- 5/16-18 UNC tapped mounting holes for easy installation
- 1" hex nut on bottom of bowl for easy maintenance
- Pleated element offers higher contaminant loading capacity and lower pressure drop
- 35 GPM/LPG @ 6.2 PSI pressure differential
- Removes solid contaminants from LPG/NH3 (20 micron rated element)
- 1" FNPT inlet/outlet connections
- 350 PSI maximum pressure
- 1/4" FNPT plugged ports both upstream and downstream of the filter element



ME680-8

RMI Part No.	Description	Inlet	Outlet	Filter Element	Flow Rate
ME680-8	High Capacity Dispensing Filter	1" FNPT	1" FNPT	20 micron	35 GPM/LPG
ME680-ERK	Replacement Filter Element				

PRO2000V PROPANE VAPORIZER FUEL TREATMENT

PRO2000-V is a highly effective liquid additive to help eliminate heavy ends in liquid propane. The solvents in Pro200-V allow the heavy ends to be carried into the combustion chamber without creating deposits in control valves and regulators.

RMI Part No.	Description
208L-2.5	2.5 Gallon Container PRO2000-V
208L-55	55 Gallon Drum PRO PRO2000-V



208L-2.5



Pilot Burners & Orifices

J SERIES MULTI MOUNT UNIVERSAL PILOT BURNER

- Mounting bracket on all four sides
- 3 tapped holes in each bracket end for vertical adjustment
- LP & Natural gas orifices supplied
- Nuts and bolts furnished in each package

RMI Part No.	Description
J999MHA-2	Universal Pilot Burner Assembly L
J999MKA-2	Universal Pilot Burner Assembly Shell
J999MYA-2	Universal Pilot Burner Assembly Y

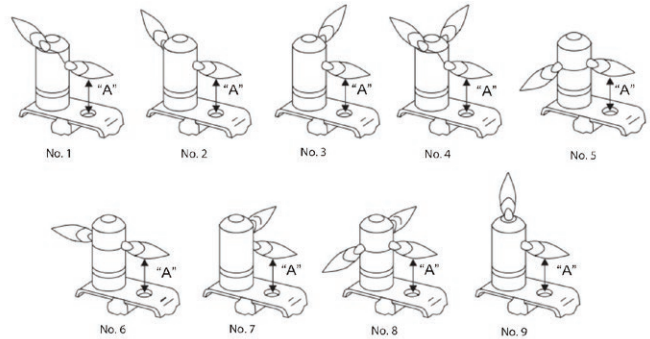


J SERIES PILOT

J SERIES COMBINATION TYPE PILOT BURNER

RMI Part No.	Tip Position	"A" Dimension
J993MDA-2	3	0.85 in. (21.6 mm)
J996MDA-2	6	0.85 in. (21.6 mm)
J998MDA-2	8	0.85 in. (21.6 mm)
J999MDA-2	9	0.85 in. (21.6 mm)

*Other configurations available - call for details



TIP POSITION DIAGRAM

Q345A IGNITOR-SENSOR

RMI Part No.	Description
Q345U1005	Universal Pilot Assembly

Q345 Pilot Assemblies are factory set for natural gas. LP orifices are below.

RMI Part No.	OEM #	Size
390686-1	BBR10	0.010
390686-25	BBR12	0.012



Q345U1005

UNIVERSAL 2B PILOT UNI-KIT

The 1800-100 is designed to replace all obsolete Model 2B Pilot variations. Kit fits 1/4" or 3/16" tubing and orifices for LP and Natural gas.

RMI Part No.	Description
1810-100	Universal 2B pilot kit



1810-100

PG9 REPLACEMENT PILOT UNI-KIT

The Uni-Kit comes with a natural gas orifice installed and a separate LP orifice. Special 1/4 tubing adaptor is provided. These 1820 series Uni-Kits feature aerated type pilots, providing non-lifting characteristics. No air shutters or supplementary shields are required.

RMI Part No.	Flame Pattern	Thermopile Included	Replaces Part
1820-009	90 deg. Right	Yes	PG9A42JTL020
1820-019	90 deg. Left	Yes	PG9A41JTL020
1820-029	90 deg. Right	No	
1820-039	90 deg. Left	No	



1820-009

Pilot Burners & Orifices

JUNCTION BLOCK ADAPTOR

Converts any Johnson Controls thermocouple lead to a junction block application.

RMI Part No.	Description
Y99AN-1	Junction Block Adaptor



Y99AN-1

INCINERATOR TARGET PILOT UNI-KIT

The 1830 Series pilot Uni-Kit is designed to be used with all Uni-Line and competitive thermocouples. Kits include an adaptor that converts a threaded thermocouple/thermopile model 2CH to a snap-in thermocouple type model 2C. Fits 1/4" tubing and has orifices for LP and Natural gas.

RMI Part No.	Flame Pattern
1830-110	Standard
1830-111	Left Hand



1830-110

1820,1830 (2C, 2CH)

RMI Part No.	Gas Type	Tube size	Orifice size
10-114	LP	1/4"	0.010
10-210	LP	1/4"	0.016
10-211	LP	1/4"	0.011



10-114

1890(#11EA) ORIFICES

RMI Part No.	Pilot Usage	Gas Type	Tube Size	Orifice Size
10-067	#11EA	LP	3/16"	0.010



10-067

1898(#40, #70, & #71) ORIFICES

RMI Part No.	Pilot Usage	Gas Type	Tube Size	Orifice Size
10-067	#11EA, #70 & #71	LP	3/16"	0.010

Pilot Tubing & Fittings

ALUMINUM TUBING -50FT. COILS

RMI Part No.	Description
11-191	1/8 " Alum tube 50'
11-192	3/16 " Alum. Tube-50'
11-193	1/4 " Alum. Tube-50'
11-194	5/16" " Alum. Tube- 50'
11-195	3/8" Alum. Tube-50'
11-198	1/2 Alum. Tube-50'

PILOT TUBING KIT

5' ALUMINUM TUBE, W/ NUTS, SLEEVES & BREAKAWAY FERRULE NUTS

RMI Part No.	Description
ALUM-1/8-5	1/8" tubing kit
ALUM-3/16-5	3/16" tubing kit
ALUM-1/4-5	1/4" tubing kit



ALUMINUM TUBING

FERRULE COMPRESSION SLEEVE

RMI Part No.	Description
600-1/8	1/8 " Ferrule sleeve
600-3/16	3/16 " Ferrule sleeve
600-1/4	1/4 " Ferrule sleeve
600-3/8	3/8 " Ferrule sleeve



FERRULE SLEEVE

BREAK-AWAY FERRULE NUTS

RMI Part No.	Description
620-1/8	1/8 " Break-away Ferrule Nut
620-1/4	1/4 " Breakaway Ferrule Nut
620-3/8	3/8 " Breakaway Ferrule Nut
R-1633-1/8	1/4" x 1/8" Tube Extended Breakaway Ferrule Nut
R-2972	1/4" x 1/4" Tube Extended Breakaway Ferrule Nut



BREAKAWAY FERRULE

EXTENDED BREAKAWAY

COMPRESSION NUT

RMI Part No.	Description
610-1/8	1/8 " Compression Nut
610-3/16	3/16 " Compression Nut
610-1/4	1/4 " Compression Nut
610-3/8	3/8 " Compression Nut
4590-817	1/4 Extended Nut



COMPRESSION NUT



EXTENDED NUT

COMPRESSION FITTING KIT

Features

Kit contains 20 popular fittings and storage box

Includes:

- 12ea.-R-1633-1/8;R-29872
- 12ea.-600-1/4;600-1/8;600-3/16;600-38
- 12ea.-610-1/4;610-1/8;610-3/16;610-3/8
- 12ea.-620-1/4;620-1/8;620-3/16;620-3/8
- 12ea.-62-2;62-3;62-4
- 6ea.-62-6



COMPFITKIT-1

COMPRESSION UNION

RMI Part No.	Description
62-2	1/8 " Compression Union
62-3	3/16 " Compression Union
62-4	1/4 " Compression Union
62-6	3/8 " Compression Union



COMPRESSION UNION

RMI Part No.	Description
COMPFITKIT-1	20 popular fitting sizes in a storage box



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Thermocouples

1970 SERIES THERMOCOUPLES

- Universal 30 MV Thermocouple
- Adapter with push in clip
- Available in Variety of lead lengths

RMI Part No.	Description
1970-018	18"
1970-024	24"
1970-030	30"
1970-036	36"
1970-048	48"
1970-060	60"
1970-072	72"



1970-018

1980 SERIES THERMOCOUPLES

- Universal 30 MV Thermocouple
- Snap-Fit Adapter
- Simplest replacement thermocouple available

RMI Part No.	Description
1980-018	18"
1980-024	24"
1980-030	30"
1980-036	36"
1980-048	48"
1980-060	60"
1980-072	72"



1980-018

ROBERTSHAW THERMOPILE/PILOT GENERATOR

- SS outer jacket for long life and resistance to heat blistering
- Combination of copper and nickel alloys for good electrical conductivity
- Mica washer to insulate from shorting conditions
- Two wire or screw in style Thermopiles
- 750mv thermopiles

RMI Part No.	Length	Pilot Adapter Included	Connection Type
1950-001	36"	yes-PG9	two wire
1950-002	48"	yes-PG9	two wire
1950-532	36"	no	two wire
1951-001	36"	yes-PG9	threaded nut
1951-536	36"	No	threaded nut

1960 SERIES LOW MASS THERMOCOUPLES

- Low mass or quick drop out thermocouple
- For applications that require and ODS on the Pilot safety
- Used on many applications that require quick drop out with loss of pilot flame

RMI Part No.	Description
1960-027	Low Mass thermocouple 27"



1960-027

J.C. K15DA STANDARD BASO THERMOCOUPLE

RMI Part No.	Length	Millivolt Range
K15DA-18H	18"	20-28
K15DA-24H	24"	20-28
K15DA-30H	30"	20-28
K15DA-36H	36"	20-28



K15DA-18H

J.C. K16BT HUSKY HIGH OUTPUT THERMOCOUPLE

RMI Part No.	Length	Millivolt Range
K16BT-18	18"	25-35
K16BT-24	24"	25-35
K16BT-30	30"	25-35
K16BT-36	36"	25-35



K16BT-18

Thermocouples

J.C. K17AT SUPER SLIM UNIVERSAL THERMOCOUPLE

RMI Part No.	Length	Millivolt Range
K17AT-18H	18"	25-35
K17AT-24H	24"	25-35
K17AT-30H	30"	25-35
K17AT-36H	36"	25-35
K17AT-48H	48"	25-35
K17AT-60H	60"	25-35
K17AT-72H	72"	25-35



K17AT-60H

Q340A SERIES UNIVERSAL THERMOCOUPLES

- Universal 30 MV Thermocouples
- Positive Positioning
- Bottom Lock design

RMI Part No.	Description
Q340A1066	18"
Q340A1074	24"
Q340A1082	30"
Q340A1090	36"
Q340A1108	48"



Q340A1066

Q313A SERIES UNIVERSAL THERMOPILES

- Two wire Universal Thermopiles
- 750mv thermopiles
- Easy installation
- Compatible with a majority of millivolt gas valves

RMI Part No.	Description
Q313A1055	47"
Q313A1170	35" with PG9 adapter
Q313A1188	35" with push in clip



Q313A1055

TEST ADAPTER

RMI Part No.	Description
10-038	Thermocouple test adapter



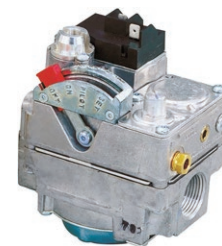
10-038

Robertshaw Control Valves

ROBERTSHAW 24 VOLT DUAL COMBINATION VALVES

Features

- 720 series Dual valve Gas control can be used to replace most constant pilot valves
- Designed for a wide variety of 24V heating applications
- Available with or without pressure regulator
- Uni-kits are factory set at 3.5"W.c. for natural gas
- Can be converted to LP by installing regulator conversion kit that is included



720-400

RMI Part No.	Robertshaw oem part number	Inlet	Outlet	Straight thru	Side Outlet with 1/2" plugs	Pressure Regulator	Btu Capacity nat/LP
720-400	7200ER	1/2"	3/4"	yes	no	Unikit*	150,000/240,000
720-402	7200ER	1/2"	3/4"	yes	yes	Unikit*	150,000/240,000



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Robertshaw Control Valves

ROBERTSHAW INTERMITTENT PILOT, DIRECT SPARK, OR HSI GAS VALVES

Features

- 720 series Pilot ignition gas valve designed for all three applications
- Designed for a wide variety of 24V heating applications
- Uni-kits are factory set at 3.5"W.c. for natural gas
- Can be converted to LP by installing regulator conversion kit that is included



720-079

RMI Part No.	Robertshaw oem part number	Inlet	Outlet	Straight thru	Side Outlet with 1/2" plugs	Pressure Regulator	Btu Capacity nat/LP
720-079	7200IPER	1/2"	3/4"	yes	yes	Unikit*	150,000/240,000

ROBERTSHAW 710 SERIES LOW PROFILE GAS VALVES

Features

- 710 series low profile gas heating valves are designed for recreational vehicles and other applications with limited space
- Maximum Capacity is 70,000 for natural gas and 112,000 for Propane
- Combines manual gas cock, automatic pilot safety and pilot outlet
- Two 1/2" x 3/8" reducer bushings are included with the 710-502



710-203

RMI Part No.	Robertshaw oem part number	Valve type	Inlet	Outlet	Straight thru	Side Outlet with 1/2" plugs	Pressure Regulator	Btu Capacity nat/LP	TP or TC
710-502	7000MVRLC	Millivolt	1/2"	1/2"	yes	yes	3.5" nat gas	70,000/112,000	TP
710-511**++	7000mvrB-4LC	Millivolt	1/2"	3/8"	yes	no	Hi/Lo adjustable 1.7 to 3.5" WC	70,000/112,000	TP & TC

** 710-511 uses Conversion kit 1751-021 to convert to Propane gas

++ 710-511 Valve have special quick drop out safety magnet to meet specifications used with quick dropout pilot assembly 1819-100 and also require the use of 1960-027 low mass thermocouple

ROBERTSHAW 700 SERIES MILLIVOLT GAS VALVES

Features

- 700 series Millivolt gas heating valves are designed for wall thermostat actuated
- Combines manual gas cock, automatic pilot safety and a millivolt operator
- Automatic Pilot Safety is separate from gas cock and provides gas shutoff in case of pilot outage



700-501

RMI Part No.	Robertshaw oem part number	Valve type	Inlet	Outlet	Straight thru	3 position Side Outlet	Pressure Regulator	Btu Capacity nat/LP	TP or TC
700-503	7000BMV	Millivolt	1/2"	1/2"	yes	yes	none	240,000	TP
700-511	7000BMVR-S7C	Millivolt	3/4"	3/4"	yes	no	10"W.C LP	485,000	TP



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Thermostats

PRO 3000 NON-PROGRAMMABLE THERMOSTAT

- 1 Heat/1 Cool
- Basic Slide Switches
- Backlit LCD Display

RMI Part No.	Description
TH3110D1008	PRO 3000 1 Heat/1 Cool Non-Programmable Digital Thermostat



TH3110D1008

FOCUSPRO 5000 NON-PROGRAMMABLE DIGITAL THERMOSTAT

- 2 Heat/2 Cool Conventional, 2 Heat/1 Cool Heat Pump
- Large Backlit LCD Display

RMI Part No.	Description
TH5220D1029	FocusPRO 5000 2 Heat/2 Cool Non-Programmable Digital Thermostat



TH5220D1029

FOCUSPRO 6000 DIGITAL PROGRAMMABLE THERMOSTAT

- 5-1-1 or 5-2 Programmable
- Large Backlit LCD Display
- 1 Heat/1 Cool or 2 Heat/2 Cool Models

RMI Part No.	Description
TH6110D1021	FocusPRO 6000 1 Heat/1 Cool Programmable Digital Thermostat
TH6220D1028	FocusPRO 6000 2 Heat/2 Cool Programmable Digital Thermostat



TH6220D1028

VISIONPRO 8000 PROGRAMMABLE THERMOSTAT WITH REDLINK

- 7-Day Programmable
- Large Touch Screen Display
- Compatible with RedLINK Wireless Home Systems
- 1 Heat/1 Cool Standalone, Up to 4 Heat/2 Cool when used with Equipment Interface Module

RMI Part No.	Description
TH8110R1008	VisionPRO 8000 1 Heat/1 Cool Programmable Digital Thermostat



TH8110R1008

T6 PRO PROGRAMMABLE WIFI SMART THERMOSTAT

- 7-Day Programmable
- Will learn and automatically adapt to your schedule
- Large Touch Screen Display
- WiFi Enabled - Connect with Resideo App
- 3 Heat/2 Cool Heat Pump Systems, 2 Heat/2 Cool Conventional Systems

RMI Part No.	Description
T6 PRO	T6 Pro 3 Heat/2 Cool Programmable WiFi Smart Thermostat



T6 PRO



Ignition Modules & Hot Surface Ignitors

HOT SURFACE HEATING IGNITORS



RMI Part No.	Factory number	RMI Part No.	Factory number
41-401	271A	41-408	271N
41-402	2714W	41-409	271
41-403	271M	41-410	271N
41-404	271M	41-411	271N
41-405	271D	41-412	271NM
41-406	271Y	41-413	271C
41-407	271	41-414	271NM

We have inventory on a wide range of the following manufacturers' gas controls:

- Robertshaw
- Honeywell
- White-Rodgers
- ITT-General
- Johnson Controls

We also have next day air direct shipment available on many non-stocked and special order controls direct from the above manufacturers.

TECH TIP: When replacing a control or valve, get the following information from the original part in order to speed up the process of finding a replacement:

- Manufacturer's Name
- Part Numbers
- Voltage Listing
- Inlet/Outlet Direction
- Inlet/Outlet Size
- BTU of Appliance
- Appliance Model #
- Appliance Serial #
- Mounting Type (if applicable)

ROBERTSHAW H.S.I. MODULE REPLACEMENT UNI-KIT

The ICM283 Uni-kit is a must have for service trucks stock in that it will easily replace the widest variety of hot surface ignition modules, including systems using:

- Local (sense through the HIS) or remote flame sensors
- Single or three ignition attempts
- 4 or 7 second ignition trial time
- 17 or 34 second ignitor warm up time
- 34 second prepurge or non-prepurg
- Natural or LP gas controls
- 120vAC Hot surface ignitors



ICM283

RMI Part No.	Description
ICM283	Universal Hot surface Ignition module

ROBERTSHAW UNIVERSAL PILOT IGNITION MODULE REPLACEMENT UNI-KIT

The 780-001(non- lockout)

- Automatic recycle features assure that in the event of flame failure man gas is disabled and the spark repetition sequence is restated until the pilot gas is ignited. Only after the pilot ignition has been reestablished can main gas be returned to the burner.



780-002

The 780-002(Lockout)

- Lockout feature shuts off all gas to the furnace should the pilot ignition fail to occur after a predetermined time period. The 780-002 provides 3 tries for ignition, each ignition period is 60 seconds followed by a 5 minute time delay between ignition attempts. After 3 tries, if no pilot flame is sensed, the unit goes into lock out and must be reset at the thermostat.

Features

- Replaces one and or two rod systems
- Reduces truck stock inventory saving space and money
- Includes vent damper adapter assembly
- Easy install with complete in-depth installation instructions

RMI Part No.	Description
780-001	Universal Intermittent Module(Natural gas -Non Lockout)
780-002	Universal intermittent Module (LP w/lockout)

620 TRANSFORMERS

The 620 series transformers are available in a wide variety of models form universal enclosed to single voltage open frame. Components recognized by Underwriters Laboratories Inc.

Features

- UL listed and approved
- Meets NEMA standards
- Thermal fuse protection
- Made in USA



620-402

RMI Part No.	Description
620-402	48Va transformer multi input /output transformer
620-403	40Va transformer 120/24v universal transformer

Ignition Modules & Hot Surface Ignitors

S8610 UNIVERSAL INTERMITTENT PILOT MODULES

- Provides ignition sequence, flame monitoring, and safety shut-off for intermittent pilot central furnaces and heating appliances
- One or two rod intermittent pilot control
- Continuous retry with configurable lock out timing
- For use with natural or Propane gas
- Includes spark cable adapters to allow field replacement of both Honeywell and competitive controls without replacing existing spark cable

RMI Part No.	Description
S8610U3009	Universal Intermittent Pilot Module



S8610U3009

Y8610 RETROFIT INTERMITTENT IGNITION SYSTEM

- Retrofit kit is complete kit converting standing pilot system to an intermittent pilot system
- For use with 24vAC gas fired heating appliances
- For use with Propane or Natural gas
- Includes spark cable adapters and installation hardware

RMI Part No.	Description
Y8610U6006	Retrofit I.P. Gas burner ignition system kit



Y8610U6006

HONEYWELL UNIVERSAL ELECTRONIC FAN TIMER

Replacement electronic fan timer for oil furnace applications
Features

- Central appliance wiring point simplifies service
- Oil burner primary control
- Fixed or field-adjustable heat fan on delay
- Field adjustable heat fan off delay
- Controls two speed circulating fan



ST9120U1011

RMI Part No.	Description
ST9120U1011	Universal electronic fan timer

HONEYWELL SMARTVALVE SYSTEM CONTROL

- Intermittent HSI pilot control combines gas flow control with electronic sequencing.
- Pilot and main gas control functions
- Electrode flame sensor
- Continuous retry
- Smartvalve replacement only



SV9501M25

HOT SURFACE PILOT/ SENSOR ASSEMBLY

- 30" lead
- Ignitor
- Sensor
- For Honeywell Smart valve system

(FOR SMARTVALVE SYSTEMS)

RMI Part No.	Description
Q3400A1024	IGNITOR/FLAME ROD ASSY 30"



Q3400A1024

RMI Part No.	Inlet	Outlet	Straight Thru	Opening Characteristics	3/4 x 1/2 reduc bushing	natural to Lp conversion kit
SV9501M2528	1/2"	1/2"	yes	standard	no	yes
SV9501M8129	1/2"	1/2"	yes	fast	no	yes
SV9502H2522	1/2"	1/2"	yes	slow	no	yes
SV9602P4832	3/4"	3/4"	yes	step	two	no(LP only)
SV9602P4840	3/4"	3/4"	yes	step	two	no(LP only)

Empire Heating Systems



EMPIRE VENT FREE ROOM HEATERS

Vent-Free systems draw room air to support combustion in a clean burning blue-flame or radiant-plaque system. Rated at 99.9% efficient, push-button ignition, vent-free heaters release nearly all of the available heat energy into the room. To ensure safe operation, all vent-free systems include an Oxygen Depletion Sensor (ODS) to automatically turn off the heater if room oxygen level drops to an unsafe level.

SR Infrared Heaters produce a "radiant" heat that instantly adds warmth to you and objects in the room.

BF Blue Flame Heaters produce by "heating the air" which then surrounds people and objects with "atmospheric" warmth.

- **MADE in U.S.A.**
- CSA Certified
- Does not require electricity, operates in a power outage, provides supplemental heat, and may **not be used as a primary heat source**
- **Please refer to your local codes regarding installation and permitted uses**

INFRARED VENT FREE HEATERS

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
SR-6W	NSR-6W	Manual	6,000	1-Heat Setting White	11-7/8"	6-1/2"	22"
SR-10W	NSR-10W	Manual	10,000	1-Heat Setting White	11-7/8"	6-1/2"	22"
SR-18W	NSR-18W	Manual	18,000	3-Heat Setting White	18"	6-1/2"	22"
SR-30W	NSR-30W	Manual	30,000	3-Heat Setting White	24-1/8"	6-1/2"	22"
SR-10TW	NSR-10TW	Hydraulic T-Stat	10,000	1-Heat Setting White	11-7/8"	6-1/2"	22"
SR-18TW	NSR-18TW	Hydraulic T-Stat	18,000	Hydraulic Thermostat	18"	6-1/2"	22"
SR-30TW	NSR-30TW	Hydraulic T-Stat	30,000	Hydraulic Thermostat	24-1/8"	6-1/2"	22"

BLUE FLAME VENT FREE HEATERS

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
BF-10W	NBF-10W	Hydraulic T-Stat	10,000	Hydraulic Thermostat	18"	6-1/2"	22"
BF-20W	NBF-20W	Hydraulic T-Stat	18,000	Hydraulic Thermostat	18"	6-1/2"	22"
BF-30W	NBF-30W	Hydraulic T-Stat	30,000	Hydraulic Thermostat	18"	6-1/2"	22"

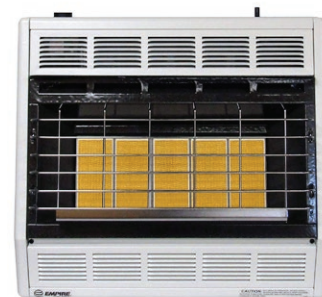
VENT FREE ACCESSORIES

RMI Part No.	Description
SRB-18W	Manual Blower for SR-18W
SRB-30W	Manual Blower for SR-30W
SRB-18TW	Automatic Blower for SR-18T, BF-10, BF-20
SRB-30TW	Automatic Blower for SR-30, BF-30, SR-30T, BF-30W
SRS-10W	Floor Stand for SR-6W, SR-10W, SR-10TW
SRS-18W	Floor Stand for SR-18W, SR-18TW, BF-10W, BF-20W
SRS-30W	Floor Stand for SR-30W, BF-30W

STANDS MAY NOT BE USED IN BEDROOM APPLICATIONS



BF-20W



SR-30TW

Empire Heating Systems



EMPIRE DIRECT VENT WALL FURNACE

A Direct Vent Wall Furnace allows you to heat a single room or an entire home. This unit is designed for areas where flues or chimneys are not available or cannot be used, provides a safer heat source because outside air is used to support combustion while the air inside is warmed as it recirculates around sealed chamber. Each unit contains an automatic shut-off valve should the pilot light become extinguished.

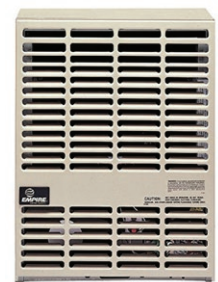
- **MADE in U.S.A.**
- CSA Certified
- Standing Pilots are restricted in some areas so refer to your local municipality
- Matchless Pushbutton Piezo ignition
- Optional Automatic Blower
- Does not require electricity, operates in a power outage
- Includes Standard Vent Kit through Outside Wall



DV35-SG

EMPIRE DV WALL FURNACE

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
DV210-SGX	NDV210-SGX	Millivolt (no T-Stat)	10,000	Millivolt Direct Vent Wall Furnace	16-1/4"	9-3/8"	21-3/8"
DV215-SGX	NDV215-SGX	Millivolt (no T-Stat)	15,000	Millivolt Direct Vent Wall Furnace	20-1/4"	9-3/8"	24-7/8"
DV25-SG	NDV25-SG	Millivolt w/T-Stat	25,000	Millivolt Direct Vent Wall Furnace	37"	11-1/2"	37-3/4"
DV35-SG	NDV35-SG	Millivolt w/T-Stat	35,000	Millivolt Direct Vent Wall Furnace	37"	11-1/2"	37-3/4"



DV215-SGX

**** Does not require electricity; operates in power outage**

CONVERSION KITS

RMI Part No	Conversion	Unit
17080	NAT to LP	DV210
17081	LP to NAT	DV210
17082	NAT to LP	DV215
17083	LP to NAT	DV215
17086	NAT to LP	DV25
17085	LP to NAT	DV25
17086	NAT to LP	DV35
17087	LP to NAT	DV35

ACCESSORIES

RMI Part No.	Description
DVB-1	Automatic Blower (DV210/DV215)
DRB-1	Automatic Blower (DV25/DV35, RH25/RH35)
DV822	Vinyl Siding Vent Kit (DV210/DV215/DV25 /DV35)**
VSKXXX	Slim Line Vinyl Kit (DV210/DV215)*
VSK-2	Slim Line Vinyl Kit (DV25/DV35, DVC35/DVC55)
TH-345	Flue Outlet Vent Tube Extension 13"-19" (DV210)
TH-346	Flue Inlet Vent Tube Extension 13"-19" (DV210)
DV-844	Flue Outlet Vent Tube Extension 13"-19" (DV25/DV35)
DV-845	Air Inlet Vent Tube Extension 13"-19" (DV25/DV35)
TRW	Wireless RemoteWall Thermostat
TMV	Millivolt Reed Switch Wall Thermostat
TDV1	Digital Wall Thermostat



DVB-1



DRB-1

* Includes Outside Wall Plate and Vent Shield

** Includes Vinyl Siding Stand-Off Only



Empire Heating Systems



EMPIRE DVC UPRIGHT DIRECT VENT WALL FURNACE

Advantage of a Direct Vent Upright Wall furnace allows you to heat a single room or an entire home. This unit is designed for areas where flues or chimneys are not available or cannot be used. Must be mounted on an outside wall and uses outside air for combustion with a sealed combustion chamber. Must have electricity to operate and has options of Intermittent Pilot electronic ignition or pilot ignition with piezo ignitor.



DVC35

- **Made in U.S.A.**
- CSA Certified
- Standing pilots are restricted in some areas so refer to your local municipality
- Automatic blower
- Requires electricity to operate
- Includes Standard vent kit for through Outside Wall

EMPIRE DVC DIRECT VENT WALL

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
DVC35-SPPX	NDVC35-SPPX	24v Standing Pilot Ignition	35,000	Direct Vent Standing Pilot Ignition Counterflow Wall Furnace w/o Thermostat	14-1/8"	10-3/8"	72-1/2"
DVC35-IPX	NDVC35-IPX	24v Electronic Ignition	35,000	Direct Vent Electronic Ignition Counterflow Wall Furnace w/o Thermostat	14-1/8"	10-3/8"	72-1/2"
DVC55-SPPX	NDVC55-SPPX	24v Standing Pilot Ignition	55,000	Direct Vent Standing Pilot Ignition Counterflow Wall Furnace w/o Thermostat	16"	11-5/16"	82-3/8"
DVC55-IPX	NDVC55-IPX	24v Electronic Ignition	55,000	Direct Vent Electronic Ignition Counterflow Wall Furnace w/o Thermostat	16"	11-5/16"	82-3/8"

* DVC35 Models include DV1273 Vent Kit

** DVC55 Models include DV600 Vent Kit (Ships in 2 Cartons)

ACCESSORIES

RMI Part No.	Description
DV822	Vinyl Siding Vent Kit, (DVC Models)
VSK-2	Slim Line Vent Kit for Vinyl Siding Horizontal incl Wall Plate w/Vent Shield DVC35/55
SOR-1	Side Outlet Register, (All Models)
SOK-1	10" Side Outlet Kit, (All Models)
ROK-1	10" Rear Outlet Kit, (All Models)
TRW	Wireless Wall Thermostat
TDV1	Digital Wall Thermostat
T24V	24V Wall Thermostat

CONVERSION KITS

RMI Part No	Conversion	Unit
DV-1344	NAT to LP	DVC35-SPPX
DV-1346	LP to NAT	DVC35-SPPX
DV-1348	NAT to LP	DVC35-IPX
DV-1350	LP to NAT	DVC35-IPX
682270	NAT to LP	DVC55-SPPX
682161	LP to NAT	DVC55-SPPX
682269	NAT to LP	DVC55-IPX
682160	LP to NAT	DVC55-IPX

Empire Heating Systems



EMPIRE VENTED COUNTERFLOW WALL FURNACE

Vented Zoned heating systems use room air to support combustion and exhaust their flue products to the outdoors via a single pipe, mounts anywhere you have access to an existing flue or where you can install a vent run through the roof. Electricity required for operation.

- **MADE in U.S.A.**
- CSA Certified
- 76% A.F.U.E
- GWT and FAW40 may be Recessed between Standard Wall Studs
- FAW40 and FAW55 Install on Inside or Outside Walls
- Matchless Pushbutton Piezo Ignition
- Thermostat not Included
- Counterflow Blower Circulates Warm Air at Floor Level
- Multi-Room Heating Capacity w/ Optional Outlet Kit



FAW40-IPX

EMPIRE FAW COUNTERFLOW FURNACE

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
FAW40-SPPX	NFAW40-SPPX	24v Standing Pilot Ignition	40,000	B-Vent Standing Pilot Ignition Counterflow Wall Furnace wo Thermostat	14-1/8"	10-3/8"	72-1/2"
FAW40-IPX	NFAW40-IPX	24v Electronic Ignition	40,000	B-Vent Electronic Ignition Counterflow Wall Furnace wo Thermostat	14-1/8"	10-3/8"	72-1/2"
FAW55-SPPX	NFAW55-SPPX	24v Standing Pilot Ignition	55,000	B-Vent Standing Pilot Ignition Counterflow Wall Furnace wo Thermostat	16"	11-5/16"	82-3/8"
FAW55-IPX	NFAW55-IPX	24v Electronic Ignition	55,000	B-Vent Electronic Ignition Counterflow Wall Furnace wo Thermostat	16"	11-5/16"	82-3/8"

ACCESSORIES

RMI Part No.	Description
SOR-1	Side Outlet Register, (All Models)
SOK-1	10" Side Outlet Kit, (All Models)
ROK-1	10" Rear Outlet Kit, (All Models)
FVE24DB	24" Vent Enclosure, FAW40 Models w/ DV648DBF
FVE34DB	34" Vent Enclosure, FAW40 Models w/ DV648DBF
FVE46DB	46" Vent Enclosure, FAW40 Models w/ DV648DBF
DV651DB	14" Vent Enclosure, FAW55 Models w/ DV648DBD
DV665DB	24" Vent Enclosure, FAW55 Models w/ DV648DBD
DV666DB	36" Vent Enclosure, FAW55 Models w/ DV648DBD
DV-648DBF	Oval to Round Flue Adapter, Double Wall, FAW40 Models
DV-648DBD	Oval to Round Flue Adapter, Double Wall, FAW55 Models
TRW	Wireless Wall Thermostat
TDV1	Digital Wall Thermostat
T24V	24V Wall Thermostat

CONVERSION KITS

RMI Part No	Conversion	Unit
DV-1345	NAT to LP	FAW40-SPPX
DV-1347	LP to NAT	FAW40-SPPX
DV-1349	NAT to LP	FAW40-IPX
DV-1351	LP to NAT	FAW40-IPX
682270	NAT to LP	FAW55-SPPX
682161	LP to NAT	FAW55-SPPX
682269	NAT to LP	FAW55-IPX
682160	LP to NAT	FAW55-IPX



Non-stock/special order items are not cancellable or returnable

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Empire Heating Systems



EMPIRE B-VENT GRAVITY WALL FURNACES

The Gravity Wall Furnace offers total comfort for a fraction of the cost of electric heat. The furnace's common size retrofits easily. Designed for installation in a standard 2 x 4 stud wall cavity. Optional Out-of-Wall Kit (GWTH-2W) allows surface mounting and encloses the sides.

The 50,000 Btu GWT-50W is installed in the wall between adjoining rooms and heats both.

For the smaller GWT-25W and GWT-35W, an optional Rear Register Kit (GWTR-1W) directs heat to an adjoining room.



GWT

GWT VENTED GRAVITY FURNACE

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
GWT-25W	NGWT-25W	Millivolt	25,000	B-Vent Zoned Gravity Wall Furnace, White	16"	6"	66-1/8"
GWT-35W	NGWT-35W	Millivolt	35,000	B-Vent Zoned Gravity Wall Furnace, White	16"	6"	67-1/8"
GWT-50W	NGWT-50W	Millivolt	55,000	B-Vent Zoned Dual Room Gravity Wall Furnace, White	16"	6"	68-1/8"

- * **Optional Blower will not operate in power outage**
- ** **GWT25 and GWT35 includes GWTH2535W Header**
- *** **GWT50 includes GWTH50W Header**

ACCESSORIES

RMI Part No.	Description
GWTB-2W*	Automatic Blower, (All Models) White
GWRB-T	Remote Bulb Thermostat
GWTH-25/35	Header (included with furnace) (GWT-25W/GWT-35W) White
GWTH-50	Header (included with furnace) (GWT-50W) White
GWTR-1W	Rear Register Kit (GWT-25W/GWT-35W) White
GWTH-2W **	Out of Wall Install Kit (GWT-25W/GWT-35W) White
TMV	Reed Switch Wall Thermostat
TRW	Wireless Wall Thermostat
TDV1	Digital Wall Thermostat
DV665DB	24" Vent Enclosure, FAW55 Models w/ DV648DBD
DV666DB	36" Vent Enclosure, FAW55 Models w/ DV648DBD
DV-648DBF	Oval to Round Flue Adapter, Double Wall, FAW40 Models
DV-648DBD	Oval to Round Flue Adapter, Double Wall, FAW55 Models
TRW	Wireless Wall Thermostat
TDV1	Digital Wall Thermostat

CONVERSION KITS

RMI Part No	Conversion	Unit
17088	NAT to LP	GWT-25W
17089	LP to NAT	GWT-25W
17090	NAT to LP	GWT-35W
17091	LP to NAT	GWT-35W
17092	NAT to LP	GWT-50W
17093	LP to NAT	GWT-50W

* For GWT-50W, one blower may be installed for each side
 ** Cannot be installed with GWTR-1W

Empire Heating Systems



EMPIRE B-VENT CONSOLE AND VISUAL FLAME VENTED ROOM HEATERS

Empire B-Vent Vented Room Heaters are crafted for visual appeal and maximum efficiency. Room heaters make ideal replacements for traditional woodburning or coal-burning heaters. Just like a wood stove, they use room air for combustion. Vent pipes connect the heater to a chimney or flue to carry the by-products of combustion outside. Empire Vented Room Heaters are designed for quiet operation. The curved combustion chamber design minimizes noise while the burner ignites the gas immediately as it enters the burner port to added efficiency. Electricity required to operate fan and unit can run without fan.

- **MADE in U.S.A.**
- CSA Certified
- Standing Pilots are restricted in some areas so refer to your local municipality
- Floor pad is required if installed on a combustible floor
- Maximum Air Flow and Heating (RH-25/RH-35)
- Ideal for Medium and Large Rooms (RH25/RH-35)
- Efficient Heat Flow (RH-50/RH-65)
- Ideal for Large Rooms (RH-50/RH-65)
- Optional Ceramic Log Kit (RH-50B/RH-65B)
- Includes Hydraulic Thermostat (All RH Models)
- Optional Internal Blower (All RH Models)



RH-65B

B VENT CLOSED, VISUAL ROOM HTR

Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
RH-25	NRH-25	Standing Pilot	25,000	B-Vent Standing Pilot Hydraulic Thermostat Closed Front Console Room Heater	37"	18-3/8"	26"
RH-35	NRH-35	Standing Pilot	35,000	B-Vent Standing Pilot Hydraulic Thermostat Closed Front Console Room Heater	37"	19-3/8"	26"

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
RH-50B	NRH-50B	Standing Pilot	50,000	B-Vent Standing Pilot Hydraulic Thermostat Visual Flame Room Heater with Blower	34"	23-3/16"	29-9/16"
RH-65B	NRH-65B	Standing Pilot	65,000	B-Vent Standing Pilot Hydraulic Thermostat Visual Flame Room Heater with Blower	34"	27-11/16"	30-9/16"
RH-50C	NRH-50C	Standing Pilot	50,000	B-Vent Standing Pilot Hydraulic Thermostat Closed Front Room Heater	34"	23-3/16"	31-9/16"
RH-65C	NRH-65C	Standing Pilot	65,000	B-Vent Standing Pilot Hydraulic Thermostat Closed Front Room Heater	34"	27-11/16"	32-9/16"
RH-50CB	NRH-50CB	Standing Pilot	50,000	B-Vent Standing Pilot Hydraulic Thermostat Closed Front Console Room Heater with Blower	34"	23-3/16"	33-9/16"
RH-65CB	NRH-65CB	Standing Pilot	65,000	B-Vent Standing Pilot Hydraulic Thermostat Closed Front Console Room Heater with Blower	34"	27-11/16"	34-9/16"

B VENT CONSOLE ACCESSORIES

RMI Part No.	Description
DRB-1	Automatic Blower RH-25/RH-35
DVP-1	Floor Pad 36" x 14" RH-25/RH-35
FRB-3	Automatic Blower RH-50C/RH-65C
RAD-8	Radiants & Supports RH-50B/RH-65B
RHL-2	Log Kit RH-50B/RH-65B
RH-425	Floor Pad 36" x 21" All RH-50 & RH-65 Models

CONVERSION KITS

RMI Part No	Conversion	Unit
33728	LP to NAT	RH-25
33730	NAT to LP	RH-25
33729	LP to NAT	RH-35
33731	NAT to LP	RH-35
44493	LP to NAT	RH-50
44494	NAT to LP	RH-50
44495	LP to NAT	RH-65



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Rinnai Heaters

Rinnai

RINNAI DIRECT VENT ENERGYSAVER WALL FURNACE

Transform any living space - from basement to sunroom, or even the whole home - with self-adjusting heat that keeps room temperature consistent reducing cold spots, from floor to ceiling.

- MADE in JAPAN
- Wall Thermostat Compatible
- Modulating Technology, Modulating Gas Valve and Variable-Speed Blower provides consistent warmth and comfort
- User-Friendly Control Panel
- Quick, Flexible Venting Installation Options allowing for many positions to outside wall. Minimizes heat loss with no ductwork
- High-Altitude Approved
- Electricity Required and Quiet Operation
- Power Outage - when power is restored unit comes back to the last temperature the unit was set to



EX38DTW

BEIGE MODELS

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
EX08DT	NEX08DT	Electronic Ignition	3,000 - 8,000	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, Beige	18-1/4"	10-1/8"	27-3/8"
EX11DT	NEX11DT	Electronic Ignition	5,500 - 11,000	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, Beige	18-1/4"	10-1/8"	27-3/8"
EX17DT	NEX17DT	Electronic Ignition	8,200 - 16,700	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, Beige	29-7/8"	10-1/8"	22-7/8"
EX22DT	NEX22DT	Electronic Ignition	8,200 - 20,700	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, Beige	29-7/8"	10-1/8"	22-7/8"
EX38DT	NEX38DT	Electronic Ignition	10,500 - 36,500	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, Beige	36-5/8"	10-1/8"	26-3/8"

WHITE MODELS

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
EX22DTW	NEX22DTW	Electronic Ignition	8,200 - 20,700	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, White	29-7/8"	10-1/8"	22-7/8"
EX38DTW	NEX38DTW	Electronic Ignition	10,500 - 36,500	Direct-Vent w/ Modulating Technology Remote Thermostat Capable Wall Furnace, White	36-5/8"	10-1/8"	26-3/8"

ACCESSORIES

RMI Part No.	Description
TH8321WFI001/U	7-Day Programmable Touch Screen Wi-Fi Thermostat
204000045	Wall Thermostat Installation Kit (Does Not Include Thermostat)
RHFE-FOT150-S	"S" Vent Termination (3" - 4-1/2")
RHFE-FOT151-A	"A" Vent Termination (4-1/2" - 9-1/2") (Standard w/ each Model)
RHFE-FOT152-B	"B" Vent Termination (9-1/2" - 15-3/4")
RHFE-FOT153-C	"C" Vent Termination (15-3/4" - 23-5/8")
RHFE-FOT154-D	"D" Vent Termination (23-5/8" - 31-1/2")
RHFE-FOT155	11.4" - 20.3" Vent Pipe Extension Kit (EX11 Models)
RHFE-FOT156	21" - 39.6" Vent Pipe Extension Kit (EX11 Models)
RHFE-FOT157	61" - 79.6" Vent Pipe Extension Kit (EX11 Models)
RHFE-FOT158	Elbow for Extension Kit (EX11/EX17/EX22 Models)
RHFE-FOT201	Extension Kit w/ Long Vent Elbow (EX11/EX17/EX22 Models)
RHFE-FOT219	Vent Kit Exhaust Pipe 11.4" - 20.3" (EX17/EX22 Models)
RHFE-FOT221	Vent Kit Exhaust Pipe 60" - 80" (EX17/EX22 Models)
RHFE-FOT102	11.4" - 20.3" Vent Pipe Extension Kit (EX38 Models)
RHFE-FOT103	21" - 39.6" Vent Pipe Extension Kit (EX38 Models)
RHFE-FOT114	61" - 79.6" Vent Pipe Extension Kit (EX38 Models)
RHFE-FOT115	Elbow for Extension Kit (EX38 Models)
RHFE-FOT269	Relay Board Wall Thermostat

CONVERSION KITS

RMI Part No	Conversion	Unit
204000033	LP to NAT	EX08DT
204000034	LP to NAT	EX11DT
204000035	LP to NAT	EX17DT
204000036	LP to NAT	EX22DT
203000001	LP to NAT	EX38DT
204000037	NAT to LP	EX08DT
204000038	NAT to LP	EX11DT
204000039	NAT to LP	EX17DT
204000040	NAT to LP	EX22DT
203000002	NAT to LP	EX38DT

Rinnai Heaters

Rinnai

RINNAI VENT FREE FAN CONVECTORS

For rooms that are hard to heat, Rinnai Vent-Free Fan Convectors are the perfect solution. The convection fan evenly distributes warm air throughout the space, providing comfort even in faraway corners. By eliminating vents or ducts, places where heat typically get lost, virtually all the warm air gets delivered to the room, making for a solution that's 99.9% efficient. **Rinnai Vent Free Convector is one of the most fuel-efficient heating products on the market today.**

- MADE in JAPAN
- Oxygen Depletion Sensor (ODS) which automatically shuts off if inadequate oxygen levels are detected
- Control Panel Lock feature allows you to lock controls to prevent unintended operation - especially by children
- Overheat Switch monitors operating temperatures and automatically shuts the system down if temperatures exceed predetermined levels, preventing damage to system components
- Tilt Switch will automatically be disabled in event heater is knocked over, fan will continue to run to cool internal parts
- Flame Failure Protection will automatically shut off heater if burner flame goes out
- Power Failure Protection will automatically shut off heater in event of power loss
- Cool-Touch Cabinet


FC510

TECH TIP: NFPA 54 prohibits unvented room heaters from being installed in bathrooms and bedrooms. They may be installed, where approved, if one listed wall-mounted, unvented room heater equipped with an ODS in a bedroom and the BTU input does not exceed 10,000 BTU. Enough combustion and ventilation air must be provided. The maximum BTU input for a bathroom would be 6,000 BTU.

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
FC510	NFC510	Electronic Ignition	5,000-10,000	Vent-Free Modulating Small Fan Convectors	19.2"	9.6"	19.4"
FC824	NFC824	Electronic Ignition	8,400-22,000	Vent-Free Modulating Medium Fan Convectors	24"	9.4"	19"



HearthRite Heaters

HearthRite

HEARTHRITE VENT-FREE ROOM HEATERS

Vent-Free systems draw room air to support combustion in a clean burning radiant-plaque or blue-flame system. Rated at 99.9% efficient, vent-free heaters release nearly all of the available heat energy into the room. To ensure safe operation, all vent-free systems include an Oxygen Depletion Sensor (ODS) to automatically turn off the heater if room oxygen level drops to an unsafe level.

- MADE in China
- Does not require electricity, operates in power outages, provides supplemental heat **and may not be use as a primary heat source**
- **Please refer to your local codes regarding installation**



HRW10TL



HRW25TL

INFRARED HEATERS

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HRW06ML	HRW06MN	Manual	6,000	Vent-Free Manual Control Infrared Heater	16.29"	7.44"	23"
HRW10ML	HRW10MN	Manual	10,000	Vent-Free Manual Control Infrared Heater	16.29"	7.44"	23"
HRW17ML	HRW18MN	Manual	16,800	Vent-Free Manual Control Infrared Heater	19.84"	7.44"	23"
HRW25ML	HRW30MN	Manual	25,000	Vent-Free Manual Control Infrared Heater	27.16"	7.44"	23"

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HRW10TL	HRW10TN	Thermostat	10,000	Vent-Free Thermostat Infrared Heater	16.29"	7.44"	23"
HRW17TL	HRW18TN	Thermostat	17,100	Vent-Free Thermostat Infrared Heater	19.84"	7.44"	23"
HRW25TL	HRW30TN	Thermostat	25,000	Vent-Free Thermostat Infrared Heater	27.16"	7.44"	23"

BLUE FLAME HEATERS

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HBW06ML	HBW06MN	Manual	6,000	Vent-Free Manual Control Blue Flame Heater	16.29"	7.44"	23"

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HBW10TL	HBW10TN	Thermostat	10,000	Vent-Free Thermostat Blue Flame Heater	16.29"	7.44"	23"
HBW20TL	HBW20TN	Thermostat	20,000	Vent-Free Thermostat Blue Flame Heater	19.84"	7.44"	23"
HBW30TL	HBW30TN	Thermostat	30,000	Vent-Free Thermostat Blue Flame Heater	27.16"	7.44"	23"

ACCESSORIES

RMI Part No.	Description
HABLR	Blower, HRW17,HRW18, HRW25, HRW30, HBW20, HBW30
HABF	Stand, HRW06, HRW10, HRW17, HRW18,HRW25, HRW30, HBW06, HBW10, HBW20, HBW30

STANDS MAY NOT BE USED IN BEDROOM APPLICATIONS



HABF



HABLR

Enerco Heaters



ENERCO GARAGE/WORKSHOP RADIANT OVERHEAD HEATER

Whether you use this heater in your garage, workshop to keep the work force comfortable, poultry house eggroom, the HeatStar Radiant Heater transfers almost all of the fuel it burns directly into clean safe radiant heat. Efficient Infrared heat that directly heats people and objects which in turns heats surrounding air to desired temperature.

- **MADE in U.S.A**
- 99.9% fuel efficient
- CSA Certified
- For use in buildings with 7 - 8 feet ceilings
- Includes adjustable thermostat for individually controlled warmth and all necessary brackets and hardware
- Unique Power Pile Thermocouple to control the valve, **no electricity is required.** (Hook-up the included millivolt thermostat with the appropriate **wire - not included** - then mount the heater to wall and make gas connection, ready to go.
- Quiet, Clean, Odor-Free Operation
- **DO NOT** use this in sleeping quarters, mobile homes or recreational vehicles



HS22L

Model #	Gas Type	Operation	BTU's	Description	Length x Width x Height
HS22L	LP	Power Pile Ignition	22,000	High Intensity Radiant Overhead Workshop, Thermostat Heater	29.75" x 12.25" x 7"
HS25N	NAT	Power Pile Ignition	25,000	High Intensity Radiant Overhead Workshop, Thermostat Heater	29.75" x 12.25" x 7"

ENERCO HIGH INTENSITY INFRARED OVERHEAD HEATERS

Infrared Heaters direct line of site radiant heat to floor-level objects, which in turn, heat surrounding air to the desired temperature. High Intensity Heaters are ideal for use in drafty or windy conditions like loading docks, auto mechanic bays.

- **MADE IN U.S.A.**
- CSA Certified
- Durable, Rugged Construction, Non-Corrosive Materials used throughout Heater Construction
- Instant heat, Quiet, Clean, Odor-Free Operation
- Maintenance Free - No Moving Parts to Service
- No Direct Venting Required
- Multiple BTU's Outputs (conversion orifices included)
- Spark Ignition "SP" Models ship w/ 120V/24VAC/40VA Transformer
- Power Pile Ignition "PP" Models ship w/ Thermostat and nor Electricity or Direct Venting are required for operation



HS4040PPLP

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HS4040SPLP	HS4040SPNG	Auto Spark Ignition	40,000	High Intensity Infrared, Pilot w/ Safety Burner Shutoff, 24VAC Control w/ Intermittent Pilot	20.75"	35.25"	12.25"
HS4040PPLP	HS4040PPNG	Power Pile MV	40,000	High Intensity Infrared, Manually Lit Pilot, Safety shutoff on Pilot Burner w/ Thermostat	20.75"	35.25"	12.25"
HS8060SPLP	HS8060SPNG	Auto Spark Ignition	60,000	High Intensity Infrared, Pilot w/ Safety Burner Shutoff, 24VAC Control w/ Intermittent Pilot	20.25"	48.25"	13.5"
HS8060PPLP	HS8060PPNG	Power Pile MV	60,000	High Intensity Infrared, Manually Lit Pilot, Safety shutoff on Pilot Burner w/ Thermostat	20.25"	48.25"	13.5"
HS9100SSPLP	HS9100SSPNG	Auto Spark Ignition	100,000	High Intensity Infrared, Pilot w/ Safety Burner Shutoff, 24VAC Control w/ Intermittent Pilot	26.5"	64"	13.25"
HS9100SPPLP	HS9100SPPNG	Power Pile MV	100,000	High Intensity Infrared, Manually Lit Pilot, Safety shutoff on Pilot Burner w/ Thermostat	26.5"	64"	13.25"
HS9120SPLP	HS9120SPNG	Auto Spark Ignition	120,000	High Intensity Infrared, Pilot w/ Safety Burner Shutoff, 24VAC Control w/ Intermittent Pilot	26.75"	85.5"	13.13"
HS9120PPLP	HS9120PPNG	Power Pile MV	120,000	High Intensity Infrared, Manually Lit Pilot, Safety shutoff on Pilot Burner w/ Thermostat	26.75"	85.5"	13.13"



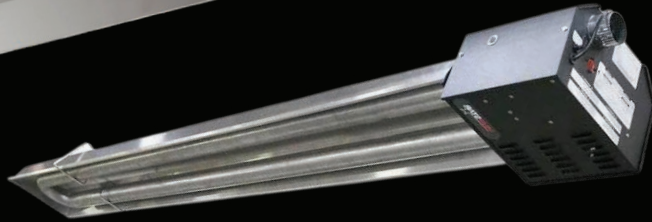
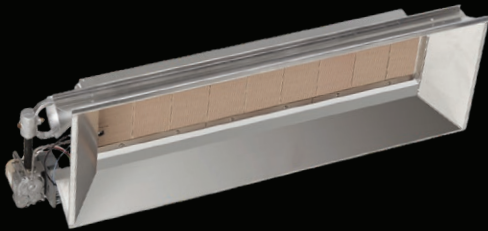
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Enerco Heaters



ENERCO PORTABLE BUDDY PROPANE HEATER

North America's Most Popular Portable Propane Heaters! These patented radiant Liquid Propane heaters are commonly used for Ice Fishing, Hunting, Camping, Workshops and Outdoors Sports. They connect directly to 1 lb. or 20 lb. cylinders (with hose adapter) and are the perfect solution for heating enclosed spaces from tents to cabins. The expertly engineered size to BTU ratio is augmented with a fold-down handle to give these heaters maximum output to a remote gas supply with the purchase of a hose and filter. To light the unit, simply rotate the knob to pilot and push. Then the integrated Piezo sparking mechanism will take care of the rest. With the Oxygen Depletion Sensor (ODS) and accidental tip-over safety shut-off, you can be sure that you will enjoy years of comfortable indoor safe heat.



MH9BX

Model #	Gas Type	Operation	BTU's	Description
MH4B	LP	Piezo Sparking	3,800	Little Buddy Portable Radiant Heater
MH4GC	LP	Piezo Sparking	4,000	Golf Cart Portable Radiant Heater
MH8CFLEX	LP	Electronic	4,000 - 8,000	Buddy Flex Cooker Portable Radiant Heater
MH9BX	LP	Piezo Sparking	4,000 - 9,000	Buddy Portable Radiant Heater
MH9BX-OUTDOOR	LP	Piezo Sparking	4,000 - 9,000	(MA & Canada) Buddy Portable Radiant Heater
MH11BFLEX	LP	Electronic	8,000 - 11,000	Buddy Flex Portable Radiant Heater
MH11BFLEX-MA	LP	Electronic	8,000 - 11,000	(MA) Buddy Flex Portable Radiant Heater
MH12HB	LP	Electronic	6,000 - 12,000	Hunting Buddy Portable Radiant Heater
MH18B	LP	Piezo Sparking	4,000 - 18,000	Big Buddy Portable Radiant Heater without Fan
MH18CH	LP	Piezo Sparking	6,000 - 18,000	Cabinet Patio Portable Radiant Heater with Hose & Regulator

ENERCO PORTABLE BUDDY ELECTRIC HEATER

Model # MHBW150FAT with a Fold Down Handle offers 2 Heat Settings w/ Fan only Setting, Adjustable Thermostat, Power Indicator Light. This model is ideal for small to medium rooms.

Model # MHBW150FATW can be mounted to wall or placed on floor using the included feet, Ability to control heater via Wi-Fi through Smart Life App (App is free for iOS and Android), Simple Voice controls enabled with common Smart Home Devices, LED Touch Screen Display, 3 heat modes: ECO/ Low/High, Adjustable Thermostat with 12 Hour Timer. This model is ideal for medium to large rooms.



MHBE150FAT

Model #	Gas Type	Description
MHBE150FAT	Electric	Electric Buddy 1500w 120v Portable Heater with 6' cord
MHBW150FAT	Electric	Electric Buddy 1500w 120v Wall Mount Heater with 6' cord

ACCESSORIES

Model #	Gas Type	Description
73701	MH9BX, MH12HB, MH18B	5' - Swivel 1" - 20 Male Throwaway Cylinder Thread x Soft Nose Excess Flow POL w/ Handwheel Propane Hose Assembly (Fuel Filter Required)
73702	MH9BX, MH12HB, MH18B	12' - Swivel 1" - 20 Male Throwaway Cylinder Thread x Soft Nose Excess Flow POL w/ Handwheel Propane Hose Assembly (Fuel Filter Required)
73704	MH9BX, MH12HB, MH18B	10' Buddy Series Swivel 1" - 20 Male Throwaway Cylinder Thread x Soft Nose Excess Flow POL w/ Handwheel Propane Hose Assembly (NO Fuel Filter Required)
71803	MH18B	12' Big Buddy Propane Hose Assembly w/ Regulator & Quick Connect
F273669	MH9BX, MH12HB, MH18B	Universal Fuel Filter, 6pk



Enerco Heaters



ENERCO VENT FREE HEATERS

Are perfect supplemental heating solutions even on the coldest days. Enjoy the comfort and warmth of safe, clean-burning all year-round. Great for recreation rooms, enclosed porches, room additions, cabins and workshops.

- MADE in CHINA
- Wall Brackets and feet are included with all models
- Blowers fan included (20,000 and 30,000 models only)
- Thermostat for automatic temperature control (LPBT and NGBT models only)
- Oxygen Depletion Sensor (ODS) which automatically shuts off if inadequate oxygen levels are detected
- This appliance is a supplemental heat and **may not be use as a primary heat source**
- **Please refer to your local codes regarding installation and permitted uses**



HSSVFBF20



HSSVFRD30

INFRARED HEATERS

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HSVFRD10LP	HSVFRD10NG	Electronic Push Button Ignition	10,000	Vent-Free Infrared Wall Bracket, Feet - No Blower	15.75"	7.5"	20"
HSSVFRD10LPT	-	Electronic Push Button Ignition	10,000	Vent-Free Infrared Wall Bracket, Feet -Thermostat - No Blower	15.75"	7.5"	20"
HSSVFRD20LPBT	HSSVFRD20NGBT	Electronic Push Button Ignition	20,000	Vent-Free Infrared Wall Bracket, Feet -Thermostat - Blower	20"	8"	24'
HSSVFRD30LPBT	HSSVFRD30NGBT	Electronic Push Button Ignition	30,000	Vent-Free Infrared Wall Bracket, Feet -Thermostat - Blower	28"	8"	24.5"

BLUE FLAME HEATERS

LP Model #	NG Model #	Operation	BTU's	Description	Width	Depth	Height
HSVFBF10LP	HSVFBF10NG	Electronic Push Button Ignition	10,000	Vent-Free Blue Flame Wall Bracket, Feet - No Blower	15.75"	7.5"	20"
HSSVFBF10LPT	-	Electronic Push Button Ignition	10,000	Vent-Free Blue Flame Wall Bracket, Feet -Thermostat - No Blower	15.75"	7.5"	20"
HSSVFBF20LPBT	HSSVFBF20NGBT	Electronic Push Button Ignition	20,000	Vent-Free Blue Flame Wall Bracket, Feet -Thermostat - Blower	20"	8"	24'
HSSVFBF30LPBT	HSSVFBF30NGBT	Electronic Push Button Ignition	30,000	Vent-Free Blue Flame Wall Bracket, Feet -Thermostat - Blower	28"	8"	24.5"



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Enerco Heaters



MR. HEATER TANK TOP HEATERS

The Tank Top heaters are a perfect solution for a variety of outdoor heating applications from sporting events to ice fishing for many decades. Simply put, Mr. Heater Tank Top Heaters last longer than any other tank top!

- **Outdoor Use Only**
- No Electricity required, Multiple Control Heat Settings: 10,000 - 45,000 btu's
- Convenient, Portable, Fast, and easy to light when you want quick heat
- Tip-Over Safety Shut-Off (MH15T/MH30T/MH45/MH540T Models)
- Constructed from Premium Materials, Chrome Reflectors and High Grade Stainless Steel Burning Surface
- MH15TS and MH30TS with Piezo Spark Ignition **NOT CERTIFIED for CANADA**
- MH540T Heater offers a unique pivoting/rotating burner features both directional & multi-directional 540 degrees of heat, push button thermo-electric valve

Model #	Gas Type	Operation	BTU's	Description
MH15	LP	Match Lit	10,000-15,000	Single Radiant Tank Top Heater (1 lb cylinder)
MH15C	LP	Match Lit	10,000-15,000	Single Radiant Tank Top Cooker-Heater, (1 lb cylinder)
MH15T	LP	Match Lit	10,000-15,000	Single Radiant Tank Top Hi-Med-Low Regulator Heater
MH15TS	LP	Electronic Spark Ignition	10,000-15,000	Single Radiant Tank Top Hi-Med-Low Regulator Heater
MH30T	LP	Match Lit	10,000-30,000	Double Radiant Tank Top Hi-Med-Low Regulator Heater
MH30TS	LP	Electronic Spark Ignition	10,000-30,000	Double Radiant Tank Top Hi-Med-Low Regulator Heater
MH45T	LP	Match Lit	8,000-45,000	Triple Radiant Tank Top Hi-Med-Low Regulator Heater
MH540T	LP	Match Lit	29,000-45,000	Rotating 540 Degree Radiant Burner Tank Top Heater



MH15T



MH30T



MH45T



MH540T



Enerco Construction Heaters



ENERCO CONSTRUCTION PORTABLE HEATERS

Designed for the worker, HeatStar portable heaters keeps your team comfortable at the job-site, allowing to work longer and more effectively in unseasonable weather to maintain your project deadlines.

Convection Heaters

- Made in China
- Piezo Push Button Igniter
- Thermocouple Operated Gas Valve
- No Electricity Required
- Telescoping Chamber
- Clean Burning, Quiet, Odorless
- Insta-lock Chamber Assembly
- Standing Pilot for Insured Safety
- 20' - 3/8" I.D. Hose w/ Regulator and POL (HS80CV)
- 20' - 1/4" I.D. Hose w/ Regulator and POL (HS200CV)
- POL / Excess Flow Check Valve



HS80CV

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
HS80CV	LP	Standing Pilot	30,000 - 80,000	Convection Industrial Construction Portable Heater w/ 20' Hose & Regulator	18.25"	17.75"	16"
HS100CVNG	NG	Standing Pilot	50,000 - 100,000	Convection Industrial Construction Portable Heater	18"	18"	19"
HS200CV	LP	Standing Pilot	75,000 - 200,000	Convection Industrial Construction Portable Heater w/ 20' Hose & Regulator	18"	18"	19"

ENERCO DIRECT-FIRED FORCED AIR PORTABLE HEATERS

- Made in China (excluded HS125FAV made U.S.A)
- Flame Safety Control
- Electricity Necessary
- Adjustable Height Control (HS85FAV,HS125FAV,HS170FAVT)
- Built-In Thermostat (HS170FAVT, HS400FAVT)
- 20' - 1/4" I.D. Hose w/ Regulator and POL (HS35FA, HS400FAVT)
- 20' - 3/8" I.D. Hose w/ Regulator and POL (HS85FAV,HS125FAV,HS170FAVT)
- POL Excess Flow Check Valve



HS35FA

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
HS35FA	LP	Piezo Ignition	35,000	Forced Air Construction Heater w/ 20' Hose & Regulator	20-3/4"	9-3/4"	12-3/4"
HS85FAV	LP	Continuous Ignition	50,000 - 85,000	Forced Air Construction Heater w/ 20' Hose & Regulator	18-1/4"	11-1/2"	14"
HS125FAV	LP	Continuous Ignition	75,000 - 125,000	Forced Air Construction Heater w/ 20' Hose & Regulator	21-1/4"	11-3/4"	15-3/4"
HS170FAVT	LP	Thermostatic	125,000 - 170,000	Forced Air Construction Heater w/20' Hose & Regulator and Built-In Thermostat	26-1/2"	11-1/2"	16-1/2"
HS170NG	NG	Thermostatic	150,000	Forced Air Construction Heater w/20' Hose & Regulator and Built-In Thermostat	26-1/2"	11-3/4"	16-1/4"
HS400FAVT	LP	Thermostatic	250,000 - 400,000	Forced Air Construction Heater w/20' Hose & Regulator and Built-In Thermostat	38-1/2"	14-3/4"	22-1/4"



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Enerco Construction Heaters



ENERCO RADIANT PORTABLE HEATERS

- Made in China
- Piezo Push Button Ignition
- Thermocouple Operated Gas Valve
- No Electricity Required
- Clean Burning, Quiet, Odorless
- Tip-Over Switch, Safety Shut-Off
- POL Connection w/ 20' Hose Included (HS35LP,HS125LP)



HS35LP



HS125LP

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
HS35LP	LP	Piezo Ignition	35,000	Radiant Portable Construction Heater w/ 20' Hose and Regulator	10.24"	12.4"	34.25"
HS125LP	LP	Piezo Ignition	125,000	Radiant Portable Construction Heater w/ 20' Hose and Regulator	16.14"	16.14"	35.04"
HS125NG	NG	Piezo Ignition	125,000	Radiant Portable Construction Heater w/ Regulator Only	16.14"	16.14"	35.04"

ENERCO NOMAD TENT AND CONSTRUCTION HEATERS

- **Made in U.S.A.**
- Spark Ignition, Thermostat w/ 20' Cord, 15' Hose and Regulator
- Quiet Operation
- Multi-Rate Heat Setting
- Easy Reset High Limit Switch, Choose Rate and Fuel w/ Flip of a Switch
- Flexible Diffuser Connector System



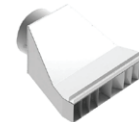
HS115



HS250

ENERCO NOMAD VENTING & ACCESSORIES

Model #	Model Series	Description
FI09105	HS115SF, HS115TC	12" Diffuser Kit
FI09106*	HS115SF, HS115TC	12" Duct Adapter
FI09107	HS115SF, HS115TC	12" x 30" Short Duct
FI09108	HS115SF, HS115TC	12" x 10' Long Duct
FI09115	HS190SF,HS250SF,HS190TC,HS250TC	16" Diffuser Kit
FI09116	HS190SF,HS250SF,HS190TC,HS250TC	16" Duct Adapter
FI09117	HS190SF,HS250SF,HS190TC,HS250TC	16" x 30" Short Duct
FI09118	HS190SF,HS250SF,HS190TC,HS250TC	16" x 10' Long Duct
FI09119	HS190SF,HS250SF,HS190TC,HS250TC	Storage Box
F273737	All Models	Dual LP Tank Hook Up Kit



FI09105



FI09106



FI09118



F273737

* Optional Accessory - Required for Vented Operation

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
HS115SF	LP	Spark Ignition	81,000 - 111,000	Nomad Single Fuel Tent & Construction Heater w/Thermostat and 20' Cord, 15' Hose and Regulator	15"	30"	23.8"
HS190SF	LP	Spark Ignition	127,000 - 190,000	Nomad Single Fuel Tent & Construction Heater w/Thermostat and 20' Cord, 15' Hose and Regulator	20.3"	35.8"	34.8"
HS250SF	LP	Spark Ignition	181,000 - 249,000	Nomad Single Fuel Tent & Construction Heater w/Thermostat and 20' Cord, 15' Hose and Regulator	20.3"	35.8"	34.8"
HS115TC	LP/NG Dual Fuel	Spark Ignition	81-111,000 LP / 77,000-108,000 NG	Nomad Dual Fuel Tent & Construction Heater w/Thermostat, 20' Cord, 15' Hose and Regulator	15"	30"	23.8"
HS190TC	LP/NG Dual Fuel	Spark Ignition	127-190,000 LP / 129-184,000 NG	Nomad Dual Fuel Tent & Construction Heater w/Thermostat, 20' Cord, 15' Hose and Regulator	20.3"	35.8"	34.8"
HS250TC	LP/NG Dual Fuel	Spark Ignition	181-249,000 LP / 172-249,000 NG	Nomad Dual Fuel Tent & Construction Heater w/Thermostat, 20' Cord, 15' Hose and Regulator	20.3"	35.8"	34.8"



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Shop online at www.raymurray.com or call 800-628-5044

LB White Construction Heaters



L B WHITE CONVECTION PORTABLE HEATERS

Convection Heaters can warm up spaces fast. No Electricity on the job site yet? No Problem, Our Convection Heater don't need it. As the heater warms, the surrounding air will increase in temperature, expand, and rise to the top of the space. This forces down the cooler air so it can be heated creating a convection heat pattern.

- **MADE in U.S.A**
- 99.9% Direct-Fired Fuel Efficiency
- 360-degree heat Distribution
- No Electricity required
- Heavy Gauge Steel Body, One-Piece Barrel
- Hose & Regulator included w/ LP Models (Canada)



NORSEMAN 200 PLUS



WORKMAN 225 PLUS

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
WORKMAN 100N PLUS	NAT	Piezo Ignition	100,000	Convection Stainless Steel Burner, Standard Duty	15"	16.5"	25"
NORSEMAN 200 PLUS	LP	Piezo Ignition	200,000	Convection Cast Iron Burner, Heavy Duty	13"	18"	24"
WORKMAN 225 PLUS	LP	Piezo Ignition	45,000 - 225,000	Convection Stainless Steel Burner, Standard Duty	15"	17"	25"
NORSEMAN 250	LP	Piezo Ignition	250,000	Convection Cast Iron Burner, Heavy Duty	13"	18"	24"

L B WHITE SUN BLAST RADIANT PORTABLE HEATERS

Like the sun, this radiant heat warms objects not the air. No Electricity on the job site yet? No Problem, Our Radiant Heater don't need it.

- **MADE in U.S.A.**
- 99.9% Direct-Fired Fuel Efficiency
- No Electricity required
- Flat Panel Style, Directional heat from Sun Blast 35
- 360-degree heat Distribution (Sun Blast 100 and 125)
- Option to hang during operation (Sun Blast 100 and 125)
- Tip Over Switch for safe shut-down (Sun Blast 100 and 125)
- Heavy 16-Gauge Galvanized Steel (Sun Blast 100 and 125)
- 7-setting thermostatic controller w/ recessed controls to prevent damage (Sun Blast 100 and 125)



SUNBLAST 35



SUNBLAST 125



SUNBLAST HD 100

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
SUN BLAST 35	LP	Piezo Ignition	35,000	Direct-Fired Radiant Portable Heater	10.4"	12.4"	37.5"
SUN BLAST HD 100	LP	Piezo Pilot Ignition	50,000 - 100,000	Direct-Fired Radiant Portable Heater	16.0"	16.0"	32.5"
SUN BLAST HD 100N	NAT	Piezo Pilot Ignition	50,000 - 100,000	Direct-Fired Radiant Portable Heater	16.0"	16.0"	32.5"
SUN BLAST 125	LP	Piezo Pilot Ignition	125,000	Direct-Fired Radiant Portable Heater	16.2"	16.5"	35.0"
SUN BLAST 125N	NAT	Piezo Pilot Ignition	125,000	Direct-Fired Radiant Portable Heater	16.2"	16.5"	35.0"

LB White Construction Heaters



L B WHITE FOREMAN DUCTABLE INDIRECT-FIRED PORTABLE HEATER

The Foreman is a vented portable heater ideal for providing dry, clean heat into insulated spaces, work areas, heating docks or anywhere 100% clean air is needed. L.B. White's Ductable Foreman heater features a fuel-saving high efficiency welded heat exchanger, powder-coated frame, quiet operation, and high CFM.

- **MADE in U.S.A.**
- Operates from LP to Natural Gas with a turn of a ball valve, Indoor/Outdoor Rated, Duct up to 100 feet to save space in work areas, vent outside or into existing chimney to operate indoors and mitigate heat loss
- Industry-leading quiet operation at 70dB or less, Reduces Sound Pollution and meets OSHA Standards
- Foreman 230 DF can be moved manually or lifting bail
- Foreman 500 DF and 750 DF can be moved manually, fork lift or lighting bail
- Save Storage Space with option Stack (Foreman 500 & 750), Store On-End (Foreman 230)



FOREMAN 230 DF

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
FOREMAN 230 DF	LP/NAT	Electronic Ignition	230,000	Dual Fuel Ductable Indirect-Fired CFM Portable Heater	26.6"	60.2"	43.3"
FOREMAN 500 DF	LP/NAT	Electronic Ignition	500,000	Dual Fuel Ductable Indirect-Fired CFM Portable Heater	32.0"	94.0"	53.0"
FOREMAN 750 DF	LP/NAT	Electronic Ignition	750,000	Dual Fuel Ductable Indirect-Fired CFM Portable Heater	32.0"	94.0"	53.0"

ACCESSORIES

Model #	Description
132047	Gas Hose, 1" X 15' (Foreman 750)
25141	Regulator, (All Foreman DF)
25965	Gas Hose, 3/4" X 15' (Foreman 230/500)
30052LBW	Duct, 12" X 25' Gray Fire-Retardant w/ Clamp
30053	Duct, 20" X 25' Gray Recirculating w/ Clamp
30076	Duct, 16" X 25' Gray Fire-Retardant w/ Clamp
500-30125	Thermostat, NEMA 4X w/ 25' Cord
30161	Exhaust Pipe Extension, Steel, 6" (Foreman 230S,500S,750 DF)
30162	Rain Cap, (Foreman 230S,500S,750 DF)
30902LBW	Duct Adapter Kit, 16"
500-30903	Heater Stacking Kit (Foreman 500/750)



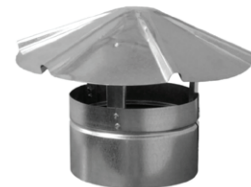
25965



30053



30161



30162



Non-stock/special order items are not cancellable or returnable

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LB White Construction Heaters



L B WHITE TRADESMAN AND BOSS DIRECT-FORCED AIR HEATER

Engineered to deliver reliable, directional heat, L.B. White Tradesman® Portable Heaters feature a unique 3-trial ignition system, the industry's heaviest gauge combustion chamber and burner plate, and Self Diagnostic Service Saver models for convenient trouble-shooting.

Big Push, Big Heat into a large, wide open job sites with the Boss Heater Series. High CFM and 99.9% fuel efficiency this Direct-Fired Series has countless Construction and Industrial Applications.

- **MADE in U.S.A.** (Excludes Tradesman 125, China)
- Reliable, Directional Heat, Efficient Forced Air
- 99% Direct-fired Fuel Efficiency with variable output controls and thermostatic control
- Boss CFM Models, True Portability w/ Cool-End Handle, Wheels, and fits through a standard 36" door frame
- Boss CFM Models, Saves Storage space with option to stand on end or stack



BOSS 400 DF



TRADESMAN 125

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
TRADESMAN 125	LP	Electronic Ignition	70,000 - 125,000	Gas Direct-Forced Air Portable Heater w/ Hose, No Thermostat	11.8"	25.6"	16.0"
TRADESMAN 170	LP	Electronic Ignition	125,000 - 170,000	Gas Direct- Forced Air Portable Heater w/ Hose and Thermostat	9.5"	24.0"	16.0"
TRADESMAN 170N	NAT	Electronic Ignition	125,000 - 155,000	Gas Direct-Forced Air Portable Heater w/ Thermostat, No Hose	9.5"	24.0"	16.0"
TRADESMAN 170 ULTRA	LP	Electronic Ignition	125,000 - 170,000	Gas Direct-Forced Air Portable Heater w/ Hose and Thermostat w/ Diagnostic Light	9.5"	24.0"	16.0"
TRADESMAN 170N ULTRA	NAT	Electronic Ignition	125,000 - 170,000	Gas Direct-Forced Air Portable Heater w/ Thermostat, Diagnostic Light, No Hose	9.5"	24.0"	16.0"
TRADESMAN 400	LP	Electronic Ignition	250,000 - 400,000	Gas Direct-Forced Air Portable Heater w/ Hose and Thermostat	12.5"	34.5"	21.5"
TRADESMAN 400 ULTRA	LP	Electronic Ignition	250,000 - 400,000	Gas Direct-Forced Air Portable Heater w/ Hose and Thermostat w/ Diagnostic Light	12.5"	34.5"	21.5"
TRADESMAN 400 ULTRA DF	LP/NAT	Electronic Ignition	175,000 - 400,000	Gas Direct-Forced Air Portable Heater w/ Hose and Thermostat w/ Diagnostic Light	12.5"	34.5"	21.5"

L B WHITE BOSS HEATERS

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
BOSS 400 DF	LP/NAT	Spark Ignition	400,000	Dual Fuel High CFM Direct-Fired Portable Heater w/ Built-In Volt Meter and Thermostat	21.3"	50"	22.5"
BOSS 1000 DF	LP/NAT	Spark Ignition	1,000,000	Dual Fuel High CFM Direct-Fired Portable Heater w/ Built-In Volt Meter and Thermostat	30.8"	60.1"	32.3"

ACCESSORIES

Model #	Description
500-25141	Regulator, (DF) (Boss 400)
500-25965	Gas Hose, 3/4" X 15' (Boss 400)
500-132235	Regulator LP, (1st Stage) (Boss 1000)
500-132046	Regulator LP, (2nd Stage) (Boss 1000)
500-132136	Regulator NG, (2 PSIG min inlet) (Boss 1000)
500-132047	Gas Hose, 1" X 15' (Boss 1000)



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

LB White Construction Heaters



L B WHITE VOLT ELECTRIC FORCED AIR PORTABLE HEATER

* Made in Finland - UL Approved - Need convenient, clean heat? Volt™ Electric Heaters are best for applications where heating is needed, as well as drying and ventilating. These portable forced air electric heaters feature a user-friendly electric design, quiet, combustion-free operation, no fuel spills or odor and are capable of quick, high temperature rises, Overheat protection at 104 Deg F. Industrial-Grade Fan, Stainless Jacket heating coil, Powder coated steel housing, high-quality seal motor.



VOLT HEATERS

Model #	Operation	Btu's	Description	Width	Depth	Height
VOLT 1.5	Electric	5,100	Forced Air, Portable Heater 120v, 60Hz, Single Phase w/ 10' Power Cord, NEMA 5-15P Plug	12"	11"	8"
VOLT 3	Electric	10,200	Forced Air, Portable Heater 240v, 60Hz, Single Phase w/ 10' Power Cord, NEMA 6-15P Plug	10"	11"	15"
VOLT 6	Electric	20,500	Forced Air, Portable Heater 240v, 60Hz, Single Phase w/ 10' Power Cord, NEMA 14-30P Plug	12"	20"	17"
VOLT 9	Electric	30,700	Forced Air, Portable Heater 240v, 60Hz, Single Phase w/ 10' Power Cord, NEMA 14-50P Plug	14"	23"	18"
VOLT 18-1	Electric	45,000 - 65,000	Forced Air, Portable Heater 240v, 60Hz, Single Phase	14"	32"	20"
VOLT 18-3	Electric	45,000 - 65,000	Forced Air, Portable Heater 240v, 60Hz, Three Phase	14"	32"	20"
VOLT 40	Electric	51,200 - 102,400 - 136,500	Forced Air, Portable Heater 480v, 60Hz, Three Phase	20"	46"	25"
VOLT 60	Electric	82,000 - 164,000 - 205,000	Forced Air, Portable Heater 480v, 60Hz, Three Phase	20"	46"	25"

L B WHITE PORTABLE EVAPORATIVE COOLER

MADE in U.S.A. - These portable evaporative coolers combine the low operating costs your customers want with rental-ready features to protect your investment. Water from an onboard tank is pumped to the top of a filter-like cooling pad. Then, a 3100 CFM fan pulls warm, environmental air over the filter and pushes out air with a cooling effect 30+ feet. Automatic pump shut-offs prevents pump burnout when water runs out, 10-gal water tank provides 3-4 hours of runtime with easy to read water level display, convenient garden hose connection for continuous fill, operates from standard circuits with low amp draw and safe GFCI connection. Quiet operation at less than 60 dB, adjustable louvers to control airflow, option to set run time.



PC-31

Model #	Coverage Area	Airflow Delivery	Description	Width	Depth	Height
PC-31	950 sq. ft.	3100 CFM	Portable Evaporative Cooler w/ Automatic Pump Shut-Off	24"	16"	38"



LB White Agricultural Heaters



L B WHITE CLASSIC FORCED AIR LIVESTOCK HEATERS

Setting the standard in swine confinement heating for more than 65 years, L.B. White Classic pilot light heaters offer simple, reliable operation for years of worry-free performance. Easy Operation, Low Maintenance Design, Classic comes equipped with eyebolts and chains for easy hanging. Panels remove effortlessly for quick access to components and pilot orifices are easy to clean with our quick take-apart pilot assembly. Classic are built to withstand the corrosive elements of even the toughest swine confinement operations. Sealed caps on the solenoid and pilot control fully protect gas valves from heavy dust, dirt and moisture. And the Classic's high quality, corrosion resistant components and solid case construction.

- **MADE in U.S.A.**
- High efficient, Pilot Light Design
- Versatile Indoor Mount options

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
CLASSIC 60	LP	Pilot Ignition	60,000	Forced Air Heaters, Chain Hanging Kit	11"	21"	24"
CLASSIC 115	LP	Pilot Ignition	115,000	Forced Air Heaters, Chain Hanging Kit	17"	23"	24"

*Also available for Natural Gas - add "N" after Model #



CLASSIC 115

L B WHITE GUARDIAN 2.0 FORCED AIR LIVESTOCK HEATERS

The direct-fired L.B. White Guardian® 2.0 is designed to protect poultry growers' investments when the weather turns cold. Guardian® 2.0 poultry complex heaters and pullet house heaters provide consistent, dependable heat that helps control poultry building temperature. Guardian® 2.0 heaters can be used in all poultry production environments and phases including breeding, laying, and meat-bird production.

- **MADE in U.S.A.**
- 250,000 and 325,000 Btu/h
- Propane and natural gas configurations
- Spark, hot surface or pilot light ignition types
- Manually adjustable variable rate valve (50% to 100%) or fixed rate heat output
- Advanced Service Saver (a built-in electronic diagnostic feature)
- Solid case construction
- Indoor or outdoor installation



GUARDIAN 250

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
GUARDIAN 60	LP	Hot Surface Ignition	30,000 - 60,000	Forced Air Heater	12.75"	22.5"	18"
GUARDIAN 60 SI	LP	Spark Ignition	30,000 - 60,000	Forced Air Heater	12.75"	22.5"	18"
GUARDIAN 100	LP	Hot Surface Ignition	50,000 - 100,000	Forced Air Heater	14"	27"	20"
GUARDIAN 100 SI	LP	Spark Ignition	50,000 - 100,000	Forced Air Heater	14"	27"	20"
GUARDIAN 250	LP	Hot Surface Ignition	160,000 - 250,000	Forced Air Heater	18"	30.6"	28"
GUARDIAN 250 PILOT	LP	Standing Pilot Ignition	160,000 - 250,000	Forced Air Heater	18"	30.6"	28"
GUARDIAN 250 SI	LP	Spark Ignition	160,000 - 250,000	Forced Air Heater	18"	30.6"	28"
GUARDIAN 325 HSI	LP	Hot Surface Ignition	200,000 - 325,000	Forced Air Heater	22"	35"	30"

* Also available for Natural Gas - add "N" after Model #



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

LB White Agricultural Heaters



ACCESSORIES FOR CLASSIC AND GUARDIAN HEATERS

Model #	Description
07742	Two Piece (Snap-In) Air Diverters (Classic 60/60N)
07434	Two Piece (Snap-In) Air Diverters (Classic (115/115N, 170/170N))
23215	LP Regulator, Single Stage (Classic 60, 115)
500-09911	LP Regulator, Single Stage (Classic 170)
00831	Remote Thermostat SS w/20' Tap Cord (All Guardian Pilot, HSI, SI) (Classic "-3" Series)
09454	Remote Thermostat NEMA 4X w/20' Tap Cord (All Guardian Pilot, HSI, SI) (Classic "-3" Series)
500-20176	Remote Thermostat NEMA 4X w/25" Cord (All Models)
500-07802	Indoor Mounting (All Models)
20095LBW	Flush Mount Diffuser (Guardian 250 Pilot, HSI, SI)
30203E	180 Deg Air Diverter (Guardian 60, 100)
30203A	180 Deg Air Diverter (Guardian 250)

Model #	Description
30203B	180 Deg Air Diverter (Guardian 325)
20111	Two Piece Air Diverter, Snap In (Classic 60)
23127LBW	Two Piece Air Diverter, Snap In (Classic 100)
20048	Two Piece Air Diverter, Snap In (Classic 250)
09177	Two Piece Air Diverter, Snap In (Classic 325)
25678	T-Duct (105 Deg Duct) (Guardian 250)
25108	NG Regulator (Guardian 325)
09810	Outdoor Mounting Kit (Guardian 60 HSI, SI)
09811	Outdoor Mounting Kit (Guardian 100 HSI, SI)
24097	Outdoor Mounting Kit (Guardian 250 HSI, SI)
24098	Outdoor Mounting Kit (Guardian 325)
500-25141	Regulator, (DF) (Boss 400)

L B WHITE PREMIER PORTABLE TENT HEATERS

The Premier Tent Series Heaters keeps tented spaces and temporary events comfortable with portable heaters you can count on. The Premier Heaters easy to setup, operate and maintain. Enclosed flame design certified CSA and ANSI Standards. Quite operation at less than 70Db, Tri-shield coated case for easy cleaning, rust resistant. One-Person portable with handles and wheel features for ease of movement.

- **MADE in U.S.A.**
- 99% Direct-fired Fuel efficiency
- Dual Fuel (DF) Models quickly switch from LP to NG with a turn of a ball valve
- Rated for Indoor and Outdoor use
- Duct and diffusing options distribute heated air inside tent with heater setup outside
- Ducting and unit diffusers connect magnetically for an easy, clean connection (no pins or screws)
- Thermostat included so temperature can be set and maintained automatically

ACCESSORIES

Model #	Description
132544	Duct, 8" x 12" White W/ Duct Adapter (Premier 40)
26347	Duct, 12" x 12' White W/ Duct Adapter (Premier 80/170)
22835	Duct, 18" x 12' Gray W/ Duct Adapter (Premier 350)
23053	Duct, Greenhouse 18" x 100' White Perforated (Premier 350)
26617	Duct Replacement Adapter, 12" Dia (Premier 80/170)
23050	Duct Replacement Adapter, 18" Dia (Premier 350)
132541	8" Duct End Diffuser (Premier 40)
26350	12" Duct End Diffuser (Premier 80/170)
23189	18" Duct End Diffuser (Premier 350)
132540	Unit Diffuser (Premier 40)
132902	Unit Diffuser (Premier 80)
26351	Unit Diffuser (Premier 170)
500-132976	Thermostat w/ 1.4' Cord
500-132047	Hose, 1" x 15', 1" NPT both ends
500-25141	LP Regulator

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
PREMIER 40	LP	Electronic Ignition	40,000	Enclosed Flame Direct Fired Portable Heater, Ventilation Fan, LP Hose, Regulator and Thermostat	14.5"	24.8"	16.3"
PREMIER 80	LP	Electronic Ignition	80,000	Enclosed Flame Direct Fired Portable Heater, Ventilation Fan, LP Hose, Regulator and Thermostat	13.5"	28"	22"
PREMIER 80 DF	LP/NAT	Electronic Ignition	80,000	Dual Fuel Enclosed Flame Direct Fired Portable Heater, Ventilation Fan, LP Hose, Regulator and Thermostat	13.5"	28"	22"
PREMIER 170	LP	Electronic Ignition	170,000	Enclosed Flame Direct Fired Portable Heater, Ventilation Fan, LP Hose, Regulator and Thermostat	24.3"	32.3"	32"
PREMIER 170 DF	LP/NAT	Electronic Ignition	170,000	Dual Fuel Enclosed Flame Direct Fired Portable Heater, Ventilation Fan, LP Hose, Regulator and Thermostat	24.3"	32.3"	32"
PREMIER 350 DF	LP/NAT	Electronic Ignition	350,000	Dual Fuel Enclosed Flame Direct Fired Portable Heater, Ventilation Fan, LP Hose, Regulator and Thermostat	28"	48.3"	41"



PREMIER 170 DF



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

LB White Agricultural Heaters



L B WHITE HIGH PRESSURE RADIANT HEAT BROODERS

Improve animal welfare, production, and profitability in poultry houses with the patented high pressure radiant chick brooder heater. This radiant heat poultry brooder leads the industry in heat efficiency, range of heat outputs, flexible installation and proven reliability. L.B. White designed our chick brooder heater to save money on energy costs - up to 40% fuel cost savings depending on the poultry house condition and existing poultry heating system.

Poultry brooder heater provides a more consistent heat pattern than other brooder heaters for poultry production resulting in birds remain warm and grow at a faster rate.

- **MADE in U.S.A.**
- Zone or Individual control
- Propane or Natural Gas Models
- Manual or Spark ignition
- Fully assembled and ready to install
- 100% Test fired
- Components highly resistant to corrosion, Filter recommended for longer product life and optimum performance
- Temperature Modulation available with all Models



I-17

Model #	Gas Type	Operation	Btu's	Description
H-17-SI	LP/NG	Spark Ignition	17,100	High Pressure, Dual Fuel, Radiant Heat, Base Model Only
H-40-SI	LP/NG	Spark Ignition	40,000	High Pressure, Dual Fuel, Radiant Heat, Base Model Only (Ships in 8 packs)
I-17P-I	LP	Manual Ignition	17,100	High Pressure, Individual Control, Radiant Heat, Base Model Only - No Accessories Incl.
I-40P-I	LP	Manual Ignition	40,000	High Pressure, Individual Control, Radiant Heat, Base Model Only - No Accessories Incl.
I-17P-SI	LP	Spark Ignition	17,100	High Pressure, House Control, Radiant Heat, Base Only w/ Filter Only
I-40P-SI	LP	Spark Ignition	40,000	High Pressure, House Control, Radiant Heat, Base Only w/ Filter Only
I-17P-Z	LP	Manual Ignition	17,100	High Pressure, Zone Controlled, Radiant Heat, Base Model Only - No Accessories Incl.
I-40P-Z	LP	Manual Ignition	40,000	High Pressure, Zone Controlled, Radiant Heat, Base Model Only - No Accessories Incl.

* Also available for Natural Gas - add "N" after the 17 or 40

L B WHITE LOW PRESSURE RADIANT HEAT BROODERS

Low profile, energy efficient, far reaching heat is what is provided with the L.B. White L-40 radiant brooder. This low pressure brooder has a simple design, making assembly time much quicker than other low pressure brooders. Fewer parts and connections make repair easy.

L.B White's L-40 can be used to replace one or all competitive 40,000 btu/h brooders in a poultry house as connections match. Simply unplug the competitive unit and plug in the L-40 to utilize the consistent and far reaching heat pattern. No need to worry about gas type as all units ship with the ability to use either LP or Natural gas with the switch of an orifice which is stored on the unit.

- **MADE in U.S.A.**
- Propane and Natural Gas Dual Fuel Model
- Components high resistant to corrosion
- No filter - No additional accessories to clean

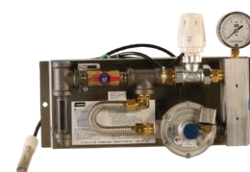
Model #	Gas Type	Operation	Btu's	Description
L-40	LP/NG	Spark Ignition	40,000	Low Pressure, Dual Fuel, House Control, Low Profile



L-40

ZONE CONTROL PANELS

Model #	Description
ZPHB1100S	For Manual Ignition Heaters, Standard Zone control, High Cap., English/Spanish labels
ZPHA2316S	For Manual Ignition Heaters, House control, dual Stage, High Cap., English/Spanish labels
ZPHA2216S	For Manual Ignition Heaters, House control, On/Off, High Cap., English/Spanish labels
ZPMA2416S	For Manual Ignition Heaters, House control, On/Off, Wint./Sum., English/Spanish labels
ZPHA5216S	For Manual Ignition Heaters, House control, Digital T-Stat, English/Spanish labels
ZPMA3120S	For Auto Modulating Heaters, House control, Med. Cap., English/Spanish labels
ZPHA3120S	For Auto Modulating Heaters, House control, High Cap., English/Spanish labels
500-26487	For Spark Ignition Heaters, House control, English/Spanish labels



ZONE PANEL



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Shop online at www.raymurray.com or call **800-628-5044**

LB White Agricultural Heaters



L B WHITE THERMA GROW GREENHOUSE HEATERS

Therma Grow™ greenhouse heaters are advanced, clean-burning, direct fired models that offer 20% better fuel efficiency than traditional greenhouse heaters. So when comparing thermal conversion or seasonal (year-round) efficiency, the Therma Grow™ greenhouse outperforms even the most advanced competitive products and it does so for less money.

- **MADE IN U.S.A.**
- 10 year warranty against heat chamber, case corrosion
- 99.99% fuel efficient, direct fired technology
- CO2 Generator
- Enclosed flame, controls and gas valve
- Two output sizes, 120,000 Btuh and 220,000 Btuh
- Meet all OSHA emissions requirements for greenhouses.
- Plus models provide even greater heat management features including 2-stage temperature control and heating and air circulation modes.
- Dependable, fuel efficient hot surface ignition
- Quick response, on-demand heat using Hot Surface Ignition
- Easy integration with building controls
- 100% test fired at our plant
- High elevation models available. (Please specify elevation while ordering.)



THERMA GROW 120 PLUS

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
THERMA GROW 120	THERMA GROW 120N	Hot Surface Igniton	120,000	1,100 CFM, 115/60/1 Standard Configuration, Blower Fan, Box Unit Style	21"	30.75"	28.25"
THERMA GROW 120 PLUS	THERMA GROW 120N PLUS	Hot Surface Igniton	120,000	1,100 CFM, 115/60/1 Two-Stage Plus Configuration, Blower Fan, Box Unit Style	21"	30.75"	28.25"
THERMA GROW 220 **	THERMA GROW 220N **	Hot Surface Igniton	220,000	1,750 CFM, 115v or 230v 60/1 Standard Configuration, Blower Fan, Box Unit Style	25.5"	35.5"	30"
THERMA GROW 220 PLUS **	THERMA GROW 220N PLUS **	Hot Surface Igniton	220,000	1,750 CFM, 115v or 230v 60/1 Two-Stage Plus Configuration, Blower Fan, Box Unit Style	25.5"	35.5"	30"

**Must specify 115 or 230 voltage when ordering

L B WHITE BLOOM 400 GREENHOUSE HEATER

Bloom 400 heater offers heat for optimum growth in large scale commercial greenhouse operations.

- **MADE in U.S.A.**
- 5000 CFM
- 400,000 Btu/h Output
- CO2 Generator
- Vent Only Option Available
- 240 Volt
- Galvanized Gas Train to Prevent Rust
- 99.9% Fuel Efficient Direct-Fired Unit That Meets Greenhouse Emissions Standards*
- Large Grow Operations



BLOOM 400

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
BLOOM 400	BLOOM 400N	Spark Igniton	400,000	5,000 CFM, 230/60/1 Axial Flower Fan, Torpedo Style Unit	25"	44"	27"

ACCESSORIES FOR THERMA GROW AND BLOOM HEATERS

Model #	Description
25995	120 Indoor Kit, Motorized Inlet Shutter, Exhaust Shutter, Shutter Exhaust Fan, Air Inlet Transition Kit, Eyebolts and Chains
25985	220 Indoor Kit, Motorized Inlet Shutter, Exhaust Shutter, Shutter Exhaust Fan, Air Inlet Transition Kit, Eyebolts and Chains
24690	120 Outdoor Kit, Gravity Exhaust Shutter and Outdoor Mount Kit
24688	220 Outdoor Kit, Gravity Exhaust Shutter and Outdoor Mount Kit
23651	120 Mounting Indoor Kit, (Sub-Kits are contained within the Complete Installation and Vent Kits)
23652	220 Mounting Indoor Kit, (Sub-Kits are contained within the Complete Installation and Vent Kits)
500-24728	Eyebolts and Chains for Indoor Mounting Kit
23578	120 Mounting Outdoor Kit, (Sub-Kits are contained within the Complete Installation and Vent Kits)
23579	220 Mounting Outdoor Kit, (Sub-Kits are contained within the Complete Installation and Vent Kits)
09381	Thermostat Kit, NEMA 4X
23778	Thermostat Kit, Two-Stage NEMA 4X (use w/ Plus Models)



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Shop online at www.raymurray.com or call **800-628-5044**

Red Dragon Construction Heaters



RED DRAGON CONSTRUCTION HEATERS

The Red Dragon Construction Heater's rugged design is perfect for temporary heating of warehouses, construction sites, machine sheds and more. These heaters require NO ELECTRICITY and are fueled by clean, efficient propane. All models come with complete safety features.

- **MADE in U.S.A.**
- Low profile prevents accidental tipping.
- Heavy gauge steel construction, stackable for convenient storage,
- Unique and efficient, high heat output close to the surface means a warmer working area.
- More radiating surface than a cylindrical shape construction heater.
- Easy Maintenance, one bolt removes burner and all controls.
- Minimum 100lb cylinder required, 5-8 hr. run time, Clearance 4ft on sides and 8ft above

PLUS...

- Heat output: 200,000 BTU/hr. at 18 psi Preset Regulator and Safety Excess Flow P.O.L
- Piezo electronic ignitor.
- Thermocouple safety control.
- U.L. listed LP-Gas Hose Assemblies w/Quick Connect



CH220-QC

Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height
CH220-QC	LP	Push Button Ignition	200,000	Construction Heater, 10' Hose Assembly	21.5"	26"	16.5"
CH250-QC	LP	Push Button Ignition	200,000	Construction Heater, 50' Hose Assembly	21.5"	26"	16.5"
CH2100-QC	LP	Push Button Ignition	200,000	Construction Heater, 100' Hose Assembly	21.5"	26"	16.5"

ACCESSORIES

Model #	Description
HP10TC	10' LP Gas Hose Kit w/ P.O.L and Regulator
HP50TQ	50' LP Gas Hose Kit w/ P.O.L and Regulator
HP10TQC	U.L. Listed 10' LP Gas Hose Kit w/ Quick Connect
HP50TQC	U.L. Listed 50' LP Gas Hose Kit w/ Quick Connect

REPLACEMENT PARTS

Model #	Description
CH221QC	Complete Burner Control Assembly (incl. everything except hose, regulator and P.O.L)
101-CH221	Heater Burner
R-700C	18 PSI Preset Regulator
H-19H	Safety Control Valve
M3012	12" Thermocouple
Model21C	Ignitor w/ Lead Wire (3009) and Spark Plug
3309	Lead Wire for Ignitor w/ ends
V-326	Flame Control Valve 1/4" Elbow
332XXX	Spark Plug
P-3200W	Excess Flow P.O.L
P-W795	Hand Tighten Excess flow P.O.L
HN-7	1/4" Female x Male Quick Connect Elbow

TOUGH JOBS? TOUGHER SOLUTIONS!

CONSTRUCTION HEATERS

RED DRAGON TORCHES

SHOP TORCHES

NO JOB TOO BIG OR TOO SMALL!

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Modine Heaters



MODINE RESIDENTIAL HOT DAWG GARAGE HEATERS

The ideal heating solution for residential garages and workshops, along with light commercial or industrial applications. With versatile installation options, the Hot Dawg garage heater frees up more workspace by getting rid of space heaters that clutter up the area. The quiet operation allows your space to be warm without the distraction of a loud machine running in the background. Certified for residential, commercial and industrial use.

HD Low Profile Power Vented Garage Heaters

- Designed, Engineered & Assembled in U.S.A
- Unit can easily be rotated to allow for convenient right or left side control placement** (Models Sizes 30-75)
- Low Profile, lightweight design easily installs 1" from ceiling with only 2 brackets (Included in Models Sizes 30-75, Accessory for 100, 125)
- Heavy gauge metal casing construction
- Permanently-lubricated motor for maintenance-free dependability
- Single or Two Stage controls available
- 100% shut-off with continuous retry to allow for safe ignition in event the unit doesn't light on the first try
- Factory installed finger proof fan guards
- Blower models (HDB) available



HD45

Standard Model #	Stainless Steel Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height	Typical Application
HD30A	HD30S	LP	Direct Spark Ignition	30,000	Power Vented Propeller Unit Heater	26.8"	22"	12.2"	1 to 1-1/2 Car Garage
HD45A	HD45S	LP	Direct Spark Ignition	45,000	Power Vented Propeller Unit Heater	26.8"	22"	12.2"	2 to 2-1/2 Car Garage
HD60A	HD60S	LP	Direct Spark Ignition	60,000	Power Vented Propeller Unit Heater	26.8"	25"	18"	3 to 3-1/2 Car Garage
HD75A	HD75S	LP	Direct Spark Ignition	75,000	Power Vented Propeller Unit Heater	26.8"	25"	18"	Large Garage
HD100A	HD100S	LP	Direct Spark Ignition	100,000	Power Vented Propeller Unit Heater	35.5"	31"	20.5"	Large Garage
HD125A	HD125S	LP	Direct Spark Ignition	125,000	Power Vented Propeller Unit Heater	35.5"	31"	20.5"	Large Garage

* Also available for Natural Gas - add "N" before the Model #

** Typical Application is sample data only. Consult a qualified installer for the actual requirements for your building

HDS Low Profile Separated Combustion Garage Heater

- Designed, Engineered & Assembled in U.S.A
- Same added features from the HD Series with extra benefits
- Draws fresh air from outside, ensuring dust, dirt or fumes do not affect durability or performance
- Factory assembled, certified separated combustion. No add-ons needed allow for an easier and quicker installation providing greater durability and reduced maintenance

Standard Model #	Stainless Steel Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height	Typical Application
HDS30A	HDS30S	LP	Direct Spark Ignition	30,000	Separated Combustion Propeller Unit Heater	26.8"	22"	12.2"	1 to 1-1/2 Car Garage
HDS45A	HDS45S	LP	Direct Spark Ignition	45,000	Separated Combustion Propeller Unit Heater	26.8"	22"	12.2"	2 to 2-1/2 Car Garage
HDS60A	HDS60S	LP	Direct Spark Ignition	60,000	Separated Combustion Propeller Unit Heater	26.8"	25"	18"	3 to 3-1/2 Car Garage
HDS75A	HDS75S	LP	Direct Spark Ignition	75,000	Separated Combustion Propeller Unit Heater	26.8"	25"	18"	Large Garage
HDS100A	HDS100S	LP	Direct Spark Ignition	100,000	Separated Combustion Propeller Unit Heater	35.5"	31"	20.5"	Large Garage
HDS125A	HDS125S	LP	Direct Spark Ignition	125,000	Separated Combustion Propeller Unit Heater	35.5"	31"	20.5"	Large Garage

* Also available for Natural Gas - add "N" before the Model #

** Typical Application is sample data only. Consult a qualified installer for the actual requirements for your building



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Modine Heaters



MODINE PDP POWER VENTED HEATER

- **Designed, Engineered & Assembled in U.S.A.**
- 83% Thermal efficiency, maximizing seasonal efficiency through the use of a collector box and the power exhauster
- Power exhaust can rotate 180 degree allowing unit to be vented vertically or horizontally
- 100% shut-off if the unit does not light, ensuring unburned gases do not build up
- Safety pressure switch monitors the vent pipe to assure flue gases lead the building
- Designed to utilize the smallest diameter vent pipe possible



PDP250

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
PDP150-85	PDP150-30	Intermittent Pilot	150,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	21"	29-13/16"	35-1/4"
PDP175-85	PDP175-30	Intermittent Pilot	175,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	23-1/2"	29-9/16"	35-1/4"
PDP200-85	PDP200-30	Intermittent Pilot	200,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	25-5/8"	34-3/4"	40-1/4"
PDP250-85	PDP250-30	Intermittent Pilot	250,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	25-5/8"	34-3/4"	40-1/4"
PDP300-85	PDP300-30	Intermittent Pilot	300,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	28-5/8"	34-3/4"	40-1/4"
PDP350-85	PDP350-30	Intermittent Pilot	350,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	33-5/8"	34-11/16"	40-1/4"
PDP400-85	PDP400-30	Intermittent Pilot	400,000	Power Vented Propeller Unit Heater, Aluminized Steel Heat Exchanger	40"	38-3/16"	40-1/4"

** PDP Series Model is also offered with Stainless Steel Heat Exchanger

MODINE PTC HIGH EFFICIENCY COMMERCIAL HEATER

- **Designed, Engineered & Assembled in U.S.A.**
- Up to 97% Thermal Efficiency
- 100% Shut-off Intermittent Pilot Ignition System with continuous retry
- Uses NAT or LP (Field Convertible from NAT to LP) plus external gas connections
- Tubular Heat Exchanger with In-Shot Burner on each Exchanger Tube for Reliable Performance and Ease of Service
- Blowers available for more robust air distribution (PTC215, 260 and 310 Only)
- Can be vented as either two-pipe or concentric vent system with 3" and 4" PVC, Two-point mounting kit, horizontal and vertical concentric vent kits, finger-proof fan guard
- Permanently Lubricated Motor
- Sealed compartment protects the combination gas valve, ignition control, manifold and burner from environment
- Full 10-Year Warranty on both Heat Exchangers



PTC55

Standard Model #	Stainless Steel Model #	Gas Type	Operation	Btu's	Description	Width	Depth	Height	Typical Application
PTC55A-21	PTC55S-21	LP	Direct Spark	55,000	High-Efficiency Separated Combustion Propeller Unit Heater	29.8"	28.19"	18.13"	Large Garage
PTC65A-21	PTC65S-21	LP	Direct Spark	65,000	High-Efficiency Separated Combustion Propeller Unit Heater	29.8"	28.19"	18.13"	Large Garage
PTC85A-21	PTC85S-21	LP	Direct Spark	85,000	High-Efficiency Separated Combustion Propeller Unit Heater	35.53"	30.73"	20.31"	Large Garage
PTC110A-21	PTC110S-21	LP	Direct Spark	110,000	High-Efficiency Separated Combustion Propeller Unit Heater	35.53"	34.16"	20.31"	Large Garage
PTC135A-21	PTC135S-21	LP	Direct Spark	135,000	High-Efficiency Separated Combustion Propeller Unit Heater	35.53"	33.83"	23.06"	Large Garage
PTC156A-21	PTC156S-21	LP	Direct Spark	156,000	High-Efficiency Separated Combustion Propeller Unit Heater	35.53"	33.83"	23.06"	Large Garage
PTC180A-21	PTC180S-21	LP	Direct Spark	180,000	High-Efficiency Separated Combustion Propeller Unit Heater	42.53"	33.83"	25.81"	Large Garage
PTC215A-21	PTC215S-21	LP	Direct Spark	215,000	High-Efficiency Separated Combustion Propeller Unit Heater	42.53"	33.83"	31.31"	Large Garage
PTC260A-21	PTC260S-21	LP	Direct Spark	260,000	High-Efficiency Separated Combustion Propeller Unit Heater	42.53"	34.83"	31.31"	Large Garage
PTC310A-21	PTC310S-21	LP	Direct Spark	310,000	High-Efficiency Separated Combustion Propeller Unit Heater	42.53"	34.83"	42.53"	Large Garage

** PTC Series Model is also offered in Natural Gas



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Modine Heaters



MODINE PTP LOW-PROFILE POWER VENTED STAINLESS STEEL HEATER

- **Designed, Engineered & Assembled in U.S.A.**
- 100% Shut-off Intermittent Pilot-Ignition System with continuous retry
- 82/83% thermal efficiency
- Use NAT or LP (Field Convertible from NAT to LP)
- Permanently Lubricated Motor
- Designed to Utilize the Smallest Diameter Vent Pipe Possible
- Full 10-Year Warranty on Heat Exchanger



PTP150

LP Model #	NG Model #	Operation	Btu's	Description	Width	Depth	Height
PTP150SS12ISBAN	LP	Direct Spark	150,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	35.53"	31.79"	23.06"
PTP175SS12ISBAN	LP	Direct Spark	175,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	42.53"	32.83"	25.81"
PTP200SS12ISBAN	LP	Direct Spark	200,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	42.53"	34.43"	25.81"
PTP250SS12ISBAN	LP	Direct Spark	250,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	42.53"	33.83"	31.31"
PTP300SS12ISBAN	LP	Direct Spark	300,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	42.53"	33.83"	31.31"
PTP350SS12ISBAN	LP	Direct Spark	350,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	42.53"	34.83"	39.56"
PTP400SS12ISBAN	LP	Direct Spark	400,000	Low-Profile Power Vented Propeller Unit Heater, Stainless Steel Heat Exchanger	42.53"	34.83"	39.56"

** PTP Series Model is also offered in Natural Gas

MODINE PTS SEPARATED COMBUSTION HEATER

- **Designed, Engineered & Assembled in U.S.A.**
- Less maintenance in dusty environments
- Improved efficiency by using outside air for combustion
- Greater durability in hostile environments (environments possessing substances that may deteriorate the performance of the unit)
- Uses natural or propane gas
- Certified for commercial and industrial use
- Permanently-lubricated motor for trouble-free dependability
- Full 10-year warranty on heat exchanger



PTS

Standard Model #	Stainless Steel Model #	Gas Type	Operation	Btu's	Description	Length	Depth	Height
PTS150AS0121	PTS150SS0121	LP	Direct Spark	150,000	Separated Combustion Propeller Unit Heater	35.53"	31.79"	23.06"
PTS175AS0121	PTS175SS0121	LP	Direct Spark	175,000	Separated Combustion Propeller Unit Heater	42.53"	32.83"	25.81"
PTS200AS0121	PTS200SS0121	LP	Direct Spark	200,000	Separated Combustion Propeller Unit Heater	42.53"	34.43"	25.81"
PTS250AS0121	PTS250SS0121	LP	Direct Spark	250,000	Separated Combustion Propeller Unit Heater	42.53"	33.83"	31.31"
PTS300AS0121	PTS300SS0121	LP	Direct Spark	300,000	Separated Combustion Propeller Unit Heater	42.53"	33.83"	31.31"
PTS350AS0121	PTS350SS0121	LP	Direct Spark	350,000	Separated Combustion Propeller Unit Heater	42.53"	34.83"	39.56"
PTS400AS0121	PTS400SS0121	LP	Direct Spark	400,000	Separated Combustion Propeller Unit Heater	42.53"	34.83"	39.56"

** PTS Series Model is offered in Natural Gas



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Modine Heaters



MODINE HEATER ACCESSORIES

Model #	Description
27865	3" Vent Cap (HD30-75)
27866	4" Vent Cap (HD100-200, PTP150-200)
27867	5" Vent Cap (PDP150-200)
27868	6" Vent Cap (PTP250-400)
77792	Horizontal Concentric Vent Kit (HDS30-45)
32161	Horizontal Concentric Vent Kit (HDS60-125, PTS150-200)
32162	Horizontal Concentric Vent Kit (PTS250-400)
57913	Horizontal Concentric Vent Kit (PTC55-135)
57914	Horizontal Concentric Vent Kit (PTC156-260)
57918	Horizontal Concentric Vent Kit (PTC310)
77793	Vertical Concentric Vent Kit (HDS30-45)
33356	Vertical Concentric Vent Kit (HDS60-125, PTS150-200)
33357	Vertical Concentric Vent Kit (PTS250-400)
57919	Vertical Concentric Vent Kit (PTC55-135)
57920	Vertical Concentric Vent Kit (PTC156-260)
57924	Vertical Concentric Vent Kit (PTC310)

Model #	Description
57970	Two-Pipe Vent Kit (PTC55-135)
57972	Two-Pipe Vent Kit (PTC156-260)
57973	Two-Pipe Vent Kit (PTC310)
27865*	Two-Pipe Vent Kit (HDS30-45)
27866*	Two-Pipe Vent Kit (HDS60-125, PTS150-200)
27868	Two-Pipe Vent Kit (PTS250-400)
56961	Ceiling Mounting Brackets (HD/HDS100-125, PCT55-110)
23432	Pipe Hanger Kit (PDP150-300)
23433	Pipe Hanger Kit (PDP350-400)
TH6110D1021	24V Programmable 1H/1C Horizontal Large Display Screen Thermostat
TH8321WF1001/U	7DAY WIFI 3H/2C Programmable Touch Screen Thermostat
FSCMKI03	3" Horizontal Vent Kit (HD30-75)
FSCMKI04CD	4" Horizontal Installation Vent Kit w/ Condensation Drain (HD100-125)

* Two Kits Required per Unit

MODINE CONVERSION KITS

LP to NAT	NAT to LP	Unit
53214	53079CONV	HD,HDS,PTP, PTS (Model Sizes 30-75)
53292	53080CONV	HD,HDS,PTP, PTS (Model Size 100)
53296	53081CONV	HD,HDS,PTP, PTS (Model Size 125)
55410	55403	HD,HDS,PTP, PTS (Model Size 150)
55411	55404	HD,HDS,PTP, PTS (Model Size 175)
55412	55405	HD,HDS,PTP, PTS (Model Size 200)
55413	55406	HD,HDS,PTP, PTS (Model Size 250)
55414	55407	HD,HDS,PTP, PTS (Model Size 300)
55415	55408	HD,HDS,PTP, PTS (Model Size 350)
55416	55409	HD,HDS,PTP, PTS (Model Size 400)
66898	66897	PTC55
66900	66899	PTC65
65947	65946	PTC85
65949	65948	PTC100
57907	57901	PTC135
65951	65950	PTC156
57909	57903	PTC180
57910	57904	PTC215
57911	57905	PTC260
57912	57906	PTC310
78348	28048	PDP150
78349	28049	PDP175
78350	28050	PDP200
78351	28051	PDP250
78352	28052	PDP300
78353	28053	PDP350
78354	28054	PDP400



28049



32161

Reznor Heaters

REZNOR


REZNOR UBZ SEPARATED COMBUSTION HEATERS

Made in U.S.A. Model UBZ gas-fired, separated combustion, high-static blower fan, 82 - 83% thermal efficiency, commercial/industrial unit heaters are great for space heating applications. These models use outside air for combustion to prevent dirt, lint, dust or other contaminants in the indoor atmosphere from being burned. Each size cabinet is easily suspended from four suspension points. The low voltage terminal strip on the outside of the cabinet makes connecting control wiring easy with no panels to remove. The addition of terminal G to the strip, along with the new design of the circuit board, allows for fan only operation (without adding relays). Integrated circuit board with 7 segment display, external status indicating LED, Tcore titanium stabilized aluminized steel heat exchanger, Patented single burner combustion system including a one-piece burner assembly, vibration/noise isolated fan and venter motor - designed for low noise operation.


UBZ

Model #	Gas Type	Operation	Btu's	Description	Length	Depth	Height
UBZ30	LP	Direct Spark Ignition	30,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	27"	40-3/32"	13-3/4"
UBZ45	LP	Direct Spark Ignition	45,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	27"	40-3/32"	13-3/4"
UBZ60	LP	Direct Spark Ignition	60,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	27"	40-3/32"	16-3/4"
UBZ75	LP	Direct Spark Ignition	75,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	27"	40-3/32"	16-3/4"
UBZ100	LP	Direct Spark Ignition	100,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	27"	48-1/8"	24-3/4"
UBZ125	LP	Direct Spark Ignition	125,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	27"	47-5/8"	24-3/4"
UBZ150	LP	Direct Spark Ignition	150,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	38-3/16"	64-3/4"	20-1/8"
UBZ175	LP	Direct Spark Ignition	175,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	38-3/16"	64-3/4"	20-1/8"
UBZ200	LP	Direct Spark Ignition	200,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	38-3/16"	64-3/4"	20-1/8"
UBZ225	LP	Direct Spark Ignition	225,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	38-3/16"	68-1/8"	26-1/8"
UBZ250	LP	Direct Spark Ignition	250,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	38-3/16"	68-1/8"	26-1/8"
UBZ300	LP	Direct Spark Ignition	300,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	41"	68-1/8"	34-1/8"
UBZ350	LP	Direct Spark Ignition	350,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	41"	68-1/8"	34-1/8"
UBZ400	LP	Direct Spark Ignition	400,000	Separated Combustion, Alum Heat Exchanger, Blower, Commercial/Industrial Heater	41"	68-1/8"	34-1/8"

*** Also available for Natural Gas - add "N" before the Model #



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Reznor Heaters

REZNOR



REZNOR UDX UNIT HEATERS

Made in U.S.A. Model UDX gas-fired unit heaters are great for space heating applications. These units are power vented to eliminate heat losses up the flue pipe. Each size cabinet is easily suspended from either two or four suspension points. Or, an optional hanger kit for Sizes 30-125 allows for ceiling mounting. The low voltage terminal strip on the outside of the cabinet makes connecting control wiring easy with no panels to remove. The addition of terminal G to the strip, along with the new design of the circuit board, allows for fan only operation (without adding relays). Integrated circuit board with 7 segment display, external status indicating LED, Tcore titanium stabilized aluminized steel heat exchanger, Patented single burner combustion system including a one-piece burner assembly, vibration/noise isolated fan and venter motor - designed for low noise operation.



UDX

Model #	Gas Type	Operation	Btu's	Description	Length	Depth	Height
UDX30	LP	Direct Spark Ignition	30,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	27"	29-3/4"	13-3/4"
UDX45	LP	Direct Spark Ignition	45,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	27"	29-3/4"	13-3/4"
UDX60	LP	Direct Spark Ignition	60,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	27"	27"	16-3/4"
UDX75	LP	Direct Spark Ignition	75,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	27"	27-5/8"	16-3/4"
UDX100	LP	Direct Spark Ignition	100,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	27"	34-9/32"	24-3/4"
UDX125	LP	Direct Spark Ignition	125,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	27"	34-9/32"	24-3/4"
UDX150	LP	Direct Spark Ignition	150,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	38-3/16"	48-7/16"	20-1/8"
UDX175	LP	Direct Spark Ignition	175,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	38-3/16"	48-7/16"	20-1/8"
UDX200	LP	Direct Spark Ignition	200,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	38-3/16"	48-7/16"	20-1/8"
UDX225	LP	Direct Spark Ignition	225,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	38-3/16"	48-7/16"	26-1/8"
UDX250	LP	Direct Spark Ignition	250,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	38-3/16"	48-7/16"	26-1/8"
UDX300	LP	Direct Spark Ignition	300,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	41"	48-29/32"	34-1/8"
UDX350	LP	Direct Spark Ignition	350,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	41"	48-29/32"	34-1/8"
UDX400	LP	Direct Spark Ignition	400,000	Power Vented, Alum Heat Exchanger, Commerical/Industrial Heater	41"	48-29/32"	34-1/8"

*** Also available for Natural Gas - add "N" before the Model #



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Detroit Radiant Heaters



DETROIT RADIANT HL3 LOW-INTENSITY TWO-STAGE INFRARED TUBE HEATERS

The HL3 Series, packed with quality features, represents today's most energy efficient line of infrared tube heaters. Our patented two-stage technology, incorporated into the HL3 Series, provides more comfort while saving valuable energy dollars, superior comfort, indoor air quality, reduced energy consumption, flexibility, durability and radiant efficiency. In addition, the highest quality materials and construction features ensure years of reliable and efficient operation. No other infrared heater can match the performance and quality of the HL3.



HL3

- **MADE in U.S.A.**
- Pre - and Post - purge controls
- Self-diagnostic LED, microprocessor based circuitry
- Independent control-air-gas compartments with too-free access
- Reliable hot surface ignition
- Stainless steel flexible gas connector included
- 24 volt controls and power cord standard

Model #	Gas Type	Operation	Btu's	Description
HL20-65/50P	LP	Hot Surface Ignition	65,000	Two-Stage Tube Heater, 20' Aluminized Combustion Tube Heater
HL20-75/50P	LP	Hot Surface Ignition	75,000	Two-Stage Tube Heater, 20' Aluminized Combustion Tube Heater
HL30-65/50P	LP	Hot Surface Ignition	65,000	Two-Stage Tube Heater, 30' Aluminized Combustion Tube Heater
HL30-75/50P	LP	Hot Surface Ignition	75,000	Two-Stage Tube Heater, 30' Aluminized Combustion Tube Heater
HL30-100/65P	LP	Hot Surface Ignition	100,000	Two-Stage Tube Heater, 30' Aluminized Combustion Tube Heater
HL30-125/95P	LP	Hot Surface Ignition	125,000	Two-Stage Tube Heater, 30' Aluminized Combustion Tube Heater
HL40-75/50P	LP	Hot Surface Ignition	75,000	Two-Stage Tube Heater, 40' Aluminized Combustion Tube Heater
HL40-100/65P	LP	Hot Surface Ignition	100,000	Two-Stage Tube Heater, 40' Aluminized Combustion Tube Heater
HL40-125/95P	LP	Hot Surface Ignition	125,000	Two-Stage Tube Heater, 40' Aluminized Combustion Tube Heater
HL40-150/100P	LP	Hot Surface Ignition	150,000	Two-Stage Tube Heater, 40' Titanium Combustion Tube Heater
HL40-175/125P	LP	Hot Surface Ignition	175,000	Two-Stage Tube Heater, 40' Titanium Combustion Tube Heater
HL50-125/95P	LP	Hot Surface Ignition	125,000	Two-Stage Tube Heater, 50' Aluminized Combustion Tube Heater
HL50-150/100P	LP	Hot Surface Ignition	150,000	Two-Stage Tube Heater, 50' Titanium Combustion Tube Heater
HL50-175/125P	LP	Hot Surface Ignition	175,000	Two-Stage Tube Heater, 50' Titanium Combustion Tube Heater
HL50-200/145P	LP	Hot Surface Ignition	200,000	Two-Stage Tube Heater, 50' Titanium Combustion Tube Heater
HL60-150/100P	LP	Hot Surface Ignition	150,000	Two-Stage Tube Heater, 60' Titanium Combustion Tube Heater
HL60-175/125P	LP	Hot Surface Ignition	175,000	Two-Stage Tube Heater, 60' Titanium Combustion Tube Heater
HL60-200/145P	LP	Hot Surface Ignition	200,000	Two-Stage Tube Heater, 60' Titanium Combustion Tube Heater
HL70-175/125P	LP	Hot Surface Ignition	175,000	Two-Stage Tube Heater, 70' Titanium Combustion Tube Heater
HL70-200/145P	LP	Hot Surface Ignition	200,000	Two-Stage Tube Heater, 70' Titanium Combustion Tube Heater

* HL3 Series are also offered in Natural Gas



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Detroit Radiant Heaters



DETROIT RADIANT DX3L LOW-INTENSITY SINGLE STAGE INFRARED TUBE HEATERS

Packed with quality features, the DX3L represents the highest in quality, single-stage, low intensity tube heaters. Performance is enhanced through the use of a specially designed stainless steel burner and black coated titanium stabilized and/or aluminized coated steel radiant tube exchangers. The DX3L Series offers superior low intensity heat, performance, and longevity.



DX3L

- **MADE in U.S.A.**
- Pre - and Post - purge controls
- Self-diagnostic LED, microprocessor based circuitry
- Independent control-air-gas compartments with too-free access
- Reliable hot surface ignition
- Stainless steel flexible gas connector included
- 24 volt controls and power cord standard

Model #	Gas Type	Operation	Btu's	Description
DX20-50P	LP	Hot Surface Ignition	50,000	Single Stage Tube Heater, 20' Aluminized Combustion Tube Heater
DX20-60P	LP	Hot Surface Ignition	60,000	Single Stage Tube Heater, 20' Aluminized Combustion Tube Heater
DX20-75P	LP	Hot Surface Ignition	75,000	Single Stage Tube Heater, 20' Aluminized Combustion Tube Heater
DX30-50P	LP	Hot Surface Ignition	50,000	Single Stage Tube Heater, 30' Aluminized Combustion Tube Heater
DX30-60P	LP	Hot Surface Ignition	60,000	Single Stage Tube Heater, 30' Aluminized Combustion Tube Heater
DX30-75P	LP	Hot Surface Ignition	75,000	Single Stage Tube Heater, 30' Aluminized Combustion Tube Heater
DX30-100P	LP	Hot Surface Ignition	100,000	Single Stage Tube Heater, 30' Aluminized Combustion Tube Heater
DX30-125P	LP	Hot Surface Ignition	125,000	Single Stage Tube Heater, 30' Aluminized Combustion Tube Heater
DX40-50P	LP	Hot Surface Ignition	50,000	Single Stage Tube Heater, 40' Aluminized Combustion Tube Heater
DX40-60P	LP	Hot Surface Ignition	60,000	Single Stage Tube Heater, 40' Aluminized Combustion Tube Heater
DX40-75P	LP	Hot Surface Ignition	75,000	Single Stage Tube Heater, 40' Aluminized Combustion Tube Heater
DX40-100P	LP	Hot Surface Ignition	100,000	Single Stage Tube Heater, 40' Aluminized Combustion Tube Heater
DX40-125P	LP	Hot Surface Ignition	125,000	Single Stage Tube Heater, 40' Aluminized Combustion Tube Heater
DX40-150P	LP	Hot Surface Ignition	150,000	Single Stage Tube Heater, 40' Titanium Combustion Tube Heater
DX40-175P	LP	Hot Surface Ignition	175,000	Single Stage Tube Heater, 40' Titanium Combustion Tube Heater
DX50-100P	LP	Hot Surface Ignition	100,000	Single Stage Tube Heater, 50' Aluminized Combustion Tube Heater
DX50-125P	LP	Hot Surface Ignition	125,000	Single Stage Tube Heater, 50' Aluminized Combustion Tube Heater
DX50-150P	LP	Hot Surface Ignition	150,000	Single Stage Tube Heater, 50' Titanium Combustion Tube Heater
DX50-175P	LP	Hot Surface Ignition	175,000	Single Stage Tube Heater, 50' Titanium Combustion Tube Heater
DX50-200P	LP	Hot Surface Ignition	200,000	Single Stage Tube Heater, 50' Titanium Combustion Tube Heater
DX60-125P	LP	Hot Surface Ignition	125,000	Single Stage Tube Heater, 60' Aluminized Combustion Tube Heater
DX60-150P	LP	Hot Surface Ignition	150,000	Single Stage Tube Heater, 60' Titanium Combustion Tube Heater
DX60-175P	LP	Hot Surface Ignition	175,000	Single Stage Tube Heater, 60' Titanium Combustion Tube Heater
DX60-200P	LP	Hot Surface Ignition	200,000	Single Stage Tube Heater, 60' Titanium Combustion Tube Heater
DX70-175P	LP	Hot Surface Ignition	175,000	Single Stage Tube Heater, 70' Titanium Combustion Tube Heater
DX80-200P	LP	Hot Surface Ignition	200,000	Single Stage Tube Heater, 80' Titanium Combustion Tube Heater

* DX3L Series are also offered in Natural Gas



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Detroit Radiant Heaters

HL3 AND DX3L ACCESSORIES

The most common accessories are listed below - additional unit models and accessories may be available. Please reach out to RMI Customer Service or RMI Technical Support for assistance and the most up-to-date information in sizing the appropriate tube heater to your application.

Model #	Description
DTH-10EA	10' Heater Extension Assembly
DTH-20EA	20' Heater Extension Assembly
DTH-TR60	5' Heater Extension Assembly
HD-THCS	5' Bulldog Chain Coil Set w/ (2) S-hooks for hanging heater, working load limit 330 lbs each
HD-SH	Heavy Duty S-hook w/ working load limit of 330 lbs.
DTH-CS	5' Bulldog Chain Coil Set w/ (2) S-hooks for hanging heater, working load limit 155 lbs each
SILSEAL	Silicone Seal, (Low Intensity Tube Heaters)
OD-KIT	Outdoor Approval Kit, (HL3, DX3L, LD3 and LS3 Series)
24VAO	24V Controls (DX2-SB, DX2-SS, DES3 Series)
DTH-ERK	External Relay Kit (HL3, HL2, CX3L, LD3, LS3 Series)required multiple heaters on one thermostat (40VA needed to power the control)
DTH-ERK-HE	External Relay Kit, Utilizes a rugged NEMA 6P Rating (40VA needed to power the control)
FC-24PVC-AO	Upgrads Standard Stainless Steel FC-24 (24") Flexible Gas Connector
DTH-5EA-SUB	(4" Models Only) Upgrades (1) 10'piece of Radiant Tubing & Reflector w/ (2) 5' pieces for making "U" heaters from 30', 50' and 70' Models
DTH-REP	Reflector and Elbow Package
DTH-BK	Brass Knuckles, Reflector Mounting Bracket
DTH-RUP	Reflector and "U" Bend Package, 1-TF1B and 1-RU
DTH-SSE	62" long x 10.5" wide, Side Shield Extension, Direct Infrared Rays Downward
DTH-SMB	Single Mount Bracket for U-Shaped configured heaters

VENTING GUIDELINES FOR DETROIT RADIANT TUBE HEATERS

Single Heater Intake		Dual Heater Intake	
Air Intake Duct Size	Max Intake Length	Duct Size	Max Intake Length
4"	20'	4" (single) / 6" (dual)	20'
5"	30'	4" (single) / 8" (dual)	30'
6"	40'	Consult Factory	

*No more than two 90° elbows are allowed

*Allow for expansion. Use a 4" flexible hose to connect the duct to the burner control box



Detroit Radiant Heaters



DETROIT RADIANT LD3 AND LS3 LOW-CLEARANCE INFRARED TUBE HEATERS

The LD3 Series extends the energy saving benefits of two-stage technology to many commercial, industrial and residential applications. The LS3 Series single stage heater represents the finest in single stage, low BTU's infrared tube heaters. Designed for lower mounting heights, the LD3 and LS3 Series is ideal for low ceiling commercial/industrial areas such as entry ways, mezzanines, lunch rooms and restaurant patios. Specific models are suitable in residential garages, enclosed swimming pools, solariums and porches. These heaters can also be designed in a U- and L- shaped configuration to fit tighter spaces.

- **MADE in U.S.A.**
- 60" Powercord Connection, Operation Indicator Lights, Fitted Air Intake Collar, Site Glass for Burner Inspection
- Separated Air and Gas Burner Chamber
- Black Enameled Steel Burner Control Box w/ ABS Plastic Cover
- Tool-Free Serviceability while Operating, Reflector End Caps w/ Clips, Tube Hangers, High Polished Aluminum Reflectors, Interlocking Swaged Radiant Tubes, Downstream Dimpled Baffle MAX Radiant Tube



LD3

LS3

LD3 LOW CLEARANCE TUBE HEATER

Model #	Gas Type	Operation	Btu's	Description
LD15-40/28P	LP	Hot Surface Ignition w/ Flame Rod Sensing	40,000	Low-Clearance Two-Stage Tube Heaters 15'
LD15-50/35P	LP	Hot Surface Ignition w/ Flame Rod Sensing	50,000	Low-Clearance Two-Stage Tube Heaters 15'
LD20-40/28P	LP	Hot Surface Ignition w/ Flame Rod Sensing	40,000	Low-Clearance Two-Stage Tube Heaters 20'
LD20-50/35P	LP	Hot Surface Ignition w/ Flame Rod Sensing	50,000	Low-Clearance Two-Stage Tube Heaters 20'
LD30-50/35P	LP	Hot Surface Ignition w/ Flame Rod Sensing	50,000	Low-Clearance Two-Stage Tube Heaters 30'

* Also available for Natural Gas - add "N" after Model #

LS3 LOW CLEARANCE TUBE HEATER

Model #	Gas Type	Operation	Btu's	Description
LS10-25P	LP	Hot Surface Ignition w/ Flame Rod Sensing	25,000	Low-Clearance Single Stage Tube Heater, 10'
LS10-30P	LP	Hot Surface Ignition w/ Flame Rod Sensing	30,000	Low-Clearance Single Stage Tube Heater, 10'
LS15-25P	LP	Hot Surface Ignition w/ Flame Rod Sensing	25,000	Low-Clearance Single Stage Tube Heater, 15'
LS15-30P	LP	Hot Surface Ignition w/ Flame Rod Sensing	30,000	Low-Clearance Single Stage Tube Heater, 15'
LS15-40P	LP	Hot Surface Ignition w/ Flame Rod Sensing	40,000	Low-Clearance Single Stage Tube Heater, 15'
LS15-50P	LP	Hot Surface Ignition w/ Flame Rod Sensing	50,000	Low-Clearance Single Stage Tube Heater, 15'
LS20-40P	LP	Hot Surface Ignition w/ Flame Rod Sensing	40,000	Low-Clearance Single Stage Tube Heater, 20'
LS20-50P	LP	Hot Surface Ignition w/ Flame Rod Sensing	50,000	Low-Clearance Single Stage Tube Heater, 20'
LS30-50P	LP	Hot Surface Ignition w/ Flame Rod Sensing	50,000	Low-Clearance Single Stage Tube Heater, 30'

* Also available for Natural Gas - add "N" after Model #



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Detroit Radiant Heaters



DETROIT RADIANT DR HIGH-INTENSITY INFRARED CERAMIC HEATER

The DR Series infrared ceramic heaters represent the preferred method of spot heating a portion of a large space. This unvented heater is commonly used in areas of high air filtration, high ceilings, and spot heating applications such as warehouses, manufacturing and maintenance facilities, distribution facilities, etc.

Specify 25 Volt or 120 Volt when ordering Direct Spark Ignition Models.

- **MADE in U.S.A.**
- Exclusive Ceramic Burner
- Stainless Steel Rods
- Highly Polished Aluminum Reflector
- Potted (water resistant) Circuitry
- CSA Designed Certified
- Even Level of Heat Distribution for Superior Comfort
- Reduced Energy Consumption, Radiant Efficiency, Low Installation Costs



DR90

120V Model #	25V Model #	Millivolt Model #	Operation	Btu's	Description	Width	Depth	Height
DR30PFS-2-120	DR30PFS-2-25V	DR30PMV-2	Direct Spark	30,000	High-Intensity Infrared Ceramic Heater	12-3/4"	15-1/4"	22-1/2"
DR45PFS-2-120	DR45PFS-2-25V	DR45PMV-2	Direct Spark	45,000	High-Intensity Infrared Ceramic Heater	19-1/8"	15-1/4"	22-1/2"
DR50PFS-2-120	DR50PFS-2-25V	DR50PMV-2	Direct Spark	50,000	High-Intensity Infrared Ceramic Heater	19-1/8"	15-1/4"	22-1/2"
DR55PFS-2-120	DR55PFS-2-25V	DR55PMV-2	Direct Spark	55,000	High-Intensity Infrared Ceramic Heater	19-1/8"	15-1/4"	22-1/2"
DR60PFS-2-120	DR60PFS-2-25V	DR60PMV-2	Direct Spark	60,000	High-Intensity Infrared Ceramic Heater	19-1/8"	15-1/4"	22-1/2"
DR75PFS-2-120	DR75PFS-2-25V	DR75PMV-2	Direct Spark	75,000	High-Intensity Infrared Ceramic Heater	26-5/8"	15-1/4"	22-1/2"
DR80PFS-2-120	DR80PFS-2-25V	DR80PMV-2	Direct Spark	80,000	High-Intensity Infrared Ceramic Heater	26-5/8"	15-1/4"	22-1/2"
DR85PFS-2-120	DR85PFS-2-25V	DR85PMV-2	Direct Spark	85,000	High-Intensity Infrared Ceramic Heater	26-5/8"	15-1/4"	22-1/2"
DR90PFS-2-120	DR90PFS-2-25V	DR90PMV-2	Direct Spark	90,000	High-Intensity Infrared Ceramic Heater	26-5/8"	15-1/4"	22-1/2"
DR100PFS-2-120	DR100PFS-2-25	DR100PMV-2	Direct Spark	100,000	High-Intensity Infrared Ceramic Heater	26-5/8"	15-1/4"	22-1/2"
DR130PFS-2-120	DR130PFS-2-25	DR130PMV-2	Direct Spark	130,000	High-Intensity Infrared Ceramic Heater	32"	15-1/4"	22-1/2"
DR160PFS-2-120	DR160PFS-2-25	DR160PMV-2	Direct Spark	160,000	High-Intensity Infrared Ceramic Heater	38-1/2"	15-1/4"	22-1/2"

* Also available for Natural Gas - replace "P" with "N" in Model #

DR ACCESSORIES

The most common accessories are listed below - additional unit models and accessories may be available. Please reach out to RMI Customer Service or RMI Technical Support for assistance and the most up-to-date information in sizing the appropriate tube heater to your application.

Model #	Description
CSXXXX	5' Chain Set w/ 4-S Hooks
FC-24	24" Stainless Steel Flexible (1/2" I.D.) Connector w/ Fittings
FC-24PVC	FC-24 w/ PVC Protective Coating
RK-130	Columbus Electric MV Thermostat, 35-75 F Deg, (used 250, 500 or 750 MV Systems)



Water Heaters and Boilers

HEAT PUMP HELPER

The Heat Pump Helper package allows propane marketers to capitalize on electric heat-pump installations and turn them into Propane-Powered households. This turnkey kit helps you upgrade the heat pump by changing out the hair dryer-style heat strips with a radiator coil that circulates hot water from the boiler, tankless, or tank-style water heater through your heating system for improved quality of heat. With the Heat Pump Helper, you can:

- Reduce electricity and overall utility costs for consumers
- Improve the quality and efficiency of your customers' home heating – especially in cold weather
- Drive increased appliance sales through tankless water heater installations
- Penetrate new market segments that wouldn't otherwise utilize propane
- Promote propane as a clean energy source and improve the visibility of the industry

Each package includes:

- An Aquecoil Hydronic Heating Unit - sized perfectly to fit your air handler
- A system installation kit matched to your water source consisting of:
 - A Universal Plumbing Kit
 - An Auto Air Bleed
 - A Pump and Controller as required by the application

Contact your RMI Customer Service to learn more about the Heat Pump Helper

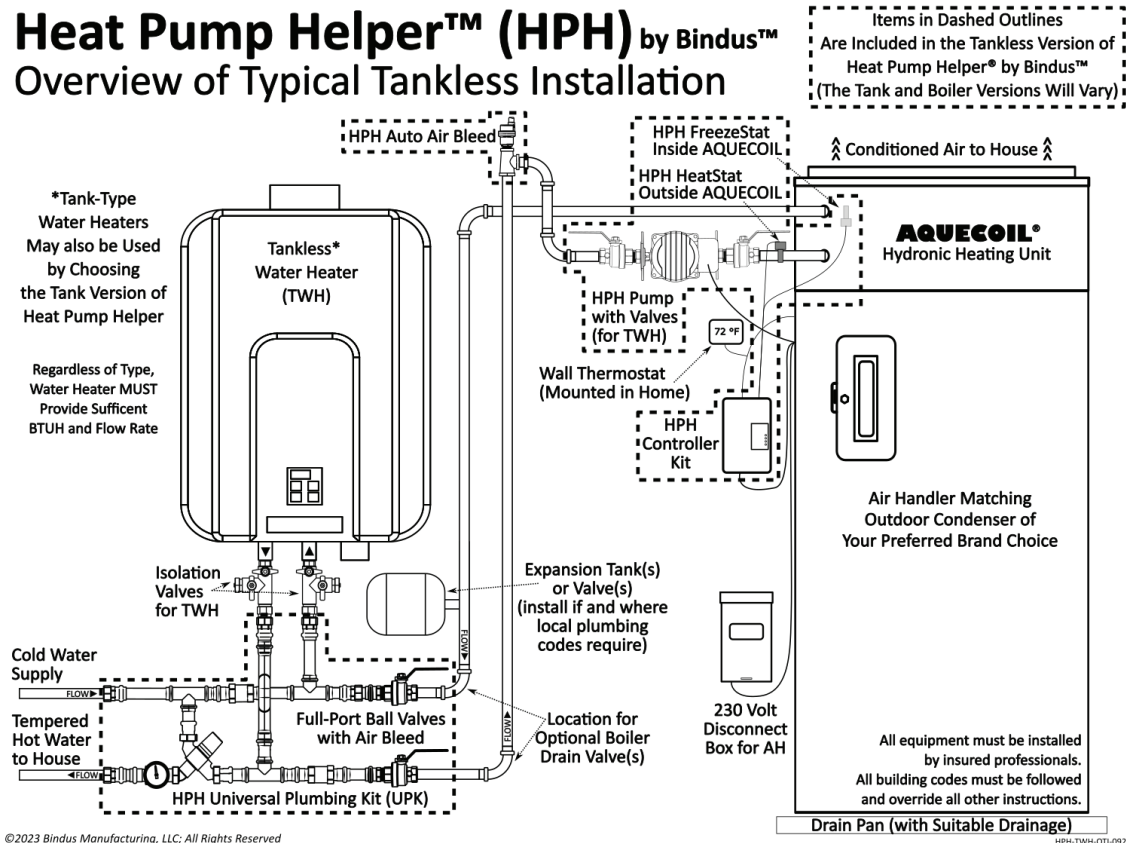
Bindus
Manufacturing, LLC

AQUECOIL
Made in the USA

HYDROHEAT UNITS

HEAT PUMP HELPER™
SYSTEM INSTALL KITS

Heat Pump Helper™ (HPH) by Bindus™
Overview of Typical Tankless Installation



Rinnai Water Heaters & Boilers

SENSEI RX SERIES CONDENSING TANKLESS WATER HEATERS

The SENSEI™ RX Series condensing tankless water heater from Rinnai is only the size of a small suitcase, uses either Natural Gas or Propane, and can be installed indoors or outdoors using the Versa-Vent™ accessory. Rinnai SENSEI RX Series tankless water heaters last up to twice as long as tanks and have twice the warranty length. Plus, they save energy by heating water only when it is needed.

- **No conversion kit required** - Rinnai's Adaptive Gas Valve Technology adjusts to either Natural gas or Liquid Propane gas for optimal combustion
- **All units are able to be installed indoors or outdoors with the vent cap** - Rinnai's Versa-Vent outdoor vent cap easily adapts to any RX Series model for outdoor installations
- **No more DIP switches or manual settings** - The Smart Connect feature allows you to connect your smartphone or tablet to the RX series via Bluetooth. Use the Rinnai Central App for quick, simplified tankless water heater set-up & registration
- The new Quick-Flush feature provides a more efficient flushing procedure to make periodic preventative maintenance a simple task

RINNAI RX CONDENSING TANKLESS

Model #	Description	Max BTU	UEF	Max Flow Rate
RX130IN	Dual Fuel Indoor/Outdoor Condensing Tankless Water Heater	130,000	0.97	7.1 GPM
RX160IN	Dual Fuel Indoor/Outdoor Condensing Tankless Water Heater	160,000	0.97	9.0 GPM
RX180IN	Dual Fuel Indoor/Outdoor Condensing Tankless Water Heater	180,000	0.98	10.0 GPM
RX199IN	Dual Fuel Indoor/Outdoor Condensing Tankless Water Heater	199,000	0.98	11.1 GPM

* Outdoor vent cap (RXOVC) required for exterior installation

** Item# RX2RXPCCK can be purchased to add recirculation to RX Models

RINNAI RXP CONDENSING TANKLESS

Model #	Description	Max BTU	UEF	Max Flow Rate
RXP160IN	Dual Fuel Indoor/Outdoor Recirculating Condensing Tankless Water Heater	160,000	0.97	9.0 GPM
RXP199IN	Dual Fuel Indoor/Outdoor Recirculating Condensing Tankless Water Heater	199,000	0.98	11.1 GPM

* Outdoor vent cap (RXOVC) required for exterior installation


RX UNIT

RX - INTERNAL

* Outdoor vent cap (RXOVC) required for exterior installation



Rinnai® RE•SERIES™

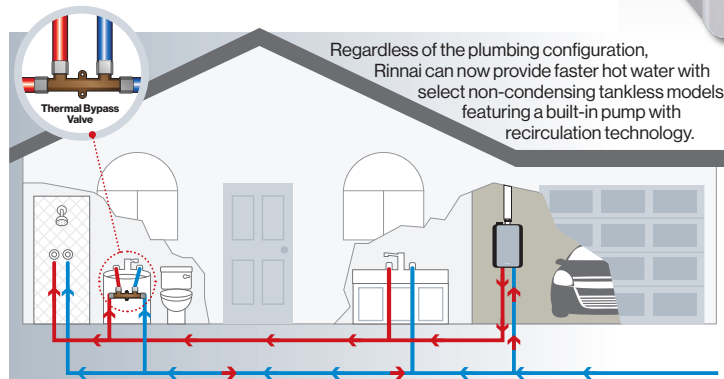
Featuring REP models with
Smart-Circ™
Intelligent Recirculation™

Get Your Customers in Hot Water...Faster!

With Rinnai's breakthrough Smart-Circ Intelligent Recirculation you can offer your customers more value and greater lifestyle comfort.

Turn any Plumbing System into a Recirc System

By installing the Thermal Bypass valve accessory, faster hot water can be enjoyed by your customers even without a dedicated return line.



Smart Design

Newly designed from the inside out, Rinnai's RE•SERIES™ makes tankless water heating even smarter. We made improvements with an eye to speeding installation, enhancing serviceability, and boosting your profitability.

- **LED screen** lets you set maintenance/service reminders, provides error codes, and alerts for maintenance intervals
- **New sliding wall bracket** allows a single installer to hang and slide unit horizontally to align with venting before securing into position.
- **Safety handle and seating bracket** for heat exchanger and combustion system helps with serviceability

The First and Only Non-Condensing Unit with a Built-In Pump and Featuring **Smart-Circ™ Intelligent Recirculation™**



REP199i
Non-Condensing Tankless Water Heater with Built-in Recirculating Pump (interior)

2X
THE WARRANTY
of Most Traditional Tanks

15 Years on the Heat Exchanger
5 Years on Parts
5 Years on Labor*
*Requires product to be registered within 90 days of installation or Labor Warranty defaults to 1-year.

Lifestyle Comfort

After it learns "users" hot water patterns, Smart-Circ Intelligent Recirculation automatically schedules recirculation when needed.

Users enjoy immediate hot water during regular demand periods, while saving themselves time, energy, water and money!

Smart-Circ™ Intelligent Recirculation™

Scan the QR Code to watch the video and learn more about Smart-Circ™ Intelligent Recirculation™



Rinnai Water Heaters & Boilers



RINNAI RE SERIES NON-CONDENSING TANKLESS WATER HEATERS

The Rinnai RE Series makes tankless water heating even smarter. Improvements have been made with an eye to speeding installation, enhancing serviceability, and boosting your profitability. Features include:

- Built-in recirculation control for faster and less expensive installation of recirculation equipment
- Recirculation-ready RE Models available with a built-in pump, works with either a dedicated return line or cross-over valve
- Smart-Circ™ REP Models Intelligent Recirculation that “learns” a user’s hot water usage patterns over a seven-day period, to schedule the pump and tankless recirculation patterns
- Mobile Home Certified
- Ultra-Low Nox
- Standard Controller Built-In
- Residential Warranty - Limited 15-year on heat exchanger, 5-year on parts, 1-year on labor
- Commercial Warranty - Limited 8-year on heat exchanger, 5-year on parts, 1-year on labor

RINNAI RE NON-CONDENSING TANK

Interior Model #	Exterior Model #	Description	Gas Type	Max BTU	UEF	GPM
RE199IP	RE199EP	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	LP	199,000	0.82	9.8 GPM
RE199IN	RE199EN	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	NAT	199,000	0.82	9.8 GPM
RE180IP	RE180EP	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	LP	180,000	0.82	8.5 GPM
RE180IN	RE180EN	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	NAT	180,000	0.82	8.5 GPM
RE160IP	RE160EP	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	LP	160,000	0.81	6.6 GPM
RE160IN	RE160EN	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	NAT	160,000	0.81	6.6 GPM
RE140IP	RE140EP	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	LP	140,000	0.81	5.3 GPM
RE140IN	RE140EN	Tankless Water Heater, Recirculating-Ready, WI-FI Capable	NAT	140,000	0.81	5.3 GPM



RE EXTERIOR MODEL



RE INTERIOR MODEL

*Item# HEPumpKitCR can be purchased to add recirculation to RE Models

RINNAI REP NON-CONDENSING TANK

Interior Model #	Exterior Model #	Description	Gas Type	Max BTU	UEF	GPM
REP199IP	REP199EP	Smart-Circ Intelligent Tankless Water Heater w/ Built-In Recirculation Pump, Valve Kit, WI-FI Ready	LP	199,000	0.82	7.9 GPM
REP199IN	REP199EN	Smart-Circ Intelligent Tankless Water Heater w/ Built-In Recirculation Pump, Valve Kit, WI-FI Ready	NAT	199,000	0.82	7.9 GPM
REP160IP	REP160EP	Smart-Circ Intelligent Tankless Water Heater w/ Built-In Recirculation Pump, Valve Kit, WI-FI Ready	LP	160,000	0.81	6.6 GPM
REP160IN	REP160EN	Smart-Circ Intelligent Tankless Water Heater w/ Built-In Recirculation Pump, Valve Kit, WI-FI Ready	NAT	160,000	0.81	6.6 GPM

GAS CONVERSION KITS

LP to NAT	NAT to LP	Unit
104000309	104000308	RE180/RE199
104000311	104000310	RE140/RE160

RINNAI V SERIES NON-CONDENSING TANKLESS WATER HEATER

The V Series tankless is cheapest most cost effective tankless that Rinnai offers. It is a very basic system with a limited amount of bells and whistles. This is a Non-Condensing tankless so it is around 80% efficient at heating water.

- Compact Design to Save Space
- Standard Digital Controller and Error Code Indicator On Unit
- EZConnect (allows for the connection of two units together for future upgrades)
- Wi-Fi Technology for Remote Monitoring and Management
- 12-year Warranty on Heat Exchanger, 5-year parts, 1-year labor for Residential



V53DE

Model #	Description	Gas Type	Installation	Max BTU	UEF	GPM
V53DEP	Value Series High-Efficiency Compact Tankless Water Heater	LP	Exterior	120,000	0.81	5.3 GPM
V53DEN	Value Series High-Efficiency Compact Tankless Water Heater	NAT	Exterior	120,000	0.81	5.3 GPM



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Rinnai Water Heaters & Boilers

Rinnai

RUS & RUCS SERIES CONDENSING TANKLESS WATER HEATERS

RUS/RUCS series models offer the highest output of condensing line of tankless units. You can expect sleek, modern design and a range of features and benefits to fully satisfy the hot water demands of larger homes.

- Energy Star Certified
- Enhanced Control-R 2.0 Mobile App features timers and schedules throughout the day and even allows you to remotely put the system into vacation mode
- Smart Home Voice Activation with Amazon Alexa integration
- Multiple venting options available including PVC/CPVC using the Ubbink Concentric to Twin Pipe adaptor allow for an easy installation
- Residential Warranty – 12-years Heat Exchanger, 5-years parts and components, 1-year labor



RUCS



RUS

Model #	Gas Type	Installation	Max BTU	UEF	GPM
RUCS75IP	LP	Interior	160,000	0.90	7.5 GPM
RUCS75IN	NAT	Interior	160,000	0.90	7.5 GPM
RUS75EP	LP	Exterior	160,000	0.89	7.5 GPM
RUS75EN	NAT	Exterior	160,000	0.89	7.5 GPM
RUCS65IP	LP	Interior	130,000	0.85	6.5 GPM
RUCS65IN	NAT	Interior	130,000	0.85	6.5 GPM
RUS65EP	LP	Exterior	130,000	0.86	6.5 GPM
RUS65EN	NAT	Exterior	130,000	0.86	6.5 GPM

GAS CONVERSION KITS

LP to NAT	NAT to LP	Unit
103000059	103000063	RUCS75I
103000060	103000064	RUS75E
103000061	103000065	RUCS65I
103000062	103000066	RUS65E

CX SERIES COMMERCIAL CONDENSING TANKLESS WATER HEATERS

Designed with the technician in mind, Rinnai's CX series offers simplified installation, decreased setup time, and increased performance, efficiency, and sustainability. Units are dual fuel and can be installed indoors or outdoors. Features include:

- Rinnai's Adaptive Gas Valve Technology adjusts to either Natural gas or Liquid Propane gas for optimal combustion - *no conversion kit required*
- Rinnai's Versa-Vent outdoor vent cap easily adapts to any RX Series model for outdoor installations - *all units are able to be installed indoors or outdoors with the vent cap*
- The Smart Connect feature allows you to connect your smartphone or tablet to the RX series via Bluetooth. Use the Rinnai Central App for quick, simplified tankless water heater set-up & registration - *no more DIP switches or manual settings*
- The new Quick-Flush feature provides a more efficient flushing procedure to make periodic preventative maintenance a simple task

**** **Contact RMI Customer Service for details on Rinnai's other commercial solutions, including the Hybrid DemandDuo H-Series, DemandDuo R-Series, and Wall-Mounted and Free-Standing Rack Systems**

CX SERIES

Model #	Description	Max BTU	UEF	Max Flow Rate
CX160IN	Dual Fuel Indoor/Outdoor Commercial Condensing Tankless Water Heater	160,000	0.97	9 GPM
CX199IN	Dual Fuel Indoor/Outdoor Commercial Condensing Tankless Water Heater	199,000	0.98	11 GPM

* Outdoor vent cap (RXOVC) required for exterior installation

** Item# RX2RXPCCK can be purchased to add recirculation to CX Models



CX SERIES

CXP SERIES

Model #	Description	Max BTU	UEF	Max Flow Rate
CXP160IN	Dual Fuel Indoor/Outdoor Recirculating Commercial Condensing Tankless Water Heater	160,000	0.97	11 GPM
CXP199IN	Dual Fuel Indoor/Outdoor Recirculating Commercial Condensing Tankless Water Heater	199,000	0.97	11 GPM

Rinnai Water Heaters & Boilers



RINNAI I-SERIES CONDENSING GAS BOILERS

The I-Series boilers feature Rinnai's exclusive self-cleaning stainless-steel heat exchanger coupled with a secondary flat plate heat exchanger. The combi models can deliver whole-house heating and simultaneous domestic hot water. Fueled with either Natural Gas or Propane, this Rinnai condensing gas boiler has obtained one of the highest AFUEs (Annual Fuel Utilization Efficiency) in the industry. Plus, the compact wall-mounted design saves space over traditional boilers.

HEAT/HOT WATER COMBINATION UNITS

Model #	Gas Type	Description	Max BTU	Max Flow Rate
I060CN	NAT	I-Series, 4.1GPM,60,000Btu's Heat/160,000 Btu's Hot Water Condensing Combi-Boiler	60,000	7.9 GPM
I090CN	NAT	I-Series, 4.1GPM,90,000Btu's Heat/160,000 Btu's Hot Water Condensing Combi-Boiler	90,000	7.9 GPM
I120CN	NAT	I-Series, 5.1GPM,120,000Btu's Heat/199,000 Btu's Hot Water Condensing Combi-Boiler	120,000	9.8 GPM

* All Models made for NG - LP Conversion Kits Sold Separately

HEAT ONLY UNITS

Model #	Gas Type	Description	Max BTU
I060SN	NAT	I-Series, 60,000Btu's Condensing Boiler	60,000
I090SN	NAT	I-Series, 90,000Btu's Condensing Boiler	90,000
I120SN	NAT	I-Series, 120,000Btu's Condensing Boiler	120,000
I150SN	NAT	I-Series, 150,000Btu's Condensing Boiler	150,000

* All Models made for NG - LP Conversion Kits Sold Separately

GAS CONVERSION

LP to NAT	NAT to LP	Description
803000040	803000040	I-Series Conversion Kit (All Models)

ACCESSORIES

RMI Part No.	Description
807000212	I-SERIES Combi Primary Secondary Heating Kit
807000213	I-SERIES Solo Primary Secondary Heating Kit
808000025	Air Intake Filter
809000024	Boiler Tool Kit
804000118	I-SERIES Boiler Tool Kit A
804000119	I-SERIES Boiler Tool Kit B
RTBRACKA	Boiler & Tankless Floor Standing Rack, Standard Height
RTBRACKS	Boiler & Tankless Floor Standing Rack, Low Profile
RTBRACKEXT	Rack Extension Kit, Add-On



I SERIES BOILER



Rinnai Water Heaters & Boilers



VENTING



184470NPP



189958



196005PVC



223181



224063



229033

RMI Part No.	Description
3"/5" Non-Condensing Concentric Vent System for RE, REP, and V Series Units	
223191	8.7", 3"/5" Universal Non-Condensing Horizontal Termination Kit
223181	11.5", 3"/5" Universal Non-Condensing Horizontal Termination Kit
223182	21", 3"/5" Universal Non-Condensing Horizontal Termination Kit
223187	21", 3"/5" Universal Non-Condensing Horizontal Diverter Termination Kit for Minimal Clearance
223183	11.5", 3"/5" in Universal Non-Condensing Horizontal Termination
223184	21", 3"/5" Universal Non-Condensing Horizontal Termination
224046	3"/5" Non-Condensing Raised Horizontal Termination Kit ("Snorkel")
184118-S	3"/5" Non-Condensing Roof Discharge Termination 18in. (above roof)
184119	3"/5" Non-Condensing Roof Discharge Termination 38in. (above roof); Cold Climate
185342	3"/5" Non-Condensing Roof Termination Extension Kit
224051	10" 3"/5" Non-Condensing Vent Pipe Extension
224052	19.5" 3"/5" Non-Condensing Vent Pipe Extension
224053	39" 3"/5" Non-Condensing Vent Pipe Extension
224054	3"/5" Non-Condensing Telescoping Extension
224063	3"/5" Non-Condensing 90 Degree Elbow
224050	3"/5" Non-Condensing 45 Degree Elbow (Qty of 2)
224069	3"/5" Non-Condensing Vent Condensate Collector
222053	Condensate Trap
223188	12" 3"/5". Universal non-Condensing Horizontal Termination Metal Kit
184127	3"/5" Non-Condensing Roof Discharge Termination 18 in. (above roof) (Metal)
224260	10" 3"/5" Non-Condensing Vent Pipe Extension (Metal)
224265	19.5" 3"/5" Non-Condensing Vent Pipe Extension (Metal)
224270	39" 3"/5" Non-Condensing Vent Pipe Extension (Metal)
224255	3"/5" Non-Condensing 90 Degree Elbow (Metal)
224250	3"/5" Non-Condensing 45 Degree Elbow (Metal)
224245	3"/5" Non-Condensing Vent Condensate Collector (Metal)
3"/5" Condensing Concentric Vent System for RX, RUS, RUCS, & I Series Units	
223174PP	8.7", 3"/5" Condensing Horizontal Termination Kit
223176PP	12", 3"/5" Condensing Horizontal Termination Kit
223177PP	21", 3"/5" Condensing Horizontal Termination Kit
223186PP	19", 3"/5" Condensing Horizontal Termination Diverter Nose Kit
224047PP	3"/5" Condensing Raised Horizontal Terminal Kit ("Snorkel")
184162PP	3"/5" Condensing Roof Discharge Termination Kit, 20" Above Roof
185344PP	3"/5" Condensing Roof Termination Extension Kit
185346PP	3"/5" Condensing Termination Extension
224087PP	10", 3"/5" Condensing Vent Pipe Extension
224079PP	19.5", 3"/5" Condensing Vent Pipe Extension
224080PP	39", 3"/5" Condensing Vent Pipe Extension
224077PP	3"/5" Condensing 45 Deg Elbow (Qty:2)
224078PP	3"/5" Condensing 90 Deg Elbow
Universal Venting Components	
189958	Universal Shingle Roof Flashing 1/2 to 16/12 pitch
50171949	Tile/Shingle Roof Flashing, 1/12 to 6/12
50171954	Tile/Shingle Flashing, 8/12 to 16/12
50171961	Tile/Shingle Flashing, 6/12 to 12/12
242141	Flashing for Metal Roof
146141	Roof Flashing Assembly-Flat Roof
224045	3 in. / 5 in. Thimble (1 piece per box)
710342	3 in. / 5 in. Rubber Wall Plate White
710602	3 in. / 5 in. Rubber Wall Plate Black
224049	3 in. / 5 in. Vent Support Bracket

RMI Part No.	Description
Universal Venting Components Cont.	
102000012	3 in. / 5 in. Horizontal Flashing Panel
169043	3"/5" Pipe Clamp - Metal
169044	Pipe Clamp Universal-Plastic
224042	Universal Bug Guard
2"/4" Condensing Concentric Vent System for RX, RUS, RUCS, & I Series Units	
229031	12", 2"/4" Condensing Horizontal Termination Kit (PPT)
229032	21", 2"/4" Condensing Horizontal Termination Kit (PPT)
229033	2"/4" Condensing Horizontal Termination (2 wallplates) (PPT)
224359	2"/4" Condensing Roof Discharge, 20" Above Roof (PPT)
229318	10", 2"/4" Condensing Vent Pipe Extension (PPT)
229319	19.5", 2"/4" Condensing Vent Pipe Extension (PPT)
229320	39", 2"/4" Condensing Vent Pipe Extension (PPT)
185348NPP	2"/4" Condensing Roof Terminal Extension Kit
229208	2"/4" Condensing 45 Deg Elbow (Qty: 2) (PPT)
229233	2"/4" Condensing 90 Deg Elbow (PPT)
229252	2"/4" Condensing 90 Deg Starter Elbow 3"/5" to 2"/4" (PPT)
227413	2"/4" Condensing Starter Straight/ Vertical 3"/5" to 2"/4" (PPT)
224055	2"/4" Thimble (1 piece per box)
169044	Pipe Clamp Universal - Plastic
169013	2"/4" Pipe Clamp - Metal
224056	2"/4" Vent Support Bracket- Metal
710265	2"/4" Wall Plate White
710192	2"/4" Wall Plate Black
711262	2"/4" Wall Plate Gray
188481	2"/4" Retrofit Wall Plate White (for 3/5 opening)
188485	2"/4" Retrofit Wall Plate Black (for 3/5 opening)
188486	2"/4" Retrofit Wall Plate Gray (for 3/5 opening)
710202NPP	2"/4" Condensing 90 Degree Diverter Nose
710215NPP	2"/4" Condensing 45 Degree Diverter Nose
IPEX Concentric Terminations for 2" & 3" PVC Venting for RX, RUS, RUCS, & I Series Units	
196005PVC	IPEX 2" Concentric Condensing Vent Termination 2x16
196105PVC	IPEX 2" Concentric Condensing Vent Termination 2x28
196125PVC	IPEX 2" Concentric Condensing Vent Termination 2x40
196984PVC	IPEX 2" Condensing Low Profile Vent Termination
196116PVC	IPEX 3" Concentric Condensing Vent Termination
196985PVC	IPEX 3" Condensing Low Profile Vent Termination
224008PPS	IPEX 2" to 3" PP Condensing Increaser/Adaptor
108000105	3" Mesh Metal, SS screen for PVC Intake
2" Twin Pipe PolyPropylene Condensing Vent System for RX, RUS, RUCS, & I Series Units	
222710NPP	2" Bend 45 degree
222711NPP	2" Bend 90 Degree
222712NPP	39", 2" Condensing Vent Pipe Extension
222714NPP	72", 2" Condensing Vent Pipe Extension
222715NPP	2" Condensing Fixing Clip Metal (Qty 10)
222716	Clamps, Plastic 60mm (Qty 10)
184470NPP	2" Condensing Flex Termination Kit (Fits 4 and 6 in B-Vent)
222720NPP	2" Flex Connector
222721NPP	2" Condensing Flex Roll (41.5 ft.)
223085NPP	2" Condensing Wall Terminal Twin Pipe
187595NPP	2" x 2"/4" Condensing Twin Pipe Adaptor
807000212	I-SERIES Combi Primary Secondary Heating Kit

Rinnai Water Heaters & Boilers



ACCESSORIES



PCD07-EW



R-UPS350A



REU-EZC-2



RGB-CTWH-3



RWM101



RWMPB01

RMI Part No.	Description	Series								
		RX	RXP	RUS	RUCS	RE	REP	V	CX	CXP
Controllers										
RWM101	Control*r Wi-Fi Module			X	X	X	X	X		
RWM200	Wireless Module	X	X						X	X
MC-195T-US	Recirculation Timer and Temperature Controller	X	X			X	X			
MC-601-BK*	Controller MC-601, Black	X	X			X	X			
MC-601-W*	Controller MC-601, White	X	X			X	X			
MCC-601-W*	Commerical Controller, MCC-601, White								X	X
Demand Recirculation										
RX2RXPCK	Internal Add-On Recirculating Pump Conversion Kit	X							X	
105000250	External Pump Wire Harness					X	X			
RPB200	Recirculation Push Button	X	X						X	X
RWMPB02	Control*r Wireless Push Button						X			
RWMPB01	Control*r Wireless Push Button (IPB)					X	X			
RWMMS01	Control*r Wireless Motion Sensor (IMS)					X	X			
RWMTS01	Control*r Temperature Sensor (ITS)					X	X			
RWMKT01	Control*r Wireless Demand Recirculation Kit (Module, IPB)					X	X			
RWMKT03	Control*r Wireless Demand Recirculation Kit (Module, IPB, ITS)					X	X			
Connection Cables										
REU-EZC-2	EZConnect (2 Units)			X	X	X	X	X	X	X
REU-EZC-3	EZConnect Cable	X	X							
REU-MSB-M	Multi-Unit Control Kit (+2 Units) (MSB + Multi-Unit Cable)			X	X	X		X		
REU-MSB-C2	MSB Cable (+2 Units)			X	X	X				
REU-MSB-C1	Multi-Unit Cable (+2 Units)			X	X	X				
REU-CSA-C1	Cascade Harness, 3m (Commercial)								X	X
REU-CSA-C2	Cascade Harness, 8m (Commercial)								X	X
Pipe Enclosures										
PCD11-SHS	Pipe Cover	X	X							
PCD11-IB	Pipe Cover Commercial (Indigo Black)								X	X
PCD07-EW	Pipe Cover (Euro White)			X	X			X		
PCD09-SHS	Pipe Cover					X				
PCD07-IB-BP	Bottom Plate for Pipe Cover (Indigo Black)	X	X						X	X
109001311	Bottom Plate for Pipe Cover					X				
PCD07-EW-BP	Bottom Plate for Pipe Cover (Euro White)			X	X			X		
Recess Boxes										
RGBCTWHRX	Recess Box	X	X						X	X
RGB-CTWH-3	Recess Box			X	X					
RGB-20-U	Recess Box							X		
RGBRE	Recess Box					X				
Other Accessories										
810-504G	Isolation Valve Kit	X	X	X	X	X	X			
RXOVC	Outdoor Vent Cap	X	X						X	X
107000639	Dedicated Return With Isolation Valves an PRV	X	X						X	X
RXLEAKKIT	Leak Detection Kit	X	X						X	X
R-UPS350A	Battery Backup System	X	X	X	X	X	X	X	X	X
REU-PVA-4	Pressure Valve Activating			X	X					
107000450	Dedicated Return Valve			X	X	X	X	X		
804000074	Condensate Neutralizer Kit	X	X	X	X	X	X	X		
809000114	Condensate Neutralizer Refill	X	X	X	X	X	X	X		
103000038	ScaleCutter System	X	X	X	X	X	X	X	X	X
103000039	ScaleCutter Refill Cartridge	X	X	X	X	X	X	X	X	X
104000059	Freeze Protection, Drain Down Kit	X	X	X	X	X				

* When using any external controllers wire harness is needed



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Navien Water Heaters & Boilers



NAVIENT NPN NON-CONDENSING TANKLESS WATER HEATER

Navien NPN-Universal high efficiency premium non-condensing tankless can be installed inside or outside with vent cap.

Navien NPN-Exterior has all the advantages of the NPN-U but are designed specifically for outdoor use.

- 0.81 UEF for all Models
- NaviLink Wi-Fi Remote Control System
- PeakFlowS Standard Scale Prevention System
- HotButton Hot Water system activates recirculation pump and gas fired burner to heat water in the supply line to provide hot water only when needed
- NPN-U NaviTech Stainless Steel heat exchanger and burner.
- NPN-U converts easily from indoor to outdoor use with optional vent cap
- NPN-U NaviVent concentric 3" x 5" Venting
- NPN-E NaviTech Stainless Steel heat exchanger and Stainless Lox NOx burner with precision control flame technology for eco-friendly low Nox emissions comparable to condensing burner
- NPN-E includes indoor remote control system
- Standard Residential Warranty - 15-year heat exchanger, 5-years parts, 1-year labor

Model #	Description	Gas Type	Max Btu's	UEF	Max Flow Rate
NPN-160ULP	Condensing,Indoor/Outdoor,Resid/Comm,3.5GPM,0.81 Energy Factor	LP	160,000	0.81	7.6 GPM
NPN-180ULP	Condensing,Indoor/Outdoor,Resid/Comm,4.0GPM,0.81 Energy Factor	LP	180,000	0.81	8.5 GPM
NPN-199ULP	Condensing,Indoor/Outdoor,Resid/Comm,4.4GPM,0.81 Energy Factor	LP	199,900	0.81	9.5 GPM
NPN-160ELP	Condensing,Outdoor,Resid/Comm,3.5GPM,0.81 Energy Factor	LP	160,000	0.81	7.6 GPM
NPN-180ELP	Condensing,Outdoor,Resid/Comm,4.0GPM,0.81 Energy Factor	LP	180,000	0.81	8.5 GPM
NPN-199ELP	Condensing,Outdoor,Resid/Comm,4.4GPM,0.81 Energy Factor	LP	199,000	0.81	9.5 GPM

* Also available for Natural Gas - replace "LP" with "NG" in Model #

NPN 3" X 5" VENTING

Model #	Description
GXXX001891	3" X 5" Standard Sidewall Termination Kit
GXXX001892	3" x 5" Long Sidewall Termination Kit
GXXX001896	3" x 5" 10" Vent Pipe Extension
GXXX001897	3" x 5" 39" Vent Pipe Extension
GXXX001900	3" x 5" Flat Roof Flashing
GXXX001893	3" x 5" Concentric Roof Termination
GXXX001894	3" x 5" 80-125mm 45 Degree Elbow
GXXX001895	3" x 5" 80-125mm 90 Degree Elbow
GXXX001901	3" x 5" Adjustable Roof Flashing
GXXX001902	3" x 5" Metal Wall Strap
GXXX001952	3" x 5" Condensate Trap Kit



NPN-E



NPN-U

Navien Water Heaters & Boilers



NHW-A SERIES NON-CONDENSING TANKLESS WATER HEATER WITH RECIRCULATION PUMP & BUFFER TANK

Enjoy faster hot water with no cold water sandwiches, thanks to the patented ComfortFlow Technology which includes a Recirculation Pump and Buffer Tank.

- 0.81 UEF for all Models
- Patented NaviTech durable stainless steel heat exchanger and gas burner
- Operates on Natural and Propane Gas
- Advanced safety features, including Vent Installation Detector (VID)
- Organized interior and space-saving design, allowing for east serviceability and installation
- NaviVent concentric 3" x 5" venting
- NaviCirc compatible
- Ultra-low Nox levels, comparable to condensing units
- Standard Residential Warranty - 15-years heat exchanger, 5-years parts, 1-year labor



NHW-AE-AI

Interior Model #	Exterior Model #	Description	Gas Type	Max Btu's	UEF	Max Flow Rate
NHW700-160AI-NG	NHW700-160AE-NG	Non-Condensing, Resid/Comm, ComfortFlow Built-In Pump and Buffer Tank, 4.0GPM, 0.81 Energy Factor	NAT	160,000	0.81	7.5 GPM
NHW700-160AI-LP	NHW700-160AE-LP	Non-Condensing, Resid/Comm, ComfortFlow Built-In Pump and Buffer Tank, 4.0GPM, 0.81 Energy Factor	LP	160,000	0.81	7.5 GPM
NHW700-180AI-NG	NHW700-180AE-NG	Non-Condensing, Resid/Comm, ComfortFlow Built-In Pump and Buffer Tank, 4.0GPM, 0.81 Energy Factor	NAT	180,000	0.81	8.5 GPM
NHW700-180AI-LP	NHW700-180AE-LP	Non-Condensing, Resid/Comm, ComfortFlow Built-In Pump and Buffer Tank, 4.0GPM, 0.81 Energy Factor	LP	180,000	0.81	8.5 GPM
NHW700-199AI-NG	NHW700-199AE-NG	Non-Condensing, Resid/Comm, ComfortFlow Built-In Pump and Buffer Tank, 4.0GPM, 0.81 Energy Factor	NAT	199,000	0.81	9.5 GPM
NHW700-199AI-LP	NHW700-199AE-LP	Non-Condensing, Resid/Comm, ComfortFlow Built-In Pump and Buffer Tank, 4.0GPM, 0.81 Energy Factor	LP	199,000	0.81	9.5 GPM

NAVIENT NPE-2 SERIES CONDENSING TANKLESS WATER HEATER

The Navien NPE-2 series tankless water heaters can be installed indoors or outdoors, for residential or commercial use. The NPE-A2 Advanced condensing tankless water heaters feature Navien's patented ComfortFlow® system which includes a buffer tank, recirculation pump and fine-tuned controls which resolve the "cold water sandwich" effect and flow rate issues common in other tankless water heaters.

- 1/2" gas pipe capable up to 24'
- Field convertible gas system
- Ultra condensing efficiency
- Dual stainless steel heat exchangers
- Low NOx emissions (20ppm)
- SCH 40, 2" venting up to 75'
- Cascading capable
- EZNav multi-line control panel
- Built-in HotButton control panel
- Common vent up to 12 units
- Standard Residential Warranty - 15-year heat exchanger, 5-years parts, 1-year labor



NPE-2

Model #	Gas Type	Operation	Max Btu's	Description	UEF	Max Flow Rate
NPE-180A2	LP/NAT	Electronic Ignition	150,000	Premium Condensing, Indoor/Outdoor, Resid/Comm, Int Pump & Buffer Tank	0.95	8.4 GPM
NPE-210A2	LP/NAT	Electronic Ignition	180,000	Premium Condensing, Indoor/Outdoor, Resid/Comm, Int Pump & Buffer Tank	0.95	10.1 GPM
NPE-240A2	LP/NAT	Electronic Ignition	199,900	Premium Condensing, Indoor/Outdoor, Resid/Comm, Int Pump & Buffer Tank	0.95	11.2 GPM
NPE-150S2	LP/NAT	Electronic Ignition	120,000	Premium Condensing, Indoor/Outdoor, Resid/Comm	0.93	6.8 GPM
NPE-180S2	LP/NAT	Electronic Ignition	150,000	Premium Condensing, Indoor/Outdoor, Resid/Comm	0.96	8.4 GPM
NPE-210S2	LP/NAT	Electronic Ignition	180,000	Premium Condensing, Indoor/Outdoor, Resid/Comm	0.96	10.1 GPM
NPE-240S2	LP/NAT	Electronic Ignition	199,900	Premium Condensing, Indoor/Outdoor, Resid/Comm	0.96	11.2 GPM



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Shop online at www.raymurray.com or call 800-628-5044

Navien Water Heaters & Boilers



NAVIEN NPE AND NPN ACCESSORIES

RMI Part No.	Description
30022717B	Remote Controller (NPE,NPE-2, NPN)
GXXX002139	3/4" Lead Free Isolation Valvew/Relief Valve Kit (NPE,NPE-2,NPN)
GXXX002140	3/4" Lead Free Isolation Valve Kit (NPE-A/A2)
GXXX002141	3/4" Lead Free Isolation Valve w/ Relief Valve Kit (NPE, NPE-A/A2, S/S2)
GXXX002212	Residential Neutralizer (NPE-2)
GXXX001322	Residential Neutralizer Kit Single Unit (NPE,NPE-2)
GXXX001323	Residential Replacement Media (NPE,NPE-2)
GXXX001324	Light Commercial Neutralizer (NPE,NPE-2)
GXXX001328	Light Commercial Replacement Media (NPE, NPE-2)
GXXX001325	Commercial Neutralizer (NPE,NPE-2)
GXXX001329	Commercial Replacement Media (NPE,NPE-2)
30010747A	2" Wall Flange and Vent Termination Kit (NPE-2)
30003873B	3" Wall Flange and Vent Termination Kit (NPE-2)
30014367B	Common Vent Collar Kit (NPE,NPE-2)
30025801A	Vent Cap (NPE-2) (Required for Outdoor Installations)
30025812A	Pipe Cover (NPE-2) (use w/ 30012581A)
30012581A	Plumb Easy Valve Kit w/ Pipe (Designed to work w/ Pipe Cover) (NPE-A/A2 S/S2)
GXXX000546	Ready-Link Communication Cable (NPE,NPE-2, NPN)
GXXX001319	External Pump Wire (NPE, NPE-2, NPN)
GFFM-KDIZUS-005	Ready-Link Rack Base (NPE,NPE-2, NPN)
GFFM-KDIZUS-006	Ready-Link Rack Add-on (NPE,NPE-2, NPN)
PBCM-AS-001	Navilink Wi-Fi Control (NPN)
GXXX001659	Expansion Cable (NPE,NPE-2,NPN)
PZZZ-00046	Hot Button Control Kit (NPE-A, NPN)
GXXX001427	Hot Button Wall Plate (NPE-A2, NPE-S2, NPN)
GXXX001426	Hot Button Push Button (NPE-A2, NPE-S2, NPN)
GPWC110001AC001	PeakFlowS Standard Scale Prevention System (NPN)
30023991A	Outdoor Vent Cap Kit (NPN-U Only)
30024017A	Pipe Cover (NPN)
30023550A	Recess Box w/o Lock (NPN-E Only)
30028683A	NPE-2 Series Parts Kit
33018661A	NPE Series Parts Kit
30024980A	NPN Series Parts Kit
PFFW-SXX-001	NaviCirc Recirculation Valve (NPE-A/A2)
30022965A	NaviCirc Kit (incl additional supply hose, adapters w/ NaviCirc Recircuation Valve



30023991A



GXXX002140



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Navien Water Heaters & Boilers



NCB-H CONDENSING WATER TUBE HIGH CAPACITY COMBI-BOILERS

Aim high with Navien... High efficiency, High output, High performance, all in one compact combi-boiler.

- Highest DHW maximum BTUs in residential combi-boilers... up to 210,000 per hour
- Highest DHW flow rate @ 70°F rise... up to 5.4 GPM
- Highest number of BTU sizes for the North American residential combi-boiler market
- Highest residential combi DHW TDR...15:1
- Highest residential combi heating TDR... up to 11:1
- Highest number of built-in zone controls for valves or pumps... up to three
- Highest full lineup 2" venting lengths... up to 65 feet
- Highest number of cascade capable units with NPE tankless water heaters... up to 15
- High altitude certification... up to 10,100 feet (NG or LP)
- Lowest minimum fire BTU for residential combi-boilers... as low as 10,700



NCB-H

Model #	Description	Gas Type	Heating Btu's	DHW Btu's	AFUE	Max Flow Rate
NCB-190/060H	Combi-Boiler, Condensing Indoor	LP/NAT	60,000	160,000	95.0	8.2 GPM
NCB-190/080H	Combi-Boiler, Condensing Indoor	LP/NAT	80,000	160,000	95.0	8.2 GPM
NCB-240/110H	Combi-Boiler, Condensing Indoor	LP/NAT	110,000	199,900	95.0	10.4 GPM
NCB-240/130H	Combi-Boiler, Condensing Indoor	LP/NAT	130,000	199,900	95.0	10.4 GPM
NCB-250/150H	Combi-Boiler, Condensing Indoor	LP/NAT	150,000	210,000	95.0	10.8 GPM

The comfort of **endless hot water** plus energy and space savings

Call 800-628-5044
or visit www.raymurray.com



NPE-2 Series
CONDENSING



NPN Series
NON-CONDENSING



W E M A K E I T E A S Y T O G O T A N K L E S S



Navien Water Heaters & Boilers



NFC-H FIRE TUBE COMBI-BOILERS

NFC-H Series Fire Tube Combi-Boilers have more heating and DHW capacities for today's larger progressive homes. 95.0% Energy Star Certified, New Built-In DHW module now with advance performance, provides a high turndown ratio, reducing energy waste and excessive cycling, increased domestic hot water flow demand, Patented Stainless Steel heat exchanger design is ASME-Certified "H" Stamped, and reduces high stress point weld failures common on other combi-boilers, Separate Stainless Steel flat plate heat exchanger for DHW creates on of the highest flow rates for combi-boilers, Advanced User Interface with Setup Wizard, Built-In control for 3-zone pumps or 3-zone valves, heavy duty fan and motor, fully modulating metal fiber premix burner.



NFC-H

Model #	Description	Gas Type	Heating Btu's	DHW Btu's	AFUE	Max Flow Rate
NCF-250/175H	Fire Tube Combi Boiler, Condensing, Indoor	LP/NAT	199,900	210,000	95.0	10.8 GPM
NCF-250/200H	Fire Tube Combi Boiler, Condensing, Indoor	LP/NAT	175,000	210,000	95.0	10.8 GPM

NHB-H HIGH EFFICIENCY CONDENSING HEATING BOILER

Navien innovation in a compact, wall-hung condensing boiler. The NHB-H boiler series is the next in a long line of innovations from Navien. All boilers have Navien's advanced burner system, an industry-leading AFUE of 95% and turndown ratios up to 15:1. With Navien's new PCB design you now can connect and control a boiler pump, 3 zone pumps or 3 zone valves, all integrated in the unit.

- High efficiency condensing
- Dual stainless steel heat exchangers
- SCH40, 2" venting up to 65'
- 3" venting up to 150'
- TDR up to 15:1
- Built-in zoning control
- Smart controls LCD display, quick dial wheel & Setup Wizard

Model #	Description	Gas Type	Max Btu's	AFUE
NHB-55H	Condensing Indoor Heating Boiler	LP/NAT	55,000	95.0
NHB-80H	Condensing Indoor Heating Boiler	LP/NAT	80,000	95.0
NHB-110H	Condensing Indoor Heating Boiler	LP/NAT	110,000	95.0
NHB-150H	Condensing Indoor Heating Boiler	LP/NAT	150,000	95.0



NHB-H

NFB-H HIGH EFFICIENCY CONDENSING FIRE TUBE HEATING BOILER

NFB Series Fire Tube Boilers totally reinvented fire tube technology from the ground up and continue to advance our boiler technology to a high level, 95.0% Energy Star Certified, Patented Stainless Steel Fire heat exchanger - reduces high stress point welds, Advanced user interface with intuitive text display and Quick Dial Wheel for easy navigation, Smart controls with Setup Wizard to simplify boiler start up, Built-In 3 zone pumps or 3-zone valves powered connections.

- 15:1 TDR
- 95% AFUE - Energy Star certified
- 2" venting up to 65', 3" venting up to 150'
- Advanced controls with Intuitive user interface and Setup Wizard
- Built-in powered connections for 3 zone valves or 3 zone pumps
- Common venting up to 8 units and cascading up to 16 units
- Approved for high altitude up to 10,100 ft. (NG and LP), conversion kits included
- Patented stainless steel fire tube heat exchanger with non-metallic condensate base

Model #	Description	Gas Type	Max Btu's	AFUE
NFB-175H	Fire Tube Boiler, Condensing Indoor	LP/NAT	175,000	95.0
NFB-200H	Fire Tube Boiler, Condensing Indoor	LP/NAT	199,900	95.0



NFB_H



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Navien Water Heaters & Boilers

CONDENSING BOILER ACCESSORIES

Model #	Description
PBCM-AS-001	NaviLink Wi-Fi Control (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-H,NFB-C)
GXXX001659	Expansion Cable (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-H,NFB-C)
GXXX001427	HotButton Wall Plate (NCB,NFC)
GXXX001426	Hotbutton Push Button (NCB,NFC)
PFMZ-02P-001	SmartZone Pump Controller (2-Zones) (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-C,NFB-H)
PFMZ-03P-002	SmartZone Pump Controller (3-Zones) (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-C,NFB-H)
PFMZ-04P-003	SmartZone Pump Controller (4-Zones) (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-C,NFB-H)
PFMZ-06P-004	SmartZone Pump Controller (6-Zones) (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-C,NFB-H)
PPFW-SXX-001	NaviCirc Recirculation Valve (NCB,NFC)
GXXX001727	NaviClean Magnetic Filtration System (NCB-ENCB-H,NFC,NFC-H,NHB,NFB,NFB-H)
GPWC110001AC001	PeakFlow S Prevention System (NCB,NFC)
GXXX001327	PeakFlow Replacement Media Cartridge 19.875"H
GXXX002212	Residential Neutralizer (V2) (NCB,NFC,NHB,NFB-H)
GXXX001322	Residential Neutralizer Kit Single Unit (NCB-E,NCB-H,NFC,NFC-H,NFB,NFB-H,NHB)
GXXX001323	Residential Replacement Media (NCB-E,NCB-H,NFC,NFC-H,NFB,NFB-H,NHB)
GXXX001324	Light Commercial Neutralizer (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-C,NFB-H)
GXXX001328	Light Commercial Replacement Media (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-C,NFB-H)
GXXX001325	Commercial Neutralizer (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-H,NFB-C)
GXXX001329	Commercial Replacement Media (NCB-E,NCB-H,NFC-H)
30014367B	Common Vent Collar Kit (Includes Cascade Cable GXXX00546) (NFC,NFC-H,NHB,NFB,NFB-H)
GFFM-MSOZUS-001	Primary Manifold Kit (NHB)
GFFM-MSOZUS-002	Primary Manifold Kit (NFB,NFB-H)
GFFM-SKTZUS-001	Secondary Manifold Kit (NCB-E,NFC,NFC-H,NFB,NFB-H,NHB)
30026576A	Combi-Boiler Primary Manifold Kit (NCB-H,NFC-H)
GXXX002139	Plumb Easy Valve Set (V2) 3/4" w/Relief Valve (NCB-E,NCB-H,NFC-H)
30010950A	Plumb Easy Valve Set, 1" (NHB,NCB-E,NCB-H,NFC-H)(will not work w/ NFC-H and NCB-H Stainless Steel Manifold #30026576A)
GXXX000546	Ready-Link Communication Cable (NCB-E,NCB-H,NFC,NFC-H,NHB-110/150,NFB-C,NFB-H)
GXXX007169	Universal Temperature Sensor (NFC,NFC-H,NFB-H,NFB-C,NFB,NHB)
30022799A	3" Common Vent Collar Kit NFB-C (Required for Cascade Installations) (Includes Cascade Cable GXXX00546)
GXXX001931	Pressure Relief Valves (75PSI) (NFB-C)
GXXX001946	Pressure Relief Valves (150 PSI) (NFB-C)
GFFM-KDIZUS-005	Ready-Link Rack Base (V3) (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-H)
GFFM-KDIZUS-006	Ready-Link Rack Add-On (V3) (NCB-E,NCB-H,NFC,NFC-H,NHB,NFB,NFB-H)
GFFM-KDIZUS-007	Ready-Link Commercial Rack System (NFB-C)
GFFM-KDIZUS-008	Ready-Link Rack Add-On (NFB-C)
30028684A	NCB-H Series Parts Kit
30029597A	NFC-H Series Parts Kit
30018663A	NHB Series Parts Kit
30023112A	NFB Series Parts Kit


GFFM-KDIZUS-005

GFFM-MSOZUS-001

PEAKFLOW SYSTEM


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 Shop online at www.raymurray.com or call **800-628-5044**

Bromic Heaters



ECLIPSE SMART-HEAT ELECTRIC HEATERS

- Premium Coated 304 Stainless Steel (heater head)
- Warm White LED Color - Dimmable
- Premium, Double Coated Steel (mounting arms)
- Minimal Vertical Clearance Requirements and Wide Range of Wall, Ceiling and Free-Standing Options

Wireless On/Off Controller

Bromic Heating independent 'On/Off' controller with wireless 4-Channel Remote can control up to two electric or four gas heaters across two separate circuits from up to 100 FT away. The wireless remote is fully portable or can be easily mounted with the included double-sided adhesive/screws.

Wireless Dimmer Control

With our Dimmer Control and wireless 7-Channel remote, you'll be able to precisely adjust the output of your electric heaters in 1% increments, or quickly jump by 25% increments for perfect comfort and complete flexibility from up to 100 FT away. The remote can be kept separate or easily mounted with the included double-sided adhesive or screws. Each dimmer controls one 6800W heater at 240VAC or two 3400W heaters at 240VAC.

ECLIPSE CEILING ELECTRIC HEATER

Model #	Description
BH0920001	Eclipse Smart-Heat Electric Unit with 24" Twin Ceiling Pole

ECLIPSE MOUNTING ARM ACCESS

Model #	Description
BH3230001	8" Straight Ceiling Pole
BH3230002	24" Straight Ceiling Pole
BH3230003	24" Curved Ceiling Pole
BH3230004	48" Straight Ceiling Pole
BH3230005	Wall Mount Pole

ECLIPSE PORTABLE HEATER

Model #	Description
BH0820001	Eclipse Smart-Heat Electric Portable with Dimmer Control

ECLIPSE PORTABLE ACCESSORIES

Model #	Description
BH3230007	Eclipse Electric Pendent Dimmer Control
BH3130012-2	42 Channel, Remote

ECLIPSE REPLACEMENT PARTS

Model #	Description
BH3130012	42 Channel Remote -Used with Dimmer Switches
BH3130025	4 Channel Wall Transmitter (replacement)
BH8080015	PCB Control for 300 & 500 Series Platinum/Tungsten
BH8080030	Burner for Platinum/Tungsten Heaters
BH8080037	Manifold Assembly NG Platinum/Tungsten 500 Heaters
BH8080038	Manifold Assembly NG Platinum/Tungsten 300 Heaters
BH8180001	Tube Element 240V 2000W for Tungsten Electric 2000/4000
BH8180002	Tube Element 240V 2000W for Tungsten Electric 3000/6000
BH8280004	Ignition Pack - Tungsten Portable
BH82800036	Thermocouple Assembly - Tungsten Portable



BH0820001

BH0920001

ECLIPSE ELECTRIC AND GAS ACCESS

Model #	Description
BH3130010-2	ON/Off Switch for Electric and Gas Heaters
BH3130011-2	Dimmer Switch for Electric Heaters

Bromic Heaters



MARINE GRADE ELECTRIC HEATERS

Our high-quality outdoor heaters and accessories have been developed & engineered specifically for marine applications and coastal environments and are the only outdoor heaters on the market that are fully Lloyd's register certified. Made of high-quality, AISI316 stainless-steel, Bromic Platinum Smart-Heat™ Electric Marine heaters were specifically engineered to provide superior resistance to the corrosive elements of coastal and marine environments. With their slim, aesthetic design and wind-resistant, radiant heat output, the Platinum Smart-Heat™ Electric Marine heaters are the ideal solution to enrich the comfort experience of owners of coastal residences and superyachts & guests on cruise ships.

Features/Benefits

- Compact & Elegant Design.
- Premium Stainless-Steel Construction.
- Tinted Glass-Ceramic Fascia.
- Slim-line Design.
- Simple and easy to use, with single-switch activation and smart system compatibility.
- Sealed compartment with thin film elements to prevent corrosion.
- Adjustable Mounting Brackets.

What's Included

- (1) 3,400 Watt Marine Grade Platinum Electric Heater.
- (1) 6" adjustable bracket for wall or ceiling mount applications.



BH0320018

Model #	Description
BH0320015	33" Electric Marine Grade, 2300W, 220/240v, Black
BH0320016	50.2" Electric Marine Grade, 3300W, 220/240v, Black
BH0320017	33" Electric Marine Grade, 2300W, 220/240v, White
BH0320018	50.2" Electric Marine Grade, 3400W, 220/240v, White
BH3130034	Marine Grade Silver Ceiling Recess Kit, 2300W
BH3130035	Marine Grade Silver Ceiling Recess Kit, 3400W
BH3130046	316 Tube Suspension Kit, 4' - 2300W/3400W
BH3130047	316 Tube Suspension Kit, 2' - 2300W/3400W



BH3130046

BH3130034



Bromic Heaters



PLATINUM ELECTRIC HEATERS

Looking for a heater that offers the most effective heating technology, an award-winning design and very little light emission? You found it. With its ultra-slim, high-quality 304 stainless steel chassis and Schott tinted ceramic-glass screens, the award-winning Platinum Smart-Heat™ Electric virtually disappears into its surroundings while delivering market-leading radiant heat output that will warm you and not the air – just like the sun.

Features/Benefits

- Compact & Elegant Design.
- Premium Stainless-Steel Construction.
- Tinted Glass-Ceramic Fascia.
- Slim-line Design.
- Simple and easy to use, with single-switch activation and smart system compatibility.
- Adjustable Mounting Brackets.



PLATINUM ELECTRIC HEATERS

What's Included

- (1) 3,400 Watt Platinum Electric Heater.
- (1) 6" adjustable bracket for wall or ceiling mount applications.

Model #	Description
PLA2300W	33" Electric Heater, 220/240v (BH0320003), Black
PLA3400W	50.2" Electric Heater, 220/240v (BH3622000), Black
PLA4500W	53.2" Electric Heater, 220/240v (BH0320005), Black
PLA2300W-WH	33" Electric Heater, 220/240v (BH0320007), White
PLA3400W-WH	50.2" Electric Heater, 220/240v (BH0320008), White
PLA4500W-WH	53.2" Electric Heater, 220/240v (BH3622001), White

PLATINUM ACCESSORIES

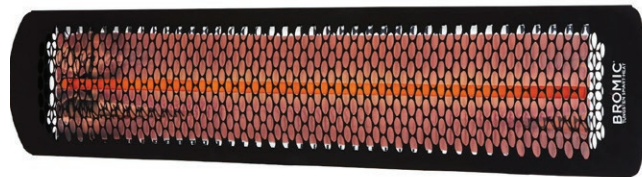
Model #	Description
BH3130017	Stainless Steel Ceiling Recess Kit, 2300W
BH3623009	Low Clearance Ceiling Recess Kit, 2300W
BH3130027	Stainless Steel Ceiling Recess Kit, 3400W
BH3623008	Low Clearance Ceiling Recess Kit, 3400W
BH3623000	Stainless Steel Ceiling Recess Kit, 4500W
BH3130023-1	Tube Suspension Kit, 2' for 2300/3400W
BH3130024-1	Tube Suspension Kit, 4' for 2300/3400W
BH3623020	Tube Suspension Kit, 2' for 4500W
BH3623021	Tube Suspension Kit, 4' for 4500W

TUNGSTEN ELECTRIC HEATERS

Expand your living space with the Bromic Tungsten Smart-Heat™ Electric series. Combining stylish, industrial design with market-leading radiant heat technology, the Tungsten Electric 6,000 watt heater will provide an even flow of warmth to outdoor spaces of up to 160 square feet. The heater's high-temperature coating and stainless-steel construction make it suitable for all environments.

Features/Benefits

- Matte Finish Stainless-Steel construction for reliable heating performance and durability, with the choice of corrosion-resistant black or white finishes.
- Superior wind resistance.
- High Quality Quartz Element.
- Parabolic Specular Reflector (PSR).
- Unique Design.
- Precise Directional Heating.



TNG2000W

What's Included

- (1) Dual element 6,000 Watt Tungsten Heater.
- (2) 9.5" brackets for wall or ceiling mount applications.

Model #	Description
TNG2000W	44" Electric Infrared Heater, 2000W, 220/240V, Single Element (BH0420030) - Black
TNG3000W	56" Electric Infrared Heater, 3000W, 220/240V, Single Element (BH0420031) - Black
TNG4000W	44" Electric Infrared Heater, 4000W, 220/240V, Single Element (BH0420032) - Black
TNG6000W	56" Electric Infrared Heater, 6000W, 220/240V, Double Element (BH0420033) - Black
TNG4000W-WH	44" Electric Infrared Heater, 4000W, 220/240V, Double Element (BH0420012) - White
TNG6000W-WH	56" Electric Infrared Heater, 6000W, 220/240V, Double Element (BH0420013) - White

TUNGSTEN ELECTRIC ACCESSORIES

Model #	Description
BH8180011	Black Ceiling Recess Kit 3000/6000W
BH8180010	Black Ceiling Recess Kit 2000/4000W
BH8180095	White Ceiling Recess Kit 3000/6000W
BH8180096	White Ceiling Recess Kit 2000/4000W
BH8180012	White Tube Suspension Kit 3'
BH3130006	Black Tube Suspension Kit 3'



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Bromic Heaters

PLATINUM RADIANT GAS HEATERS

Add style and warmth to your patio, with Bromic's Platinum 500 series gas heater. This powerful heater combines elegant design with industry-leading technology. With its signature ceramic fascia in a sleek black finish, the Bromic Platinum Gas will not only look great on your wall or ceiling but will also quickly project radiant heat deep into your outdoor area (up to 215ft²) while adding an extra layer of comfort with its soft red glow. The Platinum Gas series successfully overcomes winds of up to 12mph, keeping you and your guests warm in any condition. Choose between natural gas or propane (LPG) options.

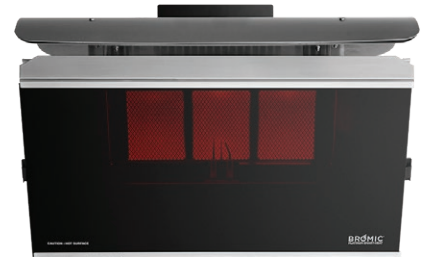
Please Note: For low clearance areas, we recommend a heat deflector to protect the mounting surface. This accessory will also provide improved weather resistance and a more directional heat output.

Features/Benefits

- Stylish Tinted Glass-Ceramic Fascia.
- Instantaneous ignition, whenever you require it, without the need for a pilot light.
- Pivot Arm Bracket.
- Multiple Installation Options.
- Premium Construction.
- Ultimate Wind Resistance.
- Environmental Efficiency.

What's Included

- (1) 39,800 BTU, 500 Series Platinum Gas Heater.
- (1) Pivoting arm bracket for wall mount applications.


PLA500

Model #	Description
PLA300-LP	LP, 23,600 Btu's, 3 Burner Heater (BH0110002-1)
PLA300-NG	NG 23,600 Btu's, 3 Burner Heater (BH0110001-1)
PLA500-LP	LP, 39,800 Btu's, 5 Burner Heater (BH0110004-1)
PLA500-NG	NG, 39,800 Btu's, 5 Burner Heater (BH0110003-1)

PLATINUM GAS ACCESSORIES

Model #	Description
BH3030001-1	Universal Low Clearance SS Heat Deflector to fit 3 Burner Models
BH3030002-1	Universal Low Clearance SS Heat Deflector to fit 5 Burner Models
BH3030003	Universal Ceiling Mounting Pole 9.69" to fit either Style
BH3030004	Universal Ceiling Mounting Pole 13.62" to fit either Style
BH3030008	Universal Ceiling Mount Pole 41.18" to fit either Style
BH3030007	Universal Ceiling Mount Pole 33.31" to fit either Style

BROMIC TUNGSTEN SMART-HEAT LP PORTABLE HEATER

- Heat Output: With coverage of up to 200ft², the Tungsten Smart-Heat™ Portable delivers a widespread heat field of up to 13ft wide and 16ft deep
- Wind Resistance: Specifically built to provide constant and consistent heat in any environment at wind speeds up to 8mph
- Modular Design: Functional and pragmatic, the Tungsten Smart-Heat™ Portable can easily be assembled, dismantled and stored
- Soft Touch Ignite: Battery activated repetitive spark ignition.
- Versatility: Unique and patented adjustable heat control ensures comfortable heat
- Efficiency: High intensity ceramic burner, delivering optimal heat with minimal heat loss
- Directional Heat: Innovative adjustable tilting head ensures warmth goes exactly where it is needed.
- Maneuverability: Anti-tilt structure with built-in wheels for easy movement.
- Dimensions 7.1'H x 1.6'W x 2.3'D

Model #	Description
TNG-P	LP, 38,500 Btu's, Portable Heater (BH0510001)
THG-N	NG, 38,500 Btu's, Portable Heater (BH0510005)
BH8280050	LP to NG Conversion Kit
BH3030010	Head Cover Only


BH3030010
TNG-P


Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Bromic Heaters

BROMIC
HEATING

TUNGSTEN RADIANT GAS HEATERS

Turn up the heat with the Bromic Tungsten Smart-Heat™ Gas Series. This 500 series powerful radiant heater can quickly heat up outdoor areas of up to 215ft², providing a comfortable, warming red glow all year around. With its stylish matte black design and exceptional wind resistance of up to 8mph, this heater will keep you and your guests warm at any time of the year. Choose between natural gas or propane (LPG) options.

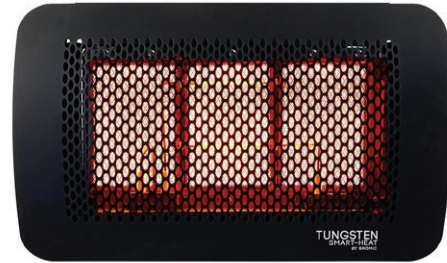
Please Note: For low clearance areas, we recommend a heat deflector to protect the mounting surface. This accessory will also provide improved weather resistance and a more directional heat output.

Features/Benefits

- Matte Finish Stainless-Steel construction for reliable heating performance and durability.
- Instantaneous ignition, whenever you require it, without the need for a pilot light.
- Pivot Arm Bracket.
- High Performance Mesh Screen.
- Enhanced Safety Features.
- Multiple Installation Options.
- Environmental Efficiency.

What's Included

- (1) 43,000 BTU, 500 Series Tungsten Gas Heater.
- (1) Pivoting arm bracket for wall mount applications.



TNG30



BH3030011



BH3030003

Model #	Description
TNG300-LP	NG, 26,000 Btu's, 3 Burner Heater (BH0210002-1)
TNG300-NG	LP, 26,000 Btu's, 3 Burner Heater (BH0210001-1)
TNG500-LP	LP, 43,000 Btu's, 5 Burner Heater (BH0210004-1)
TNG300-NG	NG, 43,000 Btu's, 5 Burner Heater (BH0210003-1)

TUNGSTEN GAS ACCESSORIES

Model #	Description
BH3030011	Universal Low Clearance Black Heat Deflector to fit 3 Burner Models
BH3030012	Universal Low Clearance Black Heat Deflector to fit 5 Burner Models
BH3030003	Universal Ceiling Mounting Pole 9.69" to fit either Style
BH3030004	Universal Ceiling Mounting Pole 13.62" to fit either Style
BH3030007	Universal Ceiling Mounting Pole 33.31" to fit either Style
BH3030008	Universal Ceiling Mounting Pole 41.18" to fit either Style

AMD Direct Heaters

HEAT
by AMD Direct

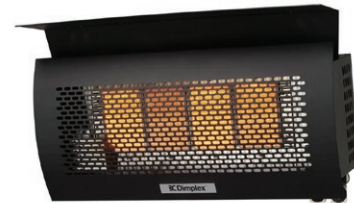
DGR WALL MOUNT AND FREE STANDING GAS HEATER

- 4 Ceramic Burners
- 31,500 btu heat Output
- Stand is E-Coated Mild Steel with Powder Coated Finish
- Electronic Finger Pull with Easy On/Off 9AA battery)
- Head is Stainless Steel (430) with High Temperature Coating

Model #	Description
DGR32WNG	Wall Mounted NG Heater
DGR32PLP	Portable LP Gas Heater
DGRSHIELD	DGR Low Clearance heat Shield
DGRPOLE-WM	Ceiling Mount Bracket
TGHCOVER	Weather Proof Cover for DGR32PLP



FREESTANDING DGR



WALL MOUNT DGR

AMD Direct Heaters

HEAT

by AMD Direct

DIR INDOOR AND OUTDOOR ELECTRIC INFRARED HEATER

- IP65 Rating for Indoor and Outdoor Applications
- Nextrema Schott Glass Ensures Even Heat Distribution and Minimizes Light Emissions
- Programmable Timer and Remote control for Ease of Operation
- Each Heater comes with the Element Pre-Installed, which eases in installation and reduces the risk of damaged, broken or misplaced elements upon delivery
- 3 heat settings for maximum comfort


DIR SERIES

Model #	Description
DIR30A10GR	3000W Infrared Heater, 240V Hard Wired
DIR22A10GR	2200W Infrared Heater, 240V Hard Wired
DIR18A10GR	1800W Infrared Heater, 240V Hard Wired
DIR15A10GR	1500W Infrared Heater, 120v and 240V Hard Wired
DIRP15A10GR	3000W Infrared Heater, 120V Plug-In

DLW INDOOR AND OUTDOOR ELECTRIC INFRARED HEATER

- Slim Profile (2" height) with Multiple Install Options
- Easy DIY Installation with Standard Mounting Brackets Included
- High Temperature Ceramic Coated Extruded which allows Corrosion Protection


DLW SERIES

Model #	Description
DLW3200B24	3200W Infrared Heater 70" Length - Black
DLW3200W24	3200W Infrared Heater 70" Length - White
DLW2400B24	2400W Infrared Heater 53.5" Length - Black
DLW2400W24	2400W Infrared Heater 53.5" Length - White
DLW1500B12	1500W Infrared Heater 36.5" Length - Black
DLW1500W12	1500W Infrared Heater 36.5" Length - White
DLWAC12SIL	12" Extension Mount Pole Kit (includes 2 poles)
DLWAC24SIL	24" Extension Mount Pole Kit (includes 2 poles)
DLWAC36SIL	36" Extension Mount Pole Kit (includes 2 poles)
DLWAC48SIL	48" Extension Mount Pole Kit (includes 2 poles)

DSH INDOOR AND OUTDOOR ELECTRIC INFRARED HEATER

- IP65 Rating for Indoor and Outdoor Applications
- 8 hour Auto Shutoff Safety Mechanism
- 3 Temperature Settings - 1000W (low), 1500W (med), 2000W (high)
- Multiple Heaters can be Controlled with a Single remote
- Each Heater comes with the Element Pre-Installed, which eases installation and reduces the risk of damages, broken or misplaced elements upon delivery
- 1, 2 and 3 Hours Delay Timer
- 3 Second Maximum Heat up Time
- Corrosion Resistant Anodized Alum and 304 Stainless Steel makes the product suitable for all climates
- Remote included


DSH SERIES

Model #	Description
DSH20W	2000W Infrared Heater
DSHSTAND	DSH Floor Mounted Stand
DSHCMB	DSH Ceiling Mounted Bracket Kit



Non-stock/special order items are not cancellable or returnable

 Shop online at www.raymurray.com or call **800-628-5044**

Detroit Radiant Patio Heaters



DETROIT RADIANT DESIGNER PATIO HEATERS

Designed to add warmth to outdoor patio applications, the DSCS (single stage) and DSCD (two stage) Series patio heaters are the perfect solution to stylishly extend the outdoor season to many commercial and residential applications. The DSC Series heaters easily mount out of the way and without the hassle of refilling costly propane tanks. Specifically designed for comfort, reliability, and ease of installation, the DSCS and DSCS Series are sure to deliver the desired amount of warmth for dining, entertainment, or work areas.



DSC SERIES

DETROIT RADIANT DSC AND DSCD

Model #	Gas Type	Operation	BTU's	Description	Length x Width x Height
DSCS-31P	LP	Spark Ignition	31,000	Designer Series,Outdoor,Residential/Commercial,Single Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCS-31P-SS	LP	Spark Ignition	31,000	Designer Series,SS,Outdoor,Residential/Commercial,Single Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCS-31N	NAT	Spark Ignition	31,000	Designer Series,Outdoor,Residential/Commercial,Single Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCS-31N-SS	NAT	Spark Ignition	31,000	Designer Series,SS,Outdoor,Residential/Commercial,Single Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCS-34N	NAT	Spark Ignition	34,000	Designer Series,Outdoor,Residential/Commercial,Single Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCS-34N-SS	NAT	Spark Ignition	34,000	Designer Series,SS,Outdoor,Residential/Commercial,Single Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"

Model #	Gas Type	Operation	BTU's	Description	Length x Width x Height
DSCD-31P	LP	Spark Ignition	31,000	Designer Series,Outdoor,Residential/Commercial,Dual Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCD-31P-SS	LP	Spark Ignition	31,000	Designer Series,SS,Outdoor,Residential/Commercial,Dual Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCD-31N	NAT	Spark Ignition	31,000	Designer Series,Outdoor,Residential/Commercial,Dual Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCD-31N-SS	NAT	Spark Ignition	31,000	Designer Series,SS,Outdoor,Residential/Commercial,Dual Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCD-34N	NAT	Spark Ignition	34,000	Designer Series,Outdoor,Residential/Commercial,Dual Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"
DSCD-34N-SS	NAT	Spark Ignition	34,000	Designer Series,SS,Outdoor,Residential/Commercial,Dual Stage,High Intensity,Infrared Patio Heaters	48.4" x 9.0" x 10.9"

DETROIT RAD DSC DSCD ACCESS

Model #	Description
PH-BKT	Adjustable Mounting Bracket DSC/DSCD Series
PH-BKT-SS	SS Adjustable Mounting Bracket DSC/DSCD Series

Detroit Radiant Patio Heaters



DETROIT RADIANT DESIGNER PATIO HEATERS

DST Detroit Radiant Designer Patio Heaters

The DST Series is a top-of-the-line patio heater with an aesthetically pleasing, modern design featuring our patented two stage technology. This gas-fired, low intensity patio heater series was manufactured specifically with the outdoor market in mind. Not only does this heater deliver an even heat pattern throughout its 10-foot span, but it also comes equipped with a smart LED self-diagnostic light and a decorative, modular grille. Certified for indoor and outdoor commercial applications as well as outdoor residential applications, the DST Series low intensity patio heater is an excellent choice for heating a wide variety of applications.



DST SERIES

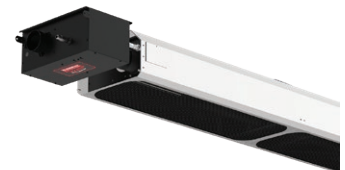
Model #	Gas Type	Operation	BTU's	Description
DST-60P	LP	Hot Surface Ignition	60,000	Designer Series,Indoor/Outdoor,Residential/Commercial,Low Intensity,Infrared Patio Heater
DST-60N	NAT	Hot Surface Ignition	60,000	Designer Series,Indoor/Outdoor,Residential/Commercial,Low Intensity,Infrared Patio Heater
DST-80N	LP	Hot Surface Ignition	80,000	Designer Series,Indoor/Outdoor,Residential/Commercial,Low Intensity,Infrared Patio Heater

DETROIT RADIANT DST ACCESS

Model #	Description
RTVP-4	4" Rooftop Vent/Intake Package
4-DSK	4" Duravent Sidewall Vent Kit
THGH10-3	Sway Bracing

DETROIT RADIANT DESIGNER PATIO HEATERS

The DSRL and DSRS Series are top-of-the-line patio heaters with an aesthetically pleasing, modern design featuring our patented two stage technology. These gas-fired, low intensity patio heaters are manufactured specifically with the outdoor market in mind. Not only do these heaters deliver an even heat pattern throughout their 9' (DSRS) and 16' (DSRL) spans, but with their decorative, modular grilles, they are the preferred heaters for outdoor driving ranges and restaurants patios.



DSR SERIES

Model #	Gas Type	Operation	BTU's	Description
DSRS-15-50P	LP	Hot Surface Ignition	45,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRS-15-50N	NAT	Hot Surface Ignition	35,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRL-30-65P	LP	Hot Surface Ignition	50,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRL-30-65N	NAT	Hot Surface Ignition	50,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRL-30-80P	LP	Hot Surface Ignition	52,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRL-30-80N	NAT	Hot Surface Ignition	52,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRL-30-100P	LP	Hot Surface Ignition	65,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater
DSRL-30-100N	NAT	Hot Surface Ignition	65,000	Designer Series,Outdoor,Residential/Commercial,2-Stage,Low Intensity,Infrared Patio Heater



Non-stock/special order items are not cancellable or returnable

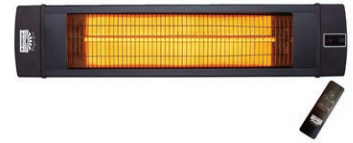
Shop online at www.raymurray.com or call 800-628-5044

Detroit Radiant Patio Heaters



DSS SERIES MEDIUM-WAVE ELECTRIC INFRARED PATIO HEATER

Outdoor approved DSS Series electric heaters produce medium-wave, instant heat with the use of revolutionary carbon lamps encased in an IP55 rated, compact, slim, black enclosure. This heater offers a remote control with timer functionality and four power settings (can also be ordered without remote), and one remote can control multiple heaters. Operational benefits include a highly efficient energy transfer, even heat distribution, and intense heat output.



DSS SERIES

Model #	Operation	BTU's / Watts	Description
DSS-35BI-A15	Electric	5,118 / 1,500	Medium Wave Infrared, Outdoor, Commercial, Remote w/ Timer
DSS-35BI-C25	Electric	8,530 / 2,500	Medium Wave Infrared, Outdoor, Commercial, Remote w/ Timer
DSS-35BI-A-15-NR	Electric	5,118 / 1,501	Medium Wave Infrared, Outdoor, Commercial, On/Off Only
DSS-35BI-C25-NR	Electric	8,530 / 2,501	Medium Wave Infrared, Outdoor, Commercial, On/Off Only

DGS SERIES FILTERED SHORT-WAVE ELECTRIC INFRARED PATIO HEATER

The DGS Series filtered short-wave electric infrared has proven to be an excellent option for electric heating that values aesthetics with its modern design and high-end quality. This heater features a custom designed reflector that focuses the desired heat pattern to your space. Thanks to its aluminum extruded body, the DGS Series is easily able to withstand harsh outdoor conditions, allowing you to extend your residential patio or outdoor restaurant season. Plus, its sleek appearance adds style to any indoor or outdoor space.



DGS SERIES

Model #	Operation	BTU's / Watts	Description
DGS-IZ-A15	Electric	5,118 / 1,500	Filtered Short Wave Infrared, Outdoor/Indoor, Residential/Commerical
DGS-Z1-C20	Electric	6,824 / 2,000	Filtered Short Wave Infrared, Outdoor/Indoor, Residential/Commerical



Pool Heaters

JANDY JXi POOL HEATERS

The JXi™ heater sets the standard in pool and spa heating with unsurpassed energy-efficiency and optional cost-saving Integrated Bypass technology that diverts water flow away from the heater when there is no call for heat. Boasting an 84% thermal efficiency rating and a low-NOx design, the JXi also features advanced automation compatibility with AquaLink® systems and iAquaLink™ control, for anytime, anywhere convenience, and an ultra-compact, lightweight design, that allows for faster and easier installation—making it a top choice for pool professionals and pool owners everywhere.


JXi SERIES

LP Model #	NG Model #	Btu's	Description
JXi200EP	JXi200EN	200,000	Ultra-Compact,84% Energy-Efficient,Low-NOx Design
JXi260EP	JXi260EN	260,000	Ultra-Compact,84% Energy-Efficient,Low-NOx Design
JXi400EP	JXi400EN	400,000	Ultra-Compact,84% Energy-Efficient,Low-NOx Design

HAYWARD UNIVERSAL H-SERIES POOL HEATERS


The Universal H-Series is an energy efficient, high performance, installation adaptable commitment to the pool service professional.

- Standard cupro nickel heat exchanger
- Excellent salt water and chemical corrosion resistance
- Exclusive "Totally Managed" cupro nickel heat exchanger water flow
- Same water velocity through all tubes for faster heating
- Patented header by-pass design
- Up to 18 percent savings by reducing pump run-time
- 2in x 2-1/2in CPVC union plumbing connections
- Common union for installation or service, adapts to larger plumbing recommended for greater efficiencies
- Low NOx emissions - meets clean air quality standards


H150FDP

LP Model #	NG Model #	Btu's	Description
H150FDP	H150FDN	150,000	Universal H-Series,Low Nox,Cupro Nickel Heat Exchanger
H200FDP	H200FDN	200,000	Universal H-Series,Low Nox,Cupro Nickel Heat Exchanger
H250FDP	H250FDN	250,000	Universal H-Series,Low Nox,Cupro Nickel Heat Exchanger
H400FDP	H400FDN	400,000	Universal H-Series,Low Nox,Cupro Nickel Heat Exchanger

HAYWARD DRAFTHOODS

Model #	Description
DHI150	HAYWARD INDOOR DRAFTHOOD (150)
DHI200	HAYWARD INDOOR DRAFTHOOD (200)
DHI250	HAYWARD INDOOR DRAFTHOOD (250)
DHI300	HAYWARD INDOOR DRAFTHOOD (300)



Pool Heaters



PM336A

RHEEM DIGITAL AND MILLIVOLT POOL HEATERS

The sleek and stylish Rheem Digital Gas Pool and Spa Heater is available in Atmospheric and Low NOx models. The Digital Gas Pool and Spa Heaters feature innovative technology designed to keep your pool or spa at the perfect temperature for your enjoyment. Built to withstand various weather conditions, this modern pool and spa heater is the perfect solution for environments requiring efficiency, convenience and versatility. Whether upgrading your existing system or adding a new pool or spa to your home, our heater offers you flexible installation solutions. Thanks to a brilliant low-profile design, corrosion resistant cabinet made of galvanized metal, copper or cupronickel fin tube heat exchanger, and a bevy of advanced-engineered materials you will be able to enjoy your heater year round.

LP Model #	NG Model #	Operation	Btu's	Description
PM206A-EP-C	PM206A-EN-C	Electronic Ignition	200,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower
PM266A-EP-C	PM266A-EN-C	Electronic Ignition	266,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower
PM336A-EP-C	PM336A-EN-C	Electronic Ignition	333,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower
PM406A-EP-C	PM406A-EN-C	Electronic Ignition	399,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower

LP Model #	NG Model #	Operation	Btu's	Description
PM206A-MP-C	PM206A-MN-C	Millivolt	200,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower
PM266A-MP-C	PM266A-MN-C	Millivolt	266,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower
PM336A-MP-C	PM336A-MN-C	Millivolt	333,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower
PM406A-MP-C	PM406A-MN-C	Millivolt	399,000	Digital Pool/Spa, Low Nox Certified, Polymer Headers w/ProTek Shield, Blower

RHEEM DRAFTHOODS

Model #	Description	Model #	Description
09834	6" OUTDOOR STOCK TOP (PM206A)	09838	INDOOR DRAFTHOOD TOP (PM206A)
09835	7" OUTDOOR STOCK TOP (PM266A)	09839	INDOOR DRAFTHOOD TOP (PM266A)
09836	8" OUTDOOR STOCK TOP (PM366A)	09840	INDOOR DRAFTHOOD TOP (PM366A)
09837	9" OUTDOOR STOCK TOP (PM406A)	09841	INDOOR DRAFTHOOD TOP (PM406A)

PENTAIR STA-RITE POOL HEATERS



Save money and energy with the Max-E-Therm High-Performance Heater. Already known as being dependable and efficient, Max-E-Therm now offers smart features and an optional energy-saving automatic bypass to help you ensure your pool is ready whenever you are.

- Smart connectivity via the Pentair **IntelliCenter® Control System** enables management of pool functions from across the yard or around the globe.
- Alerts pushed to a smart device to keep you updated on heater performance and real-time status.
- Digital connectivity with your pool's automation system and an advanced ignition control module with flame strength sensor help to ensure optimal heater performance.
- Full-text digital display combines new functions and a user-friendly menu for easy operation and diagnostics.
- Optional Smart Heater Bypass valve control diverts water flow when the heater isn't needed to help save up to 35% in yearly operational costs.*



SR200LP

Model #	Gas Type	Btu's	Description
SR200LP	LP	200,000	Max-E-Therm, Low Nox, Smart Connectivity
SR333LP	LP	333,000	Max-E-Therm, Low Nox, Smart Connectivity
SR400LP	LP	400,000	Max-E-Therm, Low Nox, Smart Connectivity



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Aluminum Cylinders

ALUMINUM CYLINDERS FOR CO2

- Specifications: DOT-3AL & TC-3ALM designed.
- Alloy: Manufactured from high strength aluminum alloy 6061-T6
- Markings: As required by specification. Additional markings available upon request
- Accessories: Valves installed upon request.
 - Other sizes available upon request

PART #	SERVICE PRESSURE (PSI)	CO2 capacity (Lbs)	DIAMETER IN	LENGTH In	Empty WEIGHT Lbs	Thread Size
C2.5V	1800	2.5	4.4	10.4	3.6	.750-16UNF-2B
C5V	1800	5	5.3	9	6.2	1.125-12UNF-2B
C10V	1800	10	6.9	16.6	12.9	1.125-12UNF-2B
C20V	1800	20	8	23.3	23	1.125-12UNF-2B
C35V	1800	35	8	38	34.8	1.125-12UNF-2B
C50V	1800	50	8.6	46.5	50.6	1.125-12UNF-2B

ALUMINUM CYLINDERS FOR INDUSTRIAL USES

- Specifications: DOT-3AL & TC-3ALM designed.
- Alloy: Manufactured from high strength aluminum alloy 6061-T6
- Markings: As required by specification. Additional markings available upon request
- Accessories: Valves installed upon request.
 - Other sizes available upon request

PART #	SERVICE PRESSURE (PSI)	DIAMETER IN	LENGTH In	Empty WEIGHT Lbs	OXYGEN cu ft	Thread Size
14	2216	3.2	9	1.8	4	A
16	2216	3.2	11.8	2.2	5.8	A
122	2216	5.3	17.1	8.6	22.9	B
160	2216	7.3	23.5	22.6	60.9	B
188	2216	7.3	32.9	30.3	89.9	B
1122	2216	8	36.3	39.5	121.9	B
1150	2015	8	47.9	48.5	153.2	B
1265	2216	9.8	52.8	85.3	265.1	B

A = .750-16UNF-2B

B = .750-16UNF-28B or 1.125-12UNF-2B



ALUMINUM INDUSTRIAL



Aluminum Cylinders

ALUMINUM CYLINDERS FOR MEDICAL USES

- Specifications: DOT-3AL & TC-3ALM designed
- Alloy: Manufactured from high strength aluminum alloy 6061-T6
- Markings: As required by specification. Additional markings available upon request
- Finish: Standard finish is brushed body with green crown (white crown for Canada) and clear paint
- Accessories: Valves installed upon request. M60 and larger are available with either a carrying handle or protective caps and collars.
 - Other sizes available upon request

RMI Part No.	Service Pressure psi	Diameter in	Length in	Cylinder Weight lbs	Oxygen cu ft	Thread Size
M2	2216	2.5	5.9	0.7	1.6	.750-16UNF-2B
M4	2216	3.19	8.4	1.6	3.7	.750-16UNF-2B
M6	2216	3.19	11.8	2.3	5.7	.750-16UNF-2B
ML6	2015	4.38	7.6	2.8	5.8	.750-16UNF-2B
M9	2015	4.38	10.8	3.6	8.6	.750-16UNF-2B
MD	2015	4.38	16.2	5.1	14.3	.750-16UNF-2B
ME	2015	4.38	25.6	7.5	23.9	.750-16UNF-2B
M22	2216	5.25	16.5	8.2	8.3	.750-16UNF-2B
M60	2216	7.25	22.9	21.9	60	1.125-12UNF-2B
M90	2216	7.25	32.6	29.8	90	1.125-12UNF-2B
M122	2216	8	36.3	39.5	121.9	1.125-12UNF-2B
M150	2015	8	47.9	48.5	153.2	1.125-12UNF-2B
M265	2216	9.8	51.4	85.3	265.1	1.125-12UNF-2B



MEDICAL CYL COLOR

****Valve shown is not included with the cylinder.***

Leak Detectors & Sealants

GASKIT® ECO

GASKIT® ECO Leak Detector is Non-Toxic and 100% Biodegradable leak detection liquid specifically formulated for commercial and industrial use to locate leaks wherever compressed gases are used.

GASKIT® ECO Leak Detector is compatible with stainless steel, Steel, cast iron, ductile iron, copper, nylon, rubber, MDPE, HDPE, and others!

- Oxygen safe in accordance with Mil. Spec MIL-L-25567
- Protects against static electricity
- Longer adhesion fluid stays on surfaces longer, vertical and horizontal pipes

RMI Part No.	Description	Case Qty	Color
GASKIT-LT-ECO	LoTemp (10°)-1 Gallon	4 Gallons	Green
GASKIT-XL -ECO	Extra Lo Temp (-40°)-1 Gallon	4 Gallons	Med. Blue
GASKIT-LT-ECO-55	LoTemp (10°)- 55 Gallon Drum	55 Gal Drum	Green
GASKIT-XL -ECO-55	Extra Lo Temp (-40°)- 55 Gallon Drum	55 Gal Drum	Med. Blue



ECO GASKIT-LT

BRUSH, SQUEEZE & SPRAY BOTTLE

- Wide neck bottle and brush for easy application
- Pint bottle with spray nozzle
- Handy squeeze bottle

RMI Part No.	Description
LD-BOTTLE	Empty Pint Bottle & Brush
LD-SPRAY	Empty Pint Bottle W/Sprayer
LD-DAUBER	Empty 8oz. Bottle & Dauber
WP-120	Empty 80oz. Squeeze Bottle



LD-BOTTLE



LD-SPRAY

LEAK DETECTOR SOLUTION

GAS-KIT® 5-second Leak detector solution is fast and dependable, and finds even the smallest leaks. Available in regular or low temperature for sub-freezing temperatures. Available in 55 gallon Drums drop shipped from factory.

RMI Part No.	Description	Case Qty	Color
GASKIT-REG	Regular (27 Deg F)- 1 Gallon	4 Gallons	Green
GASKIT-LT	Lo Temp(-10 Deg F)-1 Gallon	4 Gallons	Red
GASKIT-XL	Extra Low Temp (-50 Deg F)- 1 Gallon	4 Gallons	Pink
GASKIT-CG	For O2 (27 Deg F)- 1 Gallon	4 Gallons	Blue
GasKit-Type II	Low Temp O2 (-65 deg F)- 1Gallon	4 Gallons	Lt. Blue



GASKIT-LT

THREAD SEALANTS

OC-3

Use oxygen compatible OC3 to seal threaded connections on cylinder valves more effectively than Teflon tape.

OC-5 and OC-7

Can be used in High Vacuum 10⁻⁷ Torr applications where exposure to corrosive gases is probable.

They are superior lubricants which provide leak tight sealing in a wide range of vacuum requirements.

These off-white homogenous grease and paste formulations provide unique sealing and lubricating solutions, as their properties remain unaltered over a wide temperature ranges, from cryogenic through thermally stable to +450°F. Both are non-flammable, non-migrating, non-toxic, odorless, and waterproof as well as anti-corrosive, anti-galling, anti-seize, and dielectric and lubricating.

Not recommended for aluminum against aluminum applications. Do not use with concentrated alkalis, fluorine(liquid) or chlorine trifluoride(liquid).

All OC products are approved by the major industrial gas providers.

RMI Part No.	Description
OC-3	Oxygen Safe Thread Sealant Paste 4oz Tube
OC3-16	Oxygen Safe Thread Sealant Paste 16oz Jar
OC-5	Oxygen Safe Thread Paste 2oz Jar
OC-5-16	Oxygen Safe Thread Paste 16oz Jar
OC-7	Oxygen Safe Grease 2oz Jar
OC-7-16	Oxygen Safe Grease 16oz Jar
O2TT-1/2	Green, Oxygen Safe, High Density, Teflon Tape 1/2" x 520" Roll
TT41	White High Density, Teflon Tape 1/2" x 520" Roll
TT41Y	Yellow High Density, Teflon Tape 1/2" x 520" Roll
O2TT-3/4	Green, Oxygen Safe, High Density, Teflon Tape 3/4" x 520" Roll
TT35	White High Density, Teflon Tape 3/4" x 520" Roll



MPT_OC5&OC7



MPT_OCTHREE



O2TT



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Shop online at www.raymurray.com or call 800-628-5044

Valve & Cylinder Accessories

GASKIT® BRAND SAFETY WIPES

Dual action all-purpose industrial cleaning wipes.

Cleans hands of antioxidant compounds, silicone, oil, grease, dirt, and other grime. Leaves hands soft and moisturized after use. Equally effective for cleaning tools and other hard surfaces.

The Gaskit® Safety Wipes feature a textured side to effectively clean more stubborn areas and a soft side to be gentler on the skin.

- 100% biodegradable
- Non-toxic and non-flammable
- Non-corrosive
- Contains no d-Limonene
- Oxygen Safe

RMI Part No.	Description	Oxygen Compatible
GASKIT-SWE	Dual Textured Safety Wipes 75ct	Y



GAS-KIT WIPES

GASKIT® DEGREASER

Formulated to provide cleaning levels equal to dangerous and toxic products containing hydrochloric acid, lye, phosphates and other petroleum-based compounds, while providing complete user safety.

- 100% biodegradable
- Ready -to-use formula
- Easily rinses off all surfaces.
- Oxygen compatible
- Safe to use on metals, plastic, glass, concrete.
- Non-flammable and non-explosive
- Removes machine oils and cutting fluids from manufactured parts



GAS-KIT DEGREASER

RMI Part No.	Description	Oxygen Compatible
GASKIT-DEG	Biodegradeable Degreaser 1 Gallon Bottle	Y
GASKIT-DEG-5	Biodegradeable Degreaser 5 Gallon Pail	Y

CARRY HANDLES FOR ALUMINUM CYLINDERS

RMI Part No.	Description
RM215	Carry Handle- Catalina
CATALINA-RING	Snap Ring for Catalina Cylinder
RM214	Carry Handle- Luxfer
LUXFER-RING	Snap Ring for Luxfer Cylinder
RM179	Carry Handle- 3-1/8" Course Thread
RM439	Carry Handle- Kidde



CATALINA-RING



RM214



RM439

3 INCH ROUND CYLINDER COLLAR

RMI Part No.	Description
RM081	3" Round Black Collar
RM084	3" Round Med Blue Collar
RM085	3" Round Brown Collar
RM087	3" Round DK Green Collar
RM088	3" Round Lime Collar
RM194	3" Round Orange Collar
RM197	3" Round Red Collar
RM198	3" Round Yellow Collar



RM084

* other colors available upon request

7 INCH ROUND CYLINDER COLLAR

RMI Part No.	Description
RM058	7" Round DK Green Collar
RM056	7" Round Med Blue Collar
RM060	7" Round Red Collar
RM062	7" Round Yellow Collar
RM071	7" Round Black Collar
RM073	7" Round Lime Collar
RM101	7" Round Orange Collar
RM107	7" Round Brown Collar



RM101

* other colors available upon request

Valve & Cylinder Accessories

CYLINDER VALVE OUTLET CAPS

RMI Part No.	Description
RM037	Orange Plastic CGA 320 Dust Cap w/ Strap
RM036	Red Plastic CGA 320 Dust Cap w/ Strap
RM098	Blue Plastic CGA 320 Dust Cap w/ Strap
RM333	Plastic "MC" Acetylene Valve Cap
RM340	Plastic "B" Acetylene Valve Cap
RM123	Multi CGA Tear Away With Blow Out
RM355	Plastic CGA540 No Tamper Cap W/ Strap
RM175	Plastic CGA540 Dust Cap W/Tear Tab
RM033	Plastic Washer for CO2
MSW1	Fiber Washer for CO2
RM327	CO2 Washer W/ Oring



MSW-1



RM-033



RM037



RM123



RM175



RM327



RM333



RM340



RM355

CYLINDER SIPHON TUBE

RMI Part No.	Description
TUBE-53	Copper Siphon Tube 53" OAL 1/4" MNPT



TUBE-53

ORINGS FOR CYLINDER VALVES

RMI Part No.	Description
450-17T	Teflon Inlet Oring for Post Medical Valve
216T	1.125-12UNF2A Teflon Inlet Oring
G210A9	.750-16UNF2A Buna Inlet Oring
G210EP9	.750-16UNF2A Inlet Oring For CO2
G210V	.750-16UNF2A VITON Inlet Oring (Oxygen Service)
G216N	1.125-12UNF2A Inlet Oring For CO2
G212A9	For .875-14 UNF Thread Valves (SCBA)

ORING DIMENSIONS

Part #	ID/ Inches	ID/MM	OD/Inches	OD/MM
450-17T	3/4	18.66	1	25.4
G210A9	3/4	18.66	1	25.4
G210EP9	3/4	18.66	1	25.4
G210V	3/4	18.66	1	25.4
G212A9	7/8	21.82	1-1/8	28.17
G216N	1-1/8	28.17	1-3/8	34.93
216T	1-1/8	28.17	1-3/8	34.93

POST MEDICAL VALVE ACCESSORIES

RMI Part No.	Description
RM003	Tamper Resistant Post Vlv Dust Cover
RM017	Green Yoke Washer for Post Valve
RM019	*Post Valve Push in Washer W/Pull Tap
RM017436	Universal Post Valve sleeve W/Washer
RM124	Pull Over Dust Cover for Post Valve
RM142P	Post Valve Wrench No Chain
RM291	Medical Yoke Washer, Brass W/ Viton Insert
RM300	X-Mas Barb Adaptor For DISS O2 Outlet
RM02W	Large Green Yoke Washer

* Valve not included



RM003



RM017



RM019



RM291



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Valve & Cylinder Accessories

PROPANE VALVE ACCESSORIES

RMI Part No.	Description
87P-S	*POL Safety Plug W/ Strap
94QC1	QCC1 Valve Outlet Cover For Grill Cylinder
RM426S	1-3/4" Acme Cap and Strap
RM475	Fork Lift Relief Valve Rain Cap
RM481	Fork Lift Relief Valve Pipe Away
RM509	Strap for 87P-S
RM483	OPD Valve Tear Away Outlet Cap

* Valve not included



87P-S



94QC1



RM426S



RM481 RM475



RM483

SCREENS AND FELTS FOR ACETYLENE CYLINDERS

RMI Part No.	Description
Screen-1/2	S.S. Screen for "B" and "MC" Acetylene Cylinders
Screen-3/4	S.S. Screen for "3/4" Neck Acetylene Cylinders
Screen-1	S.S. Screen for "1" Neck Acetylene Cylinders
FELT-1/2	Felt "B" and "MC" Acetylene Cylinders
FELT-3/4	Felt for "3/4" Neck Acetylene Cylinders
FELT-1	Felt "1" Neck Acetylene Cylinders



FELTS



SCREENS
IMAGE

STEEL CYLINDER NECK ADAPTORS

Adaptors enable you to add RM214 carry handle to a small steel cylinder.

RMI Part No.	Description
AR004Z	Adaptor Ring 1-3/4" inside Diameter
AR005Z	Adaptor Ring 1-7/8" inside Diameter



AR004Z

TRIANGLE CYLINDER ID COLLARS CYLINDER WITH CAPS

RMI Part No.	Description
RM156	7" Triangle Black Collar
RM159	7" Triangle Med Blue Collar
RM160	7" Triangle Brown Collar
RM161	7" Triangle DK Green Collar
RM162	7" Triangle Lime Collar
RM166	7" Triangle Orange Collar
RM169	7" Triangle Red Collar
RM172	7" Triangle Yellow Collar



RM172

* Valve not included



Cryogenic Shut-Off Valves

BRONZE GLOBE VALVE FOR CRYOGENIC SERVICE 222 SERIES INCLUDING 226LL, 226GF, 226ULL, 226BLL, 222X, 226LL, 226BLL

Application

The 222 Series valves are designed exclusively for the handling of cryogenic liquids on bulk storage tanks, transports, and pipelines. These globe valves provide positive shutoff and offer a long, low maintenance service life. The valves are available with a variety of inlet and outlet connections and stem lengths.



B-226ULL-12T6

222X BRONZE GLOBE VALVES, EXTENDED STEM - CONICAL SEAT, 400 PSIG (28 BARG) COLD WORKING PRESSURE THREADED ENDS

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-222X-2T4	1/4	8	1.50 (0.70)	1.30 (1.12)
B-222X-4T4	1/2	15	1.50 (0.70)	3.25 (2.81)
B-222X-4T4A			1.65 (0.75)	
B-222X-6T4	3/4	20	3.00 (1.40)	6.25 (5.40)
B-222X-6T4A			3.15 (1.43)	
B-222X-8T4			1	
B-222X-8T4A	4.20 (1.90)			
B-222X-12T4	1-1/2	40	7.75 (3.50)	26.00 (22.49)
B-222X-12T4A			8.00 (3.63)	
B-222X-16T4	2	50	12.50 (5.70)	45.00 (38.92)
B-222X-16T4A			12.75 (5.78)	
B-222X-20T4	2-1/2	65	61.00 (27.70)	50.00 (43.25)
B-222X-24T4	3	80	61.00 (27.70)	100.00 (86.5)

SILVER BRAZED ENDS

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-222X-4S4	1/2	15	2.00 (0.90)	3.25 (2.81)
B-222X-6S4	3/4	20	2.75 (1.30)	6.25 (5.40)
B-222X-8S4	1	25	3.75 (1.70)	10.00 (8.65)
B-222X-12S4	1-1/2	40	7.25 (3.30)	26.00 (22.49)
B-222X-16S4	2	50	11.50 (5.20)	45.00 (38.92)
B-222X-24S4	3	80	58.00 (26.40)	100.00 (86.5)

SB-222X STAINLESS STEEL BODY, BRONZE TOPWORKS, CONICAL SEAT, 450 PSIG COLD WORKING PRESSURE

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
SB00222X-12SW	1-1/2	40	7.75 (3.50)	26.00 (22.49)

226LL BRONZE GLOBE VALVES, LIVE LOAD PACKING, EXTENDED STEM, 600 PSIG (42 BARG) COLD WORKING PRESSURE THREADED ENDS

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-0226LL-2T6	1/4"	8	1.50 (0.68)	1.30 (1.12)
B-0226LL-3T6	3/8"	10	1.50 (0.68)	2.40 (2.07)
B-0226LL-4T6	1/2"	15	2.5 (1.13)	3.25 (2.81)
B-0226LL-6T6	3/4"	20	3.2 (1.45)	6.25 (5.40)
B-0226LL-8T6	1"	25	5.3 (2.40)	10.00 (6.65)

SILVER BRAZED END

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-0226LL-2S6	1/2	15	2.00 (0.90)	3.25 (2.81)
B-0226LL-3S6	3/4	20	2.75 (1.30)	6.25 (5.40)
B-0226LL-4S6	1	25	5.8 (2.63)	10.00 (6.65)

226ULL BRONZE GLOBE VALVES, LIVE LOADED PACKING - UNION BONNET, EXTENDED STEM, 600 PSIG (42 BARG) COLD WORKING PRESSURE THREADED ENDS

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-226ULL-12T6	1-1/2	40	7.75 (3.50)	26.00 (22.49)
B-226ULL-16T6	2"	50	12.50 (5.70)	45.00 (38.92)

SILVER BRAZED END

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-226ULL-12S6	1-1/2	40	7.25 (3.30)	26.00 (22.49)
B-226ULL-16S6	2	50	11.50 (5.20)	45.00 (38.92)

226BLL BRONZE GLOBE VALVES, LIVE LOADED PACKING - BOLTED BONNET, EXTENDED STEM, 600 PSIG (42 BARG) COLD WORKING PRESSURE THREADED ENDS

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
B-226BLL-12T6	1-1/2	40	7.75 (3.50)	26.00 (22.49)
B-226BLL-16T6	2	50	12.50 (5.70)	45.00 (38.92)

226XGF BRONZE GLOBE VALVES, EXTENDED STEM - CONICAL SEAT GRAFOIL® PACKING, GASKET AND PFA SEAT 600 PSIG (42 BARG) COLD WORKING PRESSURE TEMPERATURE RANGE -325°F TO +300°F (-198°C TO +149°C) THREADED ENDS

Part Number	Size		Weight Lbs (Kg)	Estimated Cv (Kv)
	Inches	DN		
VB-226XGF-4T6	1/2	15	1.50 (0.70)	3.25 (2.81)
VB-226XGF-6T6	3/4	20	3.00 (1.40)	6.25 (5.40)
VB-226XGF-8T6	1	25	4.00 (1.80)	10.00 (8.65)
VB-226XGF-12T6	1-1/2	40	7.75 (3.50)	26.00 (22.49)



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Cryogenic Shut-Off Valves

BRONZE GLOBE VALVE FOR CRYOGENIC SERVICE BB SERIES

Application

The BB Series globe valves are designed for handling cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Our time-tested spring-loaded stem packing and superior seat design provide for long life and easy maintenance. Internal components are identical with the SKB Series. The BB Series globe valves are offered with brazed-in schedule 10 and 40 stainless steel pipe stubs. Also available in short stem version.

Features

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading
- V-Ring spring loaded packing provides extended service life without constant packing adjustment
- Conical PCTFE Seat provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life
- Ideal for loading & unloading cryogenic bulk tanks and trucks. The 1-1/2" & 2" valves are designed to be operator friendly, opening and closing completely with only four 360° rotations.
- Connections: NPT, SBT & Flange
- Sizes: 1/4" to 2" • Bonnet Type: Bolted
- Pressure Rating: 720 psig (50 barg)
- Temperature Rating: -325°F (-198°C) to +150°F (+65°C)
- Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations.
- Cleaned for Oxygen Service per CGA G-4.1



BB9412F

Part Number	Size Inches	Size DN	Connection	Cv	Kv	Weight lbs.	Weight kg.
BB9402S	1/4"	8	Silver Brazed Tube	1.7	1.47	8.30	3.7
BB9404S	1/2"	15		5.0	4.30		
BB9406S	3/4"	20		9.4	8.1		
BB9408S	1"	25		14.0	12.10		
BB9412S	1-1/2"	40		28.3	21.60	12.90	5.8
BB9416S	2"	50		53.0	47.41	21.60	9.8
BB9402T	1/4"	8	Threaded NPT	1.7	1.47	8.30	3.7
BB9404T	1/2"	15		5.0	4.30		
BB9406T	3/4"	20		9.4	8.1		
BB9408T	1"	25		14.0	12.10		
BB9412T	1-1/2"	40		28.3	21.60	12.90	5.8
BB9416T	2"	50		53.0	47.41	21.60	9.8
BB9412F	1-1/2"	40	Flanged RF	28.3	21.60	18.56	8.4
BB9416F	2"	50		53.0	47.41	30.00	13.6



Cryogenic Shut-Off Valves

EXTENDED BONNET BRONZE GATE VALVE FOR CRYOGENIC SERVICE 322 AND 326 SERIES

Application

The RegO Goddard 322 and 326 Series gate valves are designed for handling of cryogenic liquids through bulk tanks, trucks, trailers, ASU plants and piping configurations. Compatible with oxygen, nitrogen, CO₂, and argon.

Features

- Top Entry: This union bonnet valve can be permanently installed in the line and serviced from the top • Sizes: 1/2" - 3" (15mm - 80mm)
- Ends: Threaded (FNPT), Sil Braze Tube (SBT), Silver Braze Pipe (SBP) or with stainless steel pipe nipples brazed in
- Service: Liquefied and vaporized atmospheric gases, LNG
- Temperature Rating: -320°F to +150°F (-196°C + 65°C)
- Pressure Rating: (Cold, Non-shock) 322 Series 400 psig (28 barg) 326 Series 600 psig (42 barg)
- Cleaned for Oxygen Service per CGA G-4.1
- Designed to MSS SP-80 and ASME B31.3
- Series 1.5" to 3" PED Approved per EN 10204, 3.1
- Ideal for cryogenic supply and storage handling applications.
- Straight-through flow for highest CV rating in the industry.
- Also available with GRAFOIL® packing



B-322-24T4

322 SERIES BRONZE GATE VALVES 400 PSIG (28 BARG) COLD WORKING PRESSURE

Part Number	NPT Size Inches	NPT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-322-20T4	2-1/2"	65	Threaded	19	8.64	372.00 (321.78)
B-322-24T4	3"	80		28	121.73	588.00 (508.62)

Part Number	SBT Size Inches*	SBT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-322-4S4	1/2"	15	Silver Braze	1.75	0.8	19.80 (17.12)
B-322-6S4	3/4"	20		2.25	1.02	36.00 (31.14)
B-322-8S4	1"	25		3.5	1.59	60.80 (52.59)
B-322-12S4	1-1/2"	40		7.5	3.41	152.00 (131.48)
B-322-16S4	2"	50		11.25	5.11	245.00 (211.92)
B-322-20S4	2-1/2"	65		17	7.73	372.00 (321.78)
B-322-24S4	3"	80		24	10.91	588.00 (508.62)

*Nominal Size

326 SERIES BRONZE GATE VALVES 600 PSIG (42 BARG) COLD WORKING PRESSURE

Part Number	NPT Size Inches	NPT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-326-4T6	1/2"	15	Threaded	1.75	0.8	19.80 (17.12)
B-326-6T6	3/4"	20		2.25	1.02	36.00 (31.14)
B-326-8T6	1"	25		4	1.82	60.80 (52.59)
B-326-12T6	1-1/2"	40		8.25	3.75	152.00 (131.48)
B-326-16T6	2"	50		12.5	5.68	245.00 (211.92)



Cryogenic Shut-Off Valves

BRONZE/STAINLESS STEEL BODY GLOBE VALVE FOR CRYOGENIC SERVICE SKB SERIES

Application

The SKB Series globe valves are designed for the handling of cryogenic liquids through trailer, bulk tanks, and piping configurations.

Time- tested spring- loaded stem packing and superior seat design provide for long life and easy maintenance. Internal components are the same as the BB series.

Features

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading
- Top Entry: This valve can be permanently installed in the line and serviced from the top. Bolted bonnet style provides secure integrity.
- Conical PCTFE Seat provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life
- Stem Packing: V-Ring spring loaded packing provides extended service life without constant packing adjustment
- Ends: Buttweld and Socket Weld
- Service: Liquefied and vaporized atmospheric gases, LNG for trailers, bulk tanks ISO containers and piping configurations.
- Sizes: 1/4" to 2" • Bonnet Type: Bolted
- Pressure Rating: (cold, Non-Shock) 720 psig (50 barg)
- Temperature Rating: -325°F (-198°C) to +150°F (+65°C)
- Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations.
- Cleaned for Oxygen Service per CGA G-4.1

SKB9406BW



Part Number	Size Inches	Size DN	Connection	Cv (Kv)
SKB9402BW	1/4"	8	Butt Weld	1.7 (1.47)
SKB9402SW			Socket Weld	
SKB9404BW	1/2"	15	Butt Weld	5.0 (4.30)
SKB9404SW			Socket Weld	
SKB9406BW	3/4"	20	Butt Weld	9.4 (8.10)
SKB9406SW			Socket Weld	
SKB9408BW	1"	25	Butt Weld	14.0 (12.10)
SKB9408SW			Socket Weld	
SKB9412BW	1-1/2"	40	Butt Weld	28.3 (21.60)
SKB9412SW			Socket Weld	
SKB9416BW	2"	50	Butt Weld	53 (45.80)
SKB9416SW			Socket Weld	

S.S. GLOBE VALVE FOR HYDROGEN CRYO SERVICE 231 SERIES

STAINLESS BODY 400 PSIG (28 BARG) SOCKET WELD ENDS

Part Number	Valve size Inches	Valve Size DN	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv (Kv)
S-231-2S4	1/4"	8	Socket Weld	6	2.72	1.30 (1.12)
S-231-4S4	1/2"	15				3.90 (3.37)
S-231-6S4	3/4"	20		7.10 (6.14)		
S-231-8S4	1"	25		10.50 (9.08)		
S-231-12S4	1-1/2"	40		15	6.8	25.00 (21.62)

STAINLESS BODY 300 PSIG (20 BARG) BUTT WELD ENDS

Part Number	Valve size Inches	Valve Size DN	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv (Kv)
S-231-4WA	1/2"	15	Butt Weld	6	2.72	3.90 (3.37)
S-231-8WA	1"	25		10	4.54	10.50 (9.08)
S-231-12WA	1-1/2"	40		15	6.8	25.00 (21.62)

S-231-12S4



Cryogenic Shut-Off Valves

S.S.GLOBE VALVES FOR CRYO SERVICE 210 SERIES

STAINLESS BODY RF FLANGE ENDS

150# Part Number	300# Part Number	Valve Size		Ends	150# Weight		300# Weight		Estimated C v
		Inches	MM		Lbs.	Kg.	Lbs.	Kg.	
GS-00210W-8F	GS-00210W-8F3	1"	25 mm	Flange	15	6.80	20	9.07	11.50
GS-00210W-16F	GS-00210W-16F3	2"	50 mm		35	15.88	40	18.14	40.00
GS-00210W-24F	GS-00210W-24F3	3"	80 mm		65	29.48	70	31.75	60.00
GS-00210W-32F	GS-00210W-32F3	4"	100 mm		95	43.09	100	45.35	175

GS-210W-32F3


STAINLESS BODY BUTT WELD, SOCKET WELD, THREADED ENDS

150# Part Number	300# Part Number	Valve Size		Ends	150# Weight		300# Weight		Estimated C v
		Inches	MM		Lbs.	Kg.	Lbs.	Kg.	
GS-00210W-4S3	GS-00210W-4S3	1/2"	15 mm	Socket Weld	15	6.80	3.90	9.07	11.50
GS-00210W-4T3	GS-00210W-4T3	1/2"	15 mm	Threaded	15	6.80	3.90	18.14	40.00
GS-00210W-6S3	GS-00210W-6S3	3/4"	20 mm	Socket Weld	15	6.80	7.10	31.75	60.00
GS-00210W-6T3	GS-00210W-6T3	3/4"	20 mm	Threaded	15	6.80	7.10	45.35	175
GS-00210W-8S3	GS-00210W-8S3	1"	25 mm	Socket Weld	15	6.80	11.50	45.35	175
GS-00210W-8T3	GS-00210W-8T3	1"	25 mm	Threaded	15	6.80	11.50	45.35	175
GS-00210W-12S3	GS-00210W-12S3	1-1/2"	40 mm	Socket Weld	25	11.34	29.00	45.35	175
GS-00210W-16W3A	GS-00210W-16W3A	2"	50 mm	Butt Weld SCH10	35	15.88	40.00	45.35	175
GS-00210W-16W3J	GS-00210W-16W3J	2"	50 mm	Butt Weld SCH40	35	15.88	40.00	45.35	175
GS-00210W-24W3A	GS-00210W-24W3A	3"	80 mm	Butt Weld SCH10	55	24.95	60.00	45.35	175
GS-00210W-24W3J	GS-00210W-24W3J	3"	80 mm	Butt Weld SCH40	55	24.95	60.00	45.35	175
GS-00210W-32W3A	GS-00210W-32W3A	4"	100 mm	Butt Weld SCH10	80	36.29	175.00	45.35	175
GS-00210W-32W3J	GS-00210W-32W3J	4"	100 mm	Butt Weld SCH40	80	36.29	175.00	45.35	175

Second number indicates valve for 300# part number.

150# ANSI Class (275 psig Cold Working Pressure)

300# ANSI Class (720 psig Cold Working Pressure)

REGO-LOK™ FOR SECURING CGA FITTINGS ON LIQUID CYLINDERS

Part Number	Item Description	Typical Service Connection
9464RL-0	REGO-LOK™ for 3/4" hex fittings	CGA 295
9464RL-1	REGO-LOK™ for 7/8" fittings	CGA 440, CGA 320 & CGA 326
9464RL-2	REGO-LOK™ for 1" fittings	CGA 540
9464RL-3	REGO-LOK™ for 1-1/8" hex CGA 580RL fitting by Rego	CGA 580
CGA580RL	3/8" MNPTxCGA for use with 9464RL-3	CGA 580

* Valve not included


9464RL-1

9464RL-3


Cryogenic Shut-Off Valves

SHORT STEM CRYOGENIC VALVES T9450 SERIES & T9460 SERIES

Application

The T9450 and T9460 series valves are designed for use on portable cryogenic cylinders and other in-line shut-off valve applications. Approved for TPED in accordance with EN1626.

Features

- Spring loaded stem seal automatically adjusts for any gasket wear, eliminating the need to constantly retighten the packing nut.
- Non-rising stem and low profile allow the valve to fit into tight areas and still provide easy access.
- Unique pressure-sealed moisture barrier helps prevent freezing up at cryogenic temperatures.
- Conical swivel seal design helps prevent seat galling from over torquing.
- Cleaned for liquid oxygen service per CGA G-4.1. • Maximum working pressure is 600 PSIG. (41.3 Bar)
- Working temperature range is -320°F to +165°F. (-196°C to +74°C)
- 100% Factory Tested

Part Number	Inlet	Outlet	Orifice A	Tube D	Cv Factor
T9452	1/4" FNPT	1/4" FNPT	0.25	None	0.99
T9453	3/8" FNPT	3/8" FNPT	0.406		1.76
T9454	1/2" FNPT	1/2" FNPT			1.79
T9464CA	.675 Tube	3/8" FNPT	0.406	1-1/8"	1.76
T9464DA				2-1/8"	
T9464ADA				3-3/8"	



T9454



T9464DA

ES8450 SERIES EXTENDED STEM VALVES BK9450 & BK9470 SERIES EXTENDED BONNET VALVES

Application

For use as a trycock valve or hose drain valve on cryogenic tanks, or as a use, liquid fill, or vent valve on mini-bulk cryogenic tanks. These valves can be used likewise for other cold gas applications requiring extended stem valves as LNG Fueling.

Part Number	Inlet/Outlet Connections	Height "A"	Body Width "B"	Width with Tube "C"	Cv
ES8452	1/4" FNPT	4.2"	2.5"	NA	0.7
TES8452					
ES8453	3/8" FNPT				1.1
TES8453					
ES8454	1/2" FNPT	6.5"	2.5"	NA	0.7
TES8454					
BK9452	1/4" FNPT				1.1
BK9453	3/8" FNPT				
BK9454	1/2" FNPT				4.0"
BK9453FA	5/8" OD tubing x 3/8" FNPT				
BK9475A	5/8" OD tubing both ends	5.5"			



ES8454



BK9454



Cryogenic Shut-Off Valves

STAINLESS STEEL GATE VALVE FOR CRYOGENIC SERVICE 110 SERIES

Application

RegO Goddard gate valves are designed for handling of cryogenic liquids through bulk tanks, trucks, trailers, ASU plants and piping configurations. Compatible with Oxygen, Nitrogen, CO₂, Argon and LNG.

Features

- Top Entry: This valve can be permanently installed in the line and serviced from the top
- Soft Seated: PCTFE Seat provides a bubble-tight seal and is replaceable
- Construction: Body and Bonnet ASTM A351-CF8 J92600 Stainless steel
- Sizes: 1/2" - 6" (15mm - 150mm)
- Ends: RF Flange, Butt Weld, Socket Weld, Threaded (FNPT)
- Service: Liquefied and vaporized atmospheric gases, LNG
- WHZ valves with Grafoil® stem packing available
- Temperature Rating: -320°F - 150°F (-196°C +65°C)
- 100% Factory Tested • Clean for use in Oxygen per CGA G-4.1
- PED Approved
- Pressure Rating: (Cold, Non-shock) Class 150 valve - 275 psig (19 barg) Class 300 valve - 720 psig (50 barg)



GS-110W-8S3

150# Part Number	300# Part Number	Size Inches	Ends	Weight 150# lbs	Weight 300# lbs	Cv	Kv
GS-110W-8F	N/A	1"	RF Flange	15	N/A	30	25.95
GS-110W-12F	GS-110W-12F3	1-1/2"		35	45	85	73.52
GS-110W-16F	GS-110W-16F3	2"		35	60	100	86.50
GS-110W-24F	GS-110W-24F3	3"		65	85	310	268.15
GS-110W-32F	GS-110W-32F3	4"		90	120	700	605.50
GS-110W-48F	GS-110W-48F3	6"		150	200	850	735.25
GS-110W-4WA	N/A	1/2"	Butt Weld SCH10	10	N/A	7	6.05
N/A	GS-110W-4S3		Socket Weld	N/A	15		
GS-110W-4T	N/A		Threaded	10	N/A		
GS-110W-6WA	N/A	3/4"	Butt Weld SCH10	N/A	15	23	19.89
N/A	GS-110W-6S3		Socket Weld				
GS-110W-8WA	N/A	1"	Butt Weld SCH10	10	N/A	30	25.95
N/A	GS-110W-6S3		Socket Weld	N/A	15		
GS-110W-8T	N/A		Threaded	10	N/A		
GS-110W-12WA	N/A	1-1/2"	Butt Weld SCH10	30	N/A	85	73.52
N/A	GS-110W-12S3		Socket Weld				
N/A	GS-110W-16W3A	2"	Butt Weld SCH10	N/A	35	100	86.5
N/A	GS-110W-16W3J		Butt Weld SCH40				
GS-110W-16S	N/A		Socket Weld				
N/A	GS-110W-24W3A	3"	Butt Weld SCH10	N/A	65	310	268.15
N/A	GS-110W-24W3J		Butt Weld SCH40				
N/A	GS-110W-32W3A	4"	Butt Weld SCH10	N/A	80	700	605.50
N/A	GS-110W-32W3J		Butt Weld SCH40				
N/A	GS-110W-48W3A		Butt Weld SCH10				
N/A	GS-110W-48W3J	Butt Weld SCH40					



Cryogenic Check Valves

BRONZE SWING CHECK VALVE FOR CRYOGENIC SERVICE INCLUDING 846M GODDARD 840 SERIES

Application

The RegO Goddard 846M and 840 series check valve is designed for handling cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Compatible with oxygen, nitrogen, CO2, argon and LNG.

Features

- Top Entry: This swing check valve can be permanently installed in the line and serviced from the top
- Construction: Designed to prevent back flow in cryogenic systems. Higher fluid capacity (Cv) than poppet or lift check valves. Bronze body and internals. Rugged construction for long life and minimal down time • Sizes: 1/2" through 2" (15mm through 50mm)
- Ends: Threaded (FNPT), or with Sil Brazed Tube (SBT) SCH-10, Threaded back brazed pipe nipples in 1" increments up to 6" SCH-40, Threaded back brazed pipe nipples in 1" increments up to 6" SCH-80, Threaded back brazed pipe nipples in 1" increments up to 6"
- Temperature Rating: -320°F to +150°F (-196°C to +65°C)
- Cleaned for Oxygen Service per CGA G-4.1.
- Pressure Rating: (Cold, Non-shock) 840 Series 400 psig (27.6 barg) 846M Series 600 psig (41.4 barg) Sizes 1-1/2" to 2" PED Approved Note: Do not use for reciprocating gas service.
- Cracking Pressure: 0.5 psig (.03 barg)

840 BRONZE SWING CHECK VALVES - SOFT SEATED, THREADED, SIL BRAZED ENDS, THREADED AND BACK BRAZED PIPE NIPPLES 400 PSIG (28 BARG) COLD WORKING PRESSURE

THREADED ENDS

Part Number	NPT Size Inches	NPT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-840-4T	1/2"	15	Threaded	2	0.91	4.50 (3.89)
B-840-6T	3/4"	20		4	1.81	7.00 (6.05)
B-840-8T	1"	25		4.5	2.04	10.00 (8.65)
B-840-12T	1-1/2"	40		8.5	3.86	40.00 (34.6)
B-840-16T	2"	50		14.5	6.58	100.00 (86.5)

SILVER BRAZED - PIPE NIPPLE

Part Number	SBT Size Inches*	SBT Size DN*	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-840-4S	1/2"	15	Silver Braze	2.5	1.13	4.50 (3.89)
B-840-6S	3/4"	20		4.5	2.05	7.00 (6.05)
B-840-8S	1"	25		5.25	2.38	10.00 (8.65)
B-840-12S	1-1/2"	40		10.75	4.88	40.00 (34.6)
B-840-16S	2"	50		17.5	7.94	100.00 (86.5)

* nominal size

846M BRONZE SWING CHECK VALVES - METAL SEATED, THREADED, SIL BRAZED ENDS, THREADED AND BACK BRAZED PIPE NIPPLES 600 PSIG (42 BARG) COLD WORKING PRESSURE

THREADED ENDS

Part Number	NPT Size Inches	NPT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-846M-4T6	1/2"	15	Threaded	2	0.91	4.50 (3.89)
B-846M-8T6	1"	25		4.5	2.04	10.00 (8.65)
B-846M-12T6	1-1/2"	40		8.5	3.86	40.00 (34.6)
B-846M-16T6	2"	50		14.5	6.58	100.00 (86.5)

SILVER BRAZED - PIPE NIPPLE

Part Number	SBT Size Inches*	SBT Size DN*	Ends	Weight Lbs.	Weight Kg	Estimated CV
B-846M-4S6	1/2"	15	Silver Braze	2.5	1.13	4.5
B-846M-6S6	3/4"	20		4.5	2.04	7
B-846M-8S6	1"	25		5.25	2.38	10
B-846M-12S6	1-1/2"	40		10.75	4.88	40
B-846M-16S6	2"	50		17.5	7.94	100



B-840-6T

Cryogenic Check Valves

HORIZONTAL LIFT CHECK VALVES 8500 SERIES

Application

8500 series valves are designed for use as a check valve on cryogenic bulk stations and pipelines.

Features

- Replaceable Kel-F seat discs
- Self-centering cap holds plunger in position
- Each valve is cleaned and packaged for liquid oxygen service per CGA G-4.1
- 100% Factory Tested
- Working temperature range is -320°F to +165°F (-196°C to +74°C)
- Maximum working pressure is 600 psig MAWP (41.3 barg) • 2 psig opening pressure



BK-8508S

Part Number	Inlet / Outlet Connection	inches	mm	inches	Length mm	C v (Kv)
BK8508S	1.128"-1.130"	2-1/4"	57.15	4 15/16"	125.47	10 (8.65)
BK8508T	1" F.NPT					
BK8512S	1.629"-1.631"	3-1/4"	82.55	5 3/16"	131.82	27 (23.35)
BK8512T	1-1/2" F.NPT					

Cryogenic Check Valves

STAINLESS STEEL SWING CHECK VALVE FOR CRYOGENIC SERVICE 886 SERIES

Application

The RegO Goddard 886 Series check valve is designed for handling cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Compatible with oxygen, nitrogen, CO2 argon and LNG.

Features

- Top Entry: This bolted bonnet valve can be permanently installed in the line and services from the top
- Construction: Designed to prevent back flow in cryogenic systems. Higher fluid capacity (Cv) than poppet or lift check valves. 316L stainless steel investment cast body, cap and arm, according to ASME B16.34
- Sizes: 1/2" through 4" (15mm through 100mm)
- Ends: Socket weld and butt weld schedule 10 and 40
- Temperature Rating: -320°F to 150°F (-196°C to +66°C)
- Cleaned for Oxygen Service per CGA G-4.1.
- Pressure Rating: (Cold, Non-shock) 400 psig (27 barg) 1/2" - 2" 275 psig (19 barg) 150# ANSI Class 3" and 4" 720 psig (50 barg) 300# ANSI Class 3" and 4" PED Approved
- Note: Do not use for reciprocating gas service
- Our investment cast stainless steel is specified by leading industrial gas companies for storage tank and yard operations
- Ideal for liquid atmospheric gases and LNG storage and handling
- High cycle life and superior sealing
- Valves for hydrogen service can be supplied (-425°F to +350°F) (-254° C to 176° C.)
- Cracking Pressure: 0.5 psig (0.03) barg

886 STAINLESS STEEL SWING CHECK VALVES SOFT SEAT - GRAFOIL® GASKET - HYDROGEN SERVICE - SOCKET WELD

Part Number	Valve Size		End Connection	Seat	Pressure Rating	Estimated C v (Kv)	Weight	
	Inches	DN					Lbs.	Kg
S-886GF-4S	1/2"	15	Socket Weld	Soft	400 (27.5 barg)	4.50 (3.89)	3	1.36
S-886GF-8S	1"	25				18.00 (15.57)	11	4.98
S-886GF-12S	1-1/2"	40				61.00 (52.76)	17	7.71



S-886-8S

PTFE GASKET - SOCKET WELD

Part Number	Valve Size		End Connection	Seat	Pressure Rating	Estimated C v (Kv)	Weight	
	Inches	DN					Lbs.	Kg
S-886-4S	1/2"	15	Socket Weld	Soft	400 (27.5 barg)	4.50 (3.89)	3	1.36
S-886-8S	1"	25				18.00 (15.57)	11	4.98
S-886-12S	1-1/2"	40				61.00 (52.76)	17	7.71

PTFE GASKET - SOCKET WELD

Part Number	Valve Size		End Connection	Seat	Butt Weld Schedule	Pressure Rating	Estimated C v (Kv)	Weight	
	Inches	DN						Lbs.	Kg
S-886-4WA	1/2"	15	Butt Weld	Soft	10	400 (27.5 barg)	4.50 (3.89)	3	1.36
S-886-8WA	1"	25					18.00 (15.57)	11	4.98
S-886-12WA	1-1/2"	40					61.00 (52.76)	17	7.71
S-886-16W3A	2"	50					99.00 (85.63)		
S-886-24WA	3"	80			225.00 (194.62)	47	21.31		
S-886-24WJ					275 (19 barg)	46	20.86		
S-886-32W3J	4"	100			720 (50 barg)	95	43.09		
S-886-32WA					475.00 (410.87)			275 (19 barg)	



Cryogenic Check Valves

886M STAINLESS STEEL SWING CHECK VALVES - METAL SEAT - PTFE GASKET - SOCKET WELD

Part Number	Valve Size		End Connection	Seat	Pressure Rating	Estimated C v (Kv)	Weight	
	Inches	DN					Lbs.	Kg
S-886M-4S3	1/2"	15	Socket Weld	Metal	720 (50 barg)	4.50 (3.89)	3	1.36
S-886M-8S3	1"	25				18.00 (15.57)	11	4.98
S-886M-12S3	1-1/2"	40				61.00 (52.76)	17	7.71

BUTT WELD ENDS

Part Number	Valve Size		End Connection	Seat	Butt Weld Schedule	Pressure Rating	Estimated C v (Kv)	Weight	
	Inches	DN						Lbs.	Kg
S-886M-16W3A	2"	50	Butt Weld	Metal	10	720 (50 barg)	99.00 (85.63)	17	7.71
S-886M-24W3J	3"	80			40		225.00 (194.62)	46	20.86
S-886M-24W3A	3"	100			10	275 (19 barg)	475.00 (410.87)	95	43.09
S-886M-32WA	4"				40	720 (50 barg)			
S-886M-32W3J	4"								

BUTT WELD ENDS WITH GRAFOIL® GASKET FOR HYDROGEN SERVICE

Part Number	Valve Size		End Connection	Seat	Butt Weld Schedule	Pressure Rating	Estimated C v (Kv)	Weight	
	Inches	DN						Lbs.	Kg
S-886MGF-16W3A	2"	50	Butt Weld	Metal	10	720 (50 barg)	99.00 (85.63)	17	7.71
S-886MGF-24W3A	3"	80			40		225.00 (194.62)	46	20.86



Cryogenic Relief Valves

CARBON DIOXIDE RELIEF VALVES, ASME UA3149A SERIES

Application

The UA3149A series "pop-type" relief valves are especially designed for use as a secondary relief valve in carbon dioxide transports and stationary storage tanks. The relief valve is designed to protect the tank from excessive over pressure in the event of fire or other emergencies. A small throttling-type primary relief valve must also be provided to control boil-off and maintain tank pressure. Provisions must be made to prevent the accumulation and build-up of water and foreign material in the valve by use of protective cap included.

CARBON DIOXIDE MULTIPOINT VALVES, UA8564A SERIES

Part Number	Start To Discharge Setting	Container Flange Connection	Relief Valve		
			Max Quantity	Part Number	Inlet Connection M. NPT Inches (mm)
UA8564A330	330 psig (22.7 barg)	3"-300#	4	UA3149A330	2-1/2" (63.5)
UA8574A290	290 psig (20.0 barg)	4"-300#		UA3149A290	



UA8564A330

Bolt Stud and Nut Assemblies				
7560-55	1-Bolt Stud and Nut	All RegO Multiports™	Modified 3" - 300# and 4"-ASA 300# Welding Neck Flange	8
7560-56			Manway Cover Plate	

CARBON DIOXIDE RELIEF VALVES, ASME UA3149A SERIES

Part Number	Pressure Setting psig (barg)**	Flow Capacity (SCFM/Air)	Inlet Connection (M.NPT) Inches (mm)	Height Inches (mm)	Wrenching Hex Inches (mm)
UA3149A303	303 psig (20.9 barg)	9,883*	2-1/2" (63.50)	10-1/2" (266.70)	4-1/8" (104.90)
UA3149A330	330 psig (22.7 barg)	10,726*			
UA3149A350	350 psig (24.1 barg)	11,351*			
UA3149A358	358 psig (24.7 barg)	11,601*			



UA3149A330

* Capacity certified by National Board of Boiler and Pressure Vessel Inspectors at 10% above set pressure.

** Other settings not ASME/NB Certified



Cryogenic Relief Valves

CO2 SERVICE EXTERNAL PRESSURE RELIEF VALVE

Designed for use as a secondary relief valve in carbon dioxide (CO₂), transports and stationary bulk plant storage tank applications.

A primary relief valve of the small throttle type configuration shall also be installed to maintain tank pressure and control boil-off. The relief valve is designed to protect the storage vessel from excessive over-pressurization due to fire impingement or other emergency situations. All working components are external to the container connection and away from possible product contamination. Compatible with 2-1/2" FNPT connections and all 2-1/2 FNPT multiple head units including ME903S & ME904S Series Quad Port Manifolds. Optional 2" MNPT tank adaptor available for adapting to standard 2" FNPT tank openings.

Features

- Durable ductile iron base
- All stainless steel internal components
- Seal material; FKM
- Integral break-away feature leaves seat and seal intact
- Supplied with weep hole deflector and hex socket plugs
- 3-1/2"-8 UNC straight outlet thread accepts 3" MNPT pipe away
- Corrosion resistant nickel chrome finish
- Tamper resistant
- 100% factory set and tested



MEV250VM ASME



MEPI70



MEP250

Part Number	Pressure Setting psig	Flow Capacity (SCFM/Air)	Seal Material	Inlet Connection (M.NPT) Inches	Height Inches (mm)	Wrenching Hex Inches (mm)	Service
MEV250VM/303-ASME	303 psig	11,803**	FKM	2-1/2"	10-1/2"	4-1/8"	CO ₂
MEV250VM/330-ASME	330 psig	12,814**					
MEV250VM/350-ASME	350 psig	13563**					
MEV250VM/358-ASME	358 psig	13862**					

* Flow rates are shown as bare relief valves. Pipe-aways will reduce flow.

** Capacity certified by National Board of Boiler and Pressure Vessel Inspectors at 10% above set pressure.

ACCESSORIES

RMI Part No.	Description
MEV250-013	Replacement Vinyl Cap W/Lanyard for MEV250 Series Relief Valves
MEV250-015	Replacement Stainless Steel Weep Hole Deflector for MEV250 Series Relief Valves
MEPI70	External Relief Valve Tank Adaptor Fitting 2-1/2" FNPT x 2" MNPT Plated Ductile Iron
MEP250	Installation/Removal Hex Socket Tool- 1" Drive



Cryogenic Relief Valves

3" CUSTOM FLANGED/CO2 SERVICE FULL INTERNAL PRESSURE RELIEF VALVE

Designed for use in mobile transport CO2 service applications as a primary pressure relief device.

These relief valves incorporate a custom flange configuration designed to be installed into inline piping, between two ASME/ANSI- Class300 pipe flanges.

This captured design prevents damage to the pressure relief valve in rugged over the road applications by ensuring all working components are fully enclosed within the piping system.

Features

- Durable single piece stainless steel body construction
- All stainless steel internal components for maximum corrosion resistance
- Durable HNBR seals for CO2 service
- Large seating surface featuring a double O-Ring design for superior performance and reliability.
- National Board Tested
- ASME-UV Certified
- Custom set pressures available between 300-350psi

RMI Part No.	Setting (PSIG)	Seat Material	Connection	Flow Capacity SCFM/Air ASME @120% Set Pressure
MEV300FIR-3CF/300-ASME	300	HNBR	3" Custom Flange	9,828
MEV300FIR-3CF/320-ASME	320			10,458
MEV300FIR-3CF/330-ASME	330			10,773
MEV300FIR-3CF/350-ASME	350			11,402

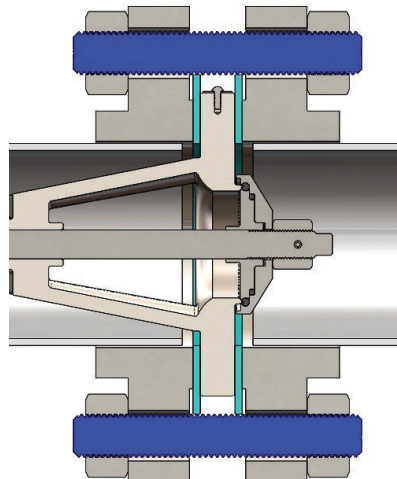


MEV300FIR-3CF

MEV300 GASKET

RMI Part No.	Description
MEV300FIR-3CFGG	Flange Gasket: Garlock3000-Ring Gasket for 3" ASME/ANSI- Class 300 Pipe Flange

* Two gaskets required for installation



Cryogenic Relief Valves

ANGLE RELIEF VALVE, ASME AR4100 SERIES

Application

The ASME approved 90° relief valves AR Series, provide precise relief set points which protect cryogenic vessels and piping systems for over-pressurization.

Features

- High flow rates are approved by rigorous testing to ASME BVPC Code Section VIII
- The ninety-degree configuration provides relief of gases eliminating direct flow through the spring
- The ninety-degree configuration allows easy incorporation to plumbing for output containment
- Bubble tight seat provides 100% shut off when reseating or static mode
- A variety of inlets and pressure settings assure adherence to application requirements
- Temperature Range: -320°F (-196°C) to +165°F (+74°C)
- Cleaned for Oxygen Service per CGA G-4.1
- 100% Factory Tested
- PED, TPED, ASME & CRN Certified



ASME AR4100 SERIES

RMI Part No.	Setting (PSIG)	Seat Material	Connection	Flow Capacity SCFM/Air ASME @120% Set Pressure	Flow Capacity SCFM/Air ASME @120% Set Pressure	Flow Capacity SCFM/Air ASME @120% Set Pressure		
AR4104A	1/2" (15)	1" (25)	Thread NPT	250 psig	406 SCFM	2.75 (1.25)		
AR4104B				17.23 barg	690 m ³ /hr			
AR4106A	3/4" (20)		Thread NPT	250 psig	451 SCFM			
AR4106B				17.23 barg	766 m ³ /hr			
AR4108A	1" (25)	1-1/4" (32)	Thread NPT	250 psig	1,003 SCFM	3.75 (1.7)		
AR4108B				17.23 barg	1704 m ³ /hr			
AR4112A	1-1/2" (40)		2" (50)	Thread NPT	250 psig		2,277 SCFM	8 (3.63)
AR4112B					17.23 barg		3869 m ³ /hr	

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AS SOON AS THEY'RE AVAILABLE**



Cryogenic Relief Valves

CRYOGENIC GAS RELIEF VALVES, ASME B-19434B SERIES

Application

The B-19434B Series relief valves are suitable for use with oxygen and non-corrosive industrial gases, such as nitrogen, argon and helium.

Features

- The B-19434B design permits the valve to open slightly to relieve moderately excessive pressure
- When the pressure increases beyond a predetermined point, the valve opens to its full discharge capacity to quickly reduce excess pressure
- Pipe-away adapter for venting gas to the outdoors is available (Sold Separately)
- ASME rated, certified
- Cleaned for use in oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure
- Full flow at 110% of set pressure
- Setpoint tolerance is $\pm 3\%$ of the set pressure or ± 2 psig whichever is greater
- Rated for gas service only
- 100% factory tested
- Temperature range: -60° to 165° F (-51° - 74° C)

Part Number	Pressure Setting	ASME Relief Capacity (CFM/Air)	Inlet Connection (M.NPT) Inches (mm)	Pipe-Away Adapter Part Number
B-19434B235	235 psig (16.2 barg)	476	1/2" (12.7)	*B-19434-5 1/2" F.NPT Outlet (12.70 mm)
B-19434B250	250 psig (17.2 barg)	505		
B-19434B300	300 psig (20.7 barg)	601		
B-19434B350	350 psig (24.1 barg)	711		
B-19434B375	375 psig (25.9 barg)	760		

* Pipe-away adapter sold separately



B-19434B250



B-19434-5

Cryogenic Relief Valves

CRYOGENIC GAS RELIEF VALVES, ASME C-19434B SERIES

Application

The C-19434B series relief valves are designed for use in carbon dioxide service.

Features

- The C-19434B design permits the valve to open slightly to relieve moderately excessive pressure
- When the pressure increases beyond a predetermined point, the valve opens to its full discharge capacity to quickly reduce excess pressure
- Pipe-away adapter for venting gas to the outdoors is available
- ASME rated, certified
- Cleaned for use in oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure
- Full flow at 110% of set pressure
- Setpoint tolerance is $\pm 3\%$ of the set pressure or ± 2 psig whichever is greater
- Repeatable performance guaranteed by well-proven seat design used in many other RegO relief valves for many years.
- Rated for gas service only
- 100% factory tested
- Temperature range: -40° to 165° F (-40° - 74° C)

Part Number	Pressure Setting (psig)	ASME Relief Capacity (CFM/Air)	Inlet Connection (M.NPT) Inches (mm)	Pipe-Away Adapter Part Number
C-19434B235	235 psig (16.2 barg)	476	1/2" (12.7)	*B-19484-6 1" F.NPT Outlet (25.40 mm)
C-19434B250	250 psig (17.2 barg)	505		
C-19434B280	280 psig (19.3 barg)	555		
C-19434B285	285 psig (19.6 barg)	579		
C-19434B300	300 psig (20.7 barg)	601		
C-19434B325	325 psig (22.4 barg)	649		
C-19434B335	335 psig (23.1 barg)	668		
C-19434B350	350 psig (24.1 barg)	711		
C-19434B375	375 psig (25.9 barg)	760		

* Pipe-away adapter sold separately



C-19434B250



B-19484-6



Cryogenic Relief Valves

CRYOGENIC GAS RELIEF VALVES, ASME PRV19430 & PRV29430 SERIES

Application

The 19430 and 29430 relief valves are designed for oxygen and other industrial gases and for cryogenic service in vapor space. Apply on piping systems, liquid cylinders or mini-bulk cryogenic containers where an ASME relief valve is required.

Features

- A.S.M.E. rated, National Board Certified
- Bubble tight at 95% of set pressure
- Full flow at 110% at set pressure
- Repeatable performance
- 100% factory tested
- Temperatures Range (Teflon Seat) -320° to +165° F (-196°C to +74°C)
(Fluorosilicone Seat) -60° to +165° F (-51°C to +74°C)
- Cleaned and packaged for oxygen service per CGA G-4.1
- Rated for gas service only
- Color coded labels clearly identify pressure setting range
- Tamper resistant
- In liquid service be sure to use with a candy cane riser (Sold Separately)



PRV19434

Part Number	Body and Valves Material	Pressure Setting Range psig (barg)	Inlet MNPT Inches	Wrenching Hex C inches (mm)	Kd value	Orifice Size In2 (mm2)
PRV19432	Brass	15-600 (1.03-41.36)	1/4"	7/8" (22.35)	0.686	.062 (40)
PRV29432	Stainless Steel					
PRV19433	Brass		3/8"			
PRV29433	Stainless Steel					
PRV19434	Brass		1/2"			
PRV29434	Stainless Steel					

Drain hole option cannot be used with pipe-away

Cryogenic Relief Valves

CRYOGENIC GAS RELIEF VALVES, NON-ASME 9400 SERIES

Application

9400 series relief valves are specifically designed for vapor line safety relief applications and cryogenic liquid containers.

Features

- Cleaned and packaged for oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure • Color coded labels clearly identify pressure setting range
- Tamper resistant
- Adapters provide standard pipe thread connections for venting gas to the outdoors • Repeatable performance
- 100% factory tested
- Temperature Range (Teflon Seat) -320° to +165° F (-196°C to +74°C) (Fluorosilicone Seat) -60° to +165° F (-51°C to +74°C)
- Rated for gas service only
- In liquid service be sure to use with a candy cane riser (Sold Separately)
- Setpoint tolerance $\pm 3\%$

Style	Size	Body and Valves Material	Pressure Setting Range psig (barg)	Inlet MNPT Inches (mm)	Height Inches (mm)	Wrenching Hex inches (mm)	Kd value	Orifice Size In2 (mm2)	Pipe-Away Adapter P/N	Pipe-Away Outlet FNPT Inches (mm)
PRV	9432	Brass	10-600 (0.68-41.36)	1/4" (6.35)	2.6" (66.04)	7/8" (22.35)	0.686	.062 (40)	B-9412-2	3/8" (9.65)
SS		Stainless Steel		SS9412-4					1/2" (6.35)	
PRV	9433	Brass		3/8" (9.65)	2.8" (71.12)				B-9412-2	3/8" (9.65)
SS		Stainless Steel		SS9412-4					1/2" (6.35)	
PRV	9434	Brass		1/2" (12.70)	2.8" (71.12)				B-9412-4	1/2" (6.35)
SS		Stainless Steel		SS9412-4	1/2" (6.35)					
B-	9425	Brass	20-300 (1.37-20.68)	3/4" (19.05)	3.4" (86.36)	3.4" (86.36)	0.894	.42 (271)	B-3131-10	1" (25.4)
	9426		60-300 (4.13-20.68)	1" (25.4)	5.3" (134.62)	5.3" (134.62)	0.986	.62 (400)	B-3132-10	1-1/4" (31.75)

Drain hole option cannot be used with pipe-away



B-9412-4



PRV9432T-230



SS9432T-230



Cryogenic Relief Valves

REGO® - BULK VESSEL SAFETY ASSEMBLY - RELIEF VALVE & DIVERTER DA6200 SERIES

Application

RegO® provides a complete unitized solution for pressure relief devices assembled in a factory setting ready for attachment to cryogenic bulk tanks. Ideal for OEM applications where prefabricated assemblies are favored to streamline construction. Excellent for protecting bulk liquid vessels, transport trailers, industrial pipelines and LNG systems.

Features

- High flow rates complement our AR series pressure relief valves and burst disks
- Valve side selection is accomplished with a heavy-duty control arm clearly labeled for positive isolation
- RegO® needle valves accessorize for easy bleed of gas before removing pressure relief devices
- Inlet pipe factory installed for easy assembly
- Pressure Rating: 600 psig (41.37 barg) MAWP
- Temperature Rating: -320°F (-196°C) to +165°F (+74°C)
- Oxygen cleaned per CGA G-4.1
- Packaged ready for installation
- PED Certified CE
- Copper inlet stubs available for DA6206CA



DA6206A

DR6208

Part Number*	Inlet Inches (DN)	Outlet Inches (DN)	Connection Type
DA6206AXXX	1" (25)	3/4" (20)	Thread NPT
DA6208AXXX	1-1/2" (40)	1" (25)	

* Include pressure setting in part number

Cryogenic Relief Valves

REGO® - RELIEF DEVICE DIVERTER (3-WAY) VALVE DR6100 SERIES

Application

The DR Diverter Valve Series provides a simple solution for the isolation of pressure relief devices during routine change out of a relief valve and burst discs without evacuating the vessel. Excellent for protecting bulk liquid vessels, transport trailers, industrial pipelines, and LNG systems.

Features

- High flow rates complement our AR series pressure relief valves.
- Valve side selection is accomplished with a heavy-duty control arm clearly labeled for positive isolation
- RegO® needle valves accessorize for easy bleed of gas before removing pressure relief devices
- Fitted with threaded top Relief Valve ports and bottom Burst Disk connections
- Pressure Rating: 600 psig (41.37 barg) MAWP • Temperature Rating: -320°F (-196°C) to +165°F (+74°C)
- 100% Factory tested
- Oxygen cleaned per CGA G-4.1
- PED Certified
- Stainless Steel inlet stub available, add the letter P in the end of the part number to request this option



DR6108

DR6112

Part Number	Inlet Inches (DN)	Outlet Inches (DN)	Connection Type	Weight Lbs (Kg)	Open Port	C v (Kv)
DR6108	1" (25)	3/4" (20)	Thread NPT	10 (4.50)	Right	13.3 (11.50)
					Left	
					Both	
DR6112	1-1/2" (40)	1" (25)	Thread NPT	28 (12.70)	Right	18.8 (16.26)
					Left	
					Both	
DR6113	1-1/2" (40)	1-1/2" (40)	Thread NPT	30 (13.60)	Right	22.6 (19.54)
					Left	
					Both	



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Cylinder Brass

8000 SERIES BRASS DIAPHRAGM VALVES

Superior's 8000 Series is designed for various high purity gases, UHP mixtures and pure gas applications. Superior's 8000 Series has multiple seat material configurations to accommodate all high-purity gas applications, UHP mixtures and pure gas applications.. The 8000 Series valve also has a standardized anti-extrusion pin feature that prevents seat extrusion and cold flow of the polymeric seat.

Key Features & Benefits

- Available in multiple seat material configurations to accommodate all high-purity gas applications
- Increased flow (Cv) to aid in reducing vent and purge times
- Low operating torque design ensures ease of operation during filling and use
- Available with unitized pressure-relief device, which is equipped with a webbed washer design to protect the burst disc from damage during transportation and replacement
- Optional inlets equipped for dip tube assembly
- Available with standard CGA connections as well as international inlets and outlets

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size	Safety Type
807429651-XXX	0-3000PSI	326	1.125-12 UNF	CG-1
807432061-XXNT	0-3000PSI	320	3/4" NGT	CG-1
807432661-XXNT	0-3000PSI	326	3/4" NGT	CG-1
807435054-XXC	0-3000PSI	350	1.125-12 UNF	CG-4
807435054-XXC-75	0-3000PSI	350	.750-16 UNF	CG-4
807435054-XXC-75B	0-3000PSI	350	.750-16 UNF	CG-4
807435055-XXC	0-3000PSI	350	1.125-12 UNF	CG-5
807435061-XXC	0-3000PSI	350	3/4" NGT	CG-1
807435064-XXC	0-3000PSI	350	3/4" NGT	CG-4
807435064-XXCR	0-3000PSI	350	3/4" NGT	CG-4
807435065-XXC	0-3000PSI	350	3/4" NGT	CG-5
807454061-XXN	0-3000PSI	540	3/4" NGT	CG-1
807454061-XXNB	0-3000PSI	540	3/4" NGT	CG-1
807458041-XX	0-3000PSI	580	1/2" NGT	CG-1
807458041-XXNB	0-3000PSI	580	1/2" NGT	CG-1
807458051-XXN	0-3000PSI	580	1.125-12 UNF	CG-1
807458051-XXN-75	0-3000PSI	580	.750-16 UNF	CG-1
807458061-XXN	0-3000PSI	580	3/4" NGT	CG-1
807458061-XXNT	0-3000PSI	580	3/4" NGT	CG-1
807459051-XXN-75	0-3000PSI	590	.750-16 UNF	CG-1
807459051-XXN	0-3000PSI	590	1.125-12 UNF	CG-1
807459061-XXN	0-3000PSI	590	3/4" NGT	CG-1
807466061-XXN	0-3000PSI	660	3/4" NGT	CG-1

Safety Type

0= No Safety
1= Unbacked Frangible Disc
4= Backed Frangible Disc with 165° Fuse Metal
5= Backed Frangible Disc with 212° Fuse Metal

For more information or additional configurations please contact customer service

"XX" should be replaced with safety pressure needed
Suffix Explanation

"B"	Valve is Bagged
"C"	Copper Disc
"K"	Kynar Seat
"N"	Nickel Disc
"P"	Platinum Disc
"R"	Tapped for Flow Restrictor
"T"	1/4" FNPT Tapped Inlet
"V"	Vespal Seat

Safety Pressure

28- 3000PSIG
32- 3360PSIG
35- 3775PSIG
38- 4000PSIG



8000 SERIES



Cylinder Brass

LOW PRESSURE BRASS HYDROCARBON DIAPHRAGM VALVES

These valves are designed for use in liquefied gas applications including the following,

- Refrigerants
- Propane
- Butane
- Sterilant Gas

Key Features & Benefits

- Optional valve charging port to build head pressure
- Liquid and vapor withdrawal versions
- Replaceable 375 or 435 psi CG7 safety



1132X9510-435

RMI Part No.	Inlet	Outlet	PRD (PSI)	Tapped For Dip tube	Pressurizing port	Excess Flow Device
1132X9555-435	3/4-14 NGT	CGA555	435	1/8"-27 NPT	Y	N
1132X9510-435	3/4-14 NGT	CGA510	435	1/8"-27 NPT	Y	N
1132E510-435	3/4-14 NGT	CGA510	435	N/A	N	N
1132T555-435	3/4-14 NGT	CGA555	435	1/8"-27 NPT	N	N
1132X9555-375	3/4-14 NGT	CGA555	375	1/8"-27 NPT	Y	N
1132X9510-375	3/4-14 NGT	CGA510	375	1/8"-27 NPT	Y	N
1132E510-375	3/4-14 NGT	CGA510	375	N/A	N	N
1132T555-375	3/4-14 NGT	CGA555	375	1/8"-27 NPT	N	N
1132T510-375	3/4-14 NGT	CGA510	375	1/8"-27 NPT	N	N
1132T660-375	3/4-14 NGT	CGA660	375	1/8"-27 NPT	N	N
1132E660-376	3/4-14 NGT	CGA660	375	N/A	N	N
1132X8555	3/4-14 NGT	CGA555	212°Fuse	1/8"-27 NPT	N	N
1132X8510	3/4-14 NGT	CGA510	212°Fuse	1/8"-27 NPT	N	N
F10090158	3/4-14 NGT	CGA555	375	1/8"-27 NPT	N	Y



Cylinder Brass

GSV & GSHV SERIES GLOBAL INDUSTRIAL VALVES

Designed for use in every country around the world, our Global Industrial Gas Valve, the GSV Series is designed to meet the newest revision of ISO 10297 and CGA V-9. For use in cylinders containing inert, oxidizers and flammables.

Key Features & Benefits

- Automated assembly and testing processes ensure exceptional quality
- 100% helium leak tested
- Heavy-duty forged brass body for durability and high pressure
- Precisely machined internal components meet the most stringent international valve performance standards
- Pressure Relief Device (PRD) is a unitized plug design that provides excellent flow characteristics, ensures proper assembly and tamper resistance
- Improved metal-to-metal seal below bonnet threads prevents pressure in the threads at top of valve body
- Direct-drive stem design with optimized O-ring (GSV) or double O-ring (GSHV) seal reduces friction and operates at exceptionally low torque levels
- Inlet and outlet thread configurations are available for a broad spectrum of customer, country and code specifications
- Inlets tapped (1/4" NPT) for dip tube as required



GSHV68061-XX



GSV32051-XX



GSV58061-XX

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size
GSV32041•XX	0 PSI-3000 PSI	320	1/2" NGT
GSV32061•XX	0 PSI-3000PSI	320	3/4" NGT
GSV32081•XX	0 PSI-3000 PSI	320	1" NGT
GSV32025E1•XX	0 PSI-3000PSI	320	25EISO
GSV32051•XX•75	0 PSI-3000 PSI	320	.750-16 UNF
GSV32051•XX	0 PSI-3000PSI	320	1.125-12 UNF
GSV32641•XX	0 PSI-3000PSI	326	1/2" NGT
GSV32661•XX	0 PSI-3000 PSI	326	3/4" NGT
GSV32681•XX	0 PSI-3000 PSI	326	1" NGT
GSV32625E1•XX	0 PSI-3000 PSI	326	25EISO
GSV32651•XX•75	0 PSI-3000 PSI	326	.750-16 UNF
GSV32651•XX	0 PSI-3000 PSI	326	1.125-12 UNF
GS'/34641•XX	0 PSI-3000 PSI	346	1/2" NGT
GSV34661•XX	0 PSI-3000 PSI	346	3/4" NGT
GSV34681•XX	0 PSI-3000 PSI	346	1" NGT
GSV34625E1•XX	0 PSI-3000 PSI	346	25EISO
GSV34651•XX•75	0 PSI-3000 PSI	346	.750-16 UNF
GSV34651•XX	0 PSI-3000 PSI	346	1.125-12 UNF
GSHV34761•XX	3001PSI-4700 PSI	347	3/4" NGT
GSHV34725E1•XX	3001PSI-4700 PSI	347	25EISO
GSHV70225E1•XX	4701PSI-6400 PSI	702	25EISO
GSHV70261•XX	4701PSI-6400 PSI	702	3/4" NGT
GS'/35045-XX	0 PSI-3000 PSI	350	1/2" NGT
GSV35065-XX	0 PSI-3000 PSI	350	3/4" NGT
GSV35085-XX	0 PSI-3000 PSI	350	1" NGT
GSV35025E5•XX	0 PSI-3000 PSI	350	25EISO
GSV35055-XX•75	0 PSI-3000 PSI	350	.750-16 UNF

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size
GSV35055-XX	0 PSI-3000 PSI	350	1.125-12 UNF
GSHV69565-XX	3001PSI-4700 PSI	695	3/4" NGT
GSHV70365•XX	4701PSI-6400 PSI	703	3/4" NGT
GSV54041•XX	0 PSI-3000 PSI	540	W'NGT
GSV54025E1•XX	0 PSI-3000 PSI	540	25EISO
GSV54061•XX	0 PSI-3000 PSI	540	3/4" NGT
GSV54081•XX	0 PSI-3000 PSI	540	1" NGT
GSV54051•XX•75	0 PSI-3000 PSI	540	.750-16 UNF
GSV54051•XX	0 PSI-3000 PSI	540	1.125-12 UNF
GSHV57761•XX	3001PSI-3500 PSI	577	3/4" NGT
GSHV70161•XX	3501PSI-4700 PSI	701	3/4" NGT
GSV58041•XX	0 PSI-3000 PSI	580	1/2" NGT
GSV58061•XX	0 PSI-3000 PSI	580	3/4" NGT
GSV58081•XX	0 PSI-3000 PSI	580	1" NGT
GSV58025E1•XX	0 PSI-3000 PSI	580	25EISO
GSV58051•XX•75	0 PSI-3000 PSI	580	.750-16 UNF
GSV58051•XX	0 PSI-3000 PSI	580	1.125-12 UNF
GSHV68061•XX	3001PSI-4700 PSI	680	3/4" NGT
GSHV68025E1•XX	3001PSI-4700 PSI	680	25EISO
GSHV67761•XX	4701PSI-6400 PSI	677	3/4" NGT
GSHV67725E1•XX	4701PSI-6400 PSI	677	25EISO
GSV59041•XX	0 PSI-3000 PSI	590	1/2" NGT
GSV59061•XX	0 PSI-3000 PSI	590	3/4" NGT
GSV59081•XX	0 PSI-3000 PSI	590	1" NGT
GSV59025E1•XX	0 PSI-3000 PSI	590	25EISO
GSV59051•XX•75	0 PSI-3000 PSI	590	.750-16 UNF
GSV59051•XX	0 PSI-3000 PSI	590	1.125-12 UNF

"Oversize Inlets: 4 and 7 (low-pressure) and 24 (high-pressure) threads oversize inlets: To order, add -4, -7 or -24 to the end of the Part Number. For example, GSV34661-XX becomes GSV34661•XX•7 Chrome plating: To order, add letter "A" after letters GSV or GSHV in the Part Number. For example, GSV34661•XX becomes GSVA34661•XX.

Lexan® polycarbonate handWheels: To order, add suffix LX to the end of the Part Number. For example, GSV34661-XX becomes GSV34661-XXLX. Fusible backed pressure relief devices: For 165°F nominal melting temperatures, change 1 in the Part Number to 4 (165°F) or to 5 (212°F) (e.g. GSV35061-XX becomes GSV35064-XX for 165°F or GSV35065-XXY for 212°F).



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Cylinder Brass

PRESSURE RELIEF DEVICES FOR GSV & GSHV SERIES VALVES

Pressure Relief Device			Cylinder Working Pressure	Disc Rupture Range PSI @ 160°				
CG-1	CG-4*	CG-5*		D.O.T Spec 3A 3AA 3AL Cylinders PSI	D.O.T. Exemption Cylinders PSI	International Cylinders BAR	Min.	Max.
Frangible Disc	Frangible Disc	Frangible Disc						
No Fuse Metal	165° F Fuse Metal	212° F Fuse Metal	-XX					
GSV Low Pressure								
P625-19N9-28	P625-19C9-28M	P625-19C9-28W	-28	1800	-----	-----	2700	3000
P625-19N9-32	P625-19C9-32M	P625-19C9-32W	-32	2015	-----	-----	3025	3360
P625-19N9-35	P625-19C9-35M	P625-19C9-35W	-35	2265	-----	-----	3400	3775
P625-19N9-38	P625-19C9-38M	P625-19C9-38W	-38	2400	-----	-----	3600	4000
P625-19N9-39	P625-19C9-39M	P625-19C9-39W	-39	-----	-----	200	3915	4350
P625-19N9-43	P625-19C9-43M	P625-19C9-43W	-43	2670	-----	-----	4005	4450
P625-19N9-46	P625-19C9-46M	P625-19C9-46W	-46	2900	-----	-----	4350	4833
P625-19N9-47	P625-19C9-47M	P625-19C9-47W	-47	2950	-----	-----	4425	4917
GSHV High Pressure								
P625-19N9H-48	-----	P625-19C9H-48W	-48	3000	-----	230	4500	5000
P625-19N9H-55	-----	P625-19C9H-55W	-55	3500/3600	-----	-----	5250	58333
P625-19N9H-63	-----	P625-19C9H-63W	-63	4000	-----	-----	6000	6665
P625-19N9H-65	-----	P625-19C9H-65W	-65	-----	4500	300	6075	6750
P625-19N9H-71	-----	P625-19C9H-47W	-71	-----	5000	-----	6750	7500
P625-19N9H-78	-----	P625-19C9H-78W	-78	5000	-----	-----	7500	8333
P625-19N9H-85	-----	P625-19C9H-85W	-85	6000	6000	-----	8100	9000
P625-19N9H-95	-----	P625-19C9H-95W	-95	-----	-----	-----	9000	10,000

* Copper disc must be used for hydrogen service
 Pressure relief devices come standard with a nickel disc. For copper disc option with CG-4 and CG-5, use an "C" in place of the "N" in the part number. For chrome-plated CG-1 PRD's, add "1" before part number. For example, P625-19N9H-XX becomes 1-P625-19N9H-XX



P625-19N9-32

Cylinder Brass

AV & GSV SERIES ACETYLENE VALVES

GSV series valves are designed specifically for acetylene cylinder applications. They meet stringent international performance standards.

GSVT is designed for special 360° collar-type cylinders (including WB, WQ, WS, WT and WK style), Sherwood's acetylene vertical outlet valve with a handwheel has a durable body, O-ring and soft seat design

AV Series offers handwheel-operated acetylene valves for B & MC cylinders used in welding applications

Key Features & Benefits

- Durable forged brass body, precisely machined internal components and design elements meet the most stringent international valve performance standards
- High-temperature aluminum alloy handwheel with large drainage holes
- 100% helium leak tested
- Designed with low-torque operation for easy hand use
- Durable lower plug made of tough naval brass resists wear
- Precise quality machining results in exceptional finishes for low-torque sealing
- Metal-to-metal seal below bonnet threads prevents pressure accumulation at top of valve body
- High durometer back-up ring prevents extrusion of O-ring in extreme applications
- Peroxide curing of elastomeric seals enhances valve longevity
- Direct drive stem design with optimized single O-ring seal reduces friction and operates at exceptionally low torque levels

RMI Part No.	CGA Outlet	Inlet Thread Size	Handwheel
AVB521	520	3/8" NGT	N
AVMC201	200	3/8" NGT	N
AV5160WB	510 Top Outlet	3/4" NGT	N
AVMC201HW	200	3/8" NGT	Y
AVB521HW	520	3/8" NGT	Y
GSV30040	300	1/2" NGT	Y
GSV30060	300	3/4" NGT	Y
GSVT30060	300 Top Outlet	3/4" NGT	Y
GSV30080	300	1" NGT	Y
GSV51040	510	1/2" NGT	Y
GSV51060	510	3/4" NGT	Y
GSVT51060	510 Top Outlet	3/4" NGT	Y
GSV51080	510	1" NGT	Y



AVB521



AVB521HW



AVMC201



AVMC201HW



GSV51060



GSVT51060



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Cylinder Brass

NGSV SERIES

Global valve for hydrocarbon based flammable gases, including compressed natural gas (CNG), methane, ethane and other similar gases.

Key Features & Benefits

- Automated assembly and testing processes ensure exceptional quality
- 100% helium leak tested
- Heavy-duty forged brass body for durability and high pressure
- Precisely machined internal components meet the most stringent international valve performance standards
- Reduced internal stress zones
- Innovative valve core design
- Durable Buna-N O-ring and PTFE backup O-ring compatible with flammable gases
- Pressure Relief Device (PRD) unitized plug design provides excellent flow characteristics
- Metal-to-metal seal below bonnet threads prevents pressure in the threads at top of valve body
- Direct-drive stem design with optimized O-ring (NGSV) or double O-ring (NGSHV) seal reduces friction and operates at exceptionally low torque levels
- Available inlets include NGT, UNF, DIN477, BS, ABNT and others
- Tapped for dip tube as required

METHYL FLUORIDE

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size
NGSV35064-XX	0 PSI-3000PSI	350	3/4" NGT
Ethane, Ethylene			
NGSV35061-XX	0 PSI-3000PSI	350	3/4' NGT

METHANE, NATURAL GAS

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size
NGSV3504X-XX	0 PSI-3000PSI	350	1/2" NGT
NGSV3506X-XX	0 PSI-3000PSI	350	3/4' NGT
NGSV3505X-XX	0 PSI-3000PSI	350	1.125-12 UNF
NGSV35025EX-XX	0 PSI-3000PSI	350	25E
NGSV3508X-XX	0 PSI-3000PSI	350	1" NGT
NGSHV6956X-XX	3001 PSI-4700PSI	695	3/4' NGT
NGSHV6955X-XX	3001 PSI-4700PSI	695	1.125"-12UNF
NGSHV69525EX-XX	3001 PSI-4700PSI	695	25E
NGSHV7036X-XX	4701 PSI-6400PSI	703	3/4' NGT
NGSHV70325EX-XX	4701 PSI-6400PSI	703	25E

NGSRPV

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size
Ethane			
NGSRPV35064-XX	0 PSI-3000PSI	350	3/4' NGT
Ethylene			
NGSRPV35061-XX	0 PSI-3000PSI	350	3/4' NGT
Methane, Natural Gas			
			25E
NGSRPV3504X-XX	0 PSI-3000PSI	350	1/2" NGT
NGSRPV3506X-XX	0 PSI-3000PSI	350	3/4' NGT
NGSRPV35025EX-XX	0 PSI-3000PSI	350	25E

Options

Oversize Inlets: 4 and 7 (low -pressure) and 24 (high pressure only) threads oversize inlets: To order ,add -4, -7 or -24 to the end of the part number. (e.g. NGSV35064-XX becomes NGSV35064-XX-7.

To order chrome plating, add letter "A" after the letters NGSV in the part number (e.g. NGSV35061-XX becomes NGSVA35061-XX)

To order fusible backed pressure relief devices in 165°F or 212°F nominal melting temperatures, change "1" in the part number to "4" for (165°F) or to "5" for (212°F)

(e.g. NGSV35061-XX becomes NGSV35064-XX for 165°F, or NGSV35065-XX for 212°F.



NGSHV69565-XX



NGSV3506X-XX

Residual Pressure

GSRPV SERIES RESIDUAL PRESSURE VALVES

Sherwood's residual pressure valves are designed to protect cylinders and contents without a time consuming purge-and-clean cycle.

Key Features & Benefits

- Prevents backflow of impurities and foreign substances
- Automated assembly and testing processes ensure exceptional quality
- 100% helium leak tested •Durable forged brass body, precisely machined internal components and design elements meet the most stringent international valve performance standards
- Innovative design and quality construction offer protection of cylinder contents without the expense of a time-consuming purge and-clean cycle
- Retains approximately 55 to 85 PSI pressure, maintaining the integrity of the cylinder contents against contaminants, even if the valve is left open •Protects and extends life of cylinder by preventing ingress of moisture
- Pressure Relief Device (PRD) is a unitized plug design that provides excellent flow characteristics, ensures proper assembly and tamper resistance
- Dynamic front piston seal design is not in direct contact with the flow passage during filling •Inlet and outlet thread configurations are available for a broad spectrum of customer, country and code specifications
- Optical Character Recognition technology utilized to verify appropriate burst disc pressure rating •Exclusive "webbed washer" design protects burst disc during handling and bulk shipment
- Inlets tapped (1/4" NPT) for dip tube as required

RMI Part Number	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size
GSRPV34641-XX	0 PSI-3000PSI	346	1/2" NGT
GSRPV34661-XX	0 PSI-3000PSI	346	3/4' NGT
GSRPV34625E1-XX	0 PSI-3000PSI	346	25E
GSRPV580R41-XX	0 PSI-3000PSI	580	1/2" NGT
GSRPV580R61-XX	0 PSI-3000PSI	580	3/4' NGT
GSRPV580R25E1-XX	0 PSI-3000PSI	580	25E
GSRPV32041-XX	0 PSI-3000PSI	320	1/2" NGT
GSRPV32061-XX	0 PSI-3000PSI	320	3/4' NGT
GSRPV32025E1-XX	0 PSI-3000PSI	320	25E
GSRPV32051-XX	0 PSI-3000PSI	320	1.125"-12UNF
GSRPV35045-XX	0 PSI-3000PSI	350	1/2" NGT
GSRPV35065-XX	0 PSI-3000PSI	350	3/4' NGT
GSRPV35025E5-XX	0 PSI-3000PSI	350	25E
GSRPV54041-XX	0 PSI-3000PSI	540	1/2" NGT
GSRPV54061-XX	0 PSI-3000PSI	540	3/4' NGT
GSRPV54025E1-XX	0 PSI-3000PSI	540	25E
GSRPV59041-XX	0 PSI-3000PSI	590	1/2" NGT
GSRPV59061-XX	0 PSI-3000PSI	590	3/4' NGT



GSRPV580R61-XX

Options

To order 7 threads oversize inlets, add -7 to the end of the part number (e.g. GSRPV58061-XX becomes GSRPV58061-XX-7.

To order chrome plating, add letter "A" after the letters GSRPV in the part number (e.g. GSRPV58061-XX becomes GSRPVA58061-XX)

To order fusible backed pressure relief devices in 165°F or 212°F nominal melting temperatures, change "1" in the part number to "4" for (165°F) or to "5" for (212°F)

(e.g. GSRPV35061-XX becomes GSRPV35064-XX for 165°F, or GSRPV35065-XX for 212°F.

NOTE: GSRPV valves are not approved for CNG service. For CNG service, see NGSRPV series. Not all valves are available in all configurations. Contact customer service for availability. Orders may be subject to minimum quantities.



Residual Pressure

RMI Part No.	Inlet	Outlet
Nipples with retractable pin (includes brass nut as shown)		
TLG580SLW	1/4"MNPT	CGA 580
TLG590SLW	1/4"MNPT	CGA 590

Retractable PIN Adaptors provide maximum operating flexibility to fill or evacuate a cylinder with either a conventional valve or a GSRPV. Engage the PIN Locking Tool (see below) and rotate the tool clockwise to depress the pin for use with a conventional valve. Rotate the tool counterclockwise to release the pin for use with a GSRPV valve. The adaptors incorporate an O-ring seal for a handtight connection.

RMI Part No.	Inlet	Outlet
Nipples with Fixed Pin (includes brass nut as shown)		
TLG320W	1/4"MNPT	CGA 320
TLG346S	1/4"MNPT	CGA 346
TLG350S	1/4"MNPT	CGA 350
TLG540S	1/4"MNPT	CGA 540

RMI Part No.	Inlet	Outlet
Matching CGA Outlet and Inlet Adaptor		
TL580RD	CGA 580 Female	CGA 580 Male
TL590D	CGA 590 Female	CGA 590 Male



TLG580SLW



TLG320W



TL580RD

TLG580, TLG580SLW REBUILD KIT

RMI Part No.	Description
TL580A-30-R	Each kit includes 25 Plunger & Pin Assemblies
TL580SP	Nose Bushing

GSRPV TOOLS

RMI Part No.	Description
TL580B	Pin Lock Tool (used with Retractable Pin Adap)
TL580C	Checking Rod



TL580B

TL580C

SUFFIX LETTER KEY

"S"	Stainless Steel
"L"	Retractable Pin
"W"	O-Ring Seal
"D"	Matching Cga Outlet & Inlet

Refrigerant Valves

RMI Part No.	Description	Inlet	Outlet	Relief setting
RVE6660L	1/2 Ton Container Vapor Valve	3/4" NGT	CGA 660	N/A
RVE6660V	1/2 Ton Container Liquid Valve	3/4" NGT	CGA 660	N/A
F21200007	Dual Outlet Refrigerant Cylinder Valve	3/4" NGT	Dual CGA 660	600PSI
F212-5	Dual Outlet Refrigerant Cylinder Valve	3/4" NGT	Dual CGA 660	450PSI
F40170002	Single Outlet Refrigerant Cylinder Valve	3/4" NGT	CGA660	450PSI
YVE445FR	Refrigerant Relief Valve	1" NGT	1"-20 UNF2B	450PSI
F30000000	Refrigerant Relief Valve	3/4" NGT	1"-20 UNF2B	600PSI



76-0169



F40170002



RVE6660L



Y165-6257



YVE445FR

Cylinder Stainless

7000 SERIES STAINLESS DIAPHRAGM VALVES

Superior's 7074 Series of 303 SS Diaphragm Packless Valves are designed for a variety of high-purity and high-pressure applications, including analytical & instrumentation gases, EPA protocol gases, environmental monitoring and medical applications using pharmaceutical gases. The 7774 Series of 316L SS Diaphragm Packless Valves are used in corrosive gas applications, cylinder phosphine gas, atmospheric and purging gases, dopant gases and reactant gases.

- New smooth operating stem ensures ease of operation during filling and use
- Standardized anti-extrusion pin feature prevents seat extrusion and cold flow of the polymeric seat
- Internal surface areas 32mc finish
- Diaphragm in wetted gas area are a nickel based alloy for corrosion resistance
- Rated at 3000 PSI Cylinder Service Pressure
- Available with unitized pressure-relief device having fuse metal backed or unbacked burst disc
- Available with standard CGA connections as well as international inlets and outlet



7000 SERIES

For more information or additional configurations please contact customer service

RMI Part No.	Gas Service @ 70° F	CGA Outlet	Inlet Thread Size	Stainless Series	Notes
707432661-XXX	0-3000PSI	326	3/4" NGT	303SS	
70743305X-XXX	0-3000PSI	330	1.125-12 UNF	303SS	
70743306X-XXX	0-3000PSI	330	3/4" NGT	303SS	
70743505X-XXX	0-3000PSI	350	1.125-12 UNF	303SS	
70743506X-XXX	0-3000PSI	350	3/4" NGT	303SS	
707435060-T	0-3000PSI	350	3/4" NGT	303SS	No Safety, Inlet Tap
707458061-XXX	0-3000PSI	580	3/4" NGT	303SS	
707458051-XXX-75	0-3000PSI	580	.750-16 UNF	303SS	
707459051-XXX	0-3000PSI	590	1.125-12 UNF	303SS	
707462654-XXX	0-3000PSI	626	1.125-12 UNF	303SS	
70746605X-XXX	0-3000PSI	660	1.125-12 UNF	303SS	
70746605X-XXX-75	0-3000PSI	660	.750-16 UNF	303SS	
707466060	0-3000PSI	660	3/4" NGT	303SS	No Safety
70746606X-XXX	0-3000PSI	660	3/4" NGT	303SS	
70747055X-XXX	0-3000PSI	705	1.125-12 UNF	303SS	
70747056X-XXX	0-3000PSI	705	3/4" NGT	303SS	
777433060-T	0-3000PSI	330	3/4" NGT	316SS	No Safety, Inlet Tap
77743306X-XXX	0-3000PSI	330	3/4" NGT	316SS	
777435040	0-3000PSI	350	1/2" NGT	316SS	No Safety
777435060	0-3000PSI	350	3/4" NGT	316SS	No Safety
777435060-T	0-3000PSI	350	3/4" NGT	316SS	No Safety, Inlet Tap
777458060	0-3000PSI	580	3/4" NGT	316SS	No Safety
77458061-XXX	0-3000PSI	580	3/4" NGT	316SS	
777466060	0-3000PSI	660	3/4" NGT	316SS	No Safety
777466060-T	0-3000PSI	660	3/4" NGT	316SS	No Safety, Inlet Tap
77466064-XXX	0-3000PSI	660	3/4" NGT	316SS	
77467960-T	0-3000PSI	679	3/4" NGT	316SS	No Safety, Inlet Tap

"B"	Valve is Bagged
"C"	Copper Disc
"K"	Kynar Seat
"N"	Nickel Disc
"P"	Platinum Disc
"R"	Tapped for Flow Restrictor
"T"	1/4" FNPT Tapped Inlet
"V"	Vespal Seat

Safety Type
0= No Safety
1= Unbacked Frangible Disc
4= Backed Frangible Disc with 165° Fuse Metal
5= Backed Frangible Disc with 212° Fuse Metal



Cylinder Stainless

5983L STAINLESS STEEL PACKED WRENCH OPERATED VALVES

Designed for corrosive bulk cylinder applications, DOT transport of specialty gases and chemicals for petrochemical, pharmaceutical, textile and electronics industries.

Key Features & Benefits

- Robust 303 Stainless Steel body providing superior corrosion resistance in multiple gas applications.
- Proven live-load packing design provides a constant load to ensure stem seal for the life of the valve.
- Body to stem seal design to withstand severe internal and external conditions.
- One-piece stainless steel stem provides positive shutoff in corrosive gas service with exceptional durability
- PTFE packing promotes easy operation while providing a durable leak-resistant stem seal under all service conditions.
- Optional tapped inlet threads for tube assembly

RMI Part No.	CGA Outlet	Inlet	PRD*
5983L-330	CGA 330	3/4" NGT	None
5983L-350	CGA 350	3/4" NGT	None
5983L-660	CGA 660	3/4" NGT	None

*Pressure relief device can be added upon request



5983L

1206A STAINLESS STEEL PACKED WRENCH OPERATED VALVES

Designed for Anhydrous Ammonia applications, including commercial refrigeration, metal treating and chemical manufacturing.

Key Features & Benefits

- One-piece carbon steel, case-hardened, nickel plated stem provides positive shut-off in corrosive gas service.
- PTFE packing promotes easy operation while providing a durable leak-resistant stem seal under all service conditions.
- Designed to ensure a safe, long, trouble-free life under all service conditions.
- 1206AX5 compatible with both CGA 705 and CGA 240 outlets.
- 1206AX9 compatible with CGA 240 outlet only
- Inlet tap 1/4"-18 NPT

RMI Part No.	Description	CGA Outlet
1206AX5	Packed Ammonia Cylinder Valve w/ Lead Washer Recess	705, 240
1206AX9	Packed Ammonia Cylinder Valve	240
628X1	Ammonia Yoke	845
5877	Adapter	845



1206AX5

Cylinder SCBA

SCBA LIFE SUPPORT ALUMINUM VALVES

Made of durable, forged aluminum, the product line meets the stringent performance requirements of NIOSH and NFPA. This product line is used by many Life Support manufacturers for applications including firefighting, hazardous waste removal and ingress and egress

Key Features & Benefits

- Constructed of corrosion-resistant anodized aluminum
- Includes rubber bumper to protect valve and gauge
- Valve gauge is doubled-sided for ease of readability
- Meets NIOSH and NFPA performance guidelines
- Locking and non-locking hand wheel option available

RMI Part No.	Outlet/ Location	Inlet	Pressure	Handwheel
YV2300	CGA 346 180°	.750-16UNF-2A	2265 PSI	Small, Locking,Black
YV2301	CGA 346 180°	.750-16UNF-2A	2265 PSI	Small, NON-Locking,Black
YV2301A	CGA 346 180°	.750-16UNF-2A	2265 PSI	Large, Diamond Shape,Black
YV2303	CGA 346 180°	.750-16UNF-2A	3000 PSI	Small, NON-Locking,Black
YV4500	CGA347 180°	.875-14UNF-2A	4500 PSI	Small, Locking,Black
YV4501	CGA347 180°	.875-14UNF-2A	4500 PSI	Small, NON-Locking,Black
YV4501A	CGA347 180°	.875-14UNF-2A	4500 PSI	Large, Diamond Shape,Black
YV4700HP	CGA347 90°	.875-14UNF-2A	4500 PSI	Small, NON-Locking,Black
YV4700AHP	CGA347 90°	.875-14UNF-2A	4500 PSI	Large, Diamond Shape,Black
YV4700LP	CGA 346 90°	.750-16UNF-2A	2265 PSI	Small, NON-Locking,Black
YV4700ALP	CGA 346 90°	.750-16UNF-2A	2265 PSI	Large, Diamond Shape,Black
YV4522LPB	CGA 346 150°	.750-16UNF-2A	2265 PSI	Small, Locking,Black, Bracket
YV4522LPH	CGA 346 150°	.750-16UNF-2A	2265 PSI	Tri- Lobe with Bracket



YV2303



YV4500



YV4501A



YV4522LPH



YV4700HP



Cylinder Medical

KVAC AND KVMC SERIES POST MEDICAL VALVES

- Inert PTFE packing provides leak-free stem seal, long cycle life and resistance to corrosion
- Secondary O-ring helps to provide a secure seal under vacuum purging and low-pressure operation
- Strong, durable body is made from extruded brass rod and coated with a protective chrome finish
- Chamber design protects threads and stem from damage
- Exceptional machining finishes for low-torque sealing and long packing life
- Durable lower plug is made of tough naval brass and coated with PTFE for lubricity
- Copper sealing gasket provides permanent, leak-resistant bonnet seal
- Pressure Relief Device is an integrated assembly to ensure proper assembly and to resist tampering
- Designed for use with all yokes made to CGA 860 drawing specifications
- Available in wrench or toggle type
- Nominal stroke is 1.5 turns, full flow at 1/3 turn
- Cleaned for oxygen service and oil free per CGA G-4.1

KVMC

- Special construction process significantly reduces magnetic attraction
- Meets all known tests for MRI-conditional components used in conjunction with a magnetic resonance imager for Level 3 Tesla requirements
- Clearly identified for hospital settings
- ASTM standard F 2503-05 marking

RMI Part No.	Gas Service	Safety	CGA Outlet	Inlet Thread	Cylinder Type
KVAC87044F-XX	Oxygen	CG-4	870	1/2" NGT	Steel
KVAC87054-XXR				.750-16 UNF-2A	Aluminum
KVAC88044F-XX	Oxygen and Carbon Dioxide Mixture	CG-4	880	1/2" NGT	Steel
KVAC88054-XX				.750-16 UNF-2A	Aluminum
KVAC89044F-XX	Oxygen and Helium Mixtures	CG-4	890	1/2" NGT	Steel
KVAC89054-XX				.750-16 UNF-2A	Aluminum
KVAC91041-XX	Nitrous Oxide	CG-1	910	1/2" NGT	Steel
KVAC91051-XX				.750-16 UNF-2A	Aluminum
KVAC93044-XX	Helium	CG-4	930	1/2" NGT	Steel
KVAC93054-XX				.750-16 UNF-2A	Aluminum
KVAC94041-XX	Carbon Dioxide	CG-1	940	1/2" NGT	Steel
KVAC94051-XX				.750-16 UNF-2A	Aluminum
KVAC95044F-XX	Air	CG-4	950	1/2" NGT	Steel
KVAC95054-XX				.750-16 UNF-2A	Aluminum
KVAC96044F-XX	Nitrogen	CG-4	960	1/2" NGT	Steel
KVAC96054-XX				.750-16 UNF-2A	Aluminum
KVAC96541-XX	Nitrous Oxide and Oxygen Mixtures	CG-1	965	1/2" NGT	Steel
KVAC96554-XX		CG-4		.750-16 UNF-2A	Aluminum
KVAC97344-XX	Medical Gas Mixtures	CG-4	973	1/2" NGT	Steel
KVAC97354-XX				.750-16 UNF-2A	Aluminum
MRI Post Valve					
KVMC95054-XX	Air	CG-4	950	.750-16 UNF-2A	Aluminum
KVMC91051-XX	Nitrous Oxide	CG-1	910	.750-16 UNF-2A	Aluminum
KVMC87054-XX	Oxygen	CG-4	870	.750-16 UNF-2A	Aluminum

Options:
All valves are supplied with rupture discs rated for 2015 PSI working pressure cylinders. Rupture discs for other working Pressures are available upon request.

To order rugged diecast aluminum toggle lever, add "TG" to end of partnumber (e.g. KVAC87054-32R becomes KVAC87054-32RTG)

To order 1/8" -27NPT modified gauge port, add "G" to end of part number (e.g. KVAC87054-32R becomes KVAC87054-32RG).

Toggle Replacement Parts:

TL-KTS_C	Toggle Pin Crimp Tool
1-KTS-IC	Toggle Handle
J33-09308SS	Toggle Rivet



KVAC87044F-32



KVAC87054-32RTG



KVMC87054-32R



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Cylinder Oxygen Delivery

INTEGRATED VALVE-REGULATOR COMBINATION FOR OXYGEN DELIVERY

- Smooth surfaces for easy cleaning
- Rounded body to prevent dust and particle accumulation
- Modern medical designs for easy integration into hospital and homecare environments
- Brass regulator body
- Shroud to protect gauge, flow selector, and connections.
- No special fill connectors required



ICONV-3-4-3360-25



M7414R

RMI Part No.	Inlet	DISS Connection	MR Conditional	Outlet	Flow Range	Fill Port
ICONV-3-4-3360-25	.750-16 UNF-2A	Y	N	DISS and Barb	0-25LPM	CGA 540
M7414R	.750-16 UNF-2A	Y	7 Tesla	DISS and Barb	0-25LPM	CGA 540

* Cylinder not included

High Pressure

HP LINE VALVES

Designed for Compressed Gas Storage & Cascade Fill Systems meeting the demands of SCUBA & SCBA professionals internationally.

Key Features & Benefits

- Strong, durable forged brass body to specifications stricter than most commercial forging specifications
- Compact design especially suited for use on compressor or cascade panels
- Chamber specially designed for low-torque operation
- Aluminum Silicon Bronze stem design for dependable service and long life
- Proprietary dual packing chamber design provides dependable seal characteristics, long service life and easy operation
- Durable lower plug made of tough naval brass to resist wear
- Lower plug is PTFE coated to add lubricity, which minimizes seizing and galling especially under high-pressure operation
- Internal protected bonnet gasket seal provides positive, damage-resistant chamber seal
- Compact molded Lexan® polycarbonate handwheel is easy to use
- Safe, dependable and easily rebuilt and maintained

RMI Part No.	Inlet Thread Size	Outlet Thread Size	Panel Mount	Panel Hole Size	Chrome Plated	Max Working Pressure
YVA-3010	1/4" FNPT	1/4" MNPT	No	N/A	Yes	7000 PSI
YVA-3010A	1/4" FNPT	1/4" MNPT	Yes	1-1/16"	Yes	7000 PSI
YVA-3010AB*	1/4" FNPT	1/4" MNPT	Yes	1-1/16"	Yes	7000 PSI
LV3**	1/4" FNPT	1/4" FNPT	No	N/A	Yes	6000PSI

* cleaned for Oxygen Service

** Has Built in Bleeder



LV3



YVA-3010



YVA-3010A



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Check Valve

INLINE CHECK VALVES CG SERIES GAS AND CRYOGENIC CHECK VALVES

Application

Inline check valves with metal seat option for cryogenic service or with soft seat option for leak free operation in gas service.

Features

- One directional flow indicated by arrow on body
- Large Cv for high flow capability and low pressure drop
- Working temperature range: -320° F to +165° F (-195°C to +74°C) for metal seats -20° F to +165° F (-20°C to +74°C) for soft seats
- 1 psig opening pressure • Cleaned for use in oxygen service per CGA G-4.1

Part Number	Seating Option	Inlet/Outlet Connections FNPT A	Length B		Wrenching Hex Size C		Cv (Kv)	Maximum Operating Pressure
			inches	mm	inches	mm		
Stainless Steel Check Valves								
CG250SS	Metal	1/4"	2-3/8"	60.45	13/16"	20.57	.87 (0.75)	5000 psig (345 barg)
CG375SS		3/8"	2-1/2"	63.50	1"	25.4	2.3 (1.98)	
CG500SS		1/2"	3"	76.20	1-1/8"	28.575	3.5 (3.02)	
CG750SS		3/4"	3-5/8"	92.20	1-1/2"	38.1	5.2 (4.49)	
CG250SSL	Soft	1/4"	2-3/8"	60.45	13/16"	20.57	.87 (0.75)	250 psig (17.2 barg)
CG375SSL		3/8"	2-1/2"	63.50	1"	25.4	2.3 (1.98)	
CG500SSL		1/2"	3"	76.20	1-1/8"	28.575	3.5 (3.02)	2000 psig (138 barg)
CG750SSL		3/4"	3-5/8"	92.20	1-1/2"	38.1	5.2 (4.49)	
Brass Body Check Valves								
CG250B	Metal	1/4"	2-3/8"	60.45	13/16"	20.57	.87 (0.75)	3000 psig (207 barg)
CG375B		3/8"	2-1/2"	63.50	1"	25.4	2.3 (1.98)	
CG500B		1/2"	3"	76.20	1-1/8"	28.575	3.5 (3.02)	
CG750B		3/4"	3-5/8"	92.20	1-1/2"	38.1	5.2 (4.49)	
CG250BL	Soft	1/4"	2-3/8"	60.45	13/16"	20.57	.87 (0.75)	250 psig (17.2 barg)
CG375BL		3/8"	2-1/2"	63.50	1"	25.4	2.3 (1.98)	
CG500BL		1/2"	3"	76.20	1-1/8"	28.575	3.5 (3.02)	2000 psig (138 barg)
CG750BL		3/4"	3-5/8"	92.20	1-1/2"	38.1	5.2 (4.49)	



CG250B



CG250SS

Lines Station & Needle

LINE STATION VALVES 7160 SERIES

Application The 7160 series valves are designed for use with oxygen and all fuel gases at station outlets of line distribution systems such as welder's benches, cutting stations, hospital rooms, etc.

Features

- UL Listed Approved for oxygen and all fuel gas services at 400 PSIG maximum working pressure
- All valves cleaned for use in oxygen per CGA G-4.1
- O-ring stem seal works with the pressure causing a tighter seal as pressure increases
- A reverse flow check valve installed in the valve outlet connection helps prevent reverse flow
- Available with brass cap and chain protection
- Meets the requirements of National Fire Protection Association (NFPA) Pamphlet No. 51



7161V

Part Number	Gas Service	Inlet Thread	Outlet Thread	CGA Connection	C v Factor	Outlet Protection*
7160V	Oxygen and Inert Gases	1/2" NGT	7/8" - 14 M. R.H.	24	0.76	10663 Brass Cap & Chain
7160VL						None
7161V	Fuel Gases		7/8" - 14 M. L.H.	25		10664 Brass Cap & Chain
7161VL						None

*Outlet Protection is recommended.

NEEDLE VALVES CMM250 SERIES AND CFF250 SERIES

Application

Ideal for use as a gauge isolation valve or applications requiring accurate throttling of pressure.

Features

- Compact design provides easy installation.
- Fine stem threading and long taper allow precise metering and leak-free shut-off
- Internal stop prevents the stem from being accidentally unscrewed from the body
- Rugged forged brass bodies withstand higher pressures
- Unbreakable brass handwheel.
- Valves come equipped for panel mounting.
- Working temperature range is -40°F to +165°F. (-40°C to +74°C)
- Maximum operating pressure: 2000 psig air. (137.9 Bar)
- Cleaned for oxygen service per CGA G-4.1
- Female ports available - consult factory

Part Number	(NPT)	C v
CMM250A	1/4	0.7
CMM250G	1/4	0.5
CFF250A	1/4	0.7
CFF250G	1/4	0.5



CMM250A



CMM250G



Manifold Valve

GSV SERIES

For Manifold, Oxygen and Fuel Gas



GSV35060



GSV58060

RMI Part No.	CGA Outlet	Inlet Thread Size	Description
GSV Manifold Valves			
GSV32040	320	1/2" NGT	No PRD
GSV32060	320	3/4" NGT	No PRD
GSV35040	350	1/2" NGT	No PRD
GSV35060	350	3/4" NGT	No PRD
GSV54040	540	1/2" NGT	No PRD
GSV54060	540	3/4" NGT	No PRD
GSV58040	580	1/2" NGT	No PRD
GSV58060	580	3/4" NGT	No PRD
GSHV68040	680	1/2" NGT	No PRD
GSHV68060	680	3/4" NGT	No PRD
GSV For Fuel Gas and Oxygen			
GSV02440	024	1/2" NGT	No PRD
GSV02440cc	024	1/2" NGT	No PRD; Cap and Chain
GSV02540	025	1/2" NGT	No PRD
GSV02540cc	025	1/2" NGT	No PRD; Cap and Chain

630 SERIES

High-pressure shut-off valves designed for heavy-duty use on manifold systems, fill plants, tube trailers and other piping systems. Valves are suitable for use with oxygen, acetylene, nitrogen, argon, helium, hydrogen, carbon dioxide, nitrous oxide and other inert gases

Key Features & Benefits

- Easy Operation - Lowest operating torque available, E-Z grip handwheel and slow opening design combine to make the new 630 series a breeze to operate.
- Flow Control - 3 turns from the closed position to fully open.
- Versatility - Specially designed resilient soft seat has been third party certified for Oxygen service so one valve can fulfill all your gas service needs.
- Installation Options - Front or back panel mounting capabilities available.
- Interchangeability - Sized to be interchangeable with other manufacturers' valves as an easy drop in replacement for your current installation.
- Vacuum Capable - Vacuum tested to ensure the highest purity filling operations.
- All valves are field rebuildable

RMI Part No.	Inlet Thread	Outlet Thread	Features
630GR-4	1/2" NPT	1/2" NPT	
630GR-6	3/4" NPT	3/4" NPT	
630GR-8	1-11-1/2" NPSM	1-11-1/2" NPSM	
630GR-4PM	1/2" NPT	1/2" NPT	Panel Mount
630GR-6PM	3/4" NPT	3/4" NPT	Panel Mount
630GR-8PM	1-11-1/2" NPSM	1-11-1/2" NPSM	Panel Mount



630GR-6PM



630GR-8



630GR

SHERW 630 SERIES REPLACEMENT PARTS

RMI Part No.	Description	Contents
630-4KIT	Plug and Seat Assembly Kit	Plug and Seat, Seat Retainer, Thrust Bearing, PTFE Seal
630-8KIT	Handwheel Kit	Handwheel Nut, Handwheel Washer, Handwheel
630-3KIT	Stem and Bonnet Kit	Stem, Inner Bonnet, PTFE Seat, Stem O-Ring, Backup Ring, Bearing Spacer, Needle Bearing and Washer, O-Ring, Lubricant
630-3PMKIT	Panel Mount Stem and Bonnet Kit	



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Manifold Valve

HIGH PRESSURE GAS MASTER VALVES HP9560 SERIES

Part Number		Inlet Connection	Outlet Connection
Soft Seat	Metal Seat		
HP9560A	HP9560CA	1/2" F. NPT	1/2" F. NPT
HP9560B	HP9560CB	3/4" F. NPT	3/4" F. NPT
HP9561R	HP9561CR	1"-11-1/2" NPSM R.H.	1"-11-1/2" R.H. Female Swivel
HP9561RL	HP9561CRL	1"-11-1/2" NPSM R.H.	1"-11-1/2" NPS L.H. Female Swivel
HP9561L	HP9561CL	1"-11-1/2" NPSM L.H.	1"-11-1/2" L.H. Female Swivel
HP9563R	HP9563CR	1"-11-1/2" NPSM R.H.	1"-11-1/2" NPSM R.H.
HP9563L	HP9563CL	1"-11-1/2" NPSM L.H.	1"-11-1/2" NPSM L.H.
HP9560ASE	HP9560CASE	.843 - .847	.843 - .847
HP9560BSE	HP9560CBSE	1.053 - 1.057	1.053 - 1.057
HP9560BSE-B	HP9560CBSE-B	1.053 - 1.057	3/4" F.NPT
GSHV68060	680	3/4" NGT	No PRD



HP9560A



HP9560BP

REGO HP9560 SERIES

- 5600 psig (386 barg) maximum working pressure
- Non-rising stem design with O-Ring Seal for durable service
- Large brass handwheel for easy low torque operation under pressure
- All valves cleaned for use in oxygen per CGA G-4.1
- Temperature range -40°F to +165°F (-40°C to +74°C)
- 100% Factory Tested

SOFT SEAT OPTION

The soft seat valves use a PCTFE seat disc in the seat retainer to create a "bubble-tight" seal against a machined seat surface on the brass body. Valve Cv is 2.6. The soft seat option is especially useful for small molecule gases like hydrogen and helium, but can be used for a variety of non-corrosive industrial gases including argon, nitrogen, carbon dioxide, nitrous oxide, and acetylene.

METAL SEAT OPTION:

A copper seat disc is used in the seat retainer to create a seal against a Monel body seat, which is installed into the body and can be replaced. Valve Cv is 2.3. The metal seat option minimizes the possibility of seat decomposition or ignition in oxygen service under adiabatic compression. The metal seat option is recommended for oxygen, and can also be used for other non-corrosive industrial gases. The metal seat option is not to be used for acetylene due to the copper seat. Not to be applied in hydrogen or helium service or where a "bubble-tight" seal is essential. (Note: C in part number) Metal Seat Option approved according to Adiabatic compression test.



Aluminum Pressure Regulators

ALUMINUM PRESSURE REGULATORS 1682M SERIES & C-1682M SERIES

Application

The 1682M Series Regulators are designed primarily for second stage regulation of a variety of gases in industrial and hospital piping systems and manifolds. The C-1682M Series is specifically designed for use with Carbon Dioxide.

Features

- Maximum inlet pressure is 400 psig (28 barg)
- Two 1/4" F.NPT gauge ports are located 180° apart to allow for gauge mounting in convenient positions
- Each 1680M Series regulator is cleaned and packaged for oxygen per CGA G-4.1
- 100% Factory Tested
- T-handle adjusting screw
- Available in three delivery pressure ranges
- Temperature Range: -40° F to +165°F (-40°C to +74°C)



C-1682M

Part Number		Delivery Pressure Range (psig)	Pressure Gauge		Inlet & Outlet Connection (F.NPT)	
			Range psig (barg)	Part Number	Inches	mm
1682ML	C-1682ML	5-50 psig (0.3-3.4 barg)	*	*	1/4"	6
1682MLG	C-1682MLG		1-100 (6.89)	1286		
1682M	C-1682M	50-125 psig (3.4-8.6 barg)	*	*		
1682MG	C-1682MG		"1-200 (13.78)"	S1679		
1682MS	C-1682MS	100-250 psig (6.9-17.2 barg)	*	*		
1682MSG	C-1682MSG		"1-400 (27.57)"	15578		

* Outlet Protection is recommended.

Automatic Changeover

AUTOMATIC CHANGEOVER REGULATORS M2523HP SERIES

Application

M2523HP series automatic changeover regulators are designed especially for use in systems where a reserve cylinder is used to provide a continuous, uninterrupted supply of gas. These regulators are suitable for use with carbon dioxide, hydrogen, oxygen, industrial air, nitrous oxide, nitrogen, helium and argon.

Features

- Automatically withdraws from the reserve cylinder after exhausting the "service" cylinder
- Cylinder pressure gauges let you know at a glance the contents of each cylinder are in use. There is no need to shut down the system to replace empty cylinders.
- Nickel plated
- 100% Factory Tested
- Cleaned per CGA G-4.1 for oxygen service
- Porous bronze filters are installed in each inlet to minimize the entry of foreign particles
- Back pressure check valves are installed in each inlet to help assure positive shut-off in case of reverse flow
- Each unit comes complete with mounting bracket and a special delivery pressure adjustment wrench
- Factory set at 50 psig (3.44 barg) on service side. CO₂ and N₂O regulators are factory set at 100 psig (6.89 barg) on service side



M2523HP320

Part Number	Gas Service	CGA Inlet Connection	Outlet Connection		Maximum Inlet Pressure	Delivery Pressure Range	Accessory Regulators
			Inches	mm			
M2523HP320	Carbon Dioxide	320	1/4" F.NPT	6	1800 psig (124.2 barg)	30-130 psig (2.1-8.9 barg)	BR-1784E, 1784E, C-1682 M Series
M2523HP326	Nitrous Oxide	326					
M2523HP350	Hydrogen	350					
M2523HP540	Oxygen	540					
M2523HP580	Nitrogen, Argon, Helium	580					
M2523HP590	Industrial Air	590					



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Automatic Changeover

INFINITY AUTO CHANGEOVER REGULATOR

How Does it Work?

The Infinity™ Auto Changeover senses a depleted cylinder and automatically switches to the reserve cylinder.

Features

- Priority Select™ feature allows service personnel to designate which cylinder is considered primary
- Installation is quick and simple
- Optional wall mount bracket

RMI Part No.	Description	Inlet/Outlet	Outlet Pressure	Inlet Pressure	Gas Service
INF3561-M	Automatic Change Over Regulator	1/4" FNPT	250PSI	3000PSI	Inert
BRKT-3560	Wall Mount Bracket for INF3561	N/A	N/A	N/A	N/A



BRKT-3560



INF3561-M

Cryogenic Regulators

CRYOGENIC 1/4" COMBINATION PRESSURE BUILDER/ECONOMIZER CBH502 & CBC502 SERIES

Application

The regulator combines the function of Pressure Building and Economizer functions in one compact unit. Available in Chart and Taylor-Wharton piping geometries and a variety of pressure ratings.

Features

- All parts are copper alloy (brass), PTFE and stainless-steel materials selected specifically for compatibility with cryogenic temperatures down to -320° F. (-196°C)
- PTFE seat helps assure a positive shut-off at cryogenic temperatures down to -320° F. (-196°C)
- High- and low-pressure builder/economizers are the same compact size designed to fit in close quarters
- Interchangeable with existing cryogenic regulator units
- Inlet screen helps prevent foreign material from entering the regulator
- Locknut is provided to maintain adjusting screw setting
- Maximum inlet pressure of 550 psig (37.9 barg)
- Cleaned for oxygen service per CGA G-4.1
- 100% Factory Tested
- Suitable for argon, CO₂, nitrogen, oxygen and LNG

Part Number	Inlet/Outlet Connections (F.NPT)	Factory Pressure Setting (psig)	Operating Range (psig)
CBH502-025	1/4"	25 psig (1.7 barg)	20-60 psig (1.3-4.1 barg)
CBH502-125		125 psig (8.6 barg)	50-175 psig (3.45-12.1 barg)
CBH502-300		300 psig (20.7 barg)	150-350 psig (10.3-24.1 barg)
CBH502-315		315 psig (21.7 barg)	
CBH502-325		325 psig (22.4 barg)	
CBH502-350		350 psig (24.1 barg)	
CBC502-025		25 psig (1.7 barg)	20-60 psig (1.3-4.1 barg)
CBC502-125		125 psig (8.6 barg)	50-175 psig (3.45-12.1 barg)
CBC502-300		300 psig (20.7 barg)	150-350 psig (10.3-24.1 barg)
CBC502-325		325 psig (22.4 barg)	
CBC502-350		350 psig (24.1 barg)	



CBH502



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Cryogenic Regulators

CRYOGENIC 1/2" COMBINATION PRESSURE BUILDER / ECONOMIZER CBE504 SERIES

Application

CBE504 series regulators maintain the pressure of the cryogenic vessels (Bulk Tanks or Micro bulks) during the operation or usage. The pressure building and economizer function are both combined in one unit, saving space and weight on the tank, simplifying the tank plumbing and reducing potential leak points. Designed and suitable for use in various cryogenic industrial gases, including Nitrogen, Oxygen, Argon, CO2 and LNG. For optimum performance with carbon dioxide and nitrous oxide, use in gas phase only.

Features

- Compact design fits well in tight plumbing geometries
- Built-in economizer check included on all models to prevent reverse flow during filling and operational upset conditions
- Up to 2 times higher pressure build flow than competition as proven through PB504 design and internal testing
- Lateral economizer port provides 1.7 times larger flow area, allowing for faster response time & reducing the potential for product loss.
- Economizer seal ring between PB (pressure build) OUT and EC (economizer) OUT (as compared to PB IN and EC OUT) prevents pressure runaways
- Diaphragm senses EC OUT pressure (as compared to PB OUT), accelerating pressure building function during gas use
- Improved calibrated pressure adjustment feature on bonnet cap aids in easier, more accurate pressure adjustment
- All parts are copper alloy (brass), PTFE, and stainless steel— materials selected specifically for compatibility with cryogenic temperatures down to -320°F (-196°F)
- PTFE seat provides positive shut off at cryogenic temperatures
- Maximum inlet pressure of 600 psig (41.4 barg)
- Pressure setting range from 25 psig to 550 psig (1.7 barg to 37.9 barg) preset and tested in factory to ensure quality performance
- Monel screens included on pressure builder (PB) inlet and outlet
- Cleaned per CGA G-4.1 for oxygen service
- May be mounted vertically or horizontally (EC port pointed up) based on customer preference; horizontal installation allows for easier pressure setting adjustment

Part Number	Inlet/Outlet Connections in. (DN)	Operating Range psig (barg)	Weight lb (kg)
CBE504-025 to 075	Pressure Build Inlet/ Outlet: 1/2" (15) Economizer Outlet: 1/4" (8)	25 - 85 (1.7 - 5.9)	4.4 (2.0)
CBE504-076 to 155		50 - 170 (3.4 - 11.7)	
CBE504-156 to 260		100 - 280 (6.9 - 19.3)	
CBE504-261 to 450		200 - 460 (13.8 - 31.7)	
CBE504-451 to 550		400 - 550 (27.6 - 37.9)	



CBE504B

Cryogenic Regulators

CRYOGENIC LIQUID CYLINDER REGULATOR LCR SERIES

Application

The RegO LCR Series pressure reducing regulator assembly controls the pressure from the gas use line or the discharge of any liquid cylinder with a flow capacity at least double the capacity of the cylinder vaporization coil. For use with oxygen, nitrogen, argon, or carbon dioxide liquid cylinders.

Features

- Easy adjusting screw to maintain pressure setting
- 100% Factory tested
- CGA fitting inlet connection for ready hook-up and 1/4" F. NPT outlet
- Gauges with applicable pressure ranges
- Two delivery pressure ranges available
- Clean for use in Oxygen per CGA G-4.1
- Temperature range -320°F (-196°C) to + 165°F (74°C)
- Maximum inlet pressure 550 psig (37.9 barg)
- Inlet filter helps prevent foreign material from entering the regulator



LCR200A580

RMI Part No.	Gas	Liquid Cylinder Connection	Delivery Pressure Range
LCR200A580	Nitrogen/Argon	CGA 580	25 to 200 psig (1.7-13.8 barg)
LCR200A540	Oxygen	CGA 540	25 to 200 psig (1.7-13.8 barg)
LCR200A320	Carbon Dioxide	CGA 320	25 to 200 psig (1.7-13.8 barg)
LCR350A580	Nitrogen/Argon	CGA 580	100 to 350 psig (6.9-24.1 barg)
LCR350A540	Oxygen	CGA 540	
LCR350A320	Carbon Dioxide	CGA 320	

CRYOGENIC 1/2" PRESSURE BUILDER PB SERIES

Application

PB series cryogenic regulators are primarily designed to maintain the pressure in cryogenic containers; they may also be used as a line regulator for cryogenic lines and cold gas lines. They are specifically useful in installations where precision in pressure control and flow capability are important. For use with oxygen, nitrogen, argon, LNG and CO2.

Features

- All parts are copper alloy (brass), PTFE and stainless steel— materials selected specifically for compatibility with cryogenic temperatures down to -320°F. (-196° C)
- One-piece PTFE Poppet seat design eliminates possible leak paths at cryogenic temperatures and provides better guidance for improved seating, ensuring a positive shutoff.
- High- and low-pressure regulators are the same compact size— designed to fit in close quarters
- Customizable pressure settings between 20 - 550 psig (1.4 - 37.9 barg)
- Interchangeable with existing cryogenic regulator units • Inlet filter (150 Mesh) helps prevent foreign material from entering the regulator
- Easier to service, use an allen wrench versus large crescent wrench
- Less field repair because diaphragm is squeezed versus twisted
- Locknut is provided to maintain adjusting screw setting
- Maximum inlet pressure of 600 psig (41.4 barg)
- Cleaned for oxygen service per CGA G-4.1
- 100% Factory Tested
- Copper Backcap Gasket reduces the possibility of external leakage at cryogenic temperatures, as the contraction coefficient is like that of brass

Part Number	Inlet / Outlet Connections (F.NPT) A Inches (mm)	Delivery Pressure Setting Range psig (barg)
PB504-020 to 070	1/2" (12.70)	20 - 75 psig (1.4 - 5.2 barg)
PB504-071 to 175		50 - 180 psig (3.4 - 12.4 barg)
PB504-176 to 300		150 - 300 psig (10.3 - 20.7 barg)
PB504-301 to 465		250 - 465 psig (17.2 - 32.1 barg)
PB504-466 to 550		400 - 550 psig (27.6 - 37.9 barg)



PB504



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Cryogenic Regulators

CRYOGENIC ECONOMIZERS ECL502 SERIES

Application

ECL502 series cryogenic economizers are designed to be used as pressure reducing valves to automatically maintain a constant inlet or back pressure, normally closed at pressures below its set-points and open at pressures above its set-point. The ECL502 is primarily designed to assist in maintaining a desired system pressure ideal for Nitrogen, Oxygen, Argon and other cryogenic cylinder applications with a performance improvement over Rego's ECLXXX series. ECL502 series offers outstanding performance for maintaining LNG fuel line pressure.

Part Number	Inlet / Outlet Connections (FNPT) A	Max inlet pressure	Operating Range (psig)
ECL502-22	1/4" NPT	235 psig	10-60 psig (0.7 - 4.1 barg)
ECL502-100			50 - 175 psig (3.4 - 12.1 barg)
ECL502-123			
ECL502-140			
ECL502-175		550 psig	150 - 350 psig (10.3 - 24.1 barg)
ECL502-325			



ECL502

CRYOGENIC PRESSURE BUILDER RG SERIES

Application RG series cryogenic regulators are primarily designed to maintain pressure on cryogenic liquid within cryogenic containers. They may also be used in cryogenic lines, vaporizer and converter applications. They are especially useful in installations where space and cost limitations are important.

Part Number	Inlet / Outlet Connections (FNPT) A	Operating Range (psig)
RG022A	1/4"	0-30 psig (0-2.1 barg)
RG125A		
RG125C3	3/8"	25-250 psig (1.7-17.2 barg)
RG175C3		
RG300A	1/4"	125-350 psig (17.2-24.2 barg)
RG000090AG		



RG125A



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Heavy Duty Final Line

HEAVY DUTY BRASS FINAL LINE PRESSURE REGULATOR BR-1780 SERIES

Application

BR-1780 Series Regulators are designed for final line pressure regulation on medical oxygen systems. They are equally suitable for a variety of gases in medical or industrial applications. The BR-1780 Series Regulators have a balanced seat, are constructed with oxygen compatible materials, and offer a tamper resistant adjustment screw cap. Flow performance is impressive as well offering up to 30,000 SCFH for the 3/4" and 1" model and up to 20,000 SCFH for the 1/2" model. Compatible with oxygen, nitrogen, argon, hydrogen, helium, CO₂, and LNG.



BR1784A

Part Number	Delivery Pressure Range	Pressure Gauge*		Inlet & Outlet (F.N.P.T.)		Cv (Kv)
		Range (psig)	P/N	inches	mm	
BR-1784A	5-55 psig (0.3-3.8 barg)	1-100	1286	1/2"	12.7	3.1 (2.68)
BR-1784B	40-110 psig (2.8-7.6 barg)	1-200	S1679			
BR-1784C	100-200 psig (6.9-13.8 barg)	1-400	15578			
BR-1784D	175-300 psig (12.1-20.7 barg)					
BR-1786A	5-55 psig (0.3-3.8 barg)	1-100	1286	3/4"	19.05	4.8 (4.15)
BR-1786B	40-110 psig (2.8-7.6 barg)	1-200	S1679			
BR-1786C	100-200 psig (6.9-13.8 barg)	1-400	15578			
BR-1786D	175-275 psig (12.1-19.0 barg)					
BR-1788A	5-55 psig (0.3-3.8 barg)	1-100	1286	1"	25.4	5.5 (4.75)
BR-1788B	40-110 psig (2.8-7.6 barg)	1-200	S1679			
BR-1788C	100-200 psig (6.9-13.8 barg)	1-400	15578			
BR-1788D	175-275 psig (12.1-19.0 barg)					

*Regulator sold without gauge. Order gauge separately.

HEAVY DUTY GAS LINE REGULATOR 1780 SERIES

Application

The 1780 Series Regulators are designed for final line pressure regulation on gas distribution systems. They are suitable for a variety of gases in medical or industrial applications. The 1780 Series Regulators have a balanced seat, are constructed with oxygen compatible materials, and have the same valve design, brass body, and internal parts as the premium BR-1780 Series. Flow performance is equal to the BR-1780 Series.

Part Number	Delivery Pressure Range	Pressure Gauge*		Inlet & Outlet (F.N.P.T.)	Cv
		Range (PSI)	P/N		
1784A	5-55 psig	1-100	1286	1/2"	3.1
1784B	40-110 psig	1-200	S1679		
1784C	100-200 psig	1-400	15578		
1784D	175-300 psig				
1786A	5-55 psig	1-100	1286	3/4"	4.8
1786B	40-110 psig	1-200	S1679		
1786C	100-200 psig	1-400	15578		
1786D	175-275 psig				
1788A	5-55 psig	1-100	1286	1"	5.5
1788B	40-110 psig	1-200	S1679		
1788C	100-200 psig	1-400	15578		
1788D	175-275 psig				



1784B



Inertrol Outfits

INERTROL OUTFITS 4286 SERIES, 4289 SERIES & 4291 SERIES

Application

The 4286, 4289, and 4291 series Inertrol outfits are three stage nitrogen regulators especially designed to maintain oil filled transformer atmospheres at 0.5 psig (.03 barg). Each Inertrol outfit consists of a two-stage regulator connected in series to a highly sensitive single-stage regulator which maintains the 0.5 psig (.03 barg) pressure. A built-in pressure relief valve in the third stage regulator helps protect against over-pressurization of the system. Inertrol units are designed for oil-filled transformers manufactured by ABB, Inc., General Electric, and Cooper Power. Some outfits are equipped with an alarm switch that activates a customer equipped warning device should the cylinder pressure drop below 300 psig (20 barg) .

Features

- Heavy duty brass and aluminum construction resists corrosion and provides for longer life
- The 4289 series incorporates a special by-pass valve to allow for quick filling of the transformer
- Hidden pressure adjusting screw helps protect against tampering by unauthorized personnel
- Large diameter diaphragm in the third-stage regulator provides for sensitive and precise control of the gas flow
- Maximum inlet pressure - 3000 psig (206 barg)

Part Number	Gas Service	Inlet	Outlet		Two Stage Regulator Part number	Third Stage Regulator Part Number	Alarm Gauge	Transformer Manufacturer
			Inches	mm				
4286A580	Nitrogen	CGA580	1/8" NPT	3	4286A-2NW	LV4286-10-8	None	ABB, Inc.
4289AG			9/16" -18 L.H.	14	4289A-2G	LV4289-10	4285-9B	General Electric
4289G							None	
4291A			3/8" NPT	.9	4291B-2P	LV4286-10-8	4285-9B	Cooper Power



4291A

Low Pressure & Low Pressure Line Regulators

LOW PRESSURE REGULATORS 4286-10 SERIES & 4289-10 SERIES

Application

The 4286 and 4289 series inertrol third-stage low pressure regulators are designed especially for secondary regulation of gaseous nitrogen on electrical transformer systems. These regulators are factory preset at 14" to 15" water column delivery pressure with an inlet pressure of 5 to 10 PSIG.

Features

- Large diaphragm allows for highly sensitive and accurate low-pressure control
- Incorporates integral relief valves (except on 4289-10)
- Zinc body and bonnet resist corrosion and provide longer life
- Adjusting screw is concealed by a cap to help prevent against tampering by unauthorized personnel
- Operating temperature range is -40°F to +160°F



LV4286-10

Part Number	Inlet (NPT)	Outlet (NPT)	Delivery Pressure Setting	Relief Valve Setting
LV4286-10-5	1/4"	1/2"	14"-15" w. c.	5 PSIG
LV4286-10-8				8 PSIG
LV4289-10				None

LOW PRESSURE LINE REGULATORS 4403 SERIES

Application

The 4403 series regulators provide very sensitive control of a variety of gases at low pressures. The large, molded diaphragm assures responsive regulation with inlet pressures up to 250 PSI.

Features

- Large, molded diaphragm provides highly sensitive and accurate low-pressure control.
- Zinc body and bonnet resist corrosion and provide longer life.
- Teflon seat disc, Teflon faced diaphragms, and stainless-steel nozzles make the T4403J regulators compatible with a variety of gases.
- LV4403C2H42 features integral relief valve set at 3 psig.
- Adjusting screw is concealed by a plastic cap which helps prevent pressure adjustments by unauthorized personnel.
- Working temperature range is -40°F to +165°F. (-40°C to +74°C)
- Not suitable for oxygen applications



LV4403C2H42

Part Number	Inlet Connection	Outlet Connection	Factory Delivery Pressure*	Delivery Adjustment Range	Relief Setting
4403W-P4	1/2" F.NPT	1/2" F.NPT	6" w.c.	3.5 - 6" w.c.	None
4403W-R4			25" w.c.	15 - 28" w.c.	
4403W-S4			5 PSIG	1 - 5 PSIG	
4403W-T4			10 PSIG	5 - 10 PSIG	
4403W-U4			15 PSIG	10 - 15 PSIG	
LV4403C2H42	1/4" F.NPT		1.5 PSIG	1.5 PSIG	3 PSIG ± 20%
T4403JS2			5 PSIG	1 - 5 PSIG	None
T4403JT2			10 PSIG	5 - 10 PSIG	

*Based on 50 PSIG inlet pressure. LV4403C2H42 based on 100 PSIG inlet pressure.



Welding Regulators

INDUSTRIAL GAS REGULATORS

The S6000 is designed for most medium duty industrial cutting and welding applications.

The S8000 is designed for all-purpose medium-heavy duty industrial gas applications.

Product Features

- Body: forged brass
- Gauges: 2" on the S6000 series 2.5" on the S8000 series
- Ev technology: Encapsulated valve, assembled in a clean room, and contains sintered filter for maximum performance and long service life
- Flow control: CGA color coded knob

RMI Part No.	Gas Service	Inlet Connection	Max Inlet (PSIG)	Delivery Pressure Range (PSIG)	Outlet Connection
60H0900002	Oxygen	CGA540	3000	0-150	9/16-18LH
60H1900007	Acetylene	CGA510	500	0-15	9/16-18LH
60H1900011	Acetylene	CGA300	500	0-15	9/16-18LH
60H3900011	Ar,He,N2	CGA580	3000	0-150	9/16-18RH
6000200580	Ar,He,N2	CGA580	3000	0-200	9/16-18RH
80H0900005	Oxygen	CGA540	3000	0-150	9/16-18RH
80H1900008	Acetylene	CGA510	500	0-15	9/16-18LH
80H3900002	CO2	CGA320	3000	0-150	5/8-18RH
80H3900003	Ar,He,N2	CGA580	3000	0-150	9/16-18RH+ 5/8 adap
80H3900004	Ar,He,N2	CGA580	3000	0-200	9/16-18RH+ 5/8 adap

*For other configurations please contact customer service



60H390

CO2 Pumps

TURBINE PUMPS (CORO-FLO®)

HIGH DIFFERENTIAL PRESSURE TURBINE MODELS DLF-SERIES

Note: DL models connect to motor frame sizes 182TC through 215TC.

F-SERIES (FRAME MOUNTED)

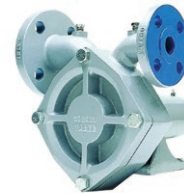
DIRECT MOUNT (C)

Base Model Number	Inlet	Outlet	Ship weight, pump (lbs)
DLF075	1-1/2" ASME (a)	1" ASME (a)	75
DLF150	1-1/2" ASME (a)	1" ASME (a)	75

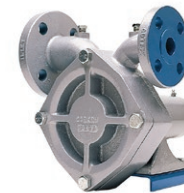
Note : (a) Class 300 RF flange

FRAME MOUNT

Base Model Number	Inlet	Outlet	Ship weight, pump (lbs)
F10	1-1/4" NPT	1" NPT	48
F12	1-1/2" NPT	1" NPT	48
F13	1-1/2" NPT	1" NPT	48
F14	1-1/2" NPT	1" NPT	48



DLF150



FI4CD2A

BLACKMER LIQUEFIED GAS PUMPS

Blackmer Liquefied Gas Pumps specifically designed for liquid CO2 service. High efficiency sliding vane, positive displacement pumps offer the best combined characteristics of sustained high level performance, energy efficiency, trouble free operation and low maintenance cost.

RMI Part No.		Inlet/Outlet	HP	Capacity GPM	
Pump & base	Pump only			50#	90#
CRLR1.25-DM	CRLR1.25	1-1/4"	2	6 GPM	1 X
CRL1.25-DM	CRL1.25	1-1/4"	3	11 GPM	7.5 GPM
CRL1.5-DM	CRL1.5	1-1/2"	3	17 GPM	15 GPM

RMI Part No.		Inlet/Outlet	Capacity GPM	
Pump & base	Pump only		50#	90#
TCRLF4		4" 300# flange Twin 2" NPT	275	245

RMI Part No.		Inlet/Outlet	Capacity GPM	
Pump & base	Pump only		50#	90#
CRL2-DM	CRL2	2"	62	55
CRL3-DM	CRL3	3"	120	95
CRL4-DM	CRL4	4" - 3"	275	245



CRL-1.25



CRL-3

BLACKMER BYPASS VALVES

Blackmer Bypass Valves are designed to protect pumps and system components from excessive pressure and system components from excessive pressure damage. In operation, Blackmer valves provide exceptional close pressure control, even under widely varying bypass conditions.

RMI Part No.	Size	Pump Size	STD PSI Range
BV-3/4	3/4"	1-1/4 - 1-1/2	70-100
BV-1	1"	1-1/4 - 1-1/2	70-100
BV-1-1/4	1-1/2"	1-1/2 - 2"	70-100
BV-1-1/2	3/4"	2 - 3"	90-125
BV-2	3/4"	3 - 4"	90-125



BV-1

CORKEN BYPASS VALVE

Dual purpose automatic priming and differential bypass valve. Allows vapor to return to tank keeping line primed.

RMI Part No.	Description	Cap. (GPM)
BI66-75	3/4" Bypass Valve 50-150 PSI	30
BI66-1	1" Bypass Valve 50-150 PSI	40
TI66-1.25	1-1/4" Bypass Valve 50-150 PSI	80
TI66-1.5	1-1/2" Bypass Valve 50-150 PSI	100



BI66-1



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Hoses & Pigtails

CRYOGENIC HOSE

1/2" inner diameter extremely flexible stainless steel hose to provide the most durable hose for your cryogenic transfer applications. Machine flare ends and stainless steel hex nuts are standard on these hoses.

RMI Part No.	Description
TCHISS048G	CGA 295 1/2" FX 1/2" F 48" with armor
TCHISS072G	CGA 295 1/2" FX 1/2" F 72" with armor
TCHOSS048G	CGA 440 5/8" FX 5/8" F 48" with armor
TCHOSS072G	CGA 440 5/8" FX 5/8" F 72" with armor
FA50090	Liquid Cylinder QC CGA 295 90 degree 1/2" SS
FA500S	Liquid Cylinder CGA 295 straight 1/2" SS
FA62590	Liquid Cylinder QC CGA 440 90 degree 5/8" SS
FA625S	Liquid Cylinder QC CGA 440 straight 5/8" SS
FA625T	Liquid Cylinder QC T Adapter CGA 440 5/8" SS
9551-MACRO	Cryogenic Swivel Male CGA440 x CGA440
9551-3	Cryogenic Swivel Female CGA440 x Male CGA440
9551-5	Cryogenic Swivel Male CGA295 x 3/8' MNPT
9551-RK	Cryogenic Swivel for 9551 Swivels

* For custom hoses please inquiry with customer service



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CRYO HOSE WITH ARMOR



FA500S



FA625T

TEFLON LINED STAINLESS STEEL BRAIDED PIGTAILS - 3000 PSIG

Teflon core pigtails surpass the requirements of CGA E.9. Constructed with a smooth core of white PTFE and exterior 300 series stainless steel braid. Highly flexible and lightweight. Each pigtail is pressure tested to 1-1/2 times working pressure.

PIGTAIL OPTIONS (fitting part number change in parenthesis):

CALL RAY MURRAY, INC. FOR ASSISTANCE

Brass male NPT (114) end fitting instead of female NPT (144)

Brass street elbow installed and pressure tested (PL-4HP)

- Brass CGA Nut and Nipple installed and pressure tested
- Brass CGA Handtight Nut and soft-tip nipple installed and pressure tested
- Brass CGA Nut and Check Valve nipple installed and pressure tested
- Brass CGA NUT and Check Valve Nipple installed and pressure tested
- Brass extension Adapter (BE-4-3HP)
- 316SS MNPT fitting-per end (214)
- 316SS FNPT fitting-per end (244)
- 316 FNPA special swivel fitting (244S)

**TSC, 3000 PSIG RATED, 1/4" FEMALE NPT BRASS END FITTINGS
WORKING PRESSURE 3000 PSIG/BURST PRESSURE 12,000 PSIG**

RMI Part No.	LENGTH	SERVICE	ID	OD (no armor)	OD (w/armor)	# BRAIDS	DYNAMIC BEND RADIUS
PF2-4-12	12"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-18	18"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-24	24"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-36	36"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-48	48"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-72	72"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-84	84"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-120	120"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-240	240"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"



05TSC STAINLESS PIGTAIL

**"SAFETY PIGTAIL" TSC W/ ANTI-WHIP, ANTI-KINK, STAINLESS STEEL ARMOR CASING,
1/4" FEMALE NPT ENDS WORKING PRESSURE 3000 PSIG/BURST PRESSURE 12,000 PSIG**

RMI Part No.	SERVICE	ID	OD (no armor)	OD (w/armor)	# BRAIDS	DYNAMIC BEND RADIUS
05TSC-144-144-XX-A	Inert	1/4"	0.375"	0.54"	1	3.0"
05TSC-144-144-XX-A-CCB	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call **800-628-5044**

Hoses & Pigtails

CO2 BEVERAGE DELIVERY HOSE

Parker 1/2" dispensing hose for CO2 transfer and Beverage Delivery trucks.

- FDA compliant polyethylene core tube
- CFR21 Part 177 compliant core
- Maximum working pressure of 2000psi
- Working temperature range -40°F-150°F
- Easy to clean



540P-8

RMI Part No.	Description
540P-8-100 HOSEKIT	1/2" CO2 Beverage Delivery Hose 100' long w/ 1/2" MNPT ends
540P-8 HOSEKIT	Custom Length 1/2" CO2 Beverage Delivery Hose

* Custom Lengths are available and crimped in house

CO2 SERVICE EXTENDED SERIES HORIZONTAL MOUNT FLOAT GAUGES

Designed to measure CO2 liquid levels within horizontal DOT tanks with fluid capacities above 2,300 gallons.

For maximum gauge life, the float arm features an integral spring-loaded shock absorber for harsh over-the-road applications.

The standard dial face features a black background for reduced glare with glow technology providing an easy to read "glow in the dark" dial face, perfect for low light applications.

Note: These gauges must be installed on the centerline of the tank side or end for accurate liquid level readings.

Features

- 4" or 8" Standard "Glow Dial" available
- Utilizes standard heavy duty MEC Accu-Max series float gauge mechanism.
- 6' extension tube is standard (custom configurations available upon request)
- Epoxy glass laminated extension tube
- Extension chamber purged with inert gas (Nitrogen) and hermetically sealed
- All stainless steel construction for maximum durability and corrosion resistance
- Welded tube to coupling design for maximum strength and durability
- Integral spring loaded shock absorber
- Exclusive easy to read "glow in the dark" dial face, perfect for low light applications
- Dial face 100% Argon filled & hermetically sealed to prevent moisture build-up & fogging
- Dial face and mounting hardware are universal with other industry standard gauges
- Mounts to all standard 8 bolt tank flange adapters
- 100% factory sealed and precision tuned for superb accuracy (+/- 2% full range)
- Custom configurations available upon request



ME934

RMI Part No.	Type	Dial Face	Dial Size	Tank Diameter	Extension Length
ME934-61-6-1826	DOT	Glow/Black	4"	61"	6"
ME935-61-6-1826	DOT	Glow/Black	8"	61"	6"

CO2 FLOAT GAUGE ACCESSORIES

RMI Part No.	Connection	Connection	Installation Tool
ME391	2-1/2" MNPT	1/2"-13 Female	MEP930WG
ME392*	Weld	1/2"-13 Female	

* Weld flanges supplied with material certification



Non-stock/special order items are not cancellable or returnable

Shop online at www.raymurray.com or call 800-628-5044

Hoses & Pigtails

CARBON DIOXIDE LIQUID TRANSFER HOSES

Flexible Components brand Polar® hose overcomes the problems caused by misapplication of rubber hose used in earlier CO2 transfer applications. They tended to crack due to the cold temperatures associated with CO2 transfer and could become stiff, brittle and hard to handle. Metal hose remains flexible in the cold but is much heavier and harder to handle. In addition, corrugations inside metal hose can cause turbulence, trap solid CO2 ice causing plugging of the hose, valves, and pipes during the transfer.

- Specifically designed for bulk CO2 transfer
- Specially formulated elastomer that is compatible with CO2 and low temperatures.
- Stainless steel inner braids for strength and durability
- Lightweight
- Flexible

RMI Part No.	Description	Max Working Pressure	Temperature Range
16POL0505AB-168	1" Hose, 276", 1" FNPT x 1" FNPT Ends	450psi	-65°F to 212°F
16POL0505UAB-276	1" Hose, 276", 1" FNPT x 1.5" FNPT Ends	450psi	-65°F to 212°F
24POL0505AB-192	1.5" Hose, 192", 1.5" FNPT x 1.5" FNPT Ends	450psi	-65°F to 212°F
24POL0505UAB-276	1.5" Hose, 276", 1.5" FNPT x 2" FNPT Ends	450psi	-65°F to 212°F

*Inquire with customer service for other lengths and end Configurations.



POLAR HOSE

CO2 LIQUID TRANSFER CONNECTIONS CGA V6

MOUNTING CLAMPS

RMI Part No.	Size	Description
ME363-8	1"	Stainless Steel Mounting Clamp with Hardware
ME363-12	1-1/2"	
ME363-16	2"	

FIXED END ADAPTER FITTING ASSEMBLIES W/ PURGE PORT & CAP

RMI Part No.	Size	Male ACME	Purge Port	Description	Swivel End Coupling #	Plug#
ME362-8	1" MNPT	1-11/16"	1/2" FNPT	Brass Fixed End Assembly with Purge Port, Cap, and Lanyard	ME362-8M	ME361-8C



ME363

ME363 FITTING NOT INCLUDED

FIXED END ADAPTER FITTING ASSEMBLIES W/ CAP

RMI Part No.	Size	Male ACME	Description	Swivel End Coupling #	Plug#
ME361-8	1" MNPT	1-11/16"	Brass Fixed End Assembly with Cap and Lanyard	ME361-8M	ME360-8C
ME361-12	1- 1/2" MNPT	2-1/4"		ME361-12M	ME361-12C
ME361-16	2" MNPT	2"		ME36116M	ME361-16C



ME362-8



ME361-16

RMI Part No.	Size	Female ACME	Description	Swivel End Coupling #	Plug#
ME360-8	1" MNPT	1-11/16"	Brass Hose Swivel Assembly with Plug and Lanyard	ME360-8MS	ME360-8P
ME360-12	1- 1/2" MNPT	2-1/4"		ME360-12MS	ME360-12P
ME360-16	2" MNPT	2"		ME360-16MS	ME360-16P



ME360-8

Pressure Gauges, Fill Connectors

PRESSURE GAUGES

2-1/2" DIAMETERS X 1/4" NPT

RMI Part No.	Gauge Type
G-25-30RLW	30 PSIG Red Line
G-25-30W	30 PSIG
G-25-60W	60 PSIG
G-25-100W	100 PSIG
G-25-200W	200 PSIG
G-25-400W	400 PSIG
G-25-600W	600 PSIG
G-25-1000W	1000 PSIG
G-25-4000W	4000 PSIG
G-25-CW	Lexan crystal

2" DIAMETERS X 1/4" NPT

RMI Part No.	Gauge Type
G-2-30RLW	30 PSIG Red Line
G-2-30W	30 PSIG
G-2-60W	60 PSIG
G-2-100W	100 PSIG
G-2-200W	200 PSIG
G-2-400W	400 PSIG
G-2-600W	600 PSIG
G-2-1000W	1000 PSIG
G-2-4000W	4000 PSIG
G-2-CW	Lexan crystal



G-25-4000W

IMPORTANT: Installation requires Teflon tape or OC-3 compound to guard against leakage.

FILL CONNECTORS

High quality fill yokes to accommodate CGA 870, CGA 880 or CGA 940 service. Manufactured to 3000PSI service pressure. T-handle or plastic knob available in each service.

MEDICAL FILL YOKES

RMI Part No.	Service	Description
M87-4	CGA 870	Yoke x 1/4" MNPT, T-Handle
MFY-870-4H	CGA870	Yoke x 1/4" MNPT, plastic knob
M88-4	CGA 880	Yoke x 1/4" MNPT, T-Handle
MFY-880-4H	CGA 880	Yoke x 1/4" MNPT, plastic knob
M94-8	CGA 940	Yoke x 1/4" MNPT, T-Handle
MFY-940	CGA940	Yoke x 1/4" MNPT, plastic knob



M87-4



MFY870-4H

EXTENDED C02 FILL CONNECTOR

RMI Part No.	Service	Description
SSCO2-EF	CGA 320	Handtight fill connector 6" diameter handwheel



SSCO2-EF

CGA 540 STANDARD CONNECTOR WITH BAIL HANDLE STYLE FOR INDUSTRIAL OXYGEN APPLICATIONS

RMI Part No.	Description
G540-0411-IND	CGA 540 Fill Connector w/ Bail Handle
CI-146922	Sleeved CGA 540 Fill Connector



G540-0411-IND



CI-146922



Pressure Gauges, Fill Connectors

FASTEST MEDIMATE 870

The FasTest MediMate 870 is a yoke style connector used for medical oxygen applications. MediMate is simple to use with a no twist, no turn approach to filling. Simply connect our product onto your valve and lock into place with a forward movement of the actuator lever and you are ready to fill the cylinder in seconds. It has an aluminum body and stainless seal actuator piston to maximize product performance and service life. Each MediMate is supplied with a straight flow 180 degree termination port and FDA grade Viton elastomer seals. The elastomer compound used is based upon industry approval and performance characteristics for the application. FasTest offers other elastomer compounds upon request.

- Rated to 3600 psi
- Aluminum body, Delrin actuator lever & Stainless steel actuator piston
- FDA grade Viton elastomer seals
- Cleaned for O2 service
- Weight 15.2 oz.



FC870A_ TANKCLOSED IMAGE

FC870A

RMI Part No.	Description	Replacement Seals
FC870A	CGA 870 Connector, 1/4" MNPT Inlet	SG870-5

CGA 580 STND

The inert gas connector is simple to use with a no twist, no turn approach to filling. Simply connect our product onto your valve and lock into place with a forward movement of the bail handle roller actuator and you are ready to fill the inert gas cylinder in a matter of seconds. Features and benefits include:

- Stainless steel and brass body wetted components
- Stainless steel bail handle for strength and operator safety under pressure
- Heavy duty "through body" design at bail handle connection point
- Simple, one hand operation bail handle roller actuation
- 3600 psi rating, 40 ounce weight



FC580-WEH

RMI Part No.	Description	Replacement Seals
FC580-WEH	CGA 580, #1 Handle, 1/4" MNPT Inlet	SG580

CGA 580 PRV

The G580 RPV inert gas connector is simple to use with a no twist, no turn approach to filling. Simply connect our product onto your valve and lock into place with a forward movement of the bail handle roller actuator and you are ready to fill the inert gas cylinder in a matter of seconds. Features and benefits include:

- Stainless steel and brass body wetted components
- Stainless steel bail handle for strength and operator safety under pressure
- Heavy duty "through body" design at bail handle connection point
- Simple, one hand operation bail handle roller actuation
- 3600 psi rating, 46 ounce weight



C1-117540

RMI Part No.	Description	Replacement Seals
C1-117540	CGA 580 PRV, #1 Handle, MNPT Inlet	SG580RPV
G580RPVP	Pin Retraction Tool	G580RPVPT



Pipe Thread & CGA Fittings

PIPE THREAD ADAPTORS, FEMALE TO MALE PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
BA-2HP	1/8" NPT x 1/8" NPT	Brass	.875"	9/16"
BA-4-2HP	1/4" NPT x 1/8" NPT	Brass	1.062"	3/4"
BA-4HP	1/4" NPT x 1/4" NPT	Brass	1.281"	3/4"
BA-6-4HP	3/8" NPT x 1/4" NPT	Brass	1.312"	7/8"
BA-8-4HP	1/2" NPT x 1/4" NPT	Brass	1.50"	1-1/8"
BA-8-6HP	1/2" NPT x 3/8" NPT	Brass	1.562"	1-1/8"


BA-4HP

PIPE THREAD BUSHINGS, FEMALE TO MALE PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
BB-2-4HP	1/8" NPT x 1/4" NPT	Brass	.937"	5/8"
BB-2-6HP	1/8" NPT x 3/8" NPT	Brass	1.437"	11/16"
BB-4-6HP	1/4" NPT x 3/8" NPT	Brass	1.50"	3/4"
BB-4-8HP	1/4" NPT x 1/2" NPT	Brass	1.875"	7/8"
BB-6-8HP	3/8" NPT x 1/2" NPT	Brass	1.937"	7/8"
BB-4-12HP	1/4" NPT x 3/4" NPT	Brass	1.437"	1-1/8"
BB-8-12HP	1/2" NPT x 3/4" NPT	Brass	1.437"	1-1/8"


BB-2-4HP

PIPE THREAD COUPLINGS, FEMALE TO FEMALE PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
BF-2HP	1/8" NPT x 1/8" NPT	Brass	.800"	9/16"
BF-4HP	1/4" NPT x 1/4" NPT	Brass	1.187"	3/4"
BF-6HP	3/8" NPT x 3/8" NPT	Brass	1.18"	7/8"
BF-8HP	1/2" NPT x 1/2" NPT	Brass	1.50"	1-3/8"
BF-12HP	3/4" NPT x 3/4" NPT	Brass	1.52"	1-3/8"
BB-4-12HP	1/4" NPT x 3/4" NPT	Brass	1.437"	1-1/8"


BB-2-4HP

PRESSURES TO 6000 PSI (41,300 KPA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
BF-4SS	1/4" NPT x 1/4" NPT	St. Steel	1.187"	3/4"

COUPLER TEES

RMI Part No.	RMI Part No.	Service	Description
w/o Check Valve	with Check Valve		
T-16	T-16CV	CGA-300	Brass, RH Female
T-15	T-15CV	CGA-510	Brass, LH Male
T-296	N/A	CGA-296	Brass, RH Male
T-CO-2	T-CO-2CV	CGA-320	Brass, RH Female
T-326	T-326CV	CGA-326	Brass, RH Female
T-346	T-346CV	CGA-346	Brass, RH Female
T-82	T-82CV	CGA-350	Brass, LH Female
T-62	T-62CV	CGA-540	Brass, RH Female
T-72	T-72CV	CGA-555	Brass, LH Female
T-92	T-92CV	CGA-580	Brass, RH Female
T-93	T-93CV	CGA-590	Brass, LH Male
T-347	N/A	CGA-347	Brass, RH Female
T-680	N/A	CGA-680	Brass, RH Male


T-62

T-92

PIPE THREAD EXTENSION ADAPTORS FEMALE TO MALE

BRASS - PRESSURES TO 3,000 PSI (20,700 KPA)

RMI Part No.	Desc. (In.)	Length	Hex
BE-2-25HP	1/8" NPT	2-1/2"	9/16"
BE-4-3HP	1/4" NPT	3"	3/4"


BE-4-3HP


Pipe Thread & CGA Fittings

PIPE THREAD CROSSES

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
4-Way Female			
PCR-2HP	1/8" NPT	Brass	3,000 (20,700)
BCR-4LP	1/4" NPT	Brass	1000 (6,900)
BCR-4HP	1/4" NPT	Brass	3,000 (20,700)
PCR-4SS	1/4" NPT	St. Steel	6,000 (41,300)



BCR-4HP

PIPE THREAD ELBOWS TABLE

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
90° Female To Female NPT:			
BEL-2-2 LP	1/8" x 1/8"	Brass	1000 (6,900)
BEL-4-4 LP	1/4" x 1/4"	Brass	1000 (6,900)
BEL-4HP	1/4" x 1/4"	Brass	3,000 (20,700)
BEL-6HP	3/8" x 3/8"	Brass	3,000 (20,700)
BEL-8HP	1/2" x 1/2"	Brass	3,000 (20,700)
90° Female To Male NPT: (Street)			
BL-2-2 LP	1/8" x 1/8"	Brass	1000 (6,900)
BL-2HP	1/8" x 1/8"	Brass	3,000 (20,700)
BL-4-2 LP	1/4" x 1/4"	Brass	1000 (6,900)
BL-4-4 LP	1/4" x 1/4"	Brass	1000 (6,900)
BL-4SS	1/4" x 1/4"	St. Steel	6,000 (41,300)
BL-4HP	1/4" x 1/4"	Brass	3,000 (20,700)
BL-6HP	3/8" x 3/8"	Brass	3,000 (20,700)
BL-8HP	1/2" x 1/2"	Brass	3,000 (20,700)
45° Female To Male NPT: (Street)			
BSL-4-4 LP	1/4" x 1/4"	Brass	1000 (6,900)
BSL-4HP	1/4" x 1/4"	Brass	3,000 (20,700)



BEL-4HP

**PIPE THREAD HEX NIPPLES, MALE TO MALE
PRESSURES TO 3000 PSI (20,700 KPA)**

RMI Part No.	Desc. (In.)	Material	Length	Hex
B-2HP	1/8" NPT x 1/8" NPT	Brass	.937"	7/16"
B-4HP	1/4" NPT x 1/4" NPT	Brass	1.437"	5/8"
B-6HP	3/8" NPT x 3/8" NPT	Brass	1.50"	11/16"
B-8HP	1/2" NPT x 1/2" NP	Brass	1.875"	7/8"
B-247	3/4" NPT x 3/4" NPT	Brass	1.937"	1-1/8"



B-4HP

PRESSURES TO 6000 PSI (41,300 KPA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
B-4SS	1/4" NPT x 1/4" NPT	St. Steel	1.43"	5/8"

**PIPE THREAD REDUCER BUSHINGS
MALE TO MALE**

BRASS, PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Desc. (In.)	Length	Hex
B-4-2HP	1/4" NPT x 1/8" NPT	1.25"	5/8"
B-6-2HP	3/8" NPT x 1/8" NPT	1.281"	11/16"
B-6-4HP	3/8" NPT x 1/4" NPT	1.467"	11/16"
B-8-4HP	1/2" NPT x 1/4" NPT	1.687"	7/8"
B-8-6HP	1/2" NPT x 3/8" NPT	1.718"	7/8"



B-4-2HP

PIPE THREAD REDUCER COUPLINGS

**FEMALE TO FEMALE
BRASS - PRESSURES TO 3,000 PSI (20,700 KPA)**

RMI Part No.	Desc. (In.)	Length	Hex
BF-4-2HP	1/4" NPT x 1/8" NPT	1.093"	3/4"
BF-6-4HP	3/8" NPT x 1/4" NPT	1.281"	7/8"
BF-8-4HP	1/2" NPT x 1/4" NPT	1.671"	1-1/8"
B-234	3/4" NPT x 1/2" NPT	1.7"	1-3/8"



BF-4-2HP

PIPE THREAD TEES

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
3-Way Female			
BFT-2LP	1/8" NPT	Brass	1000 (6,900)
PFT-2HP	1/8" NPT	Brass	3,000 (20,700)
BFT-4LP	1/4" NPT	Brass	1000 (6,900)
BFT-4HP	1/4" NPT	Brass	3,000 (20,700)
BFT-4SS	1/4" NPT	Brass	6,000 (41,300)
BFT-6HP	3/8" x 3/8"	Brass	3,000 (20,700)
BFT-8HP	1/2" x 1/2"	Brass	3,000 (20,700)
BFT-12HP	3/4" x 3/4"	Brass	3,000 (20,700)
Female x Male			
BMT-2HP	1/8" NPT (Branch)	Brass	3,000 (20,700)
BMT-4LP	1/4" NPT (Branch)	Brass	1000 (6,900)
BST-4LP	1/4" NPT (Street)	Brass	1000 (6,900)
BMT-4HP	1/4" NPT (Branch)	Brass	3,000 (20,700)
BST-4HP	1/4" NPT (Street)	Brass	3,000 (20,700)
BEL-2-2 LP	1/8" x 1/8"	Brass	1000 (6,900)
BSL-4-4 LP	1/4" x 1/4"	Brass	1000 (6,900)
BSL-4HP	1/4" x 1/4"	Brass	3,000 (20,700)



BFT-4HP



BMT-4LP



BST-4LP

Pipe Thread & CGA Fittings

CGA VALVE OUTLETS TO FPT

RMI Part No.	Service	Description
15-1	CGA-300	Brass, RH Male, .825" - 14 NGO to 1/4" NPT Female Commercial Acetylene, to 500 PSIG
CO-2-1	CGA-320	Brass, RH Male, .825" - 14 NGO to 1/4" NPT Female Carbon Dioxide, to 3000 PSIG
1321-1	CGA-326	Brass, RH Male, .825" - 14 NGO to 1/4" NPT Female Nitrous Oxide, to 3000 PSIG
1341-1	CGA-346	Brass, RH Male, .825" - 14 NGO to 1/4" NPT Female Air, to 3000 PSIG
SS-1341-1	CGA-346	SS, RH Male, .825" - 14 NGO to 1/4" NPT Female Air, to 3000 PSIG
347-1	CGA-347	Brass, RH Male, .825" - 14 NGO to 1/4" NPT Female Air, to 4700 PSIG
RMI347-ISS	CGA 347	SS, RH Male, .825" - 14 NGO to 1/4" NPT Female Air, from 3001 to 4700 PSIG
800-1	CGA-350	Brass, LH Male, .825" - 14 NGO to 1/4" NPT Female Hydrogen, Natural Gas, to 3000 PSIG
500-1	CGA-500	Brass, RH Female, .885" - 14 NGO to 1/4" NPT Female Medical Mixtures, to 3000 PSIG
ME301	CGA-510	Brass, LH Female, .885" - 14 NGO to 1/4" NPT Female POL Acetylene, Propane to 500 PSIG
ME302	CGA-510	Brass, LH Female, .885" - 14 NGO to 3/8" NPT Female POL Acetylene, Propane to 500 PSIG
ME303	CGA-510	Brass, LH Female, .885" - 14 NGO to 1/2" NPT Female POL Acetylene, Propane to 500 PSIG
ME304	CGA-510	Brass, LH Female, .885" - 14 NGO to 3/4" NPT Female POL Acetylene, Propane to 500 PSIG
415-1	CGA-540	Brass, RH Male, .903" - 14 NGO to 1/4" NPT Female Oxygen, to 3000 PSIG
SS-415-1	CGA-540	SS, RH Male, .903" - 14 NGO to 1/4" NPT Female Oxygen, to 3000 PSIG
414-1	CGA-555	Brass, LH Male, .903" - 14 NGO to 1/4" NPT Female Butane, Propane Liquid, 3000 PSIG
416-1	CGA-580	Brass, RH Female, .965" - 14 NGO to 1/4" NPT Female Argon, Helium, Nitrogen, to 3000 PSIG
417-1	CGA-590	Brass, LH Female, .965" - 14 NGO to 1/4" NPT Female Industrial Air, to 3000 PSIG
660-1	CGA-660	Brass, RH Male, 1.030" - 14 NGO to 1/4" NPT Female Nitrous Plus & Refrigerant Gases, to 3000 PSIG
SS-660-1	CGA-660	SS, RH Male, 1.030" - 14 NGO to 1/4" NPT Female Nitrous Plus & Refrigerant Gases, to 3000 PSIG


416-1

800-1

ME304

RMI347-ISS

Pipe Thread & CGA Fittings

CGA 300 - PRESSURES TO 500 PSI (3,400 KPA)

RMI Part No.	Service	Description
B-10	CGA-300	Brass, .825"-14 NGO RH Male to 1/4" NPT
B-12	CGA-300	Brass, .825"-14 NGO RH Male to 1/2" NPT
B-13	CGA-300	Brass, .825"-14 NGO RH Male to 3/4" NPT



B-10-1

CGA 320 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-20	CGA-320	Brass, .825"-14 NGO RH Male to 1/4" NPT
B-21	CGA-320	Brass, .825"-14 NGO RH Male to 3/8" NPT
B-22	CGA-320	Brass, .825"-14 NGO RH Male to 1/2" NPT
B-23	CGA-320	Brass, .825"-14 NGO RH Male to 3/4" NPT



B-20

CGA 326 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-1320	CGA-326	Brass, .825" - 14 NGO RH Male to 1/4" NPT
B-1321	CGA-326	Brass, .825"-14 NGO RH Male to 3/8" NPT
B-1322	CGA-326	Brass, .825"-14 NGO RH Male to 1/2" NPT
WMS-1-59	CGA-326	Brass, Check Valve Outlet to 1/2" NPT



B-1320

CGA 346 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-1340	CGA-346	Brass, .825" - 14 NGO RH Male to 1/4" NPT
B-1342	CGA-346	Brass, .825" - 14 NGO RH Male to 1/2" NPT
WMS-1-62	CGA-346	Brass, Check Valve Outlet to 1/2" NPT
B-1340SS	CGA-346	SS, .825" - 14 NGO RH Male to 1/4" NPT



WMS-1-62

CGA 347 - PRESSURES 3001 TO 4700 PSI

RMI Part No.	Service	Description
B-348	CGA-347	Brass, .825" - 14 NGO RH Male to 1/2" NPT
RMI347-4SS	CGA-347	SS, .825" - 14 NGO RH Male to 1/4" NPT



RMI347-4SS

CGA 350 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-30	CGA-350	Brass, .825" - 14 NGO LH Male to 1/4" NPT
B-32	CGA-350	Brass, .825" - 14 NGO LH Male to 1/2" NPT
B-33	CGA-350	Brass, .880" - 14 NGO LH Male to 3/4" NPT



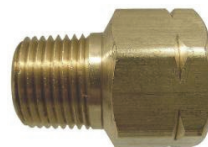
B-32



Pipe Thread & CGA Fittings

CGA 510 - PRESSURES TO 500 PSI

RMI Part No.	Service	Description
ME284	CGA-510	Brass, .885" - 14 NGO LH Female to 1/4" NPT
ME286	CGA-510	Brass, .885" - 14 NGO LH Female to 1/2" NPT
ME287	CGA-510	Brass, .885" - 14 NGO LH Female to 3/4" NPT


ME284

CGA 540 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-50	CGA-540	Brass, .903" - 14 NGO RH Male to 1/4" NPT
B-51	CGA-540	Brass, .903" - 14 NGO RH Male to 3/8" NPT
B-52	CGA-540	Brass, .903" - 14 NGO RH Male to 1/2" NPT
WMSI-53	CGA-540	Check Valve; Outlet to 1/2" NPT
B-53	CGA-540	Brass, .903" - 14 NGO RH Male to 3/4" NPT


B-52

CGA 580 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-70	CGA-580	Brass, .965" - 14 NGO RH Female to 1/4" NPT
B-71	CGA-580	Brass, .965" - 14 NGO RH Female to 3/8" NPT
B-72	CGA-580	Brass, .965" - 14 NGO RH Female to 1/2" NPT
WMS-1-54	CGA-580	Check Valve; Outlet to 1/2" NPT
B-73	CGA-580	Brass, .965" - 14 NGO RH Female to 3/4" NPT


B-70

CGA 590 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-80	CGA-590	Brass, .965" - 14 NGO LH Female to 1/4" NPT
B-83	CGA-590	Brass, .965" - 14 NGO LH Female to 3/4" NPT


B-80

CGA 660 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Description
B-660-SS	CGA-660	SS, 1.030" - 14 NGO RH Male to 1/4" NPT

CGA 677 - PRESSURES TO 6400 PSI

RMI Part No.	Service	Description
B-677-SS	CGA-677	SS, 1.030" - 14 NGO LH Male to 1/4" NPT
B-678-SS	CGA-677	SS, 1.030" - 14 NGO LH Male to 1/2" NPT
B-679-SS	CGA-677	SS, 1.030" - 14 NGO LH Male to 3/4" NPT

CGA 682 - PRESSURES TO 4700 PSI

RMI Part No.	Service	Description
B-682	CGA-680	Brass, 1.045" - 14 NGO RH Female to 1/2" NPT


B-682


Pipe Thread & CGA Fittings

"MC" TANK - ACETYLENE CGA-200
PRESSURE TO 500 PSI (3,400 KPA)

RMI Part No.	Service	Part	Description
305-2	CGA-200	Nut	Brass, "MC" T, .628-20 NGO, RH Female
305-3	CGA-200	Nipple	Brass, 7/16-20, 1-1/4 long
305-3A	CGA-200	Nipple	Brass, 1/8 NPT, 1-1/4 long



305-2



305-3

MEDICAL BREATHING MIXTURES
PRESSURE TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
284	CGA-280	Nut	Brass, .750-14 NGO, RH Female
283	CGA-280	Nipple	Brass, 1/4 NPT, 2" long



283



284

INDUSTRIAL MIXTURES OF OXYGEN
PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
29-2	CGA-296	Nut	Brass, .803-14 UNS-2A, RH Male
29-3	CGA-296	Nipple	1/4 NPT, 3" long



29-2



29-3

COMMERCIAL ACETYLENE
CGA-300 - PRESSURES TO 500 PSI (3,400 KPA)

RMI Part No.	Service	Part	Description
16-2	CGA-300	Nut	Brass, .830-14 NGO, RH Female
16-3	CGA-300	Nipple	Brass, 1/4 NPT, 1-15/16" long
16-8	CGA-300	Nipple	Brass, 1/4 NPT, 2-1/2" long
16-8CV	CGA-300	Nipple	Brass, 1/4 NPT, 2-1/2" long w/Ck. Valve
616-2P	CGA-300	Nut	H-Tight, Plastic Grip, RH Female
616-3	CGA-300	Nipple	H-Tight, 1/4 NPT, 2-1/2" L
616-PT	CGA-300	Tip	Soft Tip Replacement



16-2



16-3

CGA 320 FOR CARBON DIOXIDE
PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
CO-2	CGA-320	Nut	Brass, .830-14 NGO RH Female
CO-3	CGA-320	Nipple	Brass, 1/4 NPT, 2" long
CO-4	CGA-320	Nipple	Brass, 1/4 NPT, 2-1/2" long
CO-4CV	CGA-320	Nipple	Brass, 1/4 NPT, LH, 2-1/2" long w/Ck. Valve
CO-8	CGA-320	Nipple	Brass, 1/4 NPT LH, 2" long
CO-7	CGA-320	Nipple	Brass, 1/2 -27, 2-1/2" long
6-CO-2	CGA-320	Nut	Hand Tight, Brass, RH Female
6-CO-2P	CGA-320	Nut	Hand Tight, Plastic Grip, RH Female
6-CO-4	CGA-320	Nipple	Hand Tight, 1/4 NPT, 2-1/2" long
6-CO-4M1	CGA-320	Nipple	Recessed for 1/4 OD Tube
SS-CO-2	CGA-320	Nut	SS, .830-14 NGO RH Female
SS-CO-3	CGA-320	Nipple	SS, 1/4 NPT, 2" long
CO-1TW	CGA-320	Washer	Teflon, Snap-In
MSWI	CGA-320	Washer	Fiber, Flat
CO-6	CGA-320	Washer	Teflon, Flat
CO-6N	CGA-320	Washer	Nylon, Snap-In



CO-2



CO-3

Pipe Thread & CGA Fittings

CGA 326 FOR NITROUS OXIDE
PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
13-2	CGA-326	Nut	Brass, .830-14 NGO RH Female
13-3	CGA-326	Nipple	Brass, 1/4 NPT, 2-1/2" long
13-3CV	CGA-326	Nipple	Brass, 1/4 NPT, 2-1/2" long w/Ck. Valve
613-2	CGA-326	Nut	Hand-Tight, Brass, RH Female
613-2P	CGA-326	Nut	Hand-Tight, Plastic Grip, RH Female
613-5	CGA-326	Nut	Hand-Tight, 1/4 NPT, 2-1/2" long
613-KPT	CGA-326	Tip	Soft Tip, Replacement
SS-13-2	CGA-326	Nut	SS, .830-14 NGO RH Female
SS-13-3	CGA-326	Nipple	SS, 1/4 NPT, 2-1/2" long
6-CO-4MI	CGA-320	Nipple	Recessed for 1/4 OD Tube
SS-CO-2	CGA-320	Nut	SS, .830-14 NGO RH Female
SS-CO-3	CGA-320	Nipple	SS, 1/4 NPT, 2" long



13-2



13-3

CGA-346 - PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
14-2	CGA-346	Nut	.830-14 NGO-RH-INT, Wrenchtight
SS-14-2	CGA-346	Nut	.830-14 NGO-RH-INT, Wrenchtight, SS
614-2	CGA-346	Nut	.830-14 NGO-RH-INT, Hand-Tight, Brass
614-2P	CGA-346	Nut	.830-14 NGO-RH-INT, Hand-Tight, Plastic
14-3	CGA-346	Nipple	1/4" NPT, 2-1/2" long
SS-14-3	CGA-346	Nipple	SS 1/4" NPT, 2-1/2" long
614-5	CGA-346	Nipple	1/4" NPT x 2-1/2" Nipple w/Kel-F Tip
614-KPT	CGA-346	Tip	Replacement Kel-F Tips



14-2



14-3

CGA-347 - PRESSURES 3001 TO 4700 PSI

RMI Part No.	Service	Part	Description
347-2	CGA-347	Nut	Brass, .830-14 NGO, LH Female
347-3	CGA-347	Nipple	Brass, 1/4" NPT, 3" long
6347-2	CGA-347	Nut	Hand-Tight, RH Female
6347-3	CGA-347	Nipple	Hand-Tight, 1/4" NPT, 3" long
RMI347-2SSS	CGA-347	Nut	SS, .830-14 NGO, LH Female
RMI347-3SSS	CGA-347	Nipple	SS, 1/4" NPT, 3" long
RMI6347-2SS	CGA-347	Nut	Hand-Tight, SS RH Female
RMI6347-3SS	CGA-347	Nipple	Hand-Tight, SS, 1/4 NPT, 3" long
RMI6347-3-2SS	CGA-347	Screw	Retaining Screw
RMI6347-3-3	CGA-347	Oring	Replacement



347-2



347-3



RMI6347-2SS



RMI6347-3SS



Pipe Thread & CGA Fittings

CGA-350 - PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
82	CGA-350	Nut	Brass, .830-14 NGO, LH Female
83	CGA-350	Nipple	Brass, 1/4" NPT, 2-1/2" long
83-CV	CGA-350	Nipple	Brass, 1/4" NPT, 2-1/2" long, w/Ck. Valve
87	CGA-350	Nipple	Brass, 1/4" NPT, 3" long
682	CGA-350	Nut	Hand-Tight, Brass, LH Female
682P	CGA-350	Nipple	Hand-Tight, Plastic Grip, LH Female
683	CGA-350	Nipple	Hand-Tight, 1/4 NPT, 2-1/2" long
683-PT	CGA-350	Tip	Soft Tip, Replacement
SS-82	CGA-350	Nut	SS, .830-14 NGO, LH Female
SS-83	CGA-350	Nipple	SS, 1/4" NPT, 2-1/2" long



82



83

CGA 500 - PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
500-2	CGA-500	Nut	880-14 NGO-RH-EXT, Wrenchtight
15-8	CGA-500	Nipple	1/4" NPT x 2-1/2"
15-3	CGA-500	Nipple	1/4" NPT x 3"
15-4	CGA-500	Nipple	1/4" NPT x 4"
15-8CV	CGA-500	Nipple	1/4" NPT x 2-1/2" w/Ck. Valve



15-8



500-2

CGA 510 - PRESSURES TO 500 PSI (3,400 KPA)

RMI Part No.	Service	Part	Description
85NL	CGA-510	Nut	Brass, .880-14 NGO, LH Male
85TP	CGA-510	Nipple	Brass, 1/4" NPT, 2-1/2" long
15-8CV	CGA-510	Nipple	Brass, 1/4" NPT, 2-1/2" long, w/Ck. Valve
15-3	CGA-510	Nipple	Brass, 1/4" NPT, 3" long
15-4	CGA-510	Nipple	Brass, 1/4" NPT, 3-1/2" long
15-11	CGA-510	Nipple	Brass, 1/4" NPT, 4-1/4" long
15-9	CGA-510	Nipple	Brass, 1/2" - 27, 3" long
615-2	CGA-510	Nut	Brass, Hand-Tight LH Male
615-2P	CGA-510	Nut	Plastic Grip, Hand-Tight Nut, LH Male
615-3	CGA-510	Nipple	Hand-Tight, Brass, 1/4" NPT, 3-1/2" long w/O-Ring
615-3T	CGA-510	Nipple	Hand-Tight, Brass, 1/4" NPT, 3" long w/O-Ring
615-O	CGA-510	O-Ring	Replacement
615-PT	CGA-510	Tip	Soft Tip Replacement
SS-15-2	CGA-510	Nut	SS, .880-14 NGO, LH Male
SS-15-3	CGA-510	Nipple	SS, 1/4" NPT, 3" long
SS-15-3CV	CGA-510	Nipple	SS, 1/4" NPT, 3" long, w/Ck. Valve



85NL



85TP

CGA 520 - PRESSURES TO 500 PSI (3,400 KPA)

RMI Part No.	Service	Part	Description
300-2	CGA-520	Nut	Brass, .899-18 NGO. RH Female
300-3	CGA-520	Nipple	Brass, 1/4" NPT, 1-3/4" long



300-2



300-3



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Pipe Thread & CGA Fittings

CGA 540 - PRESSURES TO 3000 PSI (3,400 KPA)

RMI Part No.	Service	Part	Description
62XXXX	CGA-540	Nut	Brass, .908-14 NGO, RH Female
63-CV	CGA-540	Nipple	Brass, 1/4" NPT, 2" long w/Ck. Valve
63XXXX	CGA-540	Nipple	Brass, 1/4" NPT, 2" 1/16" long
66XXXX	CGA-540	Nipple	Brass, 1/4" NPT, 2-1/2" long
69XXXX	CGA-540	Nipple	Brass, 1/4" NPT, 3" long
67XXXX	CGA-540	Nipple	Brass, 1/2" - 27, 2-1/16" long
662	CGA-540	Nut	Brass, Hand-Tight RH Female
662P	CGA-540	Nut	Hand-Tight, Plastic Grip, RH Female
663-KPT	CGA-540	Tip	Soft Tip Replacement
SS-62	CGA-540	Nut	SS, .908-14 NGO, RH Female
SS-63	CGA-540	Nipple	SS, 1/4" NPT, 2-1/2" long



62

63

CGA 540 - PRESSURES TO 3000 PSI (3,400 KPA)

RMI Part No.	Service	Part	Description
72	CGA-555	Nut	Brass, .908-14 NGO, LH Female
63-CV	CGA-555	Nipple	Brass, 1/4" NPT, 2" long w/Ck. Valve
73	CGA-555	Nipple	Brass, 1/4" NPT, 2-1/16" long
673	CGA-555	H.T. Nipple	Brass, 1/4" NPT, 2-1/2" long
672P	CGA-555	H.T. Nut	Hand Tight Plastic Handle, .908-14 NGO, LH Female



72

73

CGA 577 - PRESSURES 3001 TO 3500 PSI

RMI Part No.	Service	Part	Description
577-2	CGA-577	Nut	Brass, .908-14 NGO, RH Female
577-4SF	CGA-577	Nipple	Brass w/Filter, 1/4" NPT, 3" long

CGA 580 - PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
92	CGA-580	Nut	Brass, .908-14 NGO, RH Female
15-3	CGA-580	Nipple	Brass, 1/4" NPT, 3" long
15-4	CGA-580	Nipple	Brass, 1/4" NPT, 3-1/2" long
15-8	CGA-580	Nipple	Brass, 1/4" NPT, 2-1/2" long
15-8CV	CGA-580	Nipple	Brass, 1/4" NPT, 2-1/2" long w/Ck. Valve
15-11	CGA-580	Nipple	Brass, 1/4" NPT, 4-1/2" long
15-9	CGA-580	Nipple	Brass, 1/2 - 27, 3" long
15-5	CGA-580	Nipple	Brass, 1/2 - 27, 4" long
15-6	CGA-580	Nipple	Brass, 9/16" x 25, 3" long
692	CGA-580	Nut	Hand-Tight, brass, RH male
692P	CGA-580	Nut	Hand-Tight, plastic grip, brass, RH male
615-3	CGA-580	Nipple	Hand-Tight, brass, 1/4" NPT, 3-1/2" long w/O-Ring
615-3T	CGA-580	Nipple	Hand-Tight, brass, 1/4" NPT, 3" long
615-O	CGA-580	Nipple	Replacement
615-PT	CGA-580	Tip	Soft Tip Replacement
SS-92	CGA-580	Nut	SS, .960-14 NGO, RH Male
SS-15-3	CGA-580	Nipple	Stainless St, 1/4" NPT, 3" long



15-3

92



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Pipe Thread & CGA Fittings

CGA 590 - PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
93	CGA-590	Nut	Brass, .960-14 NGO, LH Female
15-8	CGA-590	Nipple	Brass, 1/4" NPT, 2-1/2" long
15-8CV	CGA-590	Nipple	Brass, 1/4" NPT, 2-1/2" long w/Ck. Valve
15-3	CGA-590	Nipple	Brass, 1/4" NPT, 3" long
15-4	CGA-590	Nipple	Brass, 1/4" NPT, 3-1/2" long
15-11	CGA-590	Nipple	Brass, 1/4" NPT, 4-1/2" long
15-9	CGA-590	Nipple	Brass, 1/2 - 27, 3" long
15-5	CGA-590	Nipple	Brass, 1/2 - 27, 4" long
15-6	CGA-590	Nipple	Brass, 9/16" x 25, 3" long
693	CGA-590	Nut	Hand-Tight, Brass, LH male
693P	CGA-590	Nut	Hand-Tight, Plastic Grip, Brass, LH Male
615-3	CGA-590	Nipple	Hand-Tight, Brass, 1/4" NPT, 3-1/2" long w/O-Ring
615-3T	CGA-590	Nipple	Hand-Tight, Brass, 1/4" NPT, 3" long w/Soft Tip
615-O	CGA-590	O-Ring	Replacement
615-PT	CGA-590	Tip	Soft Tip Replacement
SS-93	CGA-590	Nut	SS, .960-14 NGO, LH Male
SS-15-3	CGA-590	Nipple	SS, 1/4 NPT, 3" long
SS-15-3CV	CGA-590	Nipple	SS, 1/4 NPT, 3" long w/Check Valve



15-3



93

CGA 660 - PRESSURES TO 3000 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
604	CGA-660	Nut	Brass, 1.035-14 NGO, RH Female
603	CGA-660	Nipple	Brass, 1/4 NPT, 1-3/4" long
603A	CGA-660	Nipple	Brass, 1/4 NPT, 2-3/4" long
665	CGA-660	Washer	Telfon
SS-603A	CGA-660	Nipple	Stainless St., 1/4 NPT, 2-3/4" long
SS-604	CGA-660	Nut	Stainless St, 1.035-14 NGO, RH Female



603



604

CGA 677 - PRESSURES 4701 TO 6400 PSI (41,300 KPA)

RMI Part No.	Service	Part	Description
SS-60-2	CGA-677	Nut	SS, 1.035-14 NGO, LH Female
SS-60-3	CGA-677	Nipple	SS, 1/4 NPT, 2-1/2" long
SS-60-4	CGA-677	Nipple	SS, 3/8 NPT, 3" long

CGA 680 - PRESSURES 3001 TO 4700 PSI (20,700 KPA)

RMI Part No.	Service	Part	Description
680-2	CGA-680	Nut	Brass, 1.040-14 NGO RH Male
680-3SF	CGA-680	Nipple	Brass w/Filter, 1/4" NPT, 3" long
680-4SF	CGA-680	Nipple	Brass w/Filter, 1/4" NPT, 3-1/2" long
6680	CGA-680	Nut	Hand-Tight (use with 680-4SF Nipple)



680-2



680-3SF

Pipe Thread & CGA Fittings

CGA 695 - PRESSURES 3001 TO 4700 PSI

RMI Part No.	Service	Part	Description
680-3SF	CGA-695	Nipple	Brass w/Filter, 1/4" NPT, 3" long
680-4SF	CGA-695	Nipple	Brass w/Filter, 1/4" NPT, 3-1/2" long
695-2	CGA-695	Nut	Brass 1-040-14NG0-LH-EXT


695-2

CGA 701 - PRESSURES 3001 TO 4700 PSI

RMI Part No.	Service	Part	Description
701-2	CGA-701	Nut	Brass, 1.008-14 NGO RH Female
701-4SF	CGA-701	Nipple	Brass w/Filter, 1/4" NPT, 3" long

CGA 702 - PRESSURES 4701 TO 6400 PSI

RMI Part No.	Service	Part	Description
702-2	CGA-702	Nut	Brass, 1.040-14 NGO LH Male
680-3SF	CGA-702	Nipple	Brass w/Filter, 1/4" NPT, 3" long
680-4SF	CGA-702	Nipple	Brass w/Filter, 1/4" NPT, 3-1/2" long


680-3SF

702-2

CGA 705 - PRESSURES TO 3000 PSI

RMI Part No.	Service	Part	Description
SS-705	CGA-705	Nut	SS, 1.125-14 UNS-2A LH Female
SS-705-3	CGA-705	Nipple	SS w/Filter, 1/4" NPT, 2-1/2" long
705	CGA-705	Washer	Teflon

CGA DUST CAP ASSEMBLIES

RMI Part No.	Service	Description
DC-320	CGA 320	For Carbon Dioxide
DC-346	CGA 346	For Breathing Air
DC-350	CGA 350	For Hydrogen
DC-510	CGA 510	For Acetylene
DC-540	CGA 540	For Oxygen
DC-580	CGA 580	For Nitrogen, Argon, Helium

IMPORTANT: Dust Cap Assemblies DO NOT make Gas Tight Seal


DC-320

CHAIN AND PLUG ASSEMBLIES

RMI Part No.	Service	Description
927	CGA-022	Brass, 9/16-18, RH Female Nut & Plug
928	CGA-023	Brass, 9/16-18, LH Female Nut & Plug
C-907	CGA-024	Brass, 7/8-14, RH Female Nut & Plug
922	--	Brass, 5/8 - 18, RH Male Nut (AW-14A) & Nipple
9326	CGA-326	Brass, RH Female
9346	CGA-346	Brass, RH Female
9347	CGA-347	SS, RH Female
982	CGA-350	Brass, LH Female Nut & Nipple
915	CGA-510	Brass, LH Male Nut & Nipple
962	CGA-540	Brass, RH Female Nut & Nipple
992	CGA-580	Brass, RH Female Nut & Nipple


992


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Propane & Acetylene

GOSS FEAT HER FLAME® KITS & TIPS - "SCREW-IN STYLE"

Kits feature the adjustable Target Tips for professional soldering and brazing applications. These tips are very hot and have a compact flame. Kits also include a quick disconnect handle, 12 ft. hose and UL listed regulator. Choose from a wide selection of kits below.

- Max performance turbine flame
- Adjustable flame feature
- Unique mixer design reduces brazing time over conventional tips
- Tips have a filler and removable orifice
- Interchangeable with other quick disconnect style tips and equipment
- Made of heavy gauge stainless steel and brass

These kits include our most economically priced air-acetylene tips.

Their design makes them inexpensive while still producing excellent flame characteristics.

- Pencil Point/Feather Flame
- Adjustable flame feature
- Tips have a filter and removable orifice
- Heavy-duty UL listed regulator



GKA-1H

KITS

RMI Part No.	Tip No.	Reg. FTG
GKA-1H	GBA-3	"B" Cylinder
GKA-2H	GBA-3	"MC" Cylinder
GKA-31*	GBA-2, GBA-3, GBA-4	"B" Cylinder
GKA-32*	GBA-2, GBA-3, GBA-4	"MC" Cylinder
GKA-37H	GBA-4	"B" Cylinder
GKA-38H*	GBA-4	"MC" Cylinder

TIPS

RMI Part No.	Tip Size	Soft Solder
GBA-1	1/16"	1/16" - 1/8"
GBA-2	1/8"	1/8" - 1/4"
GBA-3	3/16"	1/4" - 1/2"
GBA-4	1/4"	1/2" - 1"
GBA-5	5/16"	1" - 1-1/2"
GBA-6	7/16"	2" - 4"

GOSS TARGET® KITS & TIPS - "SNAP-IN STYLE"

Kits feature the adjustable Target Tips for professional soldering and brazing applications. These tips are very hot and have a compact flame.

Kits also include a quick disconnect handle, 12 ft. hose and UL listed regulator. Choose from a wide selection of kits below.

- Max performance turbine flame
- Adjustable flame feature
- Unique mixer design reduces brazing time over conventional tips
- Tips have a filler and removable orifice
- Interchangeable with other quick disconnect style tips and equipment
- Made of heavy gauge stainless steel and brass



GKX-3B

KITS

RMI Part No.	Tip No.	Reg. FTG
GKX-3B	GGA-3, GGA-11	"B" Cylinder
GKX-4B	GGA-5, GGA-14	"B" Cylinder
GKX-5B	GGA-5	"B" Cylinder
GKX-5MC	GGA-5	"MC" Cylinder
GKX-6MC	GGA-3, GGA-8	"MC" Cylinder
GKX-7B	GGA-8	"B" Cylinder

TIPS

Tip Size	Soft Solder	Silver Braze	Soft Solder
GGA-2	1/4"	1/8" - 1/2"	1/8" - 1/4"
GGA-3	5/16"	1/4" - 1"	1/8" - 1/2"
GGA-5	3/8"	3/4" - 1-1/2"	1/4" - 3/4"
GGA-8	3/8"	1" - 2"	1/2" - 1"
GGA-11	7/16"	1-1/2" - 3"	7/8" - 1-5/8"
GGA-14	1/2"	2" - 4"	1" - 2"
GGA-32	3/4"	4" - 6"	1-1/2" - 4"



Propane & Acetylene

UW-1725 HAND TORCH

Handheld Propane /Mapp Torch for use with convenient small disposable bottles of Propane or Mapp gas.

- Convenient Piezo ignition
- Easily adjustable flame
- Safety lock to help prevent accidental ignition



UW-1725

RMI Part No.	Description
UW-1725	Adjustable Propane Hand Torch

GOSS PROPANE KITS WITH PENCIL AND BRUSH TIPS

KITS

RMI Part No.	Tip No.
GKP-102	GBP-2
GKP-105	BGP-5

Kits include: AP-1 handle, EP-70G regulator, MP-1 lighter and HEF-10 hose and tip listed

TIPS

Flame Dia.	Flame	Diameter	Soft Solder	BTU's @ 40psi
GBP-1	Pencil	5/8"	To 1/2"	6,000
GBP-2	Pencil	1"	To 1-1/2"	11,000
GBP-3	Brush	7/8"	To 2"	14,000
GBP-4	Brush	1-1/8"	To 3"	43,000
GBP-5	Brush	1-3/8"	To 4"	57,000
GBP-6	Brush	2"	To 6"	300,000



GKP-105

KITS

RMI Part No.	Tip No.
GKLP-2	GGT-3, GGT-5
GKLP-4	GGT-4
GKLP-4L	GGT-4L

Kits include: GH-4 handle, HP3-12 hose, EP-45G regulator and torch tip(s).

*Instant Igniter.

TIPS

Flame Dia.	Flame Dia.	Soft Solder	Silver Braze
GGT-2	5/16"	Up to 1/2"	Up to 1/4"
GGT-2J	5/16"	Up to 1/2"	Up to 1/4"
GGT-3	7/16"	Up to 1"	Up to 1/2"
GGT-4	1/2"	Up to 1-1/2"	Up to 3/4"
GGT-4L	1/2"	Up to 1-1/2"	Up to 3/4"
GGT-5	3/4"	Up to 2-1/2"	Up to 1-1/4"



GKLP-4

GOSS BLAZEBURNER TORCH KITS & TORCHES

This equipment can be used for weed burning, drying, heating, melting and other applications requiring large volumes of outdoor heat. Each uses vapor propane fuel and has a durable handle with rear on/off control valve. Used by contractors, farmers, fabricators as well as road, railway and industrial maintenance crews.

RMI Part No.	Description
GKP-320A	Contents: AP-20 Torch, MP-1 Lighter, HPX-10, 10 ft. hose with Cylinder Adapter
GKP-320MA	Contents: AP-20 Torch with Piezoelectric Ignighter Tip, HPX-10, 10 ft. hose with Cylinder Adapter



GKP-320MA

Flashback Arrester

FLASHBACK ARRESTERS

Flame Dia.	Gas	Inlet	Outlet
85-30/F	Fuel Gas	1" FNPT	1" FNPT
85/30/O2	Oxygen	1" FNPT	1" FNPT
145-197	Acetylene	1/4" FNPT	1/4" FNPT

* inquire with customer service for other sizes



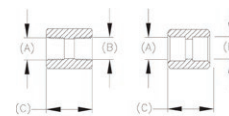
85-30/F

Manifold Fittings & Brass Pipe

BRASS ADAPTORS

BRASS ADAPTERS FEMALE X FEMALE

Part Number	A Female)		B Female)		C (Ref.)		Maximum Operating Pressure
	Inches	mm	Inches	mm	Inches	mm	
1125-15	1/2" NPT	13	1/2" NPT	13	15/8"	46	3000 psig (206 barg)
1044	3/4" NPT	19	3/4" NPT	19	2"	51	



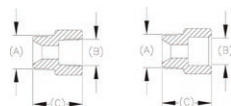
CGA FEMALE X FEMALE F

BRASS ADAPTERS FEMALE X FEMALEE

Part Number	A Female)		B Female)		C (Ref.)		Maximum Operating Pressure
	Inches	mm	Inches	mm	Inches	mm	
1125-16	.843-.847	21-22	.843-.847	21-22	15/8"	46	"3000 psig (206 barg)"
1044-1	1.053-1.057	27	1.053-1.057	27	2"	51	

BRASS ADAPTERS MALE X FEMALE

Part Number	A (Male)		B (Male)		C (Ref.)		Maximum Operating Pressure
	Inches	mm	Inches	mm	Inches	mm	
489-10	1/2" NPT	13	1/4" NPT	6	1-1/4"	38	"3000 psig (206 barg)"
1252	3/4" NPT	19			119/64"	33	
1252A			1/2" NPT	13			
2165-3	1" - 11-1/2 NPS-RH	25-292	3/4" NPT	19	127/32"	47	
2165-3B			.843-.847	21-22	13/16"	30	
2165-3A			1.053-1.057	27	127/32"	47	

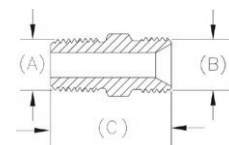


CGA MALE F X FEMALE F

BRASS ADAPTERS MALE X FEMALE

BRASS ADAPTERS MALE X MALE

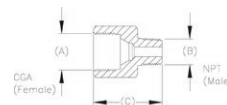
Part Number	A (Male)		B (Male)		C (Ref.)		Maximum Operating Pressure
	Inches	mm	Inches	mm	Inches	mm	
1300	1/4 NPT	6	9/16" - 18NF-LH	14-457	1-1/4"	32	3000 psig (206 barg)
1200							
2233-4HAL	1/2 NPT	13	1" - 11-1/2NPS-LH	25-292	2-3/8"	60	
2233-4HA							
2233-4HL	3/4 NPT	19			2-9/16"	65	
2233-4H							



BRASS ADAPTERS MALE X MALE

BRASS ADAPTERS CGA X MISC.

Part Number	A		B		C (Ref.)		Maximum Operating Pressure
	Inches	mm	Inches	mm	Inches	mm	
1877C	.580	15	1/2"	13	1-3/4"	44	3000 psig (206 barg)
1877D			3/4"	19			



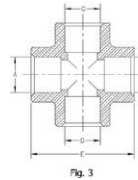
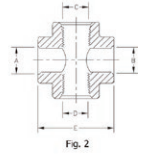
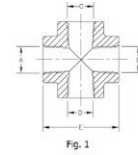
CGA X MISC

BRASS ADAPTERS CGA X MISC

Manifold Fittings & Brass Pipe

BRASS CROSSES

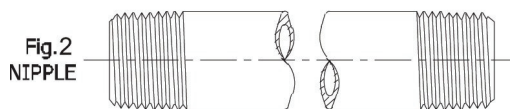
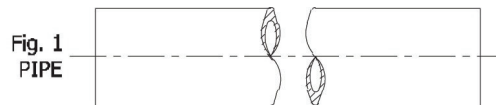
Part Number	Figure	A (Female)	B (Female)	C (Female)	D (Female)	E (Ref.)	Working Pressure*
		Inches	Inches	Inches	Inches	Inches	
1225-1	1	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT	2-1/4"	3750 psig
HP1225-1		3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT	3"	4500 psig
1045							
1225-3	2	.843-.847	.843-.847	1/2" NPT	1/2" NPT	2-1/4"	3750 psig
HP1225-3		1.053-1.057	1.053-1.057	3/4" NPT	3/4" NPT	3"	4500 psig
2222-2							
HP1225-4	3	.843-.847	.843-.847	.843-.847	.843-.847	3"	4500 psig
2222-4		1.053-1.057	1.053-1.057	1.053-1.057	1.053-1.057		



BRASS PIPE & PIPE NIPPLES

Heavy-duty, yellow brass pipe and pipe nipples are designed with a high quality, seamless thick wall construction. They are suitable for use in most industrial piping applications.

Part Number	Figure	Inside Diameter		Inlet / Outlet Connections (M.NPT)		Length		Maximum Operating Pressure*
		Inches	mm	Inches	mm	Inches	mm	
TNE1050-14400	1	1/2"	13	Not Available	-	12 Feet	3657	3600 psig (248.2 barg)
TNE1075-14400		3/4"	19					
1025-15	2	1/4"	6	1/4"	6	1.44"	37	
1050-10						1.13"	29	
1050-15						1.5"	38	
1050-20						2"	51	
1050-25						2.5"	63	
1050-40						4"	102	
1050-60		6"	152					
1050-80		8"	203					
1075-20		3/4"	19	3/4"	19	2"	51	
1075-30						3"	76	
1075-40						4"	102	
1075-50						5"	127	
1075-60						6"	152	



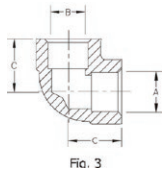
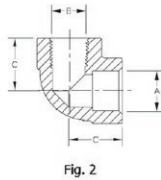
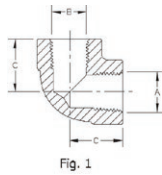
BRASS_PIPE_PIPE_NIPPLES_DRAWING



Manifold Fittings & Brass Pipe

BRASS ELBOWS

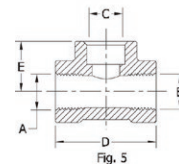
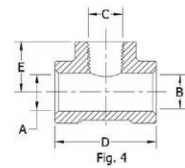
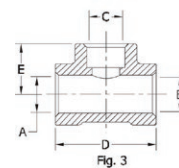
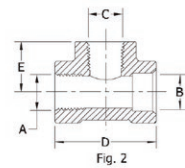
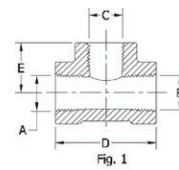
Part Number	Figure	A Female)		B Female)		C (Ref.)		Working Pressure
		Inches	mm	Inches	mm	Inches	mm	
1228-1	1	1/2" NPT	13	1/2" NPT	13	1-1/8"	28	3750 psig (258.7 barg)
HPI228-1		3/4" NPT	19	3/4" NPT	19	1-1/2"	38	4500 psig (310.5 barg)
1043								
1228-2	2	1/2" NPT	13	.843-.847	21-22	1-1/8"	28	3750 psig (258.7 barg)
HPI228-2		3/4" NPT	19	1.053-1.057	27	1-1/2"	38	4500 psig (310.5 barg)
2223-2								
1228-4	3	.843-.847	21-22	.843-.847	21-22	1-1/8"	28	3750 psig (258.7 barg)
HPI228-4		1.053-1.057	27	1.053-1.057	27	1-1/2"	38	6000 psig (414 barg)
2233-6								4500 psig (310.5 barg)



BRASS ELBOW

BRASS TEES

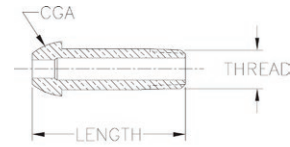
Part Number	Figure	A (Female)	B (Female)	C (Female)	D (Female)	E (Ref.)	Working Pressure psig*
		Inches	Inches	Inches	Inches	Inches	
1227-1	1	1/2" NPT	1/2" NPT	1/2" NPT	2-1/4"	1-1/8"	3750 psig
HPI227-1		3/4" NPT	3/4" NPT	3/4" NPT	3"	1-1/2"	4500 psig
1042-20							
1042							
1227-3	2	1/2" NPT	.843-.847	1/2" NPT	2-1/4"	1-1/8"	3750 psig
HPI227-3		3/4" NPT	1.053-1.057	3/4" NPT	3"	1-1/2"	4500 psig
4608-5	3	.843-.847	.843-.847	.843-.847	2-1/4"	1-1/8"	3750 psig
1227-28		1.053-1.057	1.053-1.057	1.053-1.057	3"	1-1/2"	4500 psig
HPI227-28							
2118-2	4	.843-.847	.843-.847	1/2" NPT	2-1/4"	1-1/8"	3750 psig
1227-9		1.053-1.057	1.053-1.057	3/4" NPT	3"	1-1/2"	4500 psig
HPI227-9							
2223-3	5	1/2" NPT	1/2" NPT	.843-.847	2-1/4"	1-1/8"	3750 psig
HPI227-5		1/2" NPT	1/2" NPT	.843-.847	3"	1-1/2"	4500 psig



Manifold Fittings & Brass Pipe

CGA BRASS TAILPIECES

Part Number	CGA Connection	Thread of Bore for Tubing	Length (Approx.)	Maximum Operating Pressure
2603-2U	510, 580, 590	1/4" NPT	13/32"	3000 psig (206 barg)



2603-2U
BRASS TAILPIECE

MISCELLANEOUS BRASS TAILPIECE

Part Number	For Use with Nut (RH or LH)		Thread of Bore for Tubing		Length (Approx.)		Maximum Operating Pressure
	Inches	mm	Inches	mm	Inches	mm	
2233-3A	1" - 11-1/2NPS	25-292	1/2" NPT	13	37/16"	87	"3000 psig (206 barg)"
2670-35			.312 I.D.	8	27/16"	62	

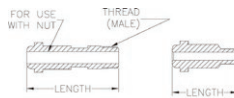


Fig. 1: THREADED Fig. 2: SWEAT END

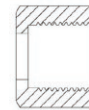
MISC. TAILPIECES

MISC BRASS TAILPIECES

BRASS UNION CONNECTION NUTS

"Part Number"	Thread Connection		Wrench Flats		Maximum Operating Pressure
	Inches	mm	Inches	mm	
1302-1	9/16" - 18-LH	17-457	11/16"	17	3000 psig (206 barg)
1271-1	7/8" - 14-RH	22-356	1-1/8"	29	
1371-1	7/8" - 14-LH	22-356			
2223-6	1" - 11-1/2 NPS-RH	25-292	1-3/4"	44	
2223-6A	1" - 11-1/2 NPS-LH	25-292			

Internal Threads

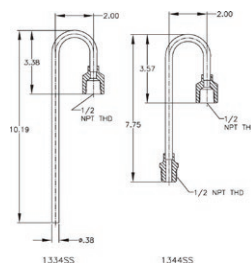


BRASS UNION CONN. NUTS

BRASS UNION CONN. NUT

CANDY CANE RISER TUBES AND ASSEMBLIES FOR PIPING-AWAY PRV-9400, SSA9400, PRV19400, & PRV29400 SERIES RELIEF VALVES FROM CRYOGENIC PIPING

Part Number	Tubing Material	Fitting Material	"A" PRV Connection		"B" Tubing OD		"C" Inlet Connection		Maximum Operating Pressure
			Inches	mm	Inches	mm	Inches	mm	
1332SS	Stainless Steel	Brass	1/4" FNPT	6	.375"	9	Tubing 0.375"	9	600 psig (41.37 barg)
1334SS			1/2" FNPT	13			.625"	16	
1344SS									
1344SSA									



1334SS & 1344SS RISER TUBES



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Raypex Pipe & Fittings

RAYPEX PIPE & FITTINGS

RAYPEX pipe is a five-layer composite pipe. The inside and outside layers are made of high density polyethylene (HDPE) tightly bonded by heating adhesive to the mid-layer of longitudinally welded aluminum core. All layers are extruded in one step. The pipe is manufactured to product standards. U.S. ASTM F1281 F1282 and meets OSHA requirements for above ground piping.

NOT FOR FLAMMABLES or OXYGEN SERVICE

RMI Part No.	Size	Description
RW451-50M	1/2"	RAYPEX Pipe 50M/164 ft.
RW451-100M	1/2"	RAYPEX Pipe 100M/328 ft.
RW551-50M	3/4"	RAYPEX Pipe 50M/164 ft.
RW551-100M	3/4"	RAYPEX Pipe 100M/328 ft.
RW601-50M	1"	RAYPEX Pipe 1" 50M/164 ft.
RW601-100M	1"	RAYPEX Pipe 1" 100M/328 ft.



RAYPEX



RW-451

RAYPEX 90° ELBOW

Elbow connects 2 ends of RAYPEX pipe of the same size.

RMI Part No.	Size
RW958	1/2"
RW978	3/4"
RW988	1"



RW958

RAYPEX REDUCING COUPLING

To connect RAYPEX pipe of different sizes.

RMI Part No.	Size
RW198	3/4" x 1/2"
RW558	1" x 3/4"



RW198

RAYPEX END CAP

To cap off the end of RAYPEX pipe.

RMI Part No.	Size
RW168	1/2"
RW188	3/4"
RW190	1"



RW188

RAYPEX 90° REDUCING ELBOW

Both ends connect to RAYPEX pipe to reduce up or down a size.

RMI Part No.	Size
RW946	3/4" x 1/2"
RW956	1" x 3/4"



RW946

RAYPEX COUPLING

Both ends connect to RAYPEX pipe of same size.

RMI Part No.	Size
RW008	1/2"
RW928	3/4"
RW288	1"

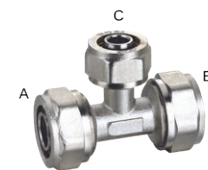


RW008

RAYPEX REDUCING TEE

Tees off RAYPEX pipe with one or two ends of different sizes.

RMI Part No.	A	B	C
RW098	3/4"	3/4"	x 1/2"
RW908	1"	1"	x 1/2"
RW158	1"	1"	x 3/4"



RW098

RAYPEX MALE THREAD ADAPTOR

Converts RAYPEX pipe to Male NPT thread.

RMI Part No.	Size
RW808	1/2" X 1/2" MPT
RW727	3/4" X 1/2" MPT
RW228	3/4" X 3/4" MPT
RW229	1" x 1/2" MPT
RW208	1" X 1" MPT



RW808

RAYPEX TEE

Connects 3 ends of RAYPEX pipe of equal size.

RMI Part No.	Size
RW068	1/2"
RW088	3/4"
RW148	1"



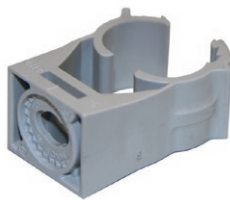
RW068

Raypex Pipe & Fittings
RAYPEX ACCESSORIES

RMI Part No.	Size	Description
RW308	1/2"	Clic Hanger
RW328	3/4"	Clic Hanger
RW338	1"	Clic Hanger
RWLAB-ARG	--	Argon Label
RWLAB-CO2	--	Carbon Dioxide label
RWLAB-NITRO	--	Nitrogen Label
RWSHEARS	--	Pipe cutter
RW888	--	Pipe Reamer
RW889	1/2"	Reamer/Beveler
RW890	3/4"	Reamer/Beveler
RW891	1"	Reamer/Beveler
RW005	--	O-Ring Lubricant
RW004	1/2" Inlet X 1/4" Outlet	Inert Station Drop w/ Ball Valve
RW009	1"	RAYPEX ORING
RW010	3/4"	RAYPEX ORING
RW011	1/2"	RAYPEX ORING
OC-3	4oz Tube	Teflon Thread Paste


OC-3

RW004

RW005

RW308

RW888-SM

RW890

RWLAB-ARGON

RWSHEARS


Rego Repair Kits

Kit Number	Part Number	Kit Contents
226XGF Series		
VB-226XGF-4-81	VB-226XGF-4	(1) Handwheel nut, (1) Bonnet bearing, (1) Packing Follower, (1) Grafoil Packing, (1) Packing adapter
VB-226XGF-6-81	VB-226XGF-6	
VB-226XGF-8-81	VB-226XGF-8	
VB-226XGF-12-81	VB-226XGF-12	
VB-226XGF-4-82	VB-226XGF-4	(1) Seat Disc Assembly, (1) Grafoil Gasket
VB-226XGF-6-82	VB-226XGF-6	
VB-226XGF-8-82	VB-226XGF-8	
VB-226XGF-12-82	VB-226XGF-12	
VB-226XGF-4-83	VB-226XGF-4	(1) Grafoil Gasket
VB-226XGF-6-83	VB-226XGF-6	
VB-226XGF-8-83	VB-226XGF-8	
VB-226XGF-12-83	VB-226XGF-12	
VB-226XGF-4KIT	VB-226XGF-4	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet & tube ASM, (1) Bonnet ring, (1) Seat Assembly, Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket, (1) Bonnet bearing, (1) Packing Follower, (1) Grafoil Packing, (1) Packing adapter
VB-226XGF-6KIT	VB-226XGF-6	
VB-226XGF-8KIT	VB-226XGF-8	
VB-226XGF-12KIT	VB-226XGF-12	

226BLL Series		
Kit Number	Part Number	Kit Contents
B-226BLL-12-81	B-206BLL-12, B-226BLA-12, B-226BLL-12	(1) Handwheel nut, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (1) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Packing separator
B-226BLL-16-81	B-226BLL-16	
B-226BLL-12-82	B-206BLL-12, B-226BLA-12, B-226BLL-12	(1) Seat Disc Assembly, (1) Gasket
B-226BLL-16-82	B-226BLL-16	
B-226BLL-12-83	B-206BLL-12, B-226BLA-12, B-226BLL-12	(1) Gasket
B-226BLL-16-83	B-226BLL-16	
B-226BLL-12KIT	B-206BLL-12, B-226BLA-12, B-226BLL-12	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet & tube ASM, (1) Bonnet ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (1) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket
B-226BLL-16KIT	B-226BLL-16	

202 Series		
Kit Number	Part Number	Kit Contents
B-202X-8-81	B-202X-8	(1) Handwheel nut, (1) Bonnet Bearing, (1) Gland Follower, (5) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Packing separator
B-202X-12-81	B-202X-12	
B-202X-16-81	B-202X-16	
B-202X-8-82	B-202X-8	(1) Seat Disc Assembly, (1) Gasket
B-202X-12-82	B-202X-12	
B-202X-16-82	B-202X-16	
B-202X-8-83	B-202X-8	(1) Gasket
B-202X-12-83	B-202X-12	
B-202X-16-83	B-202X-16	
B-202X-4KIT	B-202X-4	(1) Handwheel nut, (1) Handwheel, (1) Stem & Seat ASM, (1) Bonnet nut, (1) Bonnet, (1) Bonnet ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (5) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket, (1) Packing separator
B-202X-8KIT	B-202X-8	
B-202X-12KIT	B-202X-12	
B-202X-16KIT	B-202X-16	



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
T9450 Series, T9460 Series, ES8450 Series, TES8450 Series, BK9450 Series and BK9470 Series		
ES8450R	T9450 Series and T9460 Series	(1) Stem assembly (4"), (1) packing, (1) bonnet, (1) handwheel
BK9450-80	9450 Series, 9460 Series	(1) Stem assembly (1) Spring, (1) Jam Ring, (1) Packing V-ring, (1) Packing Gland, (1) O-ring Washer, (1) Locknut, (1) Gasket
BK9450R *	9450 Series, 9460 Series	(1) Extended Bonnet Assembly Kit, (1) Spring load packing for conversion of extended stem valves and topworks replacement
BKA8400R	BKA8412SE	(1) Stem assembly, (1) handwheel, (1) seat assembly Converts SE Series to New Style S Series
T9464-80	T9450 Series, T9460 Series, 9450 Series, 9460 Series	(1) Complete valve trim assembly including Silver handwheel
T9464-80B		(1) Complete valve trim assembly including Blue handwheel
T9464-80G		(1) Complete valve trim assembly including Green handwheel
T9464-80R		(1) Complete valve trim assembly including Red handwheel
BK-9450-KIT**	ES8450 Series, ES9450 Series, BK9450 Series	(1) Extended Bonnet Assembly Kit, (1) Spring load packing for conversion of extended stem valves and topworks replacement

* Changes to a 6.5" (165mm) stem
 ** Retrofits ES8450 and ES9450 to a 6.5" (165mm) stem and a repair kit for the BK9450 Series

RG Series, CBH & CBC Series and LCR Series		
Kit Number	Part Number	Kit Contents
RG-80*	RG22, RG75, RG125, CBC125, CBH125, LCR	(1) Backcap gasket, (1) diaphragm assembly, (1) diaphragm gasket, (1) seat assembly
RG-80A*	RG300	
RG-81**	RG75A, RG125A, CBC125A & CBH125A, LCR	
RG-81A**	RG300A, CBC300A & CBH300A, LCR	
RG-82	RG Series, LCR Series	(1) Diaphragm assembly, (1) gasket
1784NG-80	1784NG Series	(1) Diaphragm assembly, (1) seat assembly, (1) gasket

* Good for valves manufactured before Fall 2010
 ** Good for valves manufactured after Fall 2010

PB Series		
Kit Number	Part Number	Kit Contents
PB504-80R*	PB504 Series	(1) Poppet O-ring, (1) Seat Retainer, (1) Seat Disc, (1) Stem Seat, (1) BackO-ring, (1) Backcap Seal
PB504-80RA**		(1) Poppet O-Ring, (1) Poppet/Seat (PTFE), (1) Stem, (1) Backcap Gasket
PB504-81R		(1) Diaphragm, (1) gasket

* Good for valves stamped with date code 11C20 or earlier
 ** Good for valves stamped with date code 11D20 or later

ECL502 Series		
Kit Number	Part Number	Kit Contents
ECL502-80	ECL502-22 to ECL502-175	Diaphragms, Diaphragm liner, Spring guide, ball seat
ECL502-80A	ECL502-180 to ECL502-350	
ECL-80	ECL22, ECL70, ECL100, ECL140	Diaphragm assembly, diaphragm gasket, poppet, retaining ring, spring, washer
ECL-80A	ECL325	

CB504 Series		
Kit Number	Part Number	Kit Contents
CB504	CB504-B	Seat Retainer, Seat Disc, Stem, Ball, Cylindrical Spring, Check Retainer, Spring Seal, Thrusr Button, Diaphragm gasket, Diaphragm, Gasket

CBH502 & CBC502 Series		
Kit Number	Part Number	Kit Contents
CB502-80	CBC502-22 to CBC502-175, CBH502-22 to CBH502-175	Diaphragm assembly, diaphragm gasket, Backcap gasket, poppet seat, seat pin
CB502-80A	CBC502-180 to CBC502-350, CBH502-180 to CBH502-350	



Rego Repair Kits

Kit Number	Part Number	Kit Contents
BB Series, BBS Series, SKB Series and Old SK Series		
SK9404-81*	BB9402, BB9404, SKB9402, SKB9404, SK9402, SK9404	(1) Gasket, (1) Spring, (1) Washer, (1) Ring V Male, (3) Ring V female, (1) O'ring
SK9408-81*	BB9406, BB9408, SKB9406, SKB9408, SK9406, SK9408	
SK9412-81*	BB9412, SKB9412, SK9412	
SK9416-81*	BB9416, SKB9416, SK9416	
SK9404-82*	BB9402, BB9404, SKB9402, SKB9404, SK9402, SK9404, BBS9402, BBS9404	(1) Gasket and (1) Seat Disc Assembly
SK9408-82*	BB9406, BB9408, SKB9406, SKB9408, SK9406, SK9408, BBS9406, BBS9408	
SK9412-82*	BB9412, SKB9412, SK9412, BBS9412	
BB9412-82A***	BB9412, SKB9412, BBS9412	
SK9416-82*	BB9416, SKB9416, SK9416, BBS9416	
SK9404-83*	BB9402, BB9404, SKB9402, SKB9404, SK9402, SK9404, BBS9402, BBS9404	(1) Gasket
SK9408-83*	BB9406, BB9408, SKB9406, SKB9408, SK9406, SK9408, BBS9406, BBS9408	
SK9412-83*	BB9412, SKB9412, SK9412, BBS9412	
BB9412-83A***	BB9412, SKB9412, BBS9412	
SK9416-83*	BB9416, SKB9416, SK9416, BBS9416	
BB9404-85	BB9402, BB9404, SKB9402, SKB9404	(1) Gasket, (1) Stem, (1) Bonnet & tube Assy, (1) Spring, (1) Washer, (1) Ring V, Male, (3) Ring V female, (1) O-ring, (1) Nut, Bonnet, (4) Screw, (1) Handwheel, (1) Nut, Hex, and (1) Washer
BB9408-85	BB9406, BB9408, SKB9406, SKB9408	
BB9412-85**	BB9412, SKB9412	
BB9412-85A***	BB9412, SKB9412	
BB9416-85	BB9416, SKB9416	
BB9412-81A***	BB9412, SKB9412	
BBS9404-81	BBS9402, BBS9404, SKB9402BWS, SKB9402SWS, SKB9404BWS, SKB9404SWS	(1) Gland Follower, (1) Bonnet Bearing, (1) Packing, Adapter, (1) Bonnet Packing, (1) Packing Separator, (1) Gasket
BBS9408-81	BBS9406, BBS9408, SKB9406BWS, SKB9406SWS, SKB9408BWS, SKB9408SWS	
BBS9412-81**	BBS9412, SKB9412BWS, SKB9412SWS	
BBS9412-81A***	BBS9412, SKB9412BWS, SKB9412SWS	
BBS9404-81	BBS9416, SKB9416BWS, SKB9416SWS	
BBS9404-85	BBS9402, BBS9404, SKB9402BWS, SKB9402SWS, SKB9404BWS, SKB9404SWS	(4) Screw, (1) Kit Upper Assembly, (1) Handwheel, (1) Nut lock, (1) Washer, (1) Gland Follower, (1) Bonnet Bearing, (1) Packing Adapter, (1) Bonnet Packing, (1) Packing Separator, (1) Gasket
BBS9408-85	BBS9406, BBS9408, SKB9406BWS, SKB9406SWS, SKB9408BWS, SKB9408SWS	
BBS9412-85**	BBS9412, SKB9412BWS, SKB9412SWS	
BBS9412-85A***	BBS9412, SKB9412BWS, SKB9412SWS	
BBS9416-85	BBS9416, SKB9416BWS, SKB9416SWS	

* Good for SK Series valves manufactured before 2017

** Good for Valves produced on or before 05C19

*** Good for Valves produced on or after 05D19

BK Series		
Kit Number	Part Number	Kit Contents
BK8400-80J	BK8404, BK8406, BK8408, BKY8408, BK9404, BK9406, BK9408	(1) Jam ring, (1) O-ring, (3) Pressure seal rings, (1) Spring, (1) Tape, (1) Washer, (1) Gasket
BKA8412-80J	BK8408, BK9408, BKA8408, BKA9408	
BK9400-80J*	BK9410, BK9412	
BK9416-80JS	BK9416	(1) Seat Disc Assembly, (1) Gasket
BK8400-80AJ	BK8404, BK8406, BK9404, BK9406	
BK9400-80AJ	BK9410, BK9412	
BKY8408-80AJ	BKY8408	
BK8400-80BJ	BK8408, BK9408, BKA8408, BKA9408	
BKA8412-80JA*	BKA8412, BKA8408, BKA9408	
BK9416-80AJ	BK9416	
BK8404-Kit	BK8404	(1) Stem, (1) Bonnet & tube Assembly, (1) Seal housing, (1) Spring, (1) Packing Gland, (1) Washer, (1) Jam Ring, (3) Pressure seal rings, (1) O-ring, (1) Seat Assembly, (1) Locknut, (1) Washer, (1) Handwheel, (1) Gasket

*Only for valves produced after 1991



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
222 Series and 202 Series		
B-222X-4-81	B-222X-2, B-222X-4, B-00202X-4	(1) Handwheel nut, Bonnet bearing, (1) Gland Follower, (5) Bonnet Packing, (4) Packing Separator, (1) Bonnet packing adapter
B-222X-6-81	B-222X-6	
B-222X-8-81	B-222X-8	
B-222X-12-81	B-222X-12, B-222XBS-12, SB-222X-12SW	
B-222X-16-81	B-222X-16	
B-222X-24-81	B-222X-24, GB-0222WE-24PC	
B-222X-4-82	B-222X-2, B-222X-4, B-00202X-4	(1) Seat Disc Assembly, (1) Gasket
B-222X-6-82	B-222X-6	
B-222X-8-82	B-222X-8	
B-222X-12-82	B-222X-12, B-222XBS-12, SB-222X-12SW	
B-222X-16-82	B-222X-16	
B-222X-24-82	B-222X-24, GB-0222WE-24PC	
B-222X-4-83	B-222X-2, B-222X-4, B-00202X-4	(1) Gasket
B-222X-6-83	B-222X-6	
B-222X-8-83	B-222X-8	
B-222X-12-83	B-222X-12, B-222XBS-12, SB-222X-12SW	
B-222X-16-83	B-222X-16	
B-222X-24-83	B-222X-24, GB-0222WE-24PC	
B-222X-4KIT	B-222X-2, B-222X-4	(1) Stem, (1) Bonnet & tube Assembly, (1) Handwheel nut Bonnet bearing, (1) Gland Follower, (5) Bonnet Packing, (4) Packing Separator, (1) Bonnet packing adapter, (1) Seat Assembly, (1) Locknut, (1) Washer, (1) Handwheel, (1) Gasket
B-222X-6KIT	B-222X-6	
B-222X-8KIT	B-222X-8	
B-222X-12KIT	B-222X-12, B-222XBS-12, SB-222X-12SW	
B-222X-16KIT	B-222X-16	
B-222X-24KIT	B-222X-24, GB-0222WE-24PC	

226LL Series		
Kit Number	Part Number	Kit Contents
B-226LL-4-81	B-226LL-2, B-226LL-3, B-226LL-4	(1) Handwheel nut, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (1) Bonnet Packing, (1) Bonnet Packing Adapter
B-226LL-8-81	B-226LL-6, B-226LL-8, PB-226LL-8T6Y1	
B-226LL-4-82	B-226LL-2, B-226LL-3, B-226LL-4	(1) Seat Disc Assembly, (1) Gasket
B-226LL-8-82	B-226LL-6, B-226LL-8, PB-226LL-8T6Y1	
B-226LL-4-83	B-226LL-2, B-226LL-3, B-226LL-4	(1) Gasket
B-226LL-8-83	B-226LL-6, B-226LL-8, PB-226LL-8T6Y1	
B-226LL-4KIT	B-226LL-2, B-226LL-3, B-226LL-4	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet & tube ASM, (1) Bonnet Ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (1) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket
B-226LL-8KIT	B-226LL-6, B-226LL-8, PB-226LL-8T6Y1	

226ULL Series		
Kit Number	Part Number	Kit Contents
B-226ULL-12-81	B-206ULL-12, B-226ULL-12	(1) Handwheel nut, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (1) Bonnet
B-226ULL-16-81	B-206ULL-16, B-226ULL-16	
B-226ULL-12-82	B-206ULL-12, B-226ULL-12	(1) Seat Disc Assembly, (1) Gasket
B-226ULL-16-82	B-206ULL-16, B-226ULL-16	
B-226ULL-12-83	B-206ULL-12, B-226ULL-12	(1) Gasket
B-226ULL-16-83	B-206ULL-16, B-226ULL-16	
B-226ULL-12KIT	B-226ULL-12	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet & tube ASM, (1) Bonnet ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (1) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket
B-226ULL-16KIT	B-226ULL-16	



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
206GF Series		
VB-206GF-2-81	VB-206GF-2	(1) Handwheel nut, (1) Bonnet bearing, (1) Gland Follower, (1) Grafoil Packing, (1) Bonnet packing adapter
VB-206GF-4-81	VB-206GF-4	
VB-206GF-6-81	VB-206GF-6	
VB-206GF-8-81	VB-206GF-8	
VB-206GF-12-81	VB-206GF-12	
VB-206GF-16-81	VB-206GF-16	
VB-206GF-2-82	VB-206GF-2	(1) Seat Disc Assembly, (1) Grafoil Gasket
VB-206GF-4-82	VB-206GF-4	
VB-206GF-6-82	VB-206GF-6	
VB-206GF-8-82	VB-206GF-8	
VB-206GF-12-82	VB-206GF-12	
VB-206GF-16-82	VB-206GF-16	
VB-206GF-2-83	VB-206GF-2	(1) Grafoil Gasket
VB-206GF-4-83	VB-202GF-3, VB-206GF-4	
VB-206GF-6-83	VB-206GF-6	
VB-206GF-8-83	VB-206GF-8	
VB-206GF-12-83	VB-206GF-12	
VB-206GF-16-83	VB-206GF-16	
B-206GF-02-85	VB-206GF-2	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet & tube ASM, (1) Bonnet ring, (1) Seat Assembly, Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket, (1) Bonnet bearing, (1) Packing Follower, (1) Grafoil Packing, (1) Packing adapter
B-206GF-04-85	VB-206GF-4	
B-206GF-06-85	VB-206GF-6	
B-206GF-08-85	VB-206GF-8	
B-206GF-12-85	VB-206GF-12	
B-206GF-16-85	VB-206GF-16	

206LL Series		
Kit Number	Part Number	Kit Contents
B-206LL-4KIT	B-206LL-3, B-206LL-4	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet, (1) Bonnet ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Live-Load Washer, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (5) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket, (4) Packing separator
B-206LL-8KIT	B-206LL-6, B-206LL-8	

206ULL Series		
Kit Number	Part Number	Kit Contents
B-206ULL-12KIT	B-206ULL-12	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet, (1) Bonnet ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Live-Load Washer, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (5) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket, (4) Packing separator
B-206ULL-16KIT	B-206ULL-16	

206BLL Series		
Kit Number	Part Number	Kit Contents
B-206BLL-12KIT	B-206BLL-12	(1) Handwheel nut, (1) Handwheel, (1) Stem, (1) Bonnet nut, (1) Bonnet, (1) Bonnet ring, (1) Seat Assembly, (1) Live-Load Spring, (1) Live-Load Washer, (1) Spring Washer, (1) Bonnet Bearing, (1) Gland Follower, (5) Bonnet Packing, (1) Bonnet Packing Adapter, (1) Bonnet gasket, (4) Packing separator



Rego Repair Kits

Kit Number	Part Number	Kit Contents
SK Advantage Series		
SKM9404-83	SKL9402, SKM9402, SKS9402, SKL9404, SKM9404 and SKS9404	(1) Gasket
SKM9408-83	SKL9406, SKM9406, SKS9406, SKL9408, SKM9408, SKS9408 and SKA9408	
SKM9412-83	SKL9412, SKM9412, SKS9412 and SKA9412	
SKM9416-83	SKL9416 and SKM9416	
SKM9404-80AJ	SKL9402, SKM9402, SKS9402, SKL9404, SKM9404 and SKS9404	(1) Gasket and (1) Seat Disc Assembly
SKM9408-80AJ	SKL9406, SKM9406, SKS9406, SKL9408, SKM9408, SKS9408 and SKA9408	
SKM9412-80AJ	SKL9412, SKM9412, SKS9412 and SKA9412	
SKM9416-80AJ	SKL9416 and SKM9416	
SKM9408-80J	SKL9402, SKM9402, SKS9402, SKL9404, SKM9404, SKS9404, SKL9406, SKM9406, SKS9406, SKL9408, SKM9408, SKS9408 and SKA9408	(2) Spring, Belleville, (1) Washer, Live-loading, (5) Packing, Bonnet, (4) Packing, separator, (1) Bearing, Bonnet, (1) Follower, Gland, (1) Packing, Adapter
SKM9412-80J	SKL9412, SKM9412, SKS9412 and SKA9412	
SKM9416-80J	SKL9416 and SKM9416	
SKS9404-KIT	SKS9402 and SKS9404	(1) Gasket, (1) Stem, (1) Bonnet & tube Assy, (2) Spring, Belleville, (1) Washer, Live-loading, (5) Packing, Bonnet, (4) Packing, Separator, (1) Bearing, Bonnet, (1) Follower, Gland, (1) Nut, Stem, (1) Ring, Retaining, (1) Packing, Adapter, (1) Nut, Bonnet, (4) Screw, (1) Handwheel, (1) Nut, Hex, and (1) Washer
SKS9408-KIT	SKS9406 and SKS9408	
SKS9412-KIT	SKS9412	(1) Gasket, (1) Stem, (1) Bonnet & tube Assy, (2) Spring, Belleville, (1) Washer, Live-loading, (5) Packing, Bonnet, (4) Packing, Separator, (1) Bearing, Bonnet, (1) Follower, Gland, (1) Nut, Stem, (1) Ring, Retaining, (1) Packing, Adapter, (1) Nut, Bonnet, (4) Screw, (1) Handwheel, (1) Nut, Hex, and (1) Washer
SKM9404-KIT	SKM9402 and SKM9404	
SKM9408-KIT	SKM9406 and SKM9408	
SKM9412-KIT	SKM9412	
SKM9416-KIT	SKM9416	
SKL9404-KIT	SKL9402 and SKL9404	(1) Gasket, (1) Stem, (1) Bonnet & tube Assy, (2) Spring, Belleville, (1) Washer, Live-loading, (5) Packing, Bonnet, (4) Packing, Separator, (1) Bearing, Bonnet, (1) Follower, Gland, (1) Nut, Stem, (1) Ring, Retaining, (1) Packing, Adapter, (1) Nut, Bonnet, (4) Screw, (1) Handwheel, (1) Nut, Hex, and (1) Washer
SKL9408-KIT	SKL9406, SKL9408 and SKA9408	
SKL9412-KIT	SKL9412 and SKA9412	
SKL9416-KIT	SKL9416	

210 Series		
Kit Number	Part Number	Kit Contents
S-210-8-81	GS-210W-4, GS-210W-6 and GS-210W-8	(1) Packing adapter, (1) Chevron adapter, (1) Chevron set, (1) Gasket
S-210-16-81	GS-210W-12 and GS-210W-16	
S-210-24-81	GS-210W-24	
S-210-32-81	GS-210W-32	
S-210WHZ-8-81	GS-210WHZ-4, GS-210WHZ-6 and GS-210WHZ-8	(1) Packing adapter, (1) Chevron adapter, (1) Grafoil Packing, (1) Gasket
S-210WHZ-16-81	GS-210WHZ-12 and GS-210WHZ-16	
S-210-8-82	GS-210W-4, GS-210W-6 and GS-210W-8	(1) Seat/Seat Assembly, (1) Gasket (1) Seat/Seat Assembly, (1) Grafoil Gasket
S-210-16-82	GS-210W-12 and GS-210W-16	
S-210-24-82	GS-210W-24	
S-210-32-82	GS-210W-32	
S-210WHZ-8-82	GS-210WHZ-4, GS-210WHZ-6 and GS-210WHZ-8	
S-210WHZ-16-82	GS-210WHZ-12 and GS-210WHZ-16	(1) Bonnet Gasket, (1) Bonnet Grafoil Gasket
S-210-8-83	GS-210W-4, GS-210W-6 and GS-210W-8	
S-210-16-83	GS-210W-12 and GS-210W-16	
S-210-24-83	GS-210W-24	
S-210-32-83	GS-210W-32	
S-210WHZ-8-83	GS-210WHZ-4, GS-210WHZ-6 and GS-210WHZ-8	
S-210WHZ-9-84	GS-210WHZ-4, GS-210WHZ-6 and GS-210WHZ-8	(1) Handwheel, (2) Packing Bolt, (2) Nut, (1) Stem & Seat Assembly, (4) Bonnet Bolt, (1) Bonnet & Yoke ASM, (1) Retaining ring, (1) Stem bearing, (1) Gland Flange, (1) Grafoil Packing Set, (1) Chevron adapter, (1) Packing adapter, (1) Gasket, (1) Jam nut, (1) Washer, (1) Grafoil Gasket
S-210WHZ08-853	GS-210WHZ-4, GS-210WHZ-6 and GS-210WHZ-8	
S-210WHZ16-853	GS-210WHZ-12 and GS-210WHZ-16	



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
231 Series		
S-231-4-81	S-231-4	(1) Packing adapter, (1) Chevron adapter, (1) Grafoil packing, (1) Grafoil Gasket
S-231-8-81	S-231-8	
S-231-12-81	S-231-12	
S-231-4-82	S-231-4	(1) Seat/Seat Assembly, (1) Grafoil Gasket
S-231-8-82	S-231-8	
S-231-12-82	S-231-12	
S-231-4-83	S-231-4	(1) Grafoil Gasket
S-231-8-83	S-231-8	
S-231-12-83	S-231-12	
S-231-4-85	S-231-4	(1) Handwheel, (2) Packing Bolt, (2) Nut, (1) Stem & Seat Assembly, (4) Bonnet Bolt, (4) Bonnet nut, (1) Bonnet & Yoke ASM, (1) Retaining ring, (1) Stem bearing, (1) Gland Flange, (1) Grafoil Packing Set, (1) Chevron adapter, (1) Packing adapter, (1) Gasket, (1) Jam nut, (1) Washer, (1) Grafoil Gasket
S-231-8-85	S-231-8	
S-231-12-85	S-231-12	

232 Series		
Kit Number	Part Number	Kit Contents
S-232-4-81	S-232-4	(1) Packing adapter, (1) Chevron adapter, (1) Chevron set, (1) Gasket
S-232-8-81	S-232-8	
S-232-12-81	S-232-12	
S-232-4-82	S-232-4	(1) Seat/Seat Assembly, (1) Gasket
S-232-8-82	S-232-8	
S-232-12-82	S-232-12	
S-232-4-83	S-232-4	(1) Gasket
S-232-8-83	S-232-8	
S-232-12-83	S-232-12	
S-232-4-85	S-232-4	(1) Handwheel, (2) Packing Bolt, (2) Nut, (1) Stem & Seat Assembly, (4) Bonnet Bolt, (4) Bonnet nut, (1) Bonnet & Yoke ASM, (1) Retaining ring, (1) Stem bearing, (1) Gland Flange, (1) Chevron Set, (1) Chevron adapter, (1) Packing adapter, (1) Gasket, (1) Jam nut, (1) Washer, (1) Gasket
S-232-8-85	S-232-8	
S-232-12-85	S-232-12	

CFM, AFM, PFM, SFM, CSB, & CSM Series		
Kit Number	Part Number	Kit Contents
CFM2D-82	SFM, CFM, AFM, PFM, CSB, CSM Fill Manifolds Series	(1) Piston Assy, (1) Spring, (1) Strainer, (1) Gasket
CFM2D-86	CFM-2D & CFM-4D, CSB2D, CSB4D	(1) Copper gasket, (1) Retrofit Kit, (1) Gasket, (04) Cap screw, (1) Rear Flange Assy
CSM2D-86	CSM2D, CSM4D	
SKM9408-83	CSB2D, CSM2D	(1) Gasket
SKM9412-83	CSB4D, CSM4D	(1) Gasket and (1) Seat Disc Assembly
SKM9408-80AJ	CSB2D, CSM2D	
SKM9412-80AJ	CSB4D, CSM4D	(2) Spring, Belleville, (1) Washer, Live-loading, (5) Packing, Bonnet, (4) Packing separator, (1) Bearing Bonnet, (1) Follower Gland, (1) Packing, Adapter
SKM9408-80J	CSB2D, CSM2D	
SKM9412-80J	CSB4D, CSM4D	
SKM9408-KIT	CSB2D, CSM2D	(1) Gasket, (1) Stem, (1) Bonnet & tube Assy, (2) Spring, Belleville, (1) Washer, Live-loading, (5) Packing Bonnet, (4) Packing, Separator, (1) Bearing Bonnet, (1) Follower, Gland, (1) Nut, Stem, (1) Ring Retaining, (1) Packing, Adapter, (1) Nut, Bonnet, (4) Screw, (1) Handwheel, (1) Nut, Hex, and (1) Washer
SKM9412-KIT	CSB4D, CSM4D	

2500 and 2550 Series		
Kit Number	Part Number	Kit Contents
2505AC-80	2505AC	(2) Seat disc, (1) Diaphragm, (1) Washer, (1) Gaskets
2507AC-80	2507AC	
2511AC-80	2511AC	
2513AC-80	2513AC	
2553AC-80	2553AC, 2553AAC	(1) Diaphragm Assembly, (1) Washer
2554AC-80	2554AC, 2554AAC	



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
302 and 322 Series		
B-322-8-81	B-302-8, B-312-8, B-322-8, WCB-8, WCBN-8, GB-322WE-8	(1) Handwheel nut, (1) Bonnet Bearing, (1) Grand follower, (5) Bonnet packing, (4) packing separator, (1) Bonnet packing adapter
B-322-12-81	B-302-12, B-312-12, B-322-12, WCB-12, WCBN-12	
B-322-16-81	B-322-16	
B-322-20-81	B-302-20, B-312-20, B-322-20, WCB-20, WCBN-20	
B-322-24-81	B-302-24, B-312-24, B-322-24, WCB-24, WCBN-24	(1) Split Wedge Assembly, (1) Bonnet Gasket
B-322-8-82	B-302-8, B-312-8, B-322-8, WCB-8, WCBN-8, GB-322WE-8	
B-322-12-82	B-302-12, B-312-12, B-322-12, WCB-12, WCBN-12	
B-322-16-82	B-322-16	
B-322-20-82	B-302-20, B-312-20, B-322-20, WCB-20, WCBN-20	(1) Bonnet Gasket
B-322-24-82	B-302-24, B-312-24, B-322-24, WCB-24, WCBN-24	
B-322-8-83	B-302-8, B-312-8, B-322-8, WCB-8, WCBN-8, GB-322WE-8	
B-322-12-83	B-302-12, B-312-12, B-322-12, WCB-12, WCBN-12	
B-322-16-83	B-322-16	(1) Handwheel, (1) Handwheel nut, (1) Stem, (1) Bonnet Nut, (1) Bonnet & Tube ASM, (1) Bonnet ring, (1) Split wedge ASM, (1) Bonnet bearing, (1) Gland follower, (5) Bonnet packing, (4) Packing separator, (1) Bonnet packing adapter, (1) Bonnet gasket
B-322-20-83	B-302-20, B-312-20, B-322-20, WCB-20, WCBN-20	
B-322-24-83	B-302-24, B-312-24, B-322-24, WCB-24, WCBN-24	
B-322-4KIT	B-322-4	
B-322-8KIT	B-322-8	
B-322-12KIT	B-322-12	
B-322-16KIT	B-322-16	
B-322-20KIT	B-322-20	
B-322-24KIT	B-322-24	

302,306,322, and 326 Series		
Kit Number	Part Number	Kit Contents
B-326-4-81	B-312-4, B-322-4, B-326-4, GB-326WE-4, WCB-4, WCBN-4	(1) Handwheel nut, (1) Bonnet bearing, (1) Gland follower, (5) Packing, (4) Packing Separator, (1) Packing adapter
B-326-6-81	B-302-6, B-306-6, B-312-6, B-326-6, WCB-6, WCBN-6	
B-326-8-81	B-306-8, B-326-8, GB-0326EP-8, GB-0326WE-8	
B-326-12-81	B-306-12, B-326-12, GB-0326EP-12, GB-0326WE-12	
B-326-16-81	B-302-16, B-306-16, B-312-16, B-322-16, B-326-16, GB-322WE-16, GB-326EP-16, WCB-16, WCBN-16	(1) Split Wedge Assembly, (1) Bonnet gasket
B-326-4-82	B-312-4, B-322-4, B-326-4, GB-326WE-4, WCB-4, WCBN-4	
B-326-6-82	B-302-6, B-306-6, B-312-6, B-326-6, WCB-6, WCBN-6	
B-326-8-82	B-306-8, B-326-8, GB-0326EP-8, GB-0326WE-8	
B-326-12-82	B-306-12, B-326-12, GB-0326EP-12, GB-0326WE-12	(1) Bonnet gasket
B-326-16-82	B-302-16, B-306-16, B-312-16, B-322-16, B-326-16, GB-322WE-16, GB-326EP-16, WCB-16, WCBN-16	
B-326-4-83	B-312-4, B-322-4, B-326-4, GB-326WE-4, WCB-4, WCBN-4	
B-326-6-83	B-302-6, B-306-6, B-312-6, B-326-6, WCB-6, WCBN-6	
B-326-8-83	B-306-8, B-326-8, GB-0326EP-8, GB-0326WE-8	(1) Handwheel, (1) Handwheel nut, (1) Stem, (1) Bonnet Nut, (1) Bonnet & Tube ASM, (1) Bonnet ring, (1) Split wedge ASM, (1) Bonnet bearing, (1) Gland follower, (5) Bonnet packing, (4) Packing separator, (1) Bonnet packing adapter, (1) Bonnet gasket
B-326-12-83	B-306-12, B-326-12, GB-0326EP-12, GB-0326WE-12	
B-326-16-83	B-302-16, B-306-16, B-312-16, B-322-16, B-326-16, GB-322WE-16, GB-326EP-16, WCB-16, WCBN-16	
B-326-4KIT	B-326-4	
B-326-6KIT	B-326-6	
B-326-8KIT	B-326-8	
B-326-12KIT	B-326-12	
B-326-16KIT	B-326-16	

302 Series		
Kit Number	Part Number	Kit Contents
B-302-4KIT	B-302-4	(1) Handwheel, (1) Handwheel nut, (1) Stem, (1) Bonnet Nut, (1) Bonnet & Tube ASM, (1) Bonnet ring, (1) Split wedge ASM, (1) Bonnet bearing, (1) Gland follower, (5) Bonnet packing, (4) Packing separator, (1) Bonnet packing adapter, (1) Bonnet gasket
B-302-8KIT	B-302-8	
B-302-12KIT	B-302-12	
B-302-16KIT	B-302-16	
B-302-20KIT	B-302-20	
B-302-24KIT	B-302-24	



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
306 Series		
B-000306-6KIT	B-000306-6	(1) Handwheel, (1) Handwheel nut, (1) Stem, (1) Bonnet Nut, (1) Bonnet & Tube ASM, (1) Bonnet ring, (1) Split wedge ASM, (1) Bonnet bearing, (1) Gland follower, (5) Bonnet packing, (4) Packing separator, (1) Bonnet packing adapter, (1) Bonnet gasket
B-000306-8KIT	B-000306-8	
B-000306-12KIT	B-000306-12	
B-000306-16KIT	B-000306-16	

Kit Number	Part Number	Kit Contents
310 Series		
B-310X-24-81	B-310-20, B-310-24, B-310C-24, B-310X-20, B-310X-24, SB-310S-24SW	(1) Handwheel nut, (1) Bonnet bearing, (1) Gland follower, (5) Packing, (4) Packing separator, (1) Packing adapter
B-310X-24-82		(1) Wedge, (1) Seat, (1) Seat clamp, (3) Cap screw, (1) Gasket
B-310X-24-83		(1) Gasket
B-310X-24-84		(1) Seat, (1) Seat clamp, (3) Cap screw, (1) Gasket
B-310X-24KIT	B-310X-20, B-310X-24	(1) Handwheel, (1) Handwheel nut, (1) Stem, (1) Bonnet Nut, (1) Bonnet & Tube ASM, (1) Bonnet ring, (1) Split wedge ASM, (1) Bonnet bearing, (1) Gland follower, (5) Bonnet packing, (4) Packing separator, (1) Bonnet packing adapter, (1) Bonnet gasket
B-310-24KIT	B-310-20, B-310-24	

Kit Number	Part Number	Kit Contents
110 Series		
S-110-08-81	GS-110W-4, GS-110W-6 and GS-110W-8	(1) Packing Adapter, (1) Chevron adapter, (01) Chevron set, (1) Gasket
S-110-16-81	GS-110W-12 and GS-110W-16	
S-110-24-81	GS-110W-24	
S-110-32-81	GS-110W-32	
S-110-48-81	GS-110W-48	(1) Packing Adapter, (1) Chevron adapter, (1) Grafoil set, (1) Gasket
S-110WHZ-08-81	GS-110WHZ-4, GS-110WHZ-6 and GS-110WHZ-8	
S-110WHZ-16-81	GS-110WHZ-12 and GS-110WHZ-16	
S-110WHZ-24-81	GS-110WHZ-24	
S-110WHZ-32-81	GS-110WHZ-32	(1) Wedge/Stem Assembly, (1) Seat, (1) Seat Clamp, (1) Cap Screw, (1) Gasket
S-110WHZ-48-81	GS-110WHZ-48	
S-110-08-82	GS-110W-4, GS-110W-6 and GS-110W-8	
S-110-16-82	GS-110W-12 and GS-110W-16	
S-110-24-82	GS-110W-24	(1) Gasket
S-110-32-82	GS-110W-32	
S-110-48-82	GS-110W-48	
S-110WHZ-8-82	GS-110WHZ-4, GS-110WHZ-6 and GS-110WHZ-8	
S-110WHZ-16-82	GS-110WHZ-12 and GS-110WHZ-16	(1) Gasket, (1) Seat, (1) Seat Clamp, (1) Cap Screw
S-110WHZ-24-82	GS-110WHZ-24	
S-110WHZ-32-82	GS-110WHZ-32	
S-110WHZ-48-82	GS-110WHZ-48	
S-110-08-83	GS-110W-4, GS-110W-6 and GS-110W-8	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket- Grafoil, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
S-110-16-83	GS-110W-12 and GS-110W-16	
S-110-24-83	GS-110W-24	
S-110-32-83	GS-110W-32	
S-110-48-83	GS-110W-48	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket- Grafoil, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
S-110WHZ-08-83	GS-110WHZ-4, GS-110WHZ-6 and GS-110WHZ-8	
S-110WHZ-16-83	GS-110WHZ-12 and GS-110WHZ-16	
S-110WHZ-24-83	GS-110WHZ-24	
S-110WHZ-32-83	GS-110WHZ-32	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket- Grafoil, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
S-110WHZ-48-83	GS-110WHZ-48	
S-110-08-84	GS-110W-4, GS-110W-6 and GS-110W-8	
S-110-16-84	GS-110W-12 and GS-110W-16	
S-110-24-84	GS-110W-24	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket- Grafoil, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
S-110-32-84	GS-110W-32	
S-110-48-84	GS-110W-48	
S-110WHZ-08-84	GS-110WHZ-4, GS-110WHZ-6 and GS-110WHZ-8	
S-110WHZ-16-84	GS-110WHZ-12 and GS-110WHZ-16	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket- Grafoil, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
S-110WHZ-24-84	GS-110WHZ-24	
S-110WHZ-32-84	GS-110WHZ-32	
S-110WHZ-48-84	GS-110WHZ-48	
S-110WHZ08-853	GS-110WHZ-4, GS-110WHZ-6 and GS-110WHZ-8	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket- Grafoil, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
S-110WHZ16-853	GS-110WHZ-12 and GS-110WHZ-16	
S-110WHZ24-853	GS-110WHZ-24	
S-110WHZ32-853	GS-110WHZ-32	
S-110WHZ48-853	GS-110WHZ-48	



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Rego Repair Kits

Kit Number	Part Number	Kit Contents
LOX110 Series		
LOX110W-08-85	LOX110W-04, LOX110W-06, and LOX110W-08	(1) Handwheel Assembly, (2) Bolt, (2) Nut, (1) Stem & Wedge Assembly, (4) Bolt, (1) Bonnet & Yoke Assembly, (1) Retaining Ring, (1) Stem Bearing, (1) Gland Flange, (1) Packing Set, (1) Chevron Set, (1) Chevron Adapter, (1) Packing Adapter, (2) Gasket, (1) Seat, (1) Seat Clamp, (2) Socket Head Cap Screw, (1) Set Screw
LOX110W-16-85	LOX110W-12, and LOX110W-16	
LOX110W-24-85	LOX110W-24	
LOX110W-32-85	LOX110W-32	
LOX110W-48-85	LOX110W-48	
LOX110WEP-16-85	LOX110WEP-12, and LOX110WEP-16	
LOX110WEP-32-85	LOX110WEP-32	
LOX110WEP-48-85	LOX110WEP-48	

840 and 846M Series		
Kit Number	Part Number	Kit Contents
B-840-4-82	B-840-4	(1) Disc/Arm Assembly, (1) Gasket, (1) Pivot Pin, (2) Side Plug, (2) Plug Gasket
B-840-6-82	B-840-6	
B-840-8-82	B-840-8	
B-840-12-82	B-840-12	
B-840-16-82	B-840-16	
B-846M-4-82	B-846M-4	
B-846M-6-82	B-846M-6	
B-846M-8-82	B-846M-8	
B-846M-12-82	B-846M-12	
B-846M-16-82	B-846M-16	

886 Series		
Kit Number	Part Number	Kit Contents
S-886-04-82	S-886-4	(1) Disc/Arm Assembly, (1) Pin, (1) Gasket
S-886-08-82	S-886-8	
S-886-12-82	S-886-12	
S-886-16-82	S-886-16	
S-886-24-82	S-886-24	
S-886-32-82	S-886-32	
S-886M-04-82	S-886M-4	
S-886M-08-82	S-886M-8	
S-886M-12-82	S-886M-12	
S-886M-16-82	S-886M-16	
S-886M-24-82	S-886M-24	
S-886M-32-82	S-886M-32	
S-886GF-04-82	S-886GF-4	
S-886GF-08-82	S-886GF-8	
S-886GF-12-82	S-886GF-12	
S-886-04-83	S-886-4	(1) Gasket
S-886M-8-83	S-886M-8	
S-886M-12-83	S-886M-12	
S-886M-16-83	S-886M-16	
S-886M-24-83	S-886M-24	
S-886M-32-83	S-886M-32	
S-886GF-04-83	S-886GF-4	
S-886GF-08-83	S-886GF-8	
S-886GF-12-83	S-886GF-12	

TA3217AR410 Series		
Kit Number	Part Number	Kit Contents
TA3217AR-80	TA3217AR410	(1) Gasket, (1) Gasket, (1) Seat, (1) Stem Bearing, (1) Seat Retainer, (1) Bearing Seal Grand, (1) Retainer Ring, (1) "V" Packing Male Ring, (3) "V" Packing Female Ring, (1) Body Bearing, (1) O-ring, (1) Dust Seal, (1) Coiling Spring Ring, (1) Seal Housing, (1) Seal Spring, (1) Groove Pin, (1) Upper Stem Bearing, (1) Retaining Ring



Rego Repair Kits

Kit Number	Part Number	Kit Contents
1780 and BR-1780 Series		
BR-1784-80	1784 Series	Diaphragm assembly, stem and seat assembly, seal, Viton seat
BR-1786-80	1786 Series and 1788 Series	Diaphragm assembly, stem and seat assembly, seal, viton seat for oxygen service
BR-1784-7SKA	1784 Series	Spring kit for 1784, "A" spring range, 5 to 55 psig (.34 o 3.79 barg) delivery pressure 1784 "B" spring range, 40 to 110 psig (2.75 to 7.58 barg) delivery pressure Spring kit for 1784, "C" spring range, 100 to 200 psig (6.89 to 13.78 barg) delivery pressure, Spring kit for 1784, "D" spring range 175 to 300 psig (12 o 20.7 barg) delivery pressure
BR-1784-7SKB		
BR-1784-7SKC		
BR-1784-7SKD		
BR-1786-7SKA	1786 Series	
BR-1786-7SKB		Spring kit for 1786, "A" spring range, 5 to 55 psig (.34 o 3.79 barg) delivery pressure 1786 "B" spring range, 40 to 110 psig (2.75 to 7.58 barg) delivery pressure Spring kit for 1786, "C" spring range, 100 to 200 psig (6.89 to 13.78 barg) delivery pressure, Spring kit for 1786, "D" spring range 175 to 300 psig (12 o 20.7 barg) delivery pressure
BR-1786-7SKC		
BR-1786-7SKD		
BR-1788-7SKA	1788 Series	
BR-1788-7SKB		Spring kit for 1788, "A" spring range, 5 to 55 psig (.34 o 3.79 barg) delivery pressure 1788 "B" spring range, 40 to 110 psig (2.75 to 7.58 barg) delivery pressure Spring kit for 1788, "C" spring range, 100 to 200 psig (6.89 to 13.78 barg) delivery pressure, Spring kit for 1788, "D" spring range 175 to 300 psig (12 o 20.7 barg) delivery pressure
BR-1788-7SKC		
BR-1788-7SKD		

1682M and C-1682M Series		
Kit Number	Part Number	Kit Contents
1682Y-80	1682Y Series	Diaphragm assembly, stem and seat assembly seal
C-1682M-80	C-1682M Series	
1686Y-80	1686Y, 1688Y Series	
1684MHP-80	1684MHP	
1684M-80	BR-1684M Series	
1686M-80	1686M, 1688M Series	
1682M-80	1682M Series	Molded diaphragm assembly, stem and seat assembly seal
1684M-80	1684M Series	
1684Y-80	1684Y Series	Diaphragm assembly, stem and seat assembly seal, guide

M2523HP Series		
Kit Number	Part Number	Kit Contents
2523HP-80A	M2523HP350, M2523HP540, M2523HP580, M2523HP590, M2523HP1320	Seat and centerpiece assembly, diaphragm assembly, nozzle, spring, washer, gaskets
2523HP-80B	M2523HP320	

HP9560 Series		
Kit Number	Part Number	Kit Contents
9500-80K*	UL9500 Series, NUL9500 Series	(1) Packing ring set, (1) Washer, 1) Seal washer, (1) Seat Disc & Retainer Assembly
9550-80	9550 Series	(1) Seat Assembly, (1) O-ring, (2) Back up Ring, (3) Washer, (1) O-ring
9550-3-80	9550 Series	(1) Sleeve
9560-81	9560 Series	(1) O-ring, (1) Back up ring, (1) Thrust Bearing, (1) Friction washer
9560C-80	HP9560C Series, 9560C Series	(1) Seat Assembly, (1) O-ring, (1) Back up Ring, (2) Washer, (1) Thrust bearing, (1) Retainer lower, (1) Nut, (1) friction washer, (1) Retainer, (1) Seat insert
9560-80	HP9560 Series, 9560 Series	(1) Seat Assembly, (1) O-ring, (1) Back up Ring, (2) Washer, (1) Thrust bearing, (1) Retainer lower, (1) Nut, (1) friction washer, (1) Retainer
9560N-80 Repair Kit	HP9560N Series, 9560N Series	(1) Seat Assembly Nylon, (1) O-ring, (1) Back up Ring, (2) Washer, (1) Thrust bearing, (1) Retainer lower, (1) Nut, (1) friction washer, (1) Retainer
9560-4-80	HP9560 Series, HP9560N Series	(1) Stem
9560-7-80	HP9560P Series, 9560P Series	(1) Stem, (1) Nut, (1) Bonnet cap
9560-8-80	HP9560P Series, 9560P Series	(1) Stem

* Post 1978

7160 Series		
Kit Number	Part Number	Kit Contents
7160-80B	7160 Series	(1) Bonnet, (1) Stem, (1) Lower Stem Assembly, (1) Screw, (1) Handwheel



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Rego Repair Kits

Valve PN	Repair Kit PN	Description	Repair Kit PN	Description
Repair Kits				
CV9404SW	CV009404-80	Seat Repair	CV009404-83	Gasket Repair
CV9404BW	CV009404-80	Seat Repair	CV009404-83	Gasket Repair
CV9404T	CV009404-80	Seat Repair	CV009404-83	Gasket Repair
CV9406SW	CV009408-80	Seat Repair	CV009408-83	Gasket Repair
CV9406BW	CV009408-80	Seat Repair	CV009408-83	Gasket Repair
CV9406T	CV009408-80	Seat Repair	CV009408-83	Gasket Repair
CV9408SW	CV009408-80	Seat Repair	CV009408-83	Gasket Repair
CV9408BW	CV009408-80	Seat Repair	CV009408-83	Gasket Repair
CV9408T	CV009408-80	Seat Repair	CV009408-83	Gasket Repair
CV9412SW	CV009412-80	Seat Repair	CV009412-83	Gasket Repair
CV9412BW	CV009412-80	Seat Repair	CV009412-83	Gasket Repair
CV9412T	CV009412-80	Seat Repair	CV009412-83	Gasket Repair
CV9416SW	CV009416-80	Seat Repair	CV009416-83	Gasket Repair
CV9416BW	CV009416-80	Seat Repair	CV009416-83	Gasket Repair
CV9416T	CV009416-80	Seat Repair	CV009416-83	Gasket Repair
*-80 seat repair kits contains	1 seat assy, 1 gasket and 1 instruction sheet			
*-83 gasket repair kits contains	1 gasket and instruction sheet			



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General Technical Information

DOMESTIC & STORAGE TANK SPECIFICATIONS

Capacity (Gallons)	Diameter (in.)	OAL (Ft. in.)	Weight (lbs.)
120	24"	5' 5-13/16"	245
200	24"	41.9"	188
250	31-1/2"	7' 2-1/2"	472
320	31-1/2"	8' 11-3/4"	588
420	30"	53.8"	291
500	37-1/2"	9' 10"	871
1,000	41"	15' 10-13/16"	1,729
2,000	46-5/8"	23' 9-3/8"	3,676
3,900	84"	16' 3"	5,731
6,565	84"	25' 10-1/2"	9,418
12,000	84"	44' 10-1/2"	17,400
18,000	109.346"	40' 9-3/8"	26,251
30,000	109.346"	65' 11-3/8"	43,500
30,000	131.875"	46' 9-7/8"	44,359

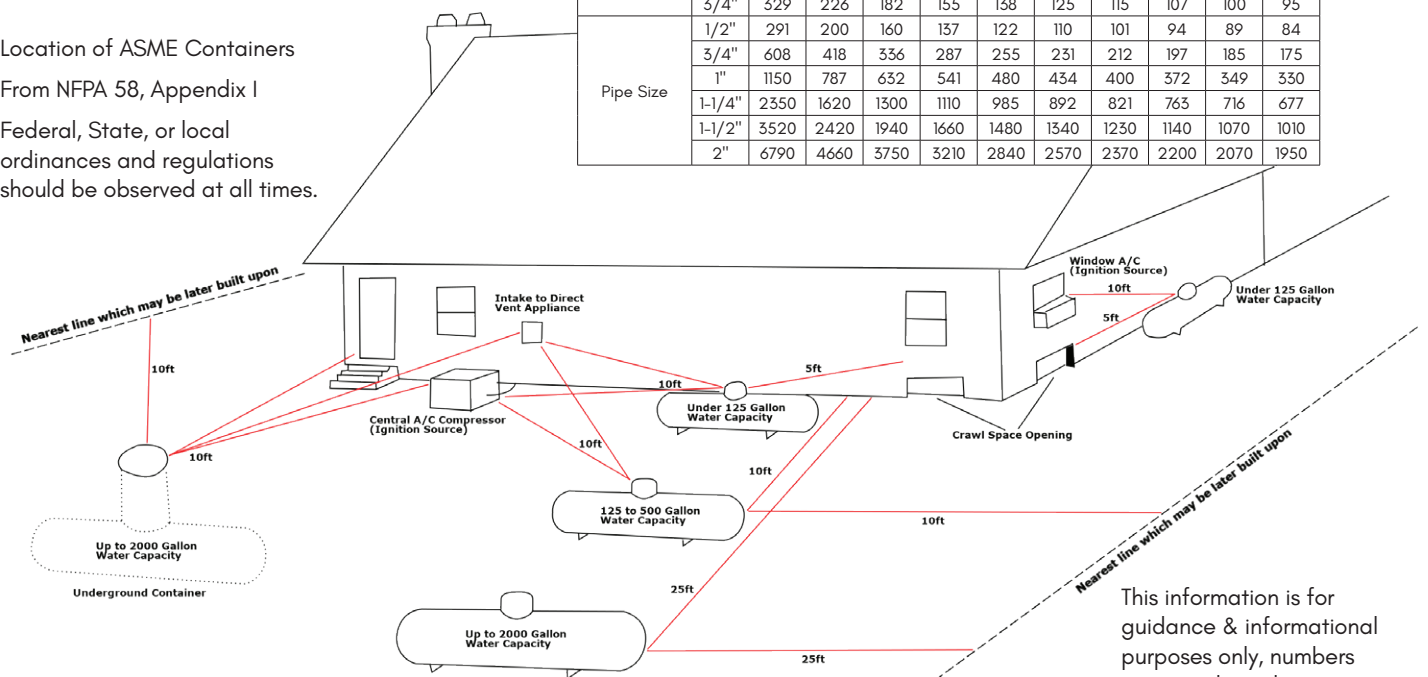
APPROX. PROPANE VAPOR PRESSURE

Degrees F	PSI
-30	8
-20	13.5
-10	23.3
0	28
10	37
20	47
30	58
40	72
50	86
60	102
70	127
80	140
90	165
100	196
110	220

Location of ASME Containers

From NFPA 58, Appendix I

Federal, State, or local ordinances and regulations should be observed at all times.



This information is for guidance & informational purposes only, numbers may vary based on specific conditions.

LPG VAPORIZATION IN BTU/HR PER TANK SIZE AT 25% FILLED

Temperature	200# DOT	420# DOT	120 ASME	250 ASME	320 ASME	500 ASME	1000 ASME
0°F	47,520	81,000	97,920	165,600	205,200	266,400	467,400
40°F	97,200	143,100	374,400	676,800	796,080	1,047,840	1,862,400

CONTINUOUS RATE OF VAPORIZATION - UNDERGROUND TANKS OUTPUT IN 1000S OF BTU'S PER HOUR - TANK 25% FULL - MINIMUM TANK PRESSURE 10 PSI

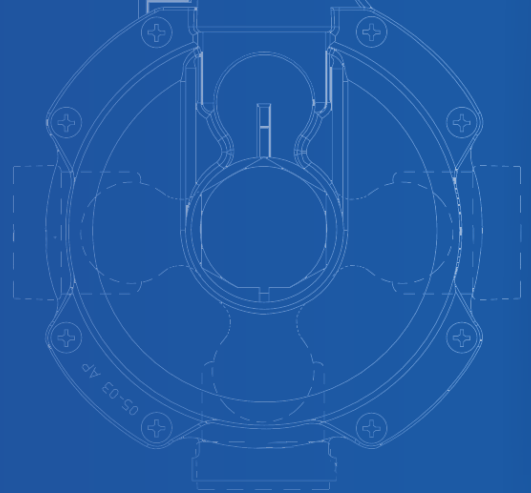
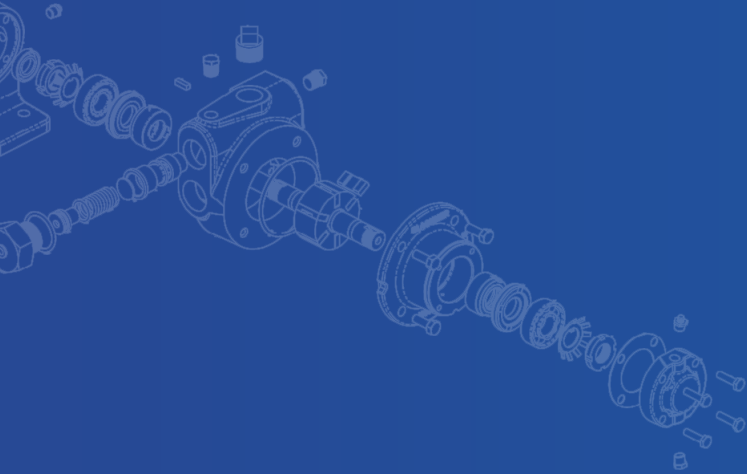
Frost Depth	Mounded Underground Tank				Regular Underground Tank			
	500 Gallons of Water		1000 Gallons of Water		500 Gallons of Water		1000 Gallons of Water	
	Short Riser	Long Riser	Short Riser	Long Riser	Short Riser	Long Riser	Short Riser	Long Riser
1'	379	536	748	968	536	536	968	968
1.5'	325	472	635	900	521	521	940	940
2'	293	412	568	783	483	505	855	912
2.5'	269	406	517	726	452	483	766	874
3'	241	338	466	642	372	469	701	868
3.5'	223	311	429	591	341	430	643	805
4'	200	285	389	542	315	399	594	747
4.5'	175	259	343	493	287	371	544	695
5'	150	233	296	446	260	343	495	644
5.5'	125	206	251	399	234	315	448	596
6'	114	191	231	369	217	293	417	554

PROPANE LINE SIZING: 10 PSI /1 PSID CAPACITY X 1000 BTU/HR, BASED ON NFPA 54 & 58

Length per Ft	Copper Tube: Type K			Poly Pipe: CTS		Poly Pipe: IPS				
	3/8"	1/2"	5/8"	1/2"	1"	1/2"	3/4"	1"	1-1/2"	2"
10	1060	2150	3760	-	-	-	-	-	-	-
20	727	1480	2580	-	-	-	-	-	-	-
30	584	1190	1780	762	5230	2140	2390	7740	20300	36400
40	500	1020	1780	653	4470	1840	3670	6630	17300	31200
50	443	901	1570	578	3960	1630	3260	5870	15400	27600
60	401	816	1430	524	3590	1470	2950	5320	13900	25000
70	179	751	1310	482	3300	1360	2710	4900	12800	23000
100	304	619	1080	397	2720	1120	2240	4040	10600	19000
150	244	497	869	319	2190	897	1797	3240	8480	15200
200	209	426	744	273	1870	778	1539	2780	7260	13000
300	168	342	597	219	1500	617	1235	2230	5830	10470

SECOND STAGE OR INTEGRAL TWIN STAGE LINE SIZING 11-IN. WATER COLUMN INLET WITH A 0.05-IN. WATER COLUMN DROP - MAXIMUM CAPACITY OF PIPE OR TUBING IN THOUSANDS OF BTU/HR OF LP GAS

Size of Pipe, Inches		Length of Pipe of Tubing in Feet									
		10	20	30	40	50	60	70	80	90	100
Copper Tubing (O.D.)	3/8"	45	31	25	21	19	17	16	15	14	13
	1/2"	93	64	51	44	39	35	32	30	28	27
	5/8"	188	129	104	89	79	71	66	61	57	54
Pipe Size	3/4"	329	226	182	155	138	125	115	107	100	95
	1/2"	291	200	160	137	122	110	101	94	89	84
	3/4"	608	418	336	287	255	231	212	197	185	175
	1"	1150	787	632	541	480	434	400	372	349	330
	1-1/4"	2350	1620	1300	1110	985	892	821	763	716	677
	1-1/2"	3520	2420	1940	1660	1480	1340	1250	1140	1070	1010
2"	6790	4660	3750	3210	2840	2570	2370	2200	2070	1950	



Phone: 800-628-5044

Fax: 800-243-8341

Email: info@raymurray.com

Website: www.raymurray.com

LOCATIONS

Ray Murray, Inc.
Quarry Hill Business Park
50 Limestone Road
Lee, MA 01238

Ray Murray, Inc.
Blanche Road Business Park
1443 Wells Drive
Bensalem, PA 19020

Ray Murray, Inc.
4411 Pier N. Blvd
Flint, MI 48504

Ray Murray, Inc.
2815F Carolina Commerce Drive
Goldsboro, NC 27530

