



# **COMPRESSED GAS EQUIPMENT**



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## COMPRESSED GAS

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GASKIT - REG

## LEAK DETECTOR

Lab proven "stainless-friendly" leak detector. Stainless-friendly (chloride and fluoride free). All leak detectors are not the same – GasKit formula was developed to NOT corrode and cause pin holes especially in flexible CSST also others may have. RMI exclusive.

Also available in 55 gallon drums - drop shipped from factory.



## GAS KIT LEAK DETECTOR

RMI Part No.	Description	Color
GASKIT-REG	Regular (27°)-1 Gallon	Green
GASKIT-LT	LoTemp (10°)-1 Gallon	Pink
GASKIT-XL	Extra Lo Temp (-50°)-1 Gallon	Red
GASKIT-CG	Green for O <sub>2</sub> (27°)-1 Gallon	Blue
GASKIT-TYPE II	Lo Temp Oxy (-65°)-1 Gallon	Lt. Blue



LD-SPRAY



WP110, 120



LD-BOTTLE

## BRUSH, SQUEEZE & SPRAY BOTTLES

- Wide neck bottle and brush for easy application.
- Pint bottle with spray nozzle.
- Handy squeeze bottles.

RMI Part No.	Description
LD-BOTTLE	Empty Pint Bottle & Brush
LD-SPRAY	Empty Pint Bottle w/ Sprayer
LD-DAUBER	8 oz. Bottle and Dauber
WP110	4 oz. Empty Squeeze Bottle
WP120	8 oz. Empty Squeeze Bottle

## THREAD SEALANTS

### OC-3

Use Oxygen compatible OC Three to seal threaded connections on cylinder valves more effectively and safely than Teflon tape.

### OC-5

Use Oxygen compatible OC Five to seal threaded connections on high pressure cylinder valves or cryogenic applications. OC Five will also seal threaded connections on large diameter pipes or more coarse threads.

### OC-7

Use Oxygen compatible OC Seven to lubricate O-rings, gaskets, bearings, stop cocks and more. OC Seven can be used as a high vacuum grease.

All OC products are approved by the major industrial gas providers.



O2TT-1/2

RMI PART NO.	DESCRIPTION
OC-3	PTFE Paste 4 oz. Tube
OC-5	PTFE Paste 2 oz. Jar
OC-5-16	PTFE Paste 16 oz. Jar
OC-7	PTFE Grease 2 oz. Jar
OC-7-16	PTFE Grease 16 oz. Jar
O2TT-1/2	Green oxygen Teflon thread seal tape 1/2" x 520
O2TT-3/4	Green oxygen Teflon thread seal tape 3/4" x 520



OC-3



OC-5



OC-7

## WITT FLASHBACK ARRESTORS

For reliable protection against dangerous reverse gas flow and flashbacks according to EN 730/ISO 5175-1. Every arrestor 100% tested.

### THE BEST FLASHBACK ARRESTORS IN THE WORLD

- A large surface area flame arrestor FA of stainless steel construction extinguishes and dangerous flashback entering the device in any direction.
- A temperature sensitive cut-off valve TV extinguishes sustained flashbacks long before the internal temperature of the arrestors reaches a dangerous level.
- A spring loaded non-return valve NV prevents slow or sudden reverse gas flow forming explosive mixtures in the gas supply.
- A filter at the gas inlet protects the arrestor against dirt contamination, extending the service life (only 85-10 and 85-30)

### OPERATION/USAGE

- Flashback Arrestors are used to protect gas cylinders and pipeline outlet points (hoses and any equipment) against dangerous reverse gas flow and flashbacks
- For pipeline outlets an single cylinders with high users for example supply units for gas cutting machines: Models 850-10 and 85-30
- For torches of burners with high flow: Model 85-10NU
- For cutting machines with high flow: Model 85010U
- WITT Flashback Arrestors may be mounted in any position/ orientation
- Only one piece of equipment may be connected to a single Flashback Arrestor
- The maximum ambient/working temperature is 70°C/158°F

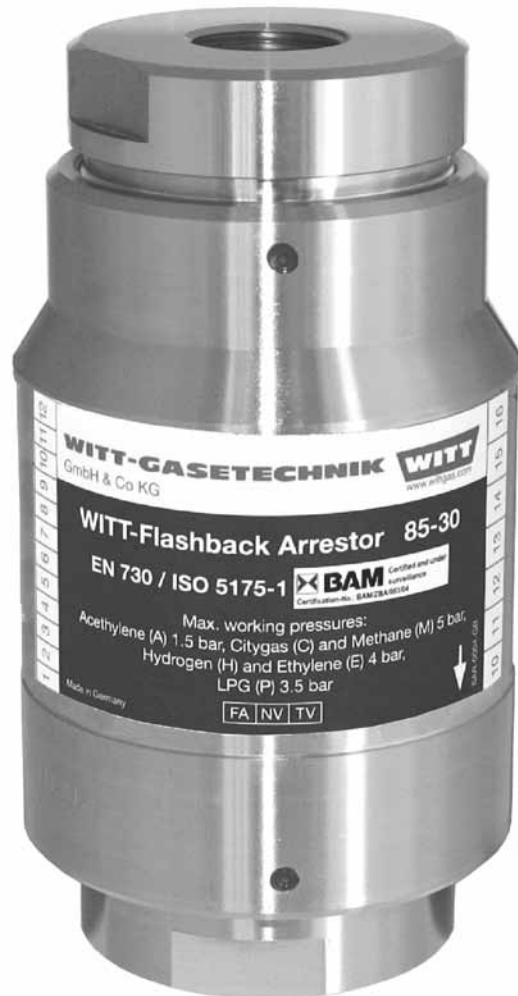
### MAINTENANCE

- Annual testing of the non-return valve, body leak tightness and flow capacity is recommended

- WITT is happy to supply special test equipment
- Flashback Arrestors are only to be serviced by manufacturer. The dirt filter may be replaced by competent staff.

### APPROVALS

Company certified according to ISO 9001:2000 and ISO 14001  
CE-marked according to: PED 97/23/EC



RMI Part No.	Gas	Inlet	Outlet
85-30/F	FUEL GAS	1" FNPT	1" FNPT
85-30/O2	OXYGEN	1" FNPT	1" FNPT
FBA135-045	FUEL GAS	9/16-18LH MALE	9/16-18LH FEMALE
FBA135-048	OXYGEN	9/16-18LH MALE	9/16-18LH FEMALE
FBA135-SET	FUEL/OXYGEN	9/16-18LH MALE	9/16-18LH FEMALE

## REGO 9560 SERIES

### APPLICATION

The HP9560 Series high pressure brass valves are used on cylinder filling panels, tube trailers, and other high pressure manifolds and piping systems. The HP9560 Series exhibits a very low operating torque under pressure for ease of manual operation.

### FEATURES

- 4200 psig maximum working pressure with a 5 to 1 safety factor.
- 5600 PSI maximum working pressure with a 4 to 1 safety factor.
- 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-4.1.
- Temperature range -40° to +165°F.
- 100% factory tested

### SOFT SEAT OPTION

The soft seat valves use a CTFE 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 oxygen, 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 and can be used in 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 "bubble-tight" seal is essential (Note: "C" in part number)

### MATERIALS

Body, bonnet, stem, and seat retainer, stem seal retaining rings and washer..... Brass  
Stem O-ring..... Viton  
Handwheel washer.....PTFE

RMI Part No.		Inlet Connection	Outlet Connection	Height A	Height B	Height C
Soft Seat	Metal Seat					
HP9560A	HP9560CA	1/2" FNPT	1/2" FNPT	4.36" or *(6.19 for panel mount version)	3.25"	5.5"
HP9560B	HP9560CB	3/4" FNPT	3/4" FNPT		3.25"	
HP9561R	HP9561CR	1" - 11 1/2" NPSM RH	1"-11 1/2" RH F. Swivel		5.27"	
HP9561RL	HP9561CRL	1" - 11 1/2" NPSM RH	1"-11 1/2" NPF LH F. Swivel		5.27"	
HP9561L	HP9561CL	1" - 11 1/2" NPSM LH	1"-11 1/2" RH F. Swivel		5.27"	
HP9563R	HP9563CR	1" - 11 1/2" NPSM RH	1"-11 1/2" NPSM RH		3.79"	
HP9563L	HP9563CL	1" - 11 1/2" NPSM LH	1"-11 1/2" NPSM LH		3.79"	
HP9560ASE	HP9560CASE	.843 - .847	.843 - .847		3.25"	
HP9560BSE	HP9560CBSE	1.053 - 1.057	1.053 - 1.057		3.25"	
HP9560BSE-B	HP9560CBSE-B	1.053 - 1.057	3/4" FNPT		3.25"	

Place "P" at end of part number for panel mount version. 1.625 diameter panel hole required for mounting.

\*Call for complete REGO catalog



**REGO** CRYO-FLOW  
PRODUCTS

## SHERWOOD TYPE 430C FOR MANIFOLD PIPING

### HIGH PRESSURE MASTER SHUT-OFF VALVES

Designed specifically for all non-corrosive high pressure compressed gas manifold piping requirements.

- Forged brass body with brass trim designed for use with non-corrosive gases.
- Pressure seal bonnet design assures positive seal.
- "O" ring moisture seal on stem.
- Kel-F seat and Teflon packing.
- Aluminum-Silicon Bronze lower stem for extra long life (Brass if furnished for acetylene).
- Large bar handle for easy operation
- Satisfactory for 6000 psi service (non-corrosive) with exception of oxygen which is 4840 psi at -7° F maximum.
- May be used with gaseous oxygen without additional cleaning.

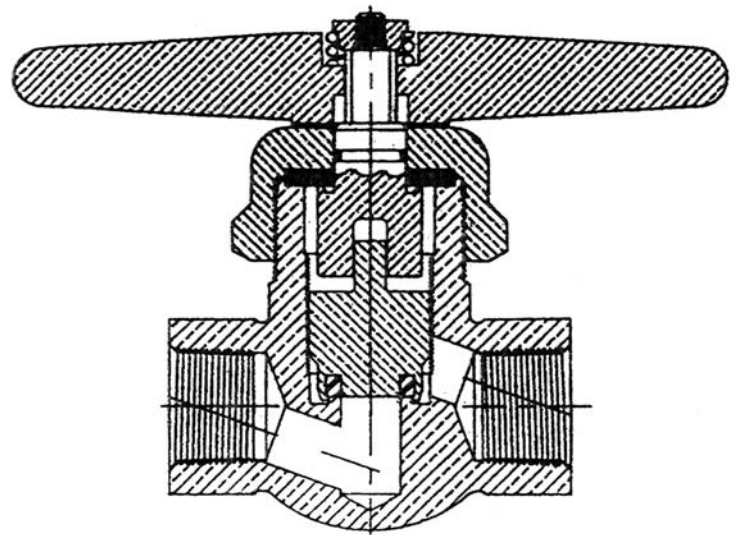
RMI Part No.	Inlet Thread	Outlet Thread
430C-F	1"-11 1/2 NPS RH (male)	1"-11 1/2 NPS RH (male)
430C-M	1/2" NPT (female)	1/2" NPT (female)
430C-MS	1/2" Pipe Socket Weld	1/2" Pipe Socket Weld
430C-N	3/4" NPT (female)	3/4" NPT (female)
430C-NS	3/4" Pipe Socket Weld	3/4" Pipe Socket Weld
430CX7-M	1/2" Pipe Socket Weld	1/2" NPT (female)
430CX7-N	3/4" Pipe Socket Weld	3/4" NPT (female)
430CX9-FM	1"-11 1/2 NPS RH (male)	1/2" NPT (female)

### REPLACEMENT PARTS

RMI Part No.	Description
P430C-32	Complete Kit - contains one of each below:
P430-13	Handwheel gasket
P1200-7	Handwheel nut
P1200-11	Handwheel spring
P430B-6T	Teflon packing
P430CX12-21K	Lower Stem & seal insert assembly
P430B-27-13	Stem "O" ring



**Sherwood**





## Pressure Relief Devices



**Sherwood**

Pressure Relief Device			-XX	Cylinder Working Pressure			Disc Rupture Range PSI @ 160° F	
CG-1 Frangible Disc No Fuse Metal	CG-4 * Frangible Disc 165° F Fuse Metal	CG-5 * Frangible Disc 212° F Fuse Metal		D.O.T. Spec 3A 3AA 3AL Cylinders PSI	D.O.T. Exemption Cylinders PSI	International Cylinders Bar	Min.	Max.
GV Low Pressure								
P625-19N9-26	P625-19C9-26M	P625-19C9-26W	-26	1665	—	—	2500	2775
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
GVHM High Pressure								
P625-19N9H-48	—	P625-19C9H-48W	-48	3000	—	230	4500	5000
P625-19N9H-55	—	P625-19C9H-55W	-55	3500/3600	—	—	5250	5833
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-71W	-71	—	5000	—	6750	7500
P625-19N9H-78	—	P625-19C9H-78W	-78	5000	—	—	7500	8333
P625-19N9H-85	—	P625-19C9H-85W	-85	—	6000	—	8100	9000
P625-19N9H-95	—	P625-19C9H-95W	-95	6000	—	—	9000	10,000

\* Copper disc must be used for hydrogen service.

Pressure relief devices come standard with a copper disc. For nickel disc option with CG-4 and CG-5, use an "N" in place of the "C" in the part number.

For chrome-plated CG1 PRDs, add "1" before Part Number. For example, P625-19N9H-XX becomes 1-P625-19N9H-XX.

### GV Key Replacement Parts

Sherwood Part Number	Description
<b>GV Kits, Brass</b>	
1400-30-101	Bonnet and Stem Assembly
<b>GV Kits, Plated</b>	
1-1400-30-101	Bonnet and Stem Assembly

### GVHM Key Replacement Parts

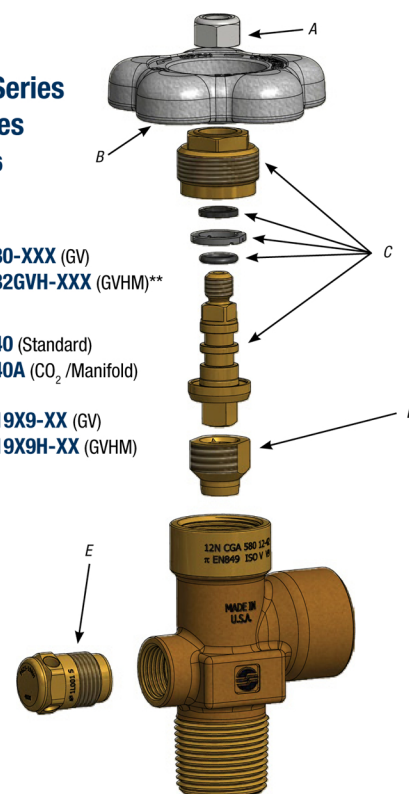
Sherwood Part Number	Description
<b>GVHM Kits, Brass</b>	
1400-32GVH-100	Bonnet and Stem Assembly
1400-32-GVH-101	Bonnet and Stem Assembly
<b>GVHM Kits, Plated</b>	
1-1400-32GVH-100	Bonnet and Stem Assembly
1-1400-32-GVH-101	Bonnet and Stem Assembly

### Parts Breakdown for GV or GVHM Series Industrial and Chrome-Plated Valves

- A. Handwheel Nut** **1251-6**
- B. Handwheel** **1919A**
- C. Bonnet and Stem Assembly Includes:** **1400-30-XXX (GV)**  
**1400-32GVH-XXX (GVHM)\*\***  
Bonnet, Back-Up O-Ring\*, O-Ring\*, Thrust Washer, Stem
- D. Lower Plug and Seat Assembly Includes:** **1400-40 (Standard)**  
**1400-40A (CO<sub>2</sub>/Manifold)**  
Lower Plug and Seat
- E. Pressure Relief Device Unitized Assembly Includes:** **P625-19X9-XX (GV)**  
**P625-19X9H-XX (GVHM)**  
Plug, Rupture Disc and Webbed Seal Washer

\* GVHM has two O-rings.

\*\* For XXX options, see kits below.





**Sherwood**

## SHERWOOD GV SERIES INDUSTRIAL & CHROME PLATED VALVES

- Robust, durable forged brass body and precisely machined internal components enable design to meet the most stringent international valve performance standards from around the world.
- Direct drive stem design with optimized single o-ring seal reduces friction and provides exceptional low operating torque.
- Unitized plug style, Pressure relief Device (PRD) offers excellent flow, robust thread design and a unique Sherwood exclusive Webbed Washer design to protect burst disc during handling.
- 100% Helium Leak testing up to 5400 PSIG.
- Leak Rate: internal/External:  
1 x 10<sup>-3</sup> atm cc/s @ 5400 PSIG
- For chrome plated valves, add "A" after "GV" in RMI Part No.

### TORQUE VALUES FOR GV SERIES

Closing Torque @ 5400 PSIG Inlet Pressure 20 - 30 in. lbs.

Operating Torque @ 5400 PSIG Inlet Pressure 10 - 20 in. lbs.

XX: denotes Pressure Relief Device burst disc rupture pressure.

RMI Part No.	Gas Service	CGA Outlet	Outlet thread size	NGT INLET
GV28061-XX	Med. Breath Mix	280	.745-14NGO RH EXT	3/4
GV29661-XX	Ind. Oxygen Mix.	296	.803-14UNS-2B RH INT	3/4
GV32041-XX	Carbon Dioxide	320	.825-14 NGO RH EXT	1/2
GV32061-XX	Carbon Dioxide	320	tapped for a ring	3/4
GV32081-XX	Carbon Dioxide	320	seal adapter	1
GV32641-XX	Nitrous Oxide	326	.825-14 NGO RH EXT	1/2
GV32661-XX	Nitrous Oxide	326	.825-14 NGO RH EXT	3/4
GV32681-XX	Nitrous Oxide	326	.825-14 NGO RH EXT	1
GV34641-XX	Air (0-3000 PSI)	346	.825-14 NGO RH EXT	1/2
GV34661-XX	Air (0-3000 PSI)	346	.825-14 NGO RH EXT	3/4
GV34681-XX	Air (0-3000 PSI)	346	.825-14 NGO RH EXT	1
GVHM34761-XX	Air (3001 - 5500 PSI)	347	.825-14 NGO RH EXT	3/4
GVHM34761-XX-24	Air (3001 - 5500 PSI)	347	.825-14 NGO RH EXT	3/4-24
GV35045-XX	Hydrogen	350	.825-14 NGO LH EXT	1/2
GV35065-XX	Hydrogen	350	.825-14 NGO LH EXT	3/4
GV35085-XX	Hydrogen	350	.825-14 NGO LH EXT	1
GV50061-XX	Med. Gas Mix	500	.825-14 NGO LH EXT	3/4
GV54041-XX	Oxygen	540	.903-14NGO RH EXT	1/2
GV54061-XX	Oxygen	540	.903-14NGO RH EXT	3/4
GV54081-XX	Oxygen	540	.903-14NGO RH EXT	1
GV55541-XX	Liq. Withdrawl of propane/butane	555	.903-14NGO LH EXT	1/2
GV55561-XX	Liq. Withdrawl of propane/butane	555	.903-14NGO LH EXT	3/4
GV55581-XX	Liq. Withdrawl of propane/butane	555	.903-14NGO LH EXT	1
GV57761-XX	Oxygen (3001-4000 PSI)	577	.903-14NGO RH EXT	3/4
GV58041-XX	Inert Gases	580	.965-14NGO RH INT	1/2
GV58061-XX	Inert Gases	580	.965-14NGO RH INT	3/4
GV58081-XX	Inert Gases	580	.965-14NGO RH INT	1
GV59041-XX	Air, Sulphur-Hexafluoride	590	.965-14NGO LH INT	1/2
GV59061-XX	Air, Sulphur-Hexafluoride	590	.965-14NGO LH INT	3/4
GV59081-XX	Air, Sulphur-Hexafluoride	590	.965-14NGO LH INT	1
GV60061-XX	Nitrous Oxide	660	1.030-14NGO RH EXT	3/4
GVHM67761-XX	Inert Gases (5501-7500 PSI)	677	1.030-14NGO LH EXT	3/4
GVHM67781-XX	Inert Gases (5501-7500 PSI)	677	1.030-14NGO LH INT	1
GVHM68061-XX	Inert Gases (3001-5500 PSI)	680	1.045-14NGO RH INT	3/4
GVHM70161-XX	Oxygen (5001 - 5500 PSI)	701	1.103-14 NGO RH EXT	3/4
GVHM70261-XX	Air (5501-7500 PSI)	702	1.125-14 NGO RH INT	3/4
GVHM70365-XX	Flamables (5500-7500 PSI)	703	1.125-14 NGO LH INT	3/4

RMI Part No.	Gas Service	CGA Outlet	Outlet thread size	STRAIGHT THREAD INLET
GV32051-XXLX75	Carbon Dioxide	320	.825-14 NGO RH EXT	.750-16 UNF2A
GV32051-XXLX	Carbon Dioxide	320	.825-14 NGO RH EXT	1.125-12 UNF2A
GV32651-XXLX75	Nitrous Oxide	326	.825-14 NGO RH EXT	.750-16 UNF2A
GV32651-XXLX	Nitrous Oxide	326	.825-14 NGO RH EXT	1.125-12 UNF2A
GV34651-XXLX75	Air	346	.825-14 NGO RH EXT	.750-16 UNF2A
GV34651-XXLX	Air	346	.825-14 NGO RH EXT	1.125-12 UNF2A
GV35055-XXLX75	Flammable Gases	350	.825-14 NGO LH EXT	.750-16 UNF2A
GV35055-XXLX	Flammable Gases	350	.825-14 NGO LH EXT	1.125-12 UNF2A
GV50051-XX	Med. Gas Mix	500	.885-14 NGO RH EXT	1.125-12 UNF2A
GV54051-XXLX75	Oxygen	540	.903-14 NGO RH EXT	.750-16 UNF2A
GV54051-XXLX	Oxygen	540	.903-14 NGO RH EXT	1.125-12 UNF2A
GV58051-XXLX75	Inert Gases	540	.965-14 NGO RH EXT	.750-16 UNF2A
GV58051-XXLX	Inert Gases	540	.965-14 NGO RH EXT	1.125-12 UNF2A
GV59051-XXLX75	Air, Sulphur-Hexafluoride	590	.965-14 NGO LH EXT	.750-16 UNF2A
GV59051-XXLX	Air, Sulphur-Hexafluoride	590	.965-14 NGO LH EXT	1.125-12 UNF2A
GV66051-XXLX	Nitrous Oxide	660	1.030-14 NGO RH EXT	3/4

Ordering Options (Refer to Ordering Information on previous page for base part numbers.)

**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.  
For example, GV34661-XX becomes GV34661-XX-7.

**Tel: 800-628-5044**

**RAY MURRAY, INC.**  
Order online at [www.raymurray.com](http://www.raymurray.com)  
or call for personal assistance

**Fax: 800-243-8341**

## SHERWOOD GRPV SERIES FEATURES

Sherwood GRVP valves are designed to retain approximately 30 to 50 psig pressure, maintaining the integrity of the cylinder contents against contaminants, even if the valve is left open.

The unique combination of innovative design and quality construction offers protection of cylinder contents without the expense of a time-consuming purge and clean cycle.

Durable forged brass body, precisely machined internal components and design elements meet the most stringent international valve performance standards. Automated assembly and testing processes ensure exceptional quality. All Sherwood GRPV valves are 100% leak tested.



Dynamic front piston seal design is not in direct contact with the flow passage during filling.



**Sherwood**

### DESIGN SPECIFICATIONS

<b>Maximum Working Pressure</b>	6,000 PSIG
	413 BAR
<b>Burst Pressure</b>	15,000 PSIG
	1,035 BAR
<b>Operating Temperature</b>	Min: -50°F
	-45°C
	Max: 130°F 55°C
<b>Storage Temperature</b>	Min: -65°F
	-54°C
	Max: 155°F 68°C
<b>Leak Rate Internal/External</b>	1X10 <sup>-3</sup> atm cc/s
<b>Minimum Cycle Life</b>	5,000 Cycles
<b>Cv Flow Factor</b>	Standard: .28
	CO2/Manifold: .50

RMI Part No.	Gas Service @ 120°F	CGA Outlet	Outlet thread size	NGT INLET
GRPV34641-XX	Air 0 psi TO 3,000 psi	346	.825 – 14 NGO RH Ext.	1/2 – 14 NGT
GRPV34661-XX	Air 0 psi TO 3,000 psi	346	.825 – 14 NGO RH Ext.	3/4 – 14 NGT
GRPV58041-XX	Argon 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	1/2 – 14 NGT
GRPV58061-XX	Argon 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	3/4 – 14 NGT
GRPV68061-XX	Argon 3,001 psi TO 5,500 psi	680	1.045 – 14 NGO RH Int.	3/4 – 14 NGT
GRPV32041-XX	Carbon Dioxide 0 psi TO 3,000 psi	320	.825 – 14 NGO RH Ext.	1/2 – 14 NGT
GRPV32061-XX	Carbon Dioxide 0 psi TO 3,000 psi	320	.825 – 14 NGO RH Ext.	3/4 – 14 NGT
GRPV32051-XX	Carbon Dioxide 0 psi TO 3,000 psi	320	.825 – 14 NGO RH Ext.	1.125-12 UNF
GRPV58041-XX	Helium 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	1/2 – 14 NGT
GRPV58061-XX	Helium 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	3/4 – 14 NGT
GRPV68061-XX	Helium 3,001 psi TO 5,500 psi	680	1.045 – 14 NGO RH Int.	3/4 – 14 NGT
GRPV35045-XX	Hydrogen 0 psi TO 3,000 psi	350	.825 – 14 NGO LH Ext.	1/2 – 14 NGT
GRPV58041-XX	Nitrogen 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	1/2 – 14 NGT
GRPV58061-XX	Nitrogen 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	3/4 – 14 NGT
GRPV68061-XX	Nitrogen 3,001 psi TO 5,500 psi	680	1.045 – 14 NGO RH Int.	3/4 – 14 NGT
GRPV54041-XX	Oxygen 0 psi TO 3,000 psi	540	.903 – 14 NGO RH Ext.	1/2 – 14 NGT
GRPV54061-XX	Oxygen 0 psi TO 3,000 psi	540	.903 – 14 NGO RH Ext.	3/4 – 14 NGT
GRPV59041-XX	Sulfur Hexafluoride 0 psi TO 3,000 psi	590	.965 – 14 NGO LH Int.	1/2 – 14 NGT
GRPV59061-XX	Sulfur Hexafluoride 0 psi TO 3,000 psi	590	.965 – 14 NGO LH Int.	3/4 – 14 NGT

### OPTIONS

4 & 7 & 24 Threads oversize inlets: To order, add -4 or -7 or -24 to the end of the part number  
e.g. GRPV58061-XX becomes GRPV58061-XX-7

Chrome Plating: To order, add letter "A" after letters GV in the part number.  
e.g. GRPV58061-XX becomes GRPVA58061-XX

Fusible backed pressure relief devices in 165°F or 212°F nominal melting temperatures: To order, change 1 in the part number to 4 (165°F) or to 5 (212°F)  
e.g. GRPV35061-XX becomes GRPV35064-XX for 165°F, or GRPV35065-XX for 212°F

**NOTE:** GRPV Valves are not approved for CNG service.

Not all valves are available in all configurations. Contact RMI for availability.

Orders may be subject to minimum quantities.

## SHERWOOD GRPV SERIES ADAPTERS



**Sherwood**



**ADAPTER WITH RETRACTABLE PIN**

Adapter provides maximum operating flexibility to fill or evacuate a cylinder with either a conventional valve or a GRPV. Engage the Pin Locking Tool (see below), rotate the tool clockwise to depress the pin for use with a conventional valve. Or, rotate the tool counter-clockwise to release the pin for use with a GRPV valve. The adapter incorporates an O-ring seal for a hand tight connection.

\* Adapters can be used with TV RPV also.

RMI Part No.	Description
TLG580SLW*	CGA 580
TLG590SLW*	CGA 590

### UNDERSTANDING ADAPTER PART NUMBERS:

TLG=Tool for Global Valve  
B=Bagged and O<sub>2</sub> Cleaned  
L=Spring Loaded  
S=Stainless Steel  
W=Washer or O-ring Seal



**ADAPTER WITH FIXED PIN**

Adapter Features a rigid-mounted pin for use on manifolds dedicated to filling cylinders with Sherwood GRPV valves.

\* Adapters can be used with TV RPV also.

RMI Part No.	Description
TLG320W	CGA 320
TLG346S	CGA 346
TLG350S	CGA 350
TLG540S	CGA 540
TLG580D*	CGA 580
TLG590D*	CGA 590



**PIN LOCKING TOOL**

Used with retractable pin adapter.\*

RMI Part No.	Description
TL580B	Pin Locking Tool



Gas cylinders can be checked for content-integrity by simply inserting the checking rod and pushing against the resistance of the check valve. The sound of escaping gas indicates residual cylinder pressure.

RMI Part No.	Description
TL580C	Checking Rod



## SHERWOOD NGV SERIES VALVES

The Sherwood Global Valve® is world renowned for quality and reliability. A variety of options including residual pressure valves are offered to meet the needs of the industrial gas market. Our new NGV Series is specially designed for all flammable gases.

### FEATURES

- Heavy-duty, industrial strength
- Reduced internal stress zones
- Innovative valve core design
- Durable Buna N O-Ring and Teflon Backup Ring compatible with flammable gases
- Low-pressure (NGV, NGRPV) and high-pressure (NGVH) applications

### ASSEMBLY TORQUES:

- NGV Bonnet: 55 ft.-lbs.
- NGV Safety Assembly: 30 ft.-lbs.
- NGVH Bonnet: 65 ft.-lbs.
- NGVH Safety Assembly: 45 ft.-lbs.
- RPV Cap: 20 ft.-lbs.



### DESIGN SPECIFICATIONS

NGV and NGRPV Max. Working Pressure: 3,000 PSIG

NGVH Max. Working Pressure: 6,000 PSIG

Burst Pressure: 15,000 PSIG

Operating Temperature:  
Min.: -50° F      Max.: 130° F

Leak Rate Internal/External:  
1x10<sup>-3</sup> atm cc/s

Minimum Cycle Life: 2,000 Cycles

Cv Flow Factor Standard: .690

### STANDARDS CONFORMANCE

CGA V-9:  
Standard for Gas Cylinder Valves

CGA S1.1:  
Standard for Pressure-Relief Devices

CGA V-1:  
Compressed Gas Cylinder Valve Outlet and Inlet Specifications

ISO 10297:  
International Standard for Cylinder Valves Design Specifications

ISO 11363-1 25E:  
Inlet Thread Specifications

### METHYL FLUORIDE

RMI Part No.	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread
NGV35064-XX	0 PSI – 3,000 PSI	CG-4	350	3/4"-14 NGT
NGRPV35064-XX	0 PSI – 3,000 PSI	CG-4	350	3/4"-14 NGT

### ETHANE & ETHYLENE

RMI Part No.	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread
NGV35061-XX	0 PSI – 3,000 PSI	CG-1	350	3/4"-14 NGT
NGRPV35061-XX	0 PSI – 3,000 PSI	CG-1	350	3/4"-14 NGT

### METHANE & NATURAL GAS

RMI Part No.	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread
NGV3504X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1/2"-14 NGT
NGV3506X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	3/4"-14 NGT
NGV3505X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1 1/8"-12 UNF
NGV35025EX-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	25E ISO
NGV3508X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1"-11 1/2" NGT
NGRPV35045X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1/2"-14 NGT
NGRPV3506X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	3/4"-14 NGT
NGRPV35025EX-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	25E ISO
NGVH6956X-XX	3,001 PSI – 5,500 PSI	CG-1, -4, or -5	695	3/4"-14 NGT
NGV6955X-XX	3,001 PSI – 5,500 PSI	CG-1, -4, or -5	695	1 1/8"-12 UNF
NGVH69525EX-XX	3,001 PSI – 5,500 PSI	CG-1, -4, or -5	695	25E ISO
NGT NGVH7036X-XX	5,501 PSI – 7,500 PSI	CG-1, -4, or -5	703	3/4"-14
NGVH70325EX-XX	5,501 PSI – 7,500 PSI	CG-1, -4, or -5	703	25E ISO

## 6074 SERIES 303 STAINLESS STEEL

- Proven leak-tight diaphragm seal capable of conforming to very low leak rates.
- Forged 303 stainless steel body to withstand severe service conditions.
- Low operating torque design for ease of operation during filling and venting.
- Especially suitable in applications where purging of the cylinder under high vacuum is required.
- Available with unitized pressure relief device having fuse-metal backed or unbacked rupture disc.
- FDA approved for INO medical applications.

### 303 STAINLESS STEEL DIAPHRAGM

RMI Part No.	Description
6074-(CGA)	3/4"-14 NGT inlet; no PRD
6074-(CGA)Sx	3/4"-14 NGT inlet; CG-1 Stainless Steel PRD
6074-(CGA)SxM	3/4"-14 NGT inlet; CG-4 Stainless Steel PRD
6074-(CGA)PxM	3/4"-14 NGT inlet; CG-4 Platinum PRD
6074X15-(CGA)Sx	1 1/8"-12 UNF inlet, CG1 Stainless Steel PRD
6074X15-(CGA)SxM	1 1/8"-12 UNF inlet, CG4 Stainless Steel PRD
6074X15-(CGA)PxM	1 1/8"-12 UNF inlet, CG4 Stainless Steel PRD



6074 CGA 626

## 6674 SERIES 316L STAINLESS STEEL

- Proven leak-tight diaphragm seal capable of conforming to very low leak rates.
- Forged 316L stainless steel body to withstand severe service conditions.
- Low operating torque design for ease of operation during filling and venting.
- Externally electropolished (internal optional)
- Especially suitable in applications where purging of the cylinder under high vacuum is required.
- Available with unitized pressure relief device having fuse-metal backed or unbacked rupture disc.
- FDA approved for INO medical applications.

### ADDERS

(R) For flow restrictor capable
(T) For inlet dip tube tapping



6674 CGA

### 316L STAINLESS STEEL DIAPHRAGM

RMI Part No.	Description
6674-(CGA)	3/4"-14 NGT inlet; no PRD
6674-(CGA)Sx	3/4"-14 NGT inlet; CG-1 Stainless Steel PRD
6674-(CGA)SxM	3/4"-14 NGT inlet; CG-4 Stainless Steel PRD
6674-(CGA)PxM	3/4"-14 NGT inlet; CG-4 Platinum PRD

6674 OR 6074

X - (CGA)

P

X

M

Large X=  
R= Tapped for Flow Restrictor  
T= Tapped for Inlet Dip Tube  
X15= 1 1/8" -12 UNF Inlet (straight Thread)

small X=  
A=3000 PSIG  
B=3360 PSIG  
C=3775 PSIG  
D=4000 PSIG

M=165 Deg. Fuse Metal  
W=212 Deg. Fuse Metal

P= Platinum Burst Disc.  
S= Stainless Burst Disc.

## SHERWOOD POST TYPE MEDICAL VALVES

### KVA SERIES POST MEDICAL VALVES

- Strong, durable brass body made from brass rod.
- Durable lower plug made of tough naval brass resists wear.
- Lower plug is Teflon-coated to add lubricity.
- Internally threaded chamber design promotes longer life and helps protect valve body chamber threads from damage.
- Oxygen-cleaned with aqueous detergent to CGA Specification G 4.1.
- For toggle, add “TG” to end of RMI Part No.



**Sherwood**

RMI Part No.	Inlet Thread Size	Pin Indexing Hole Numbers	CGA Outlet	Gas Service
KVAB95044F-32 KVAB95054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #1 & #5	950	
KVAB94041-32 KVAB94051-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #1 & #6	940	Carbon Dioxide
KVAB93044F-32 KVAB93054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #4 & #6	930	Helium
KVAB97344F-32 KVAB97354-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #11 & #24	973	Medical Gas Mixtures
KVAB96044F-32 KVAB9654-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #1 & #4	960	Nitrogen
KVAB91041-32 KVAB91051-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #3 & #5	910	Nitrous Oxide
KVAB96541-32 KVAB96554-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #7	965	Nitrous Oxide & Oxygen Mixtures
KVAB87044F-32 KVAB87054-32R	1/2 - 14 NGT .750-16 UNF-2A	Pins #2 & #5	870	Oxygen
KVAB88044F-32 KVAB88054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #2 & #6	880	Oxygen & CO2 Mixtures
KVAB89044F-32 KVAB89054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #2 & #4	890	Oxygen & Helium Mixtures



### KVM SERVICE - MRI MEDICAL VALVES

RMI Part No.	Inlet Thread Size	Pin Indexing Hole Numbers	CGA Outlet	Gas Service
KVMB87054-32R	.750-16UNF-2A	Pins #2 & #5	870	Oxygen
KVMB95054-32R	.750-16UNF-2A	Pins #1 & #5	950	Air
KVMB91051-32R	.750-16UNF-2A	Pins #3 & #5	910	Nitrous Oxide

## SHERWOOD OXY-GEN I INTEGRATED VALVE-REGULATOR COMBINATION

The Sherwood Oxy-Gen I represents the most advanced oxygen delivery system available.

**Convenient:** Pressure gauge located at the top of the unit is protected by the shroud-handle and provides good visibility through a full range of cylinder positions.

**Capable:** Protective shroud does not require removal during the filling process. Fill and evacuation rates are equivalent to standard medical post valves and deliver substantial time and money savings on the fill line.

**Durable:** Shroud material is a high performance nylon ABS polymer blend and exhibits excellent toughness and chemical and UV resistance.

**Compact:** 35% lower profile than comparable models provides more efficient racking and storage capabilities. 15% - 25% lighter weight than comparable models improves mobility and reduces user fatigue. Shroud circumference is sized to fit within the footprint diameter of standard Medical-E cylinders.

**Confidence:** Flow rate accuracy within 10% of dial setting. Regulator adjustment knob with positive flow detents guards against inadvertent flow setting changes. All units are 100% helium leak-tested. Each Oxy-Gen I unit is assigned a unique serial number for positive identification.

**MRI:** Tested to 3 Tesla, classified as MR conditional per ASTM F 250 3-05.



RMI PART NO.	for Cylinder	Flow	Valve Inlet	DISS Connection
VRM5V-32-75-15	Aluminum	15 LPM	3/4"-16UNF	No
VRM5V-32-75-15D	Aluminum	15 LPM	3/4"-16UNF	Yes
VRM5V-32-75-25	Aluminum	25 LPM	3/4"-16UNF	No
VRM5V-32-75-25D	Aluminum	25 LPM	3/4"-16UNF	Yes

\*Available with shut-off; 0-15 LPM or 0-25 LPM; with DISS connection; custom logo available on carry handle.

**PLEASE CALL RMI TO ORDER.**

\*Ask about cylinder/valve packages.

# Oxy-Gen I™





## SHERWOOD GV SERIES FOR ACETYLENE

### PACKED PRESSURE SEAL STYLE BRASS CYLINDER VALVES FOR ACETYLENE



**Sherwood**

#### KEY FEATURES

- Strong, durable forged brass body manufactured by Sherwood to specifications stricter than most commercial forging specifications.
- High temperature aluminum alloy hand wheel with large drainage holes.
- Integral stainless steel tang helps prevent internal stem breakage.
- Durable lower plug made of tough naval brass resists wear.
- Lower plug is Teflon-coated to add lubricity, which minimizes seizing and galling especially under high pressure operation.
- Internally threaded chamber design promotes longer life and helps protect valve body chamber threads from damage.
- Precise, quality machining results in exceptional finishes for low torque sealing and long packing life.
- Inert Teflon packing provides leak-free stem seal, long cycle life and resistant to corrosion.
- Secondary O-Ring seal located above Teflon packing helps provide secure seal under vacuum purging and low pressure operation.
- Hand wheel nut coated with corrosion resistant chromate/zinc organic plating.



AVB521



AV5160WB

Part No.	Gas Service	CGA Outlet	CGA Outlet Thread	NGT Inlet	Handwheel
GV30040	Acetylene	300	.825-14 NGO RH EXT	1/2"	Y
GV30060	Acetylene	300 Top Outlet	.825-14 NGO RH EXT	3/4"	Y
GVT30060	Acetylene	300 Top Outlet	.825-14 NGO RH EXT	3/4"	Y
GV30080	Acetylene	300	.825-14 NGO RH EXT	1"	Y
GV51040	Acetylene	510	.885-14 NGO LH INT	1/2"	Y
GV51060	Acetylene	510 Top Outlet	.885-14 NGO LH INT	3/4"	Y
GVT51060	Acetylene	510 Top Outlet	.885-14 NGO LH INT	3/4"	Y
GV51080	Acetylene	510	.885-14 NGO LH INT	1"	Y
AV5160WB	Acetylene ("Y" valve)	510	.885-14 NGO LH INT	3/4"	
AVB521	Acetylene	520	.895-18 NGO RH EXT	3/8"	
AVB521HW	Acetylene	520	.895-18 NGO RH EXT	3/8"	Y
AVMC201	Acetylene	200	.625-20 NGO RH EXT	3/8"	
AVMC201HW	Acetylene	200	.625-20 NGO RH EXT	3/8"	Y

VALVES



GV30060



GV51080



GVT51060



AVMC201

## 5074 SERIES BRASS DIAPHRAGM PACKLESS VALVES FOR SPECIALTY GASES

- Standardized Anti-Extrusion pin feature prevents seat extrusion and cold flow of the polymeric seat
- 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 to ensure 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 inlet threads for dip tube assembly
- Available with standard CGA connections as well as International inlets and outlets



### SPECIFICATIONS

Brass Packless Diaphragm Valves			
Valve Series	5074 Series	5074x15 Series	5074 International Series
Inlets	3/4" - 14NGT 3/8" - 14NGT 1/2" - 14NGT	1 1/8" 1 12 UNF- 2A	BS 341, DIN 477, JIS, All other available upon request
Outlets	CGA	CGA	CGA, DISS, BS 341, DIN 477, JIS
Seat Material	Nylon 6/6 PCTFE PVDF Vespel®	Nylon 6/6 PCTFE PVDF Vespel®	Nylon 6/6 PCTFE PVDF Vespel®
Pressure Relief Device			
Burst Pressure @ 165°F	A - 3000 PSIG B - 3360 PSIG C - 3775 PSIG D - 4000 PSIG		
Burst Disc Material	Nickel 200 Copper Stainless Steel		
Type (per to CGA S1.1 latest edition)	None, where prohibited CG-1 Burst Disc Only CG-2 Fuse Plug 165°F Fusemetal CG-4 Burst Disc w/ 165°F Fusemetal CG-5 Burst Disc w/ 212°F Fusemental		
Optional Features			
Outlet: Tapped for 5/16 - 24 UNF flow restrictor Inlet Tap – Available in 1/4" - NPT or 10mm			
Specifications			
Max Service Pressure:	3000 PSIG	200 Bar	
Temperature Range:	-50°F to 120°F	-45°C to 49°C	
Leak Rate @ 2000 PSIG (138 Bar):	1x10 <sup>-7</sup> atm cc/sec	1x10 <sup>-7</sup> bar mL/sec	
Closing Torque:	50 in-lbs @ 2000 PSIG	5.6 N-m @ 138 bar	
Cv:	.635	.635	

RMI Part No.	Description
5074T-320xx	CGA 320 outlet, 3/4" NGT inlet 1/4 tap
5074-350xM	CGA 350 outlet, 3/4" NGT inlet, 165°F
5074-350xW	CGA 350 outlet, 3/4" NGT inlet, 212°F
5074-540x	CGA 540 outlet, 3/4" NGT inlet
5074-580x	CGA 580 outlet, 3/4" NGT inlet
5074-590x	CGA 590 outlet, 3/4" NGT inlet
5074-660x	CGA 660 outlet, 3/4" NGT inlet
5074X15-350x	CGA 350 outlet, 1 1/8" UNF inlet
5074X15-350xM	CGA 350 outlet, 1 1/8" UNF inlet, 165°F
5074X15-350xW	CGA 350 outlet, 1 1/8" UNF inlet, 212°F
5074X15-580x	CGA 580 outlet, 1 1/8" UNF inlet
5074X15-590x	CGA 590 outlet, 1 1/8" UNF inlet

### All other CGA's not listed above

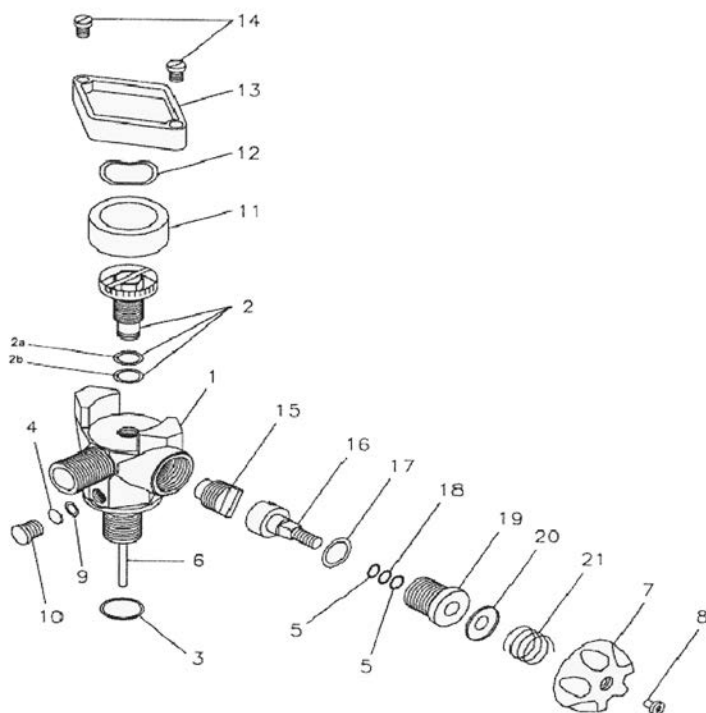
RMI Part No.	Description
5074-CGA	All CGA outlets: 3/4" NGT inlet NO PRD
5074-CGAx	All other CGA outlets: 3/4" NGT inlet
5074X15-CGAx	All other CGA outlets, 1 1/8" UNF inlet
5074X75-CGAx	All other CGA outlets, 3/4" UNF inlet

## ALUMINUM SCUBA VALVES

Sherwood's aluminum life support valve is made of forged anodized aluminum. Its combined components meet the stringent material and performance requirements of NIOSH and NFPA. Our aluminum valve is a popular component used by many life support systems manufacturers and has seen extensive service in firefighting and hazardous material removal applications, as well as life support ingress and egress units.



RMI Part No.	Description
YV2300	LSV CGA346 180° 0.750" - 16 UNF-2A 2265 psi small lock handwheel black
YV2301	LSV CGA346 180° 0.750" - 16 UNF-2A 2265 psi small handwheel black
YV2301A	LSV CGA346 180° 0.750" - 16 UNF-2A 2265 psi diamond shape handwheel
YV2302	LSV CGA346 90° 0.750 - 16 UNF-2A 2265 psi small handwheel black
YV2303	LSV CGA346 180° 0.750 - 16 UNF-2A 3000 psi small handwheel black
YV4500	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi small lock handwheel black
YV4501	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi small handwheel black
YV4501A	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi lg diamond shape handwheel
YV4502	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi sm handwheel Cu Gasket
YV4700HP	LSV CGA347 90° 0.875 - 16 UNF-2A 4500 psi sm handwheel black
YV4700AHP	LSV CGA347 90° 0.875 - 16 UNF-2A 4500 psi lg diamond shape handwheel black
YV4700HPL	LSV CGA347 90° 0.875 - 16 UNF-2A 4500 psi sm lock handwheel black
YV4700LP	LSV CGA346 90° 0.750 - 16 UNF-2A 2265 psi sm handwheel black
YV4700ALP	LSV CGA346 90° 0.750 - 16 UNF-2A 2265 psi lg diamond shape handwheel black
YV4522HP	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi small handwheel
YV4522HPB	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi small handwheel; w/bracket
YV4522HPBA	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi non-locking handwheel; w/bracket
YV4522HPH	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi Tri-lobed handwheel; w/bracket
YV4522LP	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi small handwheel black
YV4522LPB	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi small handwheel; w/bracket
YV4522LPBA	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi non-locking handwheel
YV4522LPH	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi Tri-lobed handwheel; w/bracket



RMI Part No.	Description	Item No.
G007EPY	O-ring	2B
G010A	O-ring	18
G010H	O-ring	18
G210A-9	O-ring	3
G212A-9	O-ring	3
G2200-350A	O-ring	3
1-3506-8	Stem Nut	8
221-40	Gage Assembly	2
33-450-5	Handwheel	7
33-450-50	Handwheel Assembly	7
39-450-13	Tube, Drain	6
3506-9	Plug Assembly	15
3506-9V	Plug Assembly	15
3506-10	Gasket	17
3506-13	Packing	5
450-14	Ring	2A
450-21	Gage Assembly	2
450-30FR	Bumper Guard Assembly	13
450-4	Screw	14
450-40	Gage Assembly	2
450-8	Gage Cover	11
450-9	Washer	12
4522-5	Bracket, 150° Aluminum Valve	Not shown
DR460-50HP	Gauge Assembly High Pressure	2
DR460-50LP	Gauge Assembly Low Pressure	2
61-3506-14	Packing Nut	19
61-450-2	Bonnet	19
61-450-5A	Handwheel	7
6509-34	Safety Disc	4
6509-35	Safety Disc	4
6509-45	Safety Disc	4
6509-48	Safety Disc	4
6509-72	Safety Disc	4
6510N	Gasket	9
9-3506-12	Stem	16
9-4000-6	Safety Plug	10
19-450-10	Spring	21
19-450-11	Washer	20

## GAS KIT CAPS, CARRY HANDLES, O-RINGS, SCREENS, FELTS



### CYLINDER SIPHON TUBES

RMI Part No.	Description
TUBE-53	siphon tube, 53" OAL (standard length)
TUBE-53-OXY	siphon tube, 53" OAL, O2 cleaned (standard length)

### CYLINDER CAPS - REPLACEMENT

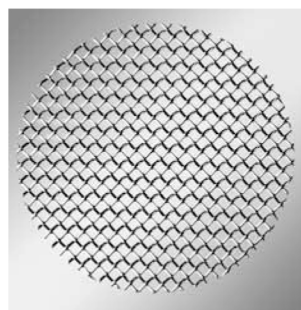
RMI Part No.	Description
CYLCAP1	Course thread, high pressure
CYLCAP2	Fine thread, high pressure
CYLCAP3	Course thread, acetylene
CYLCAP4	Fine thread, acetylene

### CYLINDER SCREENS & FELTS (ACETYLENE)

RMI Part No.	Description
SCREEN-1/2	stainless steel acetylene screen 1/2 "
SCREEN-3/4	stainless steel acetylene screen 3/4 "
SCREEN-1	stainless steel acetylene screen 1 "
FELT-1/2	felt filter for 5/8" plug
FELT-3/4	felt filter for 15/16" plug
FELT-1	felt filter for 1 3/16" plug



FELT-1



SCREEN-1

### CARRY HANDLES FOR ALUMINUM CYLINDER

RMI PART NO.	DESCRIPTION
CATALINA-VPCH	Carry handle - Catalina
CATALINA-RING	Retainer ring - Catalina
KIDDE-VPCH	<b>CARRY HANDLE - KIDDE</b>
LUXFER-VPCH	Carry handle - Luxfer
LUXFER-RING	Retainer ring - Luxfer
Threaded-VPCH	Carry Handle 3 1/8" - Course



CATALINA VPCH



CATALINA RING

### O-RINGS FOR CYLINDER VALVES

RMI Part No.	Description
450-17T	.750-16UNF2A Teflon o-ring
G216T	1.125-12UNF2A Teflon o-ring
G210A9	.750-16UNF2A Buna o-ring
G216A9	1.125-12UNF2A Buna o-ring

Adaptors enable you to add Luxfer-VPCH carry handle to a small steel cylinder.



Adaptors

RMI Part No.	Description
AR004Z	Adaptor ring 1 3/4" inside Diameter
AR005Z	Adaptor ring 1 7/8" inside Diameter



## CYLINDER VALVE ACCESSORIES

RMI Part No.	Description
RM320DC	plastic CGA 320 dust cap
RM540DC	plastic CGA 540 dust cap
RM870PI	post valve push-in washer
RM870PIPT	post valve push-in washer, pull tap
RMCO2W	plastic CO2 washer
RM02W	plastic O2 large washer green
RMPW	plastic post valve wrench
RMYDCTR	tamper resistant post valve dust cap
RMYWG	green yoke washer CGA 870
MSW1	CO2 wax fiber washer



RM320DC



RM540DC



RMYWG



RMCO2W



MSW1



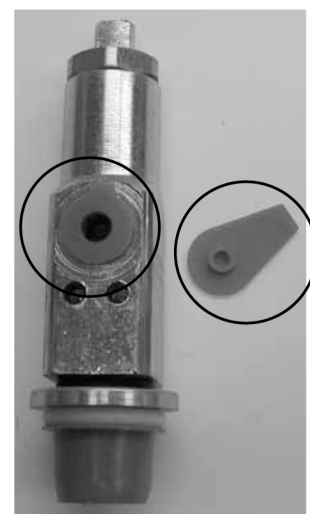
RMYDCTR



RMPW



RM870P1



RM870PIPT

VALVES

## REPLACEABLE OUTLET SEALS - CO2 VALVES

RMI Part No.	Description
10010C	Brass valve conversion kit



10010C

## REGO RELIEF VALVES FOR GAS & CRYOGENIC SYSTEMS

### 9400 SERIES BRASS OR STAINLESS STEEL, NON-ASME

All valves are cleaned and packaged for oxygen service per CGA G-4.1.

- Bubble tight at 95% of set pressure.
- Easy to read color coded psig/bar labels.
- Unique tamper resistant adjusting screw.
- Adapters provide standard pipe thread connections for venting gas to the outdoors.
- Repeatable performance.
- 100% factory tested.
- Temperature range -320 to + 165 degrees.

### FLOW PERFORMANCE

PRV and SS style flow at 0.783 SCFM Air/PSIA at 110% of set pressure.

B-9425N has a flow at 6.7 SCFM Air/PSIA at 120% of set pressure.

B-9426N has a flow at 11.0 SCFM Air/PSIA at 120% of set pressure.

### ORDERING INFORMATION

Fill in the blanks with options below:

PRV 9432 T blank or "P" 350 blank or "P"  
(style) (size) (seat material) (drain hole) (set pressure) (pipe-away option)

This example part number indicates: 1/4" PRV style brass relief valve with PTFE seat, set at 350psig and no pipe-away adaptor.

Materials	SS style	PRV and B style
Body	stainless steel	brass
Spring	stainless steel	stainless steel
Seat Retainer	stainless steel	brass
Adjusting Screw	stainless steel	brass
Pipe-Away Adapter	stainless steel	brass

**REGO** CRYO-FLOW  
PRODUCTS

Style	Size	Inlet A	Body and Valve Material	Pressure Setting Range PSIG	Height B	Wrenching Hex C	Orifice Size Sq. Inch	Pipe-Away Adapter P/N	Pipe-Away Outlet F.N.P.T
PRV	9432	1/4"	brass	17-600	2.6"	7/8"	.062	B-9412-2	3/8"
SS	9432	1/4"	ss	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
PRV	9433	3/8"	brass	17-600	2.6"	7/8"	.062	B-9412-2	3/8"
SS	9433	3/8"	ss	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
PRV	9434	1/2"	brass	17-600	2.6"	7/8"	.062	B-9412-2	1/2"
SS	9434	1/2"	ss	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
B-	9425	3/4"	brass	50-300	3.4"	1 3/4"	.43	B-3131-10	1"
B-	9426	1"	brass	100-300	5.5"	2 3/8"	.62	B-3132-10	1 1/4"

### SEAT MATERIAL OPTION

F for Fluorosilicone for PPV and SS styles for 15-139 psi.

T for PTFE for PRV and SS styles for 140-600 psi.

N for B-9425 and B-9426, Fluorosilicone seat, all set pressures.

### SET PRESSURE

Specify set pressure within range specified for style and size. The B-9426N is available in select settings only. Special order.

### PIPE-AWAY OPTION

P - Pipeaway included and attached. No drain hole in relief valve. For example PRV9432TP350P. Leave blank for relief valve without pipeaway attached. For example: PRV9432T 350.

For Easy Identification, the following standard settings have color coded labels for all PRV and SS Style sizes and settings marked in PSIG and bar:

22 psig - yellow 35 psig - purple 50 psig - white 100 psig - gray 150 psig - red

230 psig - blue 350 psig - orange 500 psig - light blue 450 psig - pink

### DRAIN HOLE OPTION

Relief valves without pipe-away typically provided with drain holes, leave blank. P - for relief valves without drain hole, for example RPV9432TP350.



## RELIEF VALVES

- Packaged and cleaned for oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure.
- 100% factory tested
- Repeatable performance.
- Temperature range -320 to + 165°F.
- Easy to read color coded psig/bar labels.
- Adapters provide standard pipe thread connections for venting gas to the outdoors.



Materials	SS style	PRV and B style
Body	stainless steel	brass
Spring	stainless steel	stainless steel
Seat Retainer	stainless steel	brass
Adjusting Screw	stainless steel	brass
Pipe-Away Adapter	stainless steel	brass

### NOISE REDUCTION ORDERING INFORMATION

RMI Part No.	Seat Material	Inlet Connections (F.NPT)	"B"	"C"	Orifice Size In	Factory Pressure Setting (PSIG)	Pipe-Away Adapter
NR009432F022	Fluorosilicone	1/4"	2.60"	7/8"	.062	22	B-9412-2
NR009432F050	Fluorosilicone	1/4"	2.60"	7/8"	.062	50	B-9412-2
NR009432F100	Fluorosilicone	1/4"	2.60"	7/8"	.062	100	B-9412-2
NR009432F230	PTFE	1/4"	2.60"	7/8"	.062	230	B-9412-2
NR009432F250	PTFE	1/4"	2.60"	7/8"	.062	250	B-9412-2
NR009432F300	PTFE	1/4"	2.60"	7/8"	.062	300	B-9412-2
NR009432F350	PTFE	1/4"	2.60"	7/8"	.062	350	B-9412-2
NR009432F360	PTFE	1/4"	2.60"	7/8"	.062	360	B-9412-2

## VALVES RELIEF

### APPLICATION:

The ASME approved 90° relief valves AR series, provide precise control set points which protect cryogenic vessels and piping systems for over-pressurization.

### FEATURES:

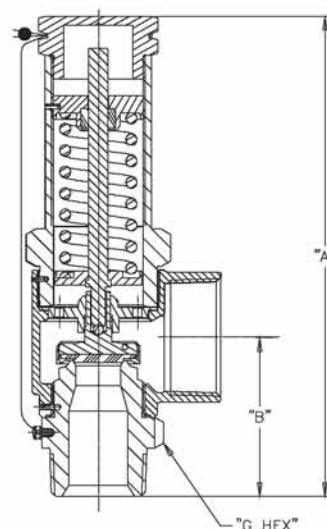
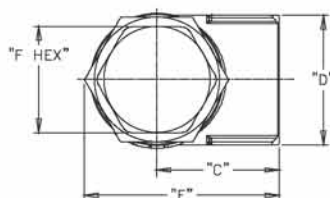
- High flow rates are approved by ASME rigorous testing to Code VIII.
- The ninety degree configuration provides relief of cryogenic gases directly avoiding flow through the spring
- Bubble tight seat provides 100% shut off when resealing or static mode.
- A variety of inlets and pressure settings assure adherence to application requirements.
- Temperature Range: -320°F (-196°C) to +165°F (+74°C)
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- 100% Factory Tested.

### MATERIALS:

Body .....	Bronze ATM B61
Upper Body .....	Stainless Steel ASTM A582
Seat & Stem .....	Brass ASTM B16
Poppet Guide .....	Brass ASTM B16
Spring Retainer .....	Brass ASTM B16
Adjusting Screw .....	Brass ASTM B16
Cap .....	Brass ASTM B16
Bushing .....	Hostaflon TFM1600 (Teflon)
Ball .....	Stainless Steel
Upper Gasket .....	PTFE ASTM D4894
Lower Gasket .....	Copper ASTM B152-17
Spring .....	Stainless Steel ASTM A 313
Screw .....	Brass ASTM B16
Grooved Pin .....	Stainless Steel ASTM A581
Cable & Tie Assy .....	Stainless Steel & Lead



AR Series



RMI Part No.	Inlet Inches DN	Outlet Inches DN	Ends	A	B	C	D	E	ASME Flow Capacity SCFM/Air @ 250 PSI	Weight Lbs
AR4106A	3/4"	1"	Thread NPT	6.03"	1.97"	1.63"	1.63"	2.49"	450	2.75
AR4108A	1"	1 1/4"	Thread NPT	6.88"	2.37"	2.00"	1.90"	3.01"	1,003	3.75
AR4112A	1 1/2"	2"	Thread NPT	9.64"	3.20"	2.45"	2.60"	3.89"	2,277	8.00

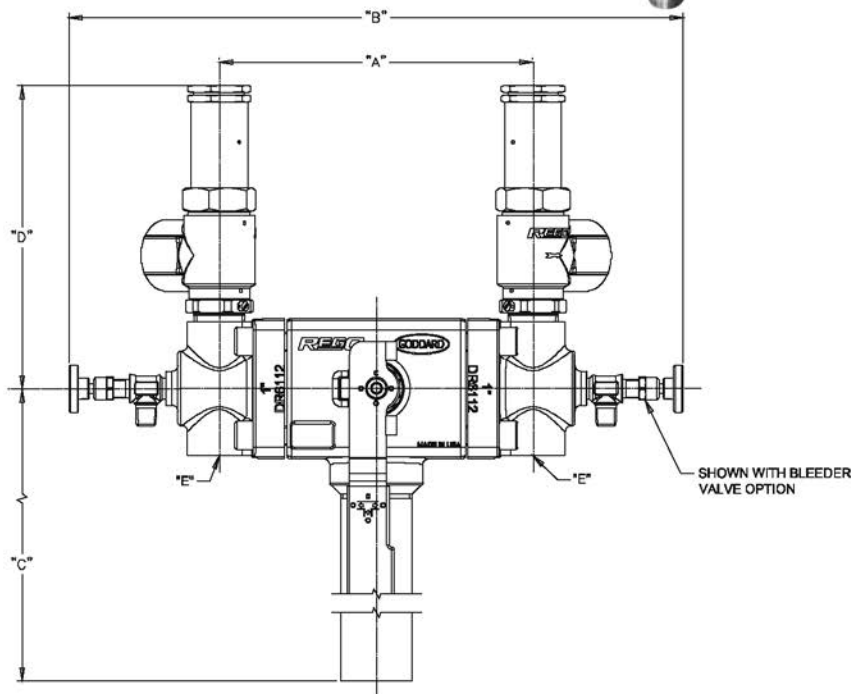
## VALVES RELIEF

### APPLICATION:

Provides a complete solution for pressure relief devices assembled in a factory setting, pressure and oxygen cleaned ready for attachment to cryogenic bulk tanks. Ideal for OEM applications where pre-fabricated assemblies are favored to streamline constructions. Ideal for all cryogenic liquids including Liquified Nitrogen, Oxygen and Argon. Safe and reliably used in LNG Systems. Excellent for protecting bulk cryogenic liquid vessels, transport trailers and industrial pipelines.

### FEATURES:

- High flow rates complement our AR series pressure relief valves and burst disc.
- Valve side selection is accomplished with a heavy duty control arm clearly labeled for positive isolation.
- Needle valves accessorize for easy bleed of gas before removing pressure relief devices.
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- Pressure Rating: 725 PSI (50 bar)
- Temperature Rating: -325°F (-198°C) to +165°F (+74°C)



RMI Part No.	Inlet Inches DN	Connection Type	A	B	C	D	E
DA6206	1"	Thread NPT	4.76"	13.08"	9.75"	7.00"	3/4" NPT
DA6208	1 1/2"	Thread NPT	8.33"	16.30"	15.75"	8.06"	1" NPT



## VALVES RELIEF

### APPLICATION:

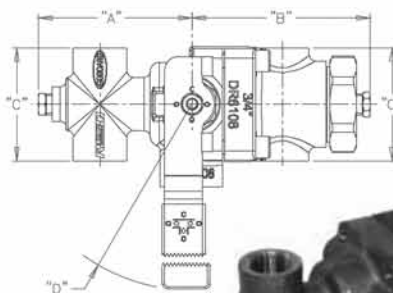
The Diverter Valve DR Series, provide a simple solution for the isolation of pressure relief devices during routine change out of a Relief Valve without evacuating the cryogenic vessel. Ideal for all cryogenic liquids including Liquified Nitrogen, Oxygen and Argon. Safe and reliably used in LNG Systems. Excellent for protecting bulk cryogenic liquid vessels, transport trailers and industrial pipelines.

### FEATURES:

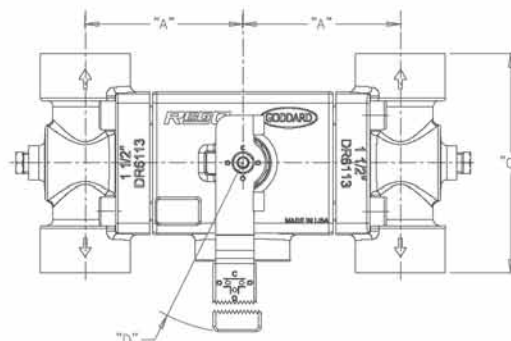
- High flow rates compliment our AR series pressure relief valves.
- Valve side selection is accomplished with a heavy duty control arm clearly labeled for positive isolation.
- Needle valves accessorize for easy bleed of gas before removing pressure relief devices.
- Fitted with threaded top Relief Valve ports and bottom Burst Disk connections.
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- Pressure Rating: 600 PSI (41.37 bar) CWP
- Temperature Rating: -320°F (-196°C) to +165°F (+74°C).
- 100% Factory tested

### MATERIALS:

Body ..... Bronze ASTM B61 UNS C92200  
 Bushing, End Cap ..... Brass B16 C36000  
 Spring Clamp ..... Brass  
 Thread Ring ..... Brass ASTM B16 C36000  
 Seat Rings ..... PCTFE ASTM D1430  
 Gasket ..... PTFE  
 Screw ..... Stainless Steel  
 Ball ..... 316 Stainless Steel  
 Pipe Plug ..... Brass ASTM B16 UNS C360000  
 Spring Washer ..... Stainless Steel  
 Spacer ..... Brass ASTM B16 UNS C360000  
 Lever ..... Cadmium Plated Steel  
 Packing ..... PTFE  
 Stem ..... Stainless Steel ASTM A582 UNS S30300  
 Packing Nut ..... Brass ASTM B16 UNS C36000  
 Lock Washer ..... Stainless Steel



DR6108



DR6112 & DR6113



RMI Part No.	Inlet Inches DN	Outlet Inches DN	Connection Type	A	B	C	D	Height	Weight Lbs
DR6108	1"	3/4"	Thread NPT	4"	4.65"	2.94"	R 7.36"	5.18"	10
DR6112	1 1/2"	1"	Thread NPT	5.94"	-	5.70"	R 7.36"	5.77"	28
DR6113	1 1/2"	1 1/2"	Thread NPT	5.94"	-	5.70"	R 7.36"	5.770"	30

## MANIFOLD

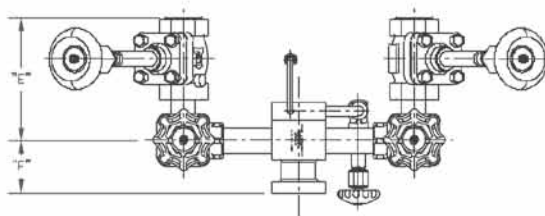
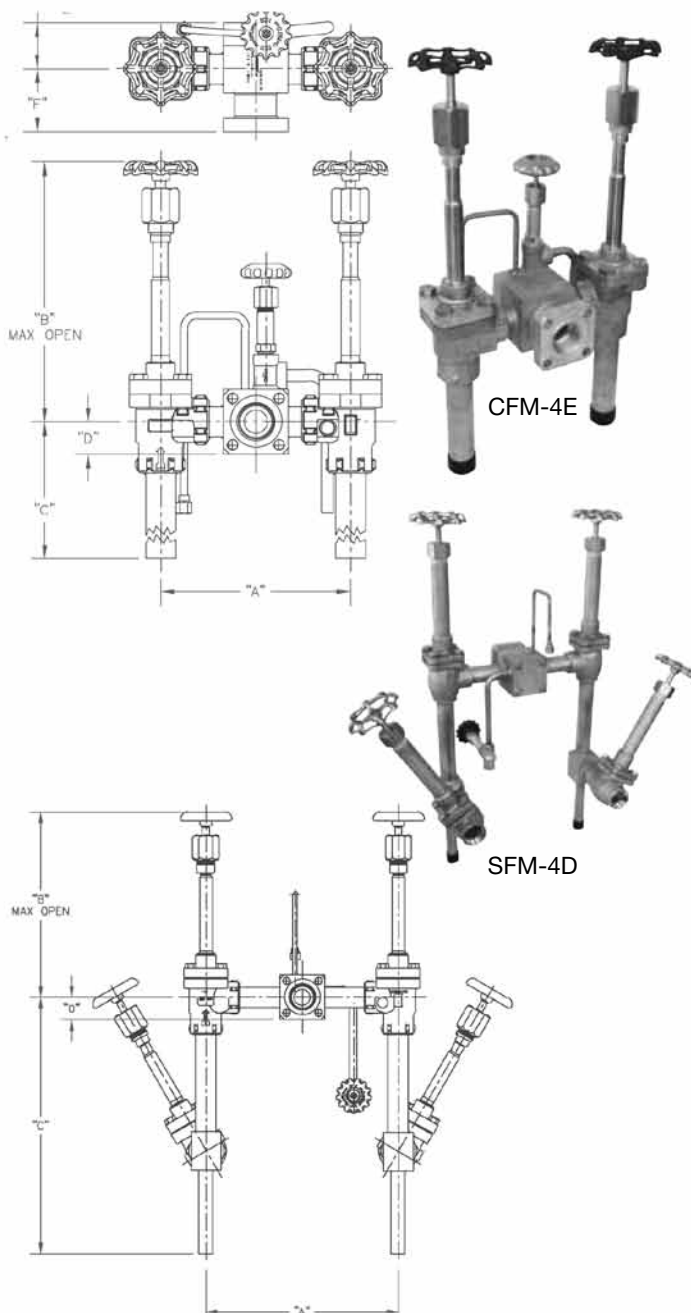
### APPLICATION:

High quality brazed and welded assemblies are ideally suited for the original equipment manufacturer of bulk cryogenic vessels. A wide variety of valve types including union or bolted bonnet, bronze or stainless steel bodies & top works and piping of stainless steel or copper onstruction are available as production unit.

Ideal for all cryogenic liquids including Liquified Nitrogen, Oxygen and Argon. Safe and reliably used in LNG systems. In addition we can custom design configurations that are welded and brazed in a factory setting.

### FEATURES:

- Unitized construction eliminates leaks and provides easy fit-up to tank piping.
- Modules commonly include top and bottom fill valves, fill check with strainer and hose bleed and relief valve.
- Many options are available which include redundant isolation valves or specific end user dimensions and specifications.
- Our valve products stand up to high cycle environments, without the need for field adjustment of valve packing.
- Available alone or as a unitized welded assembly for bulk tank filling.
- Repeatable performance and geometry.
- Precision silver brazed and welded assembly.
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- Pressure Rating: SFM Series 725 PSI (50 bar) – CFM Series 600 PSI (41 bar)
- Temperature Rating: -320°F (-196°C) to +165°F (+74°C)
- 100% Factory tested



RMI Part No.	Size	Bonnet Type	Pipe Material	A	B	C	D	E	F
CFM00002D	1"	Union	Stainless Steel	10.25"	14.64"	7.5"	1.75"	2.5"	3.4"
CFM00004D	1 1/2"	Union	Stainless Steel	10.25"	15.00"	9.5"	1.75"	2.5"	3.4"
CFM00004E	1 1/2"	Bolted	Stainless Steel	10.25"	13"	9.5"	1.75"	2.5"	3.4"
AFM00004D	1 1/2"	Bolted	Stainless Steel	10.25"	13"	9.5"	1.75"	8"	3.4"
PFM00004D	1 1/2"	Bolted	Copper	15.00"	14.63"	20"	1.75"	8"	3.4"
SFM00004D	1 1/2"	Bolted	Stainless Steel	15.00"	14.63"	20"	1.75"	2.54"	3.4"

## REGO HORIZONTAL CHECK VALVES

The Rego 8500 series are designated for use as a check valve on large cryogenic bulk stations and cryogenic pipelines.

- 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.
- Working temperature range is -320 degrees F to +165 degrees F.
- Maximum working pressure is 600 PSIG CWP.
- 2 PSI crack pressure.

REGO HORIZONTAL CHECK VALVES

**REGO** CRYO-FLOW PRODUCTS

RMI Part No.	Inlet/Outlet Connection	Mid-Inlet to Top of Valve	Length	Cv
BK8508S	1.128" - 1-1.30"	2 1/4"	4 5/16"	10
BK8508T	1" FNPT	2 1/4"	4 5/16"	10
BK8512S	1.6929" - 1.631"	3 1/4"	5 3/16"	27
BK85112T	1 1/2" FNPT	3 1/4"	5 3/16"	27

## REGO INLINE CHECK VALVES

Inline check valves with metal seat option for cryogenic service or with soft seat option for leak free operation in gas service.

- One directional flow indicated by arrow on body.
- Large Cv for high flow capacity and low pressure drop.
- Working temperature range:
  - 320° F to +165° F for metal seats
  - 20°F to +165°F for soft seats
- 1 psig cracking pressure
- Cleaned for use in oxygen service per GCA G-4-1



REGO INLINE CHECK VALVES

RMI Part No. Connections FNPT	Seating Option	Inlet/Outlet	Length HEX Size	Wrenching	Cv	Max Operating Pressure
Stainless Steel Check Valves						
CG250SS	METAL	1/4"	2 3/8"	13/16"	.87	5000 PSIG
CG375SS	METAL	3/8"	2 1/2"	1"	2.3	5000 PSIG
CG500SS	METAL	1/2"	3"	1 1/8"	3.5	5000 PSIG
CG750SS	METAL	3/4"	3 5/8"	1 1/2"	5.2	5000 PSIG
CG250SSS	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
CG375SSS	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
CG500SSS	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
CG750SSS	SOFT	3/4"	3 5/8"	1 1/2"	5.2	3000 PSIG
Brass Body Check Valves						
CG250B	METAL	1/4"	2 3/8"	13/16"	.87	5000 PSIG
CG375B	METAL	3/8"	2 1/2"	1"	2.3	5000 PSIG
CG500B	METAL	1/2"	3"	1 1/8"	3.5	5000 PSIG
CG750B	METAL	3/4"	3 5/8"	1 1/2"	5.2	5000 PSIG
CG250BL	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
CG375BL	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
CG500BL	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
CG750BL	SOFT	3/4"	3 5/8"	1 1/2"	5.2	3000 PSIG



## SERIES 322 BRONZE GATE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union bonnet valve can be permanently installed in the line and serviced from the top.

Soft Seated: Bronze cast body and internals. Rugged construction for long life.

Construction: Bronze cast body and bonnet. Rugged construction for long life.

Sizes: 1/2" through 3" (15mm through 80mm)

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) and 600 psig (40 bar) see series 326.

### UPDATES:

1/4" - 2" has been changed to the 326 Series (see above description). 2.5" and 3" remain 322 series which tested at 400 PSI (only major difference).



322



840

## SERIES 840 - SWING CHECK VALVE FOR CRYOGENIC SERVICE

Top Entry: Can be permanently installed in the line and serviced from the top.

Soft Seated: Replaceable PCTFE seat for enhanced seating.

Construction: Bronze body and internals designed to prevent back-flow in cryogenic systems. Higher fluid capacity (Cv) than poppet or Lift-Check Valves.

Sizes: 1/2" through 2" (15mm through 50mm)

Ends: Threaded (FNPT) or with stainless steel nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating: 400 psig (27 bar).

### UPDATES:

Same valve. Also available 846M series, which tested at 600 PSI and has a metal seat.

\* Call for complete Goddard catalog



886

## SERIES 886 - CHECK VALVE FOR CRYOGENIC SERVICE

Top Entry: Can be permanently installed in the line and serviced from the top.

Soft Seated: Replaceable PCTFE disc provides a high performance seal. The disc/arm assembly is easily replaced. Metal -to-metal seating also available.

Construction: 316L stainless steel investment cast body, cap and arm.

Sizes: 1/2" through 1 1/2" SW, BW Schedule 10; 2" through 4" as BW Schedule 10 and BW Schedule 40.

Ends: Threaded (FNPT) or with stainless steel nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (non-shock cold): 1/2" through 2" 300 psig (20 bar) 400 psig (27 bar); 3" and 4" 105# Class 275 psig (19 bar); 3" and 4" 300# Class 720 psig (50 bar).

### UPDATES:

Same valve with some nomenclature changes for end connection designators.

## REGO EXTENDED STEM CRYOGENIC VALVES

### ES8450 SERIES EXTENDED STEM VALVES

### BK9450 & BK9470 SERIES EXTENDED STEM VALVES

These valves are designed for use as a trycock valve or hose drain valve on cryogenic tanks. Another application is 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.



- Union Bonnet
- One piece stainless steel stem
- Conical seat design
- Maximum working pressure is 600 psig
- Working temperature is -320°F to +165°F
- Cleaned for oxygen per CGA G-4.1
- ES8450 Series also features manual torque compression packing.
- BK9450 and BK9470 features extended bonnet and spring loaded package.
- BK9470 features 304 stainless steel tube brazed into one or both ends.

**REGO** CRYO-FLOW  
PRODUCTS

RMI Part No.	Inlet/Outlet	Height	Body width	Width with inlet/outlet tubes	Cv
ES 8452	1/4" FNPT	4"	2.5"	does not apply	0.70
ES 8453	3/8" FNPT	4"	2.5"	does not apply	1.10
ES 8454	1/2" FNPT	4"	2.5"	does not apply	1.10
BK 9452	1/4" FNPT	6.5"	2.5"	does not apply	0.70
BK 9453	3/8" FNPT	6.5"	2.5"	does not apply	1.10
BK 9454	1/2" FNPT	6.5"	2.5"	does not apply	1.10
BK 9453FA	5/8" OD tubing x 3/8" FNPT	6.5"	2.5"	4.0"	1.10
BK 9475A	5/8" OD tubing both ends	6.5"	2.5"	5.5"	1.10

\*Call for complete REGO catalog.

## REGO SHORT STEM CRYOGENIC VALVES

### 9450 SERIES

### 9460 SERIES

- The 9450 and 9460 series valves are designed for use on portable cryogenic and other in-line shut-off valve applications.
- 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 freeze up at cryogenic temperatures.
- Conical swivel seal design helps prevent seat galling from over-torque tightening.
- Cleaned for liquid oxygen service per CGA G-4.1.
- Maximum working pressure is 600 psig.
- Working temperature range is -320°F to +165°F.

RMI Part No.	Inlet	Outlet	Orifice	Length	Height (app.)	Tube	Cv
T9452	1/4" FNPT	1/4" FNPT	.250	2 1/2"	2 3/4"	none	.72
T9453	3/8" FNPT	3/8" FNPT	.406	2 1/2"	2 3/4"	none	1.08
T9454	1/2" FNPT	1/2" FNPT	.406	2 1/2"	2 3/4"	none	1.10
T9464CA	.675 Tube	3/8" FNPT	.406	2 1/2"	2 3/4"	1 1/8"	1.08
T9464DA	.675 Tube	3/8" FNPT	.406	2 1/2"	2 3/4"	2 1/8"	1.08
T9464ADA	.675 Tube	3/8" FNPT	.406	2 1/2"	2 3/4"	3 3/8"	1.08





Goddard valves have created a standard that industry veterans know. If you are familiar with Goddard, you will probably request them. If not, please call on us for additional information.



110

### SERIES 110 - GATE VALVE FOR CRYOGENIC SERVICE

Top Entry: Can be permanently installed in the line and serviced from the top.

Soft Seated: Replaceable PCTFE seat provides a virtually bubble-tight seal.

Construction: Stainless steel investment cast body and bonnet.

Sizes: 1/2" through 6" (15mm through 150mm)

Ends: RF flange, butt weld, socket weld, threaded (FNPT).

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): Class 150 valve to 275 psig. (19 bar) Class 300 valve to 720 psig (50 bar).

UPDATES: Same valve with some nomenclature changes. Most valves (except flanged connections) are offered only in Class 300# (check with us on Class 150# as some sizes are available).



212

### SERIES 202/212 - BRONZE GLOBE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union-bonnet can be permanently installed in the line and serviced from the top.

Construction: Bronze cast body and bonnet. Rugged construction for long life. 202: non-extended silicon brass stem; 212: extended silicone steel stem.

Sizes: 1/4" through 2" (202 and 212 Series).

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) for a series 202 and 600 psig (40 bar) see series 206.

UPDATES:

202 to 206 - New valve has live loaded packing and is tested at 600 PSI. Older version was tested at 300 or 400 PSI.

212 to 226 - 212 was an extended stem/short bonnet and is no longer available. It has been replaced with an extended stem and extended bonnet (looks much like Goddard's 222 series). New valve has live loaded packing and is tested at 600 PSI. Old valve tested at 300 or 400 PSI.

### SERIES 222 - BRONZE GLOBE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union-bonnet can be permanently installed in the line and serviced from the top. Stainless tube prevents excessive stem distortion.

Construction: Bronze cast body and bonnet. Rugged construction for long life.

Sizes: 1/4" to 3" FNPT ends (8mm to 80mm); 3/8" to 3" SPT Ends (10mm to 80mm).

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) for a series 202 and 600 psig (40 bar) see series 226.

UPDATES:

Replaced with 226 Series. See description above. 222X series valve is still available. This valve is different because it has a conical seat (used primarily in trailer valves).

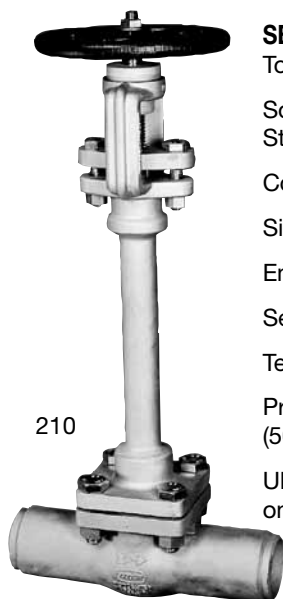
\* Call for complete Goddard catalog



222



Goddard valves have created a standard that industry veterans know. If you are familiar with Goddard, you will probably request them. If not, please call on us for additional information.



210

#### **SERIES 210 - GLOBE VALVE FOR CRYOGENIC SERVICE**

Top Entry: This valve can be permanently installed in the line and serviced from the top.

Soft Seated: PCTFE disc in stainless steel globe assembly provides a virtually bubble-tight seal. Stem/globe assembly is replaceable

Construction: Stainless Steel investment cast body and bonnet to match your piping requirements.

Sizes: 1/2" through 6" (15mm through 150mm).

Ends: RF flange, butt weld, socket weld, threaded (FNPT).

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): Class 150 valve to 275 psig (19 bar); class 300 valve to 720 psig (50 bar).

UPDATES: Same valve with nomenclature changes. Most valves (except flanged connections) offered only in Class 300# (Class 150# available in some sizes).



312

#### **SERIES 302/312 - BRONZE GATE VALVE FOR CRYOGENIC SERVICE**

Top Entry: Union bonnet valve can be permanently installed in the line and serviced from the top.

Soft Seated: Bronze cast body and bonnet. Rugged construction for long life.

Construction: Bronze cast body and bonnet. Rugged construction for long life.

Sizes: 1/2" through 3" (15mm through 80mm)

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) for a series 302 and 600 psig (40 bar) see series 306.

UPDATES:

302 has changed to 306. Only difference is 306 is tested at 600 PSI and 302 is tested at 300 or 400 PSI.

312 has changed to 326 series. 312 was an extended stem/short bonnet and is no longer available. It has been replaced with extended stem/short bonnet and is no longer available. It has been replaced with extended stem/extended bonnet. It looks like Goddard's 332 series. New valve is tested at 600 PSI while old valve tested at 300 or 400 PSI.

\* Call for complete Goddard catalog

## EXTENDED BONNET CRYOGENIC GLOBE VALVES

The BK and BKA 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. Certain BK valves are offered with brazed-in SCH 5 Stainless Steel Pipe Stubs.

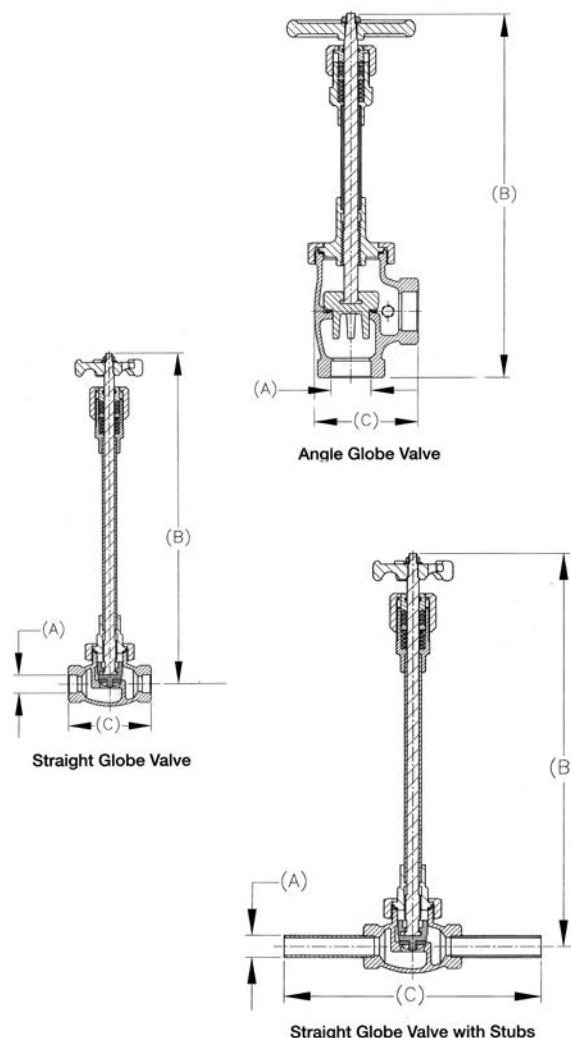
### FEATURES

- CTFE seat disc and swivel seat design offer positive shut-off, minimal seat wear and a long service life.
- Unique spring-loaded, upper packing provides extended service life without constant packing adjustment.
- One piece slip-on seat assembly for easy replacement.
- Each valve is pressure tested to be leak free.
- Each valve is cleaned and packaged for oxygen service per CGA G-4.1.
- Maximum working pressure is 600 psig CWP.
- Working Temperature Range is -320° F to +165° F
- Union Bonnet for 1/2", 3/4" and 1" valve sizes and on both the 1" model BKA8408S and 1 1/2" model BKA8412S angle valves. Bolted Bonnet design is used on the BK9410, BK9412 and BK9416 models.

**REGO** CRYO-FLOW PRODUCTS

RMI Part #	Inlet/Outlet Connections	Height Open	Length	Cv Factor
	A	B (app.)	C	
Straight Body Style				
BK8404S	.631"-.634"	9 5/32"	3 11/16"	4.7
BK8404T	1/2" F.NPT	9 5/32"	3 11/16"	4.7
BK8404ST	.631"-.634" x 1/2" F.NPT	9 5/32"	3 11/16"	4.7
BK9404S	.631" - .634"	14 1/2"	3 11/16"	4.7
BK9404T	1/2" F.NPT	14 1/2"	3 11/16"	4.7
BK9404ST	.631" - .634" x 1/2" F.NPT	14 1/2"	3 11/16"	4.7
BK8406S	.881"-.884"	9 5/32"	3 11/16"	6.7
BK8406T	3/4" F.NPT	9 5/32"	3 11/16"	6.7
BK9406S	.881"-.884"	14 1/2"	3 11/16"	6.7
BK9406T	3/4" F.NPT	14 1/2"	3 11/16"	6.7
BK8408S	1.131"-1.134"	9 1/8"	4 5/16"	11.2
BK8408T	1" F.NPT	9 1/8"	4 5/16"	11.2
BK9408S	1.131" - 1.134"	14 1/2"	4 5/16"	11.2
BK9408T	1" F.NPT	14 1/2"	4 5/16"	11.2
BK9048AA	1" Sch5 pipe	14 1/2"	10 5/16"	11.2
BK9410S*	1.378"-1.380"	16 7/16"	5 3/16"	17.5
BK9412S*	1.631"-1.634"	16 9/16"	5 3/16"	25.1
BK9412T*	1 1/2" F.NPT	16 9/16"	5 3/16"	25.1
BK9412AA	1 1/2" Sch5 pipe	16 9/16"	11 3/16"	25.1
BK9416S*	2.131"-2.134"	16"	6"	41
BK9416T*	2" F.NPT	16"	6"	41
ANGLE BODY STYLE				
BKA8404S	1.131"-1.134" x 1.631"-1.634"	11 1/4"	3 1/4"	14.5
BKA9408S	1.131"-1.134" x 1.631"-1.634"	14 5/8"	3 1/4"	14.5
BKA8412S	1.631"-1.634"	13"	4 1/4"	30.0

\*Valves with bolted body design.



## REGO 1780 SERIES

### FEATURES:

- Maintains a steady downstream pressure across a range of inlet pressure commonly provided by a cryogenic bulk tank.
- Large seat and diaphragm areas provide high capacity with sensitive control of delivery pressure with low fall-off.
- Two 1/4" FNPT delivery pressure gauge ports are located (plugged) on each side of the valve.
- Two bonnet drain/vent holes to allow for different mounting orientation.
- T Handle adjusting screw.
- Maximum inlet pressure is 400 psig.
- Available in three delivery pressure ranges.
- Temperature range: -40 degrees F to 165 degrees F.
- Cleaned per CGA G-4.1 for oxygen service.

**REGO** *CRYO-FLOW*  
**PRODUCTS**

For Carbon Dioxide and Nitrous Oxide Service: Specify EPDM material for seat disc and O-Rings, add "E" to the end of part number.

### DIMENSIONS:

The 1780 Series regulators have inlet and outlet connection dimensions similar to the popular 1680 Series aluminum regulators. This means you can replace the respective size 1680 Series regulator with the new 1780 Series Regulator and have the improved balanced seat performance.

RMI Part No.	Delivery Pressure Range	Range (PSI)	Pressure Gauge* P/N	Inlet * Outlet (FNPT)
1784A	5-55 psig	1-100	1286	1/2"
1784B	40-110 psig	1-200	S1679	1/2"
1784C	100-200 psig	1-400	15578	1/2"
1786A	5-55 psig	1-100	1286	3/4"
1786B	40-110 psig	1-200	S1679	3/4"
1786C	100-200 psig	1-400	15578	3/4"
1788A	5-55 psig	1-100	1286	1"
1788B	40-110 psig	1-200	S1679	1"
1788C	100-200 psig	1-400	15578	1"

\*Regulator sold without gauge. Order gauge separately.



1780 Series

## REGO BR-1780 SERIES

### FEATURES:

- Maintains a steady downstream pressure across a range of inlet pressure commonly provided by a cryogenic bulk tank.
- Large seat and diaphragm areas provide high capacity with sensitive control of delivery pressure with low falloff.
- Two 1/4" FNPT delivery pressure gauge ports are located (plugged) on each side of the valve.
- Two bonnet drain/vent holes to allow for different mounting orientation.
- Bonnet cap to cover adjusting screw for tamper protection.
- Maximum inlet pressure is 400 psig.
- Available in four delivery pressure ranges.
- Temperature range: -40 degrees F to 165 degrees F.
- Cleaned per CGA G-4.1 for oxygen service.

**REGO** *CRYO-FLOW*  
**PRODUCTS**

For Carbon Dioxide and Nitrous Oxide Service: Specify EPDM material for seat disc and O-Rings, add "E" to the end of part number.

RMI Part No.	Delivery Pressure Range		Pressure Gauge*	FNPT	Inlet & Outlet Cv
		Range (PSI)	RMI Part No.		
BR-1784A	5-55psig	1-100	1286	1/2"	3.1
BR-1784B	40-110psig	1-200	S1679	1/2"	3.1
BR-1784C	100-200psig	1-400	15578	1/2"	3.1
BR-1786A	5-55psig	1-100	1286	3/4"	4.8
BR-1786B	40-110psig	1-200	S1679	3/4"	4.8
BR-1786C	100-200psig	1-400	15578	3/4"	4.8
BR-1788A	5-55psig	1-100	1286	1"	5.5
BR-1788B	40-110psig	1-200	S1679	1"	5.5
BR-1788C	100-200psig	1-400	15578	1"	5.5

### MAINTENANCE & OPTION KITS

Regulator Model	BR-1784	BR-1786	BR-1788
Repair Kit Part No.	BR-1784-80	BR-1786-80	BR-1788-80
Spring Kit Part No.			
"A" spring 5-55 psig	BR-1784-7SKA	BR-1786-7SKA	BR-1788-7SKA
"B" spring 40-110 psig	BR-1784-7SKB	BR-1786-7SKB	BR-1788-7SKB
"C" spring 100-200 psig	BR-1784-7SKC	BR-1786-7SKC	BR-1788-7SKC
T-Handle Screw Thread Option Kit	BR-1784-7ST	BR-1786ST	BR-1788ST



BR-1780 Series



## REGO CRYOGENIC LIQUID CYLINDER REGULATOR

### FEATURES

- Minimum Linet Pressure: 550 psig
- Temporary Range: -320 degrees F to 165 degrees F
- Brass body & diaphragm
- PTFE seat
- Stainless Steel springs, adjusting screw & nut
- Stainless Steel Inlet Filter

**REGO** CRYO-FLOW  
PRODUCTS



RMI Part No.	Gas	Liquid Cylinder Connection	Delivery Pressure Range
LCR-B580	Nitrogen/Argon	CGA 580	25-250 psig
LCR-B540	Oxygen	CGA 540	25-250 psig
LCR-B320	Carbon Dioxide	CGA 320	25-250 psig
LCR-C580	Nitrogen/Argon	CGA 580	100-350 psig
LCR-C540	Oxygen	CGA 540	100-350 psig
LCR-C320	Carbon Dioxide	CGA 320	100-350 psig

## REGO AUTOMATIC CHANGEOVER REGULATORS

### FEATURES:

- Automatically withdraws from reserve cylinder after exhausting the "service" cylinder.
- Cylinder pressure gauges let you know at a glance which cylinder is in use. There is no need to shutdown the system to replace empty cylinders.
- Nickel plated.
- 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 with mounting bracket and a special delivery pressure adjustment wrench.
- Factory set at 50 PSIG on service side. CO<sub>2</sub> and N<sub>2</sub>O regulators are factory set at 100 PSIG on service side.

OUTLET CONNECTION: 1/4" FNPT WIDTH: 7 3/4" HEIGHT: 5 1/8"

RMI Part No.	Gas Service	CGA Inlet Connection	Maximum Inlet Pressure (PSIG)	Delivery Pressure Range (PSIG)
M2523HP320	Carbon Dioxide	320	1800	30-130
M2523HP326	Nitrous Oxide	326	1800	30-130
M2523HP350	Hydrogen	350	3000	30-130
M2523HP540	Oxygen	540	3000	30-130
M2523HP580	Nitrous, Argon, Helium	580	3000	30-130
M2523HP59 0	Industrial Air	590	3000	30-130

## REGO COMBINATION PRESSURE BUILD/ECONOMIZER REGULATOR CBH & CBC SERIES

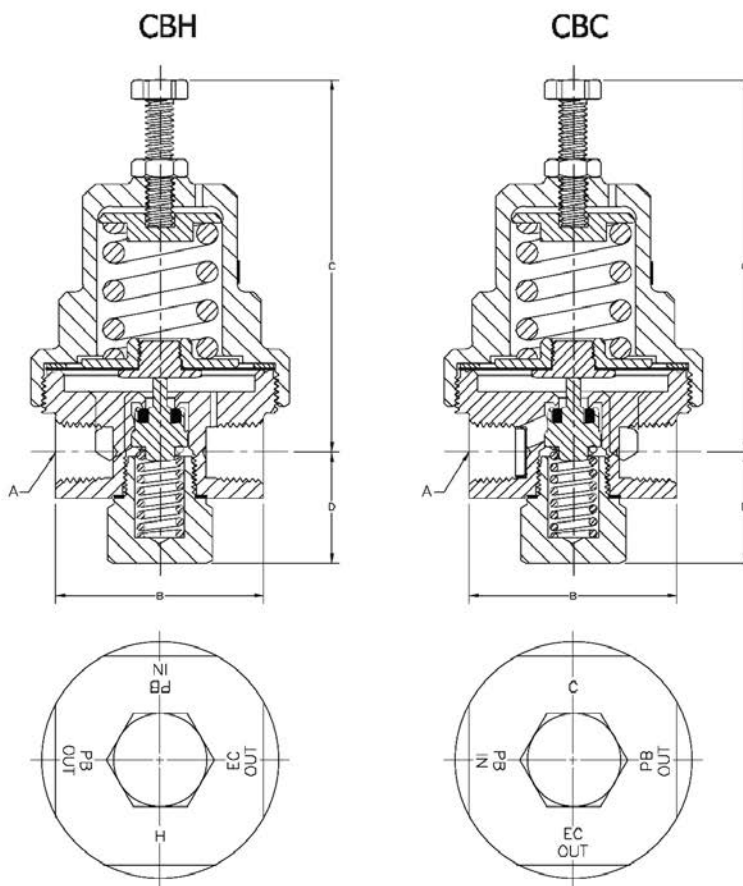
Combines the function of RG and ECL Pressure Building and Economizer functions in one compact unit. Available in Chart and Taylor-Wharton piping geometries and a variety of pressure ratings.

### FEATURES:

- Precision silver brazed assembly
- Repeatable performance and geometry
- 100% factory tested
- Temperature range -320° to +165°F



CBH000125



RMI Part No.	Inlet/Outlet Connections FNPT	A	B	C	D	Pressure Setting (PSIG)	Operating Range (PSIG)
CBH000125	1/4"	1/4"	1.82"	3.245"	.966"	125	25-250
CBH000300	1/4"	1/4"	1.82"	3.245"	.966"	300	150-350
CBH000325	1/4"	1/4"	1.82"	3.245"	.966"	325	150-350
CBC000125	1/4"	1/4"	1.82"	3.245"	.966"	125	25-250
CBC000300	1/4"	1/4"	1.82"	3.245"	.966"	300	150-350
CBC000325	1/4"	1/4"	1.82"	3.245"	.966"	325	150-350

\*Call for complete REGO catalog.

## REGO RG SERIES - CRYOGENIC REGULATORS

### FEATURES:

- All parts are copper alloy (brass), PTFE and stainless steel - materials selected specifically for compatibility with cryogenic temperatures down to -320 degrees F.
- Body & bonnet machined from solid brass bar stock.
- PTFE seat helps assure a positive shut-off at cryogenic temperatures down to -320 degrees F.
- High & low pressure regulators are the same compact size - designed to fit in close quarters. The compact high pressure design has no loss of flow capacity.
- Interchangeable with existing cryogenic regulator units.
- Inlet filter helps prevent foreign material from entering the regulator.
- Lock nut is provided to maintain adjusting screw setting.
- Maximum inlet pressure of 550 PSIG.
- Cleaned for liquid oxygen service per CGA G-4.1.

RMI Part No.	Inlet/Outlet Connections FNPT	Width	Pressure Setting (PSIG)	Operating Range (PSIG)
RG125	1/4"	2 1/4"	125	25-250
RG300	1/4"	2 1/4"	300	125-350



RG Series

## REGO ECL SERIES - CRYOGENIC ECONOMIZERS

- All parts are copper alloy (brass), PTFE and stainless steel - materials selected specifically for compatibility with cryogenic temperatures down to -320 degrees F.
- Body & bonnet machined from solid brass bar stock.
- The ECL Series utilizes a stainless steel needle seat design that provides a very sensitive flow control at lower pressure settings.
- High & low pressure economizers are the same compact size - designed to fit in close quarters. The compact high pressure design has no loss of flow capacity.
- Interchangeable with existing cryogenic economizer units.
- Inlet filter helps prevent foreign material from entering the economizer.
- Lock nut is provided to maintain adjusting screw setting.
- Maximum inlet pressure of 550 PSIG.
- Cleaned for liquid oxygen service per CGA G-4.1.

RMI Part No.	Inlet/Outlet Connections FNPT	Width	Pressure Setting (PSIG)	Operating Range (PSIG)
ECL22	1/4"	2 1/4"	22	10-150
ECL70	1/4"	2 1/4"	70	10-150
ECL140	1/4"	2 1/4"	140	10-150
ECL325	1/4"	2 1/4"	325	150-350



ECL Series

**REGO** CRYO-FLOW PRODUCTS

\*Call for complete REGO catalog.

## PRIMARY REGULATOR SERIES 3000

Series 3000 Primary Regulators (for direct cylinder mount) have an integral safety, stainless steel ball check valves and a self-relieving diaphragm. In the event of a failure of the regulator seat, this safety will respond instantaneously protecting anything downstream from potentially dangerous high pressure. The maximum down stream pressure the system will see will not exceed 143 psig in accordance with NSDA guidelines.

### REGULATOR:

Test Pressure: 3300 psig (227.59 bar.)

Maximum Inlet Pressure: 300 psig (206.90 bar.)

Operating Range: 0-130 psig (0-8.97 bar.)

Temperature Range: -40F/+200F (-40C/+93C)

Safety: Preset 130 psig (8.97 bar.)

Mounting: Wall or Bottle

HP ports: 1/4" FPT = Left

LP Ports: 1/4" FPT = Right



RMI Part No.	Description
3741	1P X 1P, 160 lb & 2000lb gauge, CO2 tank fitting, 1/4" flare with check valve outlet

### ACCESSORIES

RMI Part No.	Description
6603	0-3000 psi gauge left hand thread
740-12	CGA 320 Nipple 1/4" MNPT Left hand thread
740-18NB	CO2 Hex wrench

## PRIMARY REGULATOR SERIES 7400

Our Regulators continue to meet the various demands of the beverage industry. Robust design delivers performance and reliability. Extremely durable and user friendly polycarbonate bonnets make adjustments a snap! Pull cap to adjust the pressure and push back to lock it in.

- High CO2 volumetric flow provides continuity in product dispensing
- Primary regulators connect directly to gas source
- Recommended operating pressure should be limited to 2/3 of the gauge range for maximum accuracy
- UL approved per UL252 class IV rating for CO2
- Polycarbonate bonnet will not chip, break or fade
- 10 Micron filter built in to keep contaminants out of regulator
- One repair kit for primary and secondary
- Used primarily for Beer but can be used for other applications.



RMI Part No.	Description
T742	CO2, 60# & 2000# Gauge, 5/16B Shutoff (w/ck valve)



## GASKIT SERIES 3000 HIGH PRESSURE REDUCING REGULATORS

- Features:
  - Size (2.12" diameter x 7" high)
  - Very competitive pricing
  - 15 micron sintered 316 SS inlet filter
  - Machined bar stock body, bonnet and piston eliminates porosity found in castings
  - Numerous optional features are available
- Specifications:
  - Maximum inlet pressure (brass): 6000 PSIG
  - Maximum inlet pressure (SS): 10,000 PSIG
  - Control pressure ranges: 0-500, 0-800, 10-1500, 15-2500, 25-4000, 50-6000 or 100-10000 PSIG
- Materials of Construction:
  - Body: SAE 360 brass, 316L SS, or aluminum
  - Bonnet: SAE 360 Brass, 303 SS or 316L SS
  - Piston: 316L SS
  - Wetted Parts: 316L SS
  - Seals: Viton® is standard, with numerous other compounds available
  - Valve Seat: Vespel®, PEEK or PCTFE
- Porting:
  - Standard Inlets: 1/4" FNPT @ 0° & 55°
  - Standard Outlets: 1/4" FNPT @ 125° & 180°
  - Port Options: Type (SAE J1926), number, size & orientation
- Optional Items:
  - Gauges
  - CGA fittings



RMI Part No.	Outlet Pressure	Ports	Body Material	O-ring Material	Seat Material
GK10000-1462020	50-6000 PSIG	4 (1/4" fnpt)	BRASS	VITON	VESPEL
GK10000-1262021	50-6000 PSIG	2 (1/4" fnpt)	BRASS	VITON	VESPEL

\* other configurations and materials available please call with your requirements

## BLACKMER LIQUEFIED GAS PUMPS

Blackmer Liquefied Gas Pumps specifically designed for liquid CO<sub>2</sub> 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.

Motor Speed Recirculation Pumps offer capacities from 5 to 22 GPM (depending on differential pressure) and are ideal for loop systems and low volume transfer applications.

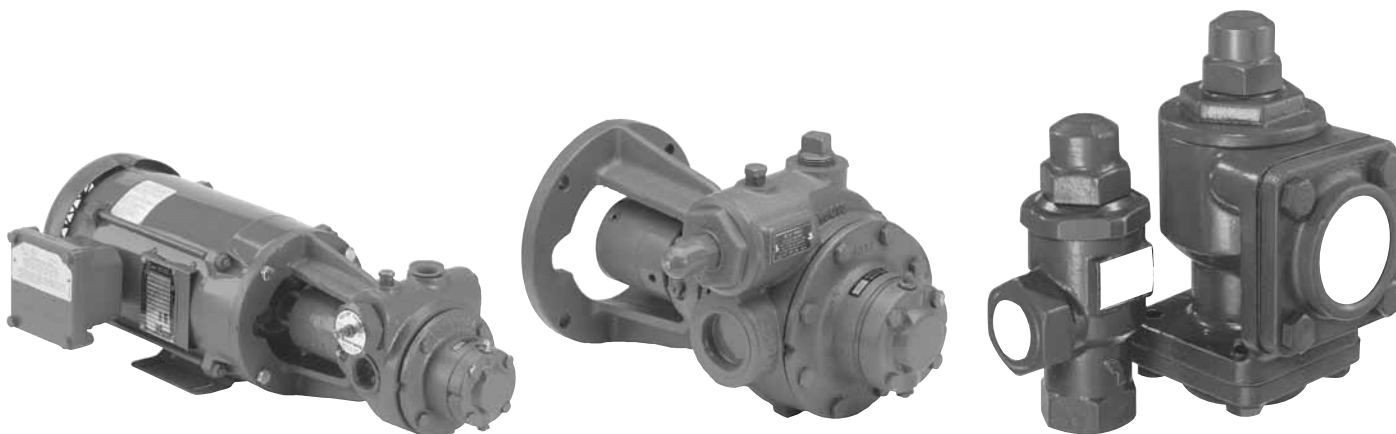
Bulk transfer and recirculation Pumps offer capacities from 25 to 300 GPM (depending on differential pressure). These heavy-duty pumps are widely used for bulk transfer and recirculation applications, which include industrial and food preparation systems, refrigeration, process plants and transport loading and unloading.

Blackmer Transfer Pumps for mobile/over the road applications with capacities from 150 to 300 GPM (depending on differential pressure). This pump mounts directly to a commercial control valve in combination with the tank of the transport. Direct mounting eliminates the need for inlet pipes, shutoff valves and external strainer, which can restrict flow and cause vaporization problems.

### PUMPS

RMI Part No. Pump & base	Pump only	Inlet/Outlet	HP	Capacity GPM	
				50#	90#
CRLR1.25-DM	CRLR1.25	1 1/4"	2	6 GPM	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
Pump & base	Pump only	Inlet/Outlet		Capacity GPM	
				50#	90#
CRL2-DM	CRL2	2"		62	55
CRL3-DM	CRL3	3"		120	95
CRL4-DM	CRL4	4" - 3"		275	245
Transport Pump		Inlet/Outlet		Capacity GPM	
				50#	90#
TCRLF4		4" 300# flange/ Twin 2" NPT		275	245

**blackmer**  
PEOPLE PROVIDING FLOW TECHNOLOGY WORLDWIDE™



### BYPASS VALVES

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

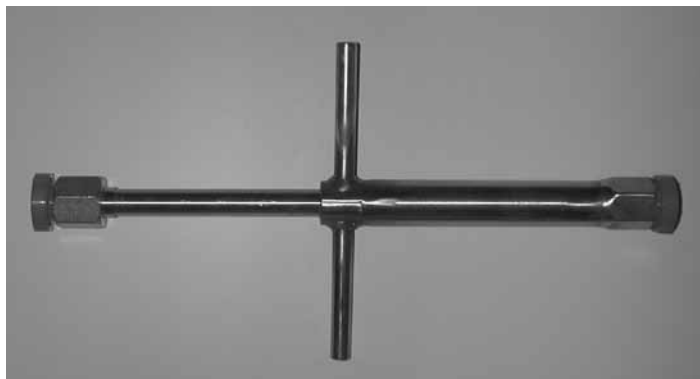
## BLACKMER BYPASS VALVES

Blackmer Bypass Valves are designed to protect pumps and system components from excessive pressure damage. In operation, Blackmer valves provide exceptional close pressure control, even under widely varying bypass conditions.

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



FA500S



FA625T

## HOSES - PIGTAIL ASSEMBLIES

### 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.



**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"

**"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
5TSC-144-144-XX-A	Inert	1/4"	0.375"	0.54"	1	3.0"
5TSC-144-144-XX-A-CCB	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"



**PIGTAIL OPTIONS** (fitting part number change in parenthesis):

### CALL RMI FOR ASISTANCE

- 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)





2 1/2" Gauge Series



2" Gauge Series

## 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

IMPORTANT: Installation requires Teflon tape or oxygen-safe compound to guard against leakage.



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	CGA 870	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	CGA 940	Yoke x 1/4 MNPT, plastic knob



Fill Yoke

## EXTENDED CO2 FILL CONNECTOR

RMI Part No.	Service	Description
SSCO2-EF	CGA 320	Handtight fill connector 6" diameter handwheel



SSCO2-EF

## 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.



RMI Part No.	Description	Replacement Seals
FC870A	CGA 870 Connector, 1/4" MNPT Inlet	SG870-5

## CGA 540 STANDARD CONNECTOR WITH BAIL HANDLE STYLE #1 USED FOR INDUSTRIAL OXYGEN APPLICATIONS

The FasTest's Industrial G540 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 industrial oxygen 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
- Cleaned for O2 service



RMI Part No.	Description	Replacement Seals
G540-0411-IND	CGA 540, #1 Handle, 1/4" MNPT Inlet	SG540

## CGA 580 STANDARD CONNECTOR WITH BAIL HANDLE STYLE #1 USED FOR INERT GAS APPLICATIONS

The FasTest's G580 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



RMI Part No.	Description	Replacement Seals
G580-0411	CGA 580, #1 Handle, 1/4" MNPT Inlet	SG580

## CGA 580 RPV STANDARD CONNECTOR WITH BAIL HANDLE STYLE #1 USED FOR INERT GAS APPLICATIONS

The FasTest's 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



RMI Part No.	Description	Replacement Seals
G580-0411-RPV	CGA 580 RPV, #1 Handle, 1/4" MNPT Inlet	SG580RPV

RMI Part No.	Description	Replacement Seals
G580RPVP	Pin Retraction Tool	G580RPVPT

## SMALL PIPE THREAD FITTINGS

### PIPE THREAD ELBOWS

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)
BEL-8SS	1/2" x 1/2"	st. steel	6,000 (41,300)
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-2HP	1/8" x 1/8"	brass	3,000 (20,700)
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)

### 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

### PIPE THREAD TEES

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
3-Way Female			
BFT-2LP	1/8" NPT	brass	1000 (6,900)
BFT-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)
T347	1/4" NPT	steel	5,000 (34,000)
BFT-4SS	1/4" NPT	st. steel	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-8SS	1/2" x 1/2"	st. steel	6,000 (41,300)
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)

### PIPE THREAD CROSSES

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
4-Way Female			
BCR-2LP	1/8" NPT	brass	1000 (6,900)
BCR-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)
BCR-4SS	1/4" NPT	st. steel	6,000 (41,300)



### PIPE THREAD REDUCER COUPLINGS, FEMALE TO FEMALE

BRASS, PRESSURES TO 3000 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
BF-12-8HP	3/4" NPT x 1/2" NPT	1.700	1-3/8



### 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	1.250	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

## SMALL PIPE THREAD FITTINGS



BF-4SS

BF-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	1.180	7/8
BF-8HP	1/2" NPT x 1/2" NPT	brass	1.500	1-3/8
BF-12HP	3/4" NPT x 3/4" NPT	brass	1.520	1-3/8
PRESSURES TO 6000 PSI (41,300 kPa)				
BF-4SS	1/4" NPT x 1/4" NPT	st. steel	1.187	3/4



B-4SS

B-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	1.500	11/16
B-8HP	1/2" NPT x 1/2" NPT	brass	1.875	7/8
B-12HP	3/4" NPT x 3/4" NPT	brass	1.937	1-1/8
PRESSURES TO 6000 PSI (41,300 kPa)				
B-4SS	1/4" NPT x 1/4" NPT	st. steel	1.437	5/8



BB-2-8HP

### PIPE THREAD BUSHINGS, FEMALE TO MALE BRASS, PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Desc. (In.)	Length	Hex
BB-2-4HP	1/8" NPT x 1/4" NPT	.937	5/8
BB-2-6HP	1/8" NPT x 3/8" NPT	1.437	11/16
BB-4-6HP	1/4" NPT x 3/8" NPT	1.500	3/4
BB-4-8HP	1/4" NPT x 1/2" NPT	1.875	7/8
BB-6-8HP	3/8" NPT x 1/2" NPT	1.937	7/8
BB-4-12HP	1/4" NPT x 3/4" NPT	1.437	1-1/8
BB-8-12HP	1/2" NPT x 3/4" NPT	1.437	1-1/8



BA-4-2HP



BF-4-2HP

### PIPE THREAD ADAPTORS, FEMALE TO MALE

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	1.500	1-1/8
BA-8-6HP	1/2" NPT x 3/8" NPT	brass	1.562	1-1/8
BA-4SS	1/4" NPT x 1/4" NPT	st. steel	1.281	3/4

## HEAVY DUTY BRASS ADAPTERS & FITTINGS

### MISCELANEOUS TAILPIECES

RMI Part No.	Description	Use with nut (RH or LH)	Pipe thread or I.D. pipe	Length
2233-3A	figure 1	1" - 11 1/2" NPS	1/2" NPT	3 7/16"
1138X-2	figure 1	1" - 11 1/2" NPS	7/8"-14NF	2 1/8"
1381-8	figure 2	1" - 11 1/2" NPS	.736 I.D.	2 7/16"
2670-35	figure 2	1" - 11 1/2" NPS	.542 I.D.	2 7/16"

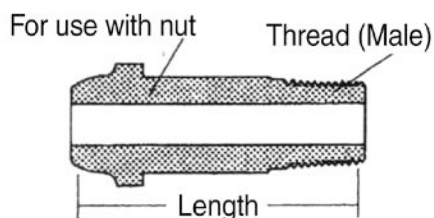


Fig. 1 Threaded

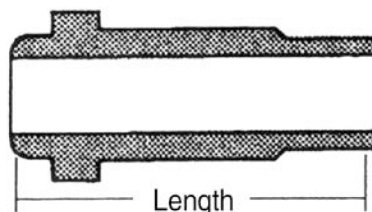


Fig. 2 Sweat End



## NUTS & NIPPLES - HANDTIGHT & WRENCHTIGHT

### NON-CORROSIVE GASES IN SMALL CYLINDERS

Pressures to 3000 PSI (20,000 kPa)			
RMI Part No.	Service	Part	Description
180-2	CGA-180	nut	brass, .625-18 UNF-2B, RH female
180-3	CGA-180	nipple	brass, 1/8 NPT, 1 3/4" long
180-4	CGA-180	washer	teflon
180-5	CGA-180	adaptor	brass, CGA-180 to 1/4" NPT male

### "MC" TANK - ACETYLENE

Pressures 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



### MEDICAL BREATHING MIXTURES

Pressures 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

### 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	brass, 1/4 NPT, 3" long
29-3CV	CGA-296	nipple	brass, 1/4 NPT, 2" w/ck. valve
29-4	CGA-296	nipple	brass, 9/16-25, 3" long



### COMMERCIAL ACETYLENE

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
16-4	CGA-300	nipple	brass, 1/2-27, 2 1/4" long
16-6	CGA-300	nipple	brass, 19/16-25, 3" long
16-3M1	CGA-300	nipple	recessed for 1/4" OD tube
616-2	CGA-300	nut	hand-tight brass, RH female
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
616-3M2	CGA-300	nipple	h-tight, recessed for 5/16" tube
616-PT	CGA-300	tip	soft tip replacement



## HANDTIGHT & WRENCHTIGHT NUTS & NIPPLES

### CGA-300 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
334	CGA-300	nut	brass, .830-14 NGO, LH female
333	CGA-300	nipple	brass, 1/4 NPT, 2 " long
333-A	CGA-300	nipple	brass, 1/4 NPT, 2 1/2" long
333-ACV	CGA-300	nipple	brass, 1/4 NPT, 2 1/2" long w/check valve
333-B	CGA-300	nipple	brass, 1/2-27, 2 1/2" long
CO-6N	CGA-300	washer	nylon, snap-in
SS-334	CGA-300	nut	SS, .830-14 NGO, LH female
SS-333	CGA-300	nipple	SS, 1/4 NPT, 2 " long
SS-333-M1	CGA-300	nipple	recessed for 1/4 OD tube
335	CGA-300	washer	Teflon

### 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/check
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
CO-3M1	CGA-320	nipple	recessed for 1/4 OD tube
CO-3M2	CGA-320	nipple	recessed for 5/16 OD tube
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
SS-CO-3M1	CGA-320	nipple	recessed for 1/4 OD tube
CO-1TW	CGA-320	washer	Teflon,snap-in
CO-5	CGA-320	washer	fiber, flat
CO-6	CGA-320	washer	Teflon, flat
CO-6N	CGA-320	washer	nylon,snap-in



### GGA 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
13-4	CGA-326	nipple	brass, 1/2 -27, 2 1/2" long
13-6	CGA-326	nipple	brass, 9/16-25, 2" long
13-3M2	CGA-326	nipple	recessed for 5/16 OD tube
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
SS-13-3M1	CGA-326	nipple	recessed for 1/4 OD tube



## HANDTIGHT & WRENCHTIGHT NUTS & NIPPLES

### 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, handtight, brass
614-2P	CGA-346	nut	.830-14 NGO-RH-INT, handtight, 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
14-3M1	CGA-346	nipple	1/4 OD tube x nipple
SS-14-3M1	CGA-346	nipple	SS 1/4 OD tube x nipple
14-3M2	CGA-346	nipple	5/16" OD tube x nipple
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



SS-6347-3

SS-6347-2

### CGA-347 - PRESSURES TO 5500 PSI (37,950 KPa)

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
SS-347-2	CGA-347	nut	SS, .830-14 NGO, LH female
SS-347-3	CGA-347	nipple	SS, 1/4" NPT, 3 " long
SS-6347-2	CGA-347	nut	hand-tight, SS RH female
SS-6337-3	CGA-347	nipple	hand-tight, SS, 1/4 NPT, 3 " long
SS-6347-3-2	CGA-347	screw	retaining screw
6337-3-3	CGA-347	o-ring	replacement



347-2

347-3

## 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/check valve
87	CGA-350	nipple	brass, 1/4" NPT, 3" long
86	CGA-350	nipple	brass, 1/2" - 27, 2 1/2" long
84	CGA-350	nipple	brass, 9/16-25, 2 1/2" long
83-M1	CGA-350	nipple	recessed for 1/4 OD tube
83-M2	CGA-350	nipple	recessed for 5/16 OD tube
83-M3	CGA-350	nipple	recessed for 3/8 OD tube
682	CGA-350	nut	hand-tight, brass, LH female
682-P	CGA-350	nipple	hand-tight, plastic grip, LH female
683	CGA-350	nipple	hand-tight, 1/4 NPT, 2 1/2" long
683-M1	CGA-350	nipple	hand-tight, recessed for 1/4 tube
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
SS-83M1	CGA-350	nipple	recessed for 1/4 OD tube



## 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"
15-8M1	CGA-500	nipple	1/4 OD tube
15-8M2	CGA-500	nipple	5/16" OD tube
15-8CV	CGA-500	nipple	1/4" NPT x 2 1/2" w/check valve

## 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/check 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 1/2" long
15-9	CGA-510	nipple	brass, 1/2" - 27, 3" long
15-8M1	CGA-510	nipple	recessed for 1/4 OD tube
15-8M2	CGA-510	nipple	recessed for 5/16 OD tube
15-8M3	CGA-510	nipple	recessed for 3/8 OD tube
615-2	CGA-510	nut	brass, handtight LH male
615-2P	CGA-510	nut	plastic grip, handtight nut, LH male
615-3	CGA-510	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w/o ring
615-3T	CGA-510	nipple	handtight, 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/check valve
SS-15-8M1	CGA-510	nipple	SS, recessed for 1/4 OD tube





## 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
300-3A	CGA-520	nipple	brass, 1/2" - 27, 1 3/4" long
300-3M1	CGA-520	nipple	recessed for 1/4 OD tube



## CGA 540 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
62	CGA-540	nut	brass, .908-14 NGO, RH female
63-CV	CGA-540	nipple	brass, 1/4" NPT, 2" long w/check valve
63	CGA-540	nipple	brass, 1/4" NPT, 2 1/16" long
66	CGA-540	nipple	brass, 1/4" NPT, 2 1/2" long
69	CGA-540	nipple	brass, 1/4" NPT, 3" long
67	CGA-540	nipple	brass, 1/2" - 27, 2 1/6" long
64	CGA-540	nipple	brass, 9/16" - 25, 2 1/6" long
65	CGA-540	nipple	brass, 1/4" NPT, 2 1/2" long
68	CGA-540	nipple	brass, 1/4" NPT, 3" long
63-M1	CGA-540	nipple	recessed for 1/4 OD tube
63-M2	CGA-540	nipple	recessed for 5/16 OD tube
63-M3	CGA-540	nipple	recessed for 3/8 OD tube
662	CGA-540	nut	brass, handtight RH female
662P	CGA-540	nut	handtight, plastic grip, RH female
663	CGA-540	nipple	handtight, brass, 1/4 NPT, 3 1/2" long w/o ring
663-M1	CGA-540	nipple	handtight, recessed for 1/4" tube
663-M2	CGA-540	nipple	handtight, recessed for 5/16" tube
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
SS-63CV	CGA-540	nipple	SS, 1/4 NPT, 3" long, w/check valve
SS-63M1	CGA-540	nipple	SS, recessed for 1/4 tube, 1 5/32" long



## CGA 555 - PRESSURES TO 3000 PSI (20,700 KpA)

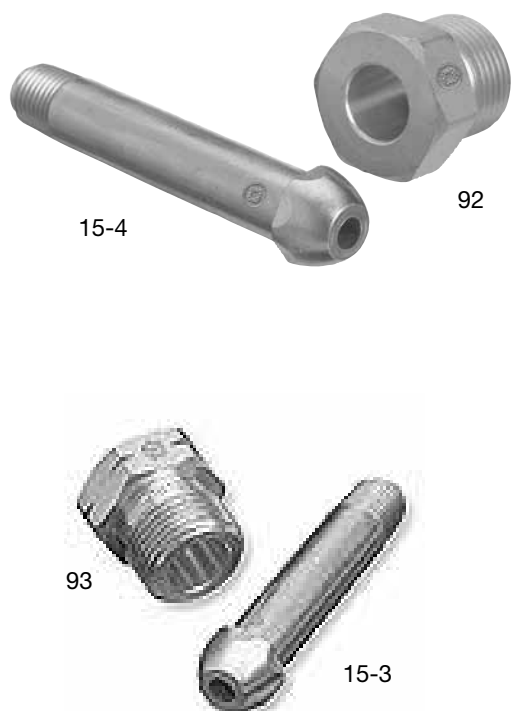
RMI Part No.	Service	Part	Description
72	CGA-555	nut	brass, .908-14 NGO, RH female
63-CV	CGA-555	nipple	brass, 1/4" NPT, 2" long w/check valve
73	CGA-555	nipple	brass, 1/4" NPT, 2 1/16" long
76	CGA-555	nipple	brass, 1/4" NPT, 2 1/2" long

## CGA 577 - PRESSURES TO 4000 PSI (20,700 KpA)

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
577-6577	CGA-577	nut	handtight (use with 577-4SF nipple)



## 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/check 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
15-7	CGA-580	nipple	brass, 9/16" x 25, 3 1/2" long
15-6	CGA-580	nipple	brass, 9/16" x 27, 3" long
15-8-M1	CGA-580	nipple	recessed for 1/4 OD tube
15-8-M2	CGA-580	nipple	recessed for 5/16 OD tube
15-8-M3	CGA-580	nipple	recessed for 3/8 OD tube
692	CGA-580	nut	handtight, brass, RH male
692P	CGA-580	nut	handtight, plastic grip, brass, RH male
615-3	CGA-580	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w/o ring
615-3T	CGA-580	nipple	handtight, brass, 1/4" NPT, 3" long w/o ring
615-8M1	CGA-580	nipple	handtight, recessed for 1/4 tube w/soft tip
615-8M1T	CGA-580	nipple	handtight, recessed for 1/4 tube w/soft tip
615-8M2T	CGA-580	nipple	handtight, recessed for 5/16 tube w/soft tip
615-O	CGA-580	o-ring	replacement
615-PT	CGA-580	tip	soft tip replacement
SS-92	CGA-580	nut	SS, .960-14 NGO, RH male

## CGA 590 - PRESSURES TO 3000 PSI (20,700 KPa)

RMI Part No.	Service	Part	Description
93	CGA-590	nut	brass, .960 -14 NGO, LH male
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/check 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
15-7	CGA-590	nipple	brass, 9/16" x 25, 3 1/2" long
15-10	CGA-590	nipple	brass, 9/16" x 27, 4 1/2" long
15-8-M1	CGA-590	nipple	recessed for 1/4 OD tube
15-8-M2	CGA-590	nipple	recessed for 5/16 OD tube
15-8-M3	CGA-590	nipple	recessed for 3/8 OD tube
693	CGA-590	nut	handtight, brass, LH male
693P	CGA-590	nut	handtight, plastic grip, brass, LH male
615-3	CGA-590	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w/o ring
615-3T	CGA-590	nipple	handtight, brass, 1/4" NPT, 3" long w/soft tip
615-8M1	CGA-590	nipple	handtight, recessed for 1/4 tube w/o-ring
615-8M1T	CGA-590	nipple	handtight, recessed for 1/4 tube w/soft tip
615-8M2T	CGA-590	nipple	handtight, recessed for 5/16 tube 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
SS-15-8M13	CGA-590	nipple	SS, recessed for 1/4 OD tube

## HANDTIGHT & WRENCHTIGHT NUTS & NIPPLES

### 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
603-A	CGA-660	nipple	brass, 1/4 NPT, 2 1/4" long
665	CGA-660	washer	Teflon

### CGA 677 - PRESSURES TO 7500 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
SS-60M1	CGA-677	nipple	Recessed for 1/4 OD tube

### CGA 680 - PRESSURES TO 5500 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	handtight (use with 680-4SF nipple)

### CGA 695 - PRESSURES TO 5500 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
695-2	CGA-695	nut	brass, 1.040-14 NGO LH male
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
6695	CGA-695	nut	handtight (use with 680-4SF nipple)

### CGA 701 - PRESSURES TO 5500 PSI (27,600 KpA)

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 TO 7500 PSI (20,700 KpA)

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

### CGA 705 - PRESSURES TO 3000 PSI (20,700 KpA)

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

## MALE NPT ADAPTORS FOR MANIFOLD PIPELINE, BRASS & STAINLESS STEEL

### CGA 280 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
WMS1-64	CGA-280	brass, .745" - 14 NGO RH male, check valve; outlet to 1/2" NPT

### CGA 347 - PRESSURES TO 5500 PSI (37,950 KpA)

RMI Part No.	Service	Description
B-348	CGA-347	brass, .825" - 14 NGO RH male to 1/2" NPT
SS-347-4	CGA-347	SS, .825" - 14 NGO RH male to 1/4" NPT

### 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

### CGA 350 - PRESSURES TO 3000 PSI (20,700 KpA)

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

### CGA 320 - PRESSURES TO 3000 PSI (20,700 KpA)

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

### CGA 500 - PRESSURES TO 3000 PSI (37,950 KpA)

RMI Part No.	Service	Description
B-500	CGA-500	brass, .880" - 14 NGO RH female to 1/4" NPT

### CGA 326 - PRESSURES TO 3000 PSI (20,700 KpA)

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

### CGA 346 - PRESSURES TO 3000 PSI (20,700 KpA)

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

### CGA 510 - PRESSURES TO 500 PSI (3,400 KpA)

RMI Part No.	Service	Description
B-40	CGA-510	brass, .885" - 14 NGO LH female to 1/4" NPT
B-42	CGA-510	brass, .885" - 14 NGO LH female to 1/2" NPT
B-43	CGA-510	brass, .885" - 14 NGO LH female to 3/4" NPT

## MALE NPT ADAPTORS FOR MANIFOLD PIPELINE, BRASS & STAINLESS STEEL

CGA 540 - PRESSURES TO 3000 PSI (20,700 KpA)

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
WMS1-53	CGA-540	check valve; outlet to 1/2" NPT
B-53	CGA-540	brass, .903" - 14 NGO RH male to 3/4" NPT
B-50SS	CGA-540	SS, .903" - 14 NGO RH male to 1/4" NPT

CGA 590 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-80	CGA-590	brass, .965" - 14 NGO LH female to 1/4" NPT
B-82	CGA-590	brass, .965" - 14 NGO LH female to 1/2" NPT
B-83	CGA-590	brass, .965" - 14 NGO LH female to 3/4" NPT

CGA 555 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-60	CGA-555	brass, .903" - 14 NGO LH male to 1/4" NPT
B-62	CGA-555	brass, .903" - 14 NGO LH male to 1/2" NPT

CGA 660 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-660SS	CGA-660	SS, 1.030" - 14 NGO RH male to 1/4" NPT

CGA 577 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-578	CGA-577	brass, .960" - 14 NGO RH male to 1/2" NPT

CGA 677 - PRESSURES TO 7500 PSI (41,400 KpA)

RMI Part No.	Service	Description
B-677SS	CGA-677	SS, 1.030" - 14 NGO LH male to 1/4" NPT
B-678SS	CGA-677	SS, 1.030" - 14 NGO LH male to 1/2" NPT
B-679SS	CGA-677	SS, 1.030" - 14 NGO LH male to 3/4" NPT

CGA 580 - PRESSURES TO 3000 PSI (20,700 KpA)

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
WMS1-54	CGA-580	check valve; outlet to 1/2" NPT
B-73	CGA-580	brass, .965" - 14 NGO RH female to 3/4" NPT

CGA 680 - PRESSURES TO 5500 PSI (41,400 KpA)

RMI Part No.	Service	Description
B-682	CGA-680	brass, 1.045" - 14 NGO RH female to 1/2" NPT

## FEMALE NPT ADAPTORS FOR MANIFOLD PIPELINE

500 PSIG (3400 KPA), 3000 PSIG (20,700 KPA), 6000 PSIG (41,300 KpA)

### CGA VALVE OUTLETS TO FEMALE PIPE THREADS

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 5500 PSIG
SS-347-1	CGA 347	SS, brass, RH male, .825" - 14 NGO to 1/4" NPT female Air, from 3001 to 5500 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
16-1	CGA-510	brass, LH male, .885" - 14 NGO to 1/4" NPT female POL Acetylene, Propane to 500 PSIG
300-1	CGA-510	brass, 90 degree LH female nut, .885" - 14 NGO to 1/4" 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
SS-667-1	CGA-677	SS, LH male, 1.030" - 14 NGO to 1/4" NPT female Argon, Helium, Nitrogen from 5501 to 7500 PSIG



## BRASS & STAINLESS STEEL CGA VALVE OUTLET ADAPTERS X NPT

RMI Part No.	Service	Description
B-695	CGA-695	brass, 1.045-14 NGO, LH female to 1/2" NPT Flammable Gases, pressures to 5500 PSIG
B-701-2	CGA-701	brass, 1.103-14 NGO, RH male to 1/2" NPT Oxygen, pressures to 5500 PSIG
B-705SS	CGA-705	SS, 1.125-14 UNS-2A, RH male to 1/4" NPT Ammonia, pressures to 5500 PSIG

## CGA DUST CAP ASSEMBLIES

IMPORTANT: Dust Cap Assemblies DO NOT  
make Gas Tight Seal

RMI Part No.	Service	Description
P1100-23-320	CGA 320	for carbon dioxide
DC-346	CGA 346	for breathing air
P1100-23-350	CGA 350	for hydrogen
P1100-23-510	CGA 510	for acetylene
P1100-23-540	CGA 540	for oxygen
P1100-23-580	CGA 580	for nitrogen, argon, helium
P1100-23-590	CGA 320	for industrial air

## CGA MANIFOLD COUPLER TEES (WITH & W/O CHECK VALVES) COUPLER TEES - 2 CGA OUTLETS, ONE CGA NUT & NIPPLE

RMI Part No. w/o check valve	RMI Part No. with check valve	Service	Description
T-16	T-16CV	CGA-300	brass, RH female
T-15	T-15CV	CGA-510	brass, LH male
T-296	-----	CGA-296	brass, RH male
T-CO-2	T-CO-2CV	CGA-320	brass, RH female
T-CO-2SS	-----	CGA-320	SS, RH female
T-326	T-326CV	CGA-326	brass, RH female
T-346	T-346CV	CGA-346	brass, RH female
T-346SS	T-346SS-CV	CGA-346	SS, RH female
T-82	T-82CV	CGA-350	brass, LH female
T-82SS	T-82SS-CV	CGA-350	SS, LH female
T-62	T-62CV	CGA-540	brass, RH female
T-62SS	T-62SS-CV	CGA-540	SS, RH female
T-72	T-72CV	CGA-555	brass, LH female
T-92	T-92CV	CGA-580	brass, RH female
T-92SS	T-92SS-CV	CGA-580	brass, RH female
T-93	T-93CV	CGA-590	brass, LH male
T-577	-----	CGA-577	brass, RH female
T-347	-----	CGA-347	brass, RH female
T-347SS	-----	CGA-347	SS, RH female
T-680	-----	CGA-680	brass, RH male

## CHAIN & PLUG ASSEMBLIES, BRASS & STAINLESS STEEL

RMI Part No. w/o check valve	RMI Part No. with check valve	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
C-909	-----	CGA-025	brass, 7/8-14, LH female nut & plug
921	-----	-----	brass, 5/8 - 18, RH female nut (AW-7) & nipple
922	-----	-----	brass, 5/8 - 18, RH male nut (AW-14A) & nipple
923	-----	-----	brass, 5/8 - 18, LH male nut (AW-14) & nipple
916	-----	CGA-300	brass, RH female nut & 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

## ROEPEX COMPOSITE PRESSURE PIPE

Roepex pipe is a five-layer composite pipe. The inside and outside layers are made of high density polyethylene (HDPE) tightly bonded with heating adhesive to the mid-layer of longitudinally welded aluminum core. All layers are extruded by one step. The pipe is manufactured to product standards. U.S. ASTM F1281 F1282 and meets OSHA requirements for above ground piping.



RMI Part No.	Size	Description
RW 451-CUT	1/2"	Roepex Pipe 1/2" custom cut
RW 451-50M	1/2"	Roepex Pipe 50M/164 ft.
RW 451-100M	1/2"	Roepex Pipe 100M/328 ft.
RW 551-CUT	3/4"	Roepex Pipe 3/4" custom cut
RW 551-50M	3/4"	Roepex Pipe 50M/164 ft.
RW 551-100M	3/4"	Roepex Pipe 100M/328 ft.
RW601-50M	1"	Roepex Pipe 1" 50M/164 ft.
RW401	1 1/2"	Roepex Pipe 1 1/2" 16.4 ft straight length

### NOT FOR FLAMMABLES

### ROEPEX X MALE THREAD ADAPTER

One end connected to composite pipe, the other to female threads.

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
RW208	1" X 1" MPT
RW478	1 1/2" X 1 1/2" MPT



### ROEPEX X ROEPEX COUPLING

Both ends connected to composite pipe of same size.

RMI Part No.	Size
RW008	1/2"
RW928	3/4"
RW288	1"
RW428	1 1/2"



### ROEPEX X ROEPEX X 90° ELBOW

Both ends connected to composite pipe of same size.

RMI Part No.	Size
RW918	1/2" wall mount elbow
RW958	1/2"
RW978	3/4"
RW988	1"
RW448	1 1/2"



### ROEPEX REDUCING COUPLING

Both ends connected to composite pipe of different sizes.

RMI Part No.	Size
RW178	1" x 1/2"
RW198	3/4" x 1/2"
RW558	1" x 3/4"
RW458	1 1/2" x 1"



### ROEPEX X ROEPEX X ROEPEX TEE

Three ends connected to composite pipe of same size

RMI Part No.	Size
RW068	1/2"
RW088	3/4"
RW148	1"
RW468	1 1/2"



### ROEPEX X CAP

The end connected to composite pipe to seal the composite pipe.

RMI Part No.	Size
RW168CAP	1/2"
RW188CAP	3/4"
RW180CAP	1"



### ROEPEX REPLACEMENT PARTS AND ACCESSORIES

RMI Part No.	Size	Description
RW308	1/2"	Clic Hanger
RW328	3/4"	Clic Hanger
RW338	1"	Clic Hanger
RWLAB	Specify Gas	Pipe Labels
55190	--	Pipe cutter
RW887	--	Pipe Reamer
RW005	--	O-Ring Lubricant
RW001	Oxygen	Station Drop
RW002	Acetylene	Station Drop
RW003	Fuel Gas	Station Drop
RW004	Inert Gas	Station Drop



### ROEPEX X ROEPEX X ROEPEX REDUCING TEE

Three ends connected to composite pipe with one or two ends different in size from the other ends.

RMI Part No.	A	B	C
RW098	3/4" x 3/4" x 1/2"		
RW908	1" x 1" x 1/2"		
RW158	1" x 1" x 3/4"		
RW438	1 1/2" x 1 1/2" x 3/4"		
RW427	1 1/2" x 1 1/2" x 1"		



## 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 removeable orifice
- Interchangeable with other quick disconnect style tips and equipment
- Made of heavy gauge stainless steel and brass



GKX-3B (shown)

### KITS

RMI Part No.	Tip No.	Reg. FTG
GKX-3B	GA-3, GA-11	"B" Cylinder
GKX-4B	GA-5, GA-14	"B" Cylinder
GKX-5B	GA-5	"B" Cylinder
GKX-5MC	GA-5	"MC" Cylinder
GKX-6MC	GA-3, GA-8	"MC" Cylinder
GKX-7B	GA-8	"B" Cylinder

Contents: HA3-12 hose, GG-4 handle, tip(s), MA-2 wrench and regulator.

### TIPS

RMI Part No.	Tip Size	Soft Solder	Silver Braze
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"

## GOSS FEATHER FLAME® KITS & TIPS – “SCREW-IN STYLE”

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 removeable orifice
- Heavy-duty UL listed regulator



GKA-1H (shown)

### KITS

RMI Part No.	Tip No.	Reg. FTG
GKA-1H	BA-3	"B" Cylinder
GKA-2H	BA-3	"MC" Cylinder
GKA-31*	BA-2, BA-3, BA-4	"B" Cylinder
GKA-32*	BA-2, BA-3, BA-4	"MC" Cylinder
GKA-37H*	BA-4	"B" Cylinder
GKA-38H*	BA-4	"MC" Cylinder

Contents: HA3-12 hose, regulator, AA-1 handle, MP-1 lighter and MA-2 wrench.

\* These kits DO NOT include lighter.

### 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"

\*Call for complete GOSS catalog.

## GOSS PROPANE KITS WITH PENCIL AND BRUSH TIPS

Kits contain a complete selection of high quality soldering and heating equipment.

- Quiet, adjustable brush flame
- Fits AP-1 handle

### KITS

RMI Part No.	Tip No.
GKP-102	BP-2
GKP-105	BP-5

Kits include: Ap-1 handle, EP-70G regulator, MP-1 lighter and HEF-10 hose and tip listed.

### TIPS

RMI Part No.	Flame	Diameter	Soft Solder	BTU's @ 40 psi
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-102 (shown)

## GOSS TARGET PROPANE/PROPYLENE KITS AND TIPS – “SNAP-IN STYLE”

Snap-in style feature the very hot, compact Target Tips for professional soldering and brazing applications. Kits also include a quick disconnect handle, UL listed regulator and accessories.

- MaxPerformance Turbine Flame
- Tips have a filter and removeable orifice
- Interchangeable with other quick disconnect style tips and equipment
- Tips for GH-4 handle
- Color-coded O-rings

### KITS

RMI Part No.	Tip No.
GKLP-2	GT-3, GT-5
GKLP-4	GT-4
GKLP-4L*	GT-4L*

Kits include: GH-4 handle, HP3-12 hose, EP-45G regulator and torch tip(s).  
\*Instant Igniter.

### TIPS

RMI Part No.	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 (shown)

## GOSS OUTDOOR FURNACES

Floor furnace\* GFP-540

A well constructed melting furnace with brush flame burner.

BTUs	Approx. 43,200
Gas Usage	Approx. 2 lb./hr
Height	8 in.
Weight	8 lbs.
Diameter	8 1/2"



- Hose and regulator required or use.
- \* For propane only

## GOSS MELTING POT AND LADLE



GMP-3  
7 in. diameter cast iron pot.  
Holds 50 lb. of lead



GMP-5  
3 in. diameter cast iron ladle



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 (shown)



## ALUMINUM CYLIDERS FOR MEDICAL USES

- Specifications: DOT-3AL & TC-3ALM designed. ISO design cylinders are available
- Alloy: Manufactured from high strength aluminum alloy 6061-T6
- Markings: As required by specification. additional markings available upon request
- Finish: Standard fnish is brushed body with green crown (white crown for Canada) and clear paint
- Graphics: Logos or labels in silkscreen or Duragrafix available upon request.
- Accessories: Valves installed upon request. M60 and larger are available with either a carrying handle or protective caps and collars.



RMI Part No.	Service Pressure		Water Capacity		Diameter		Length		Cylinder Weight		Oxygen	
	psi	bar	lbs	liters	in	mm	in	mm	lbs	kgs	cu ft	liters
M74	3000	207	22.0	10.0	7.25	184.2	23.8	605	28.4	12.9	77	2167
M32	3000	207	9.1	4.1	4.38	111.3	25.5	648	10.8	4.9	32	906
M20	3000	207	5.7	2.6	4.38	111.3	16.8	427	7.3	3.3	20	566
M12	3000	207	3.4	1.5	4.38	111.3	10.9	277	5.1	2.3	12	340
M7.8	3000	207	2.1	1.0	4.38	111.3	7.8	198	3.9	1.8	7.8	221
M7.5	3000	207	2.1	1.0	3.21	81.5	11.8	300	2.9	1.3	7.5	212
M265	2216	153	102.2	46.4	9.80	248.9	51.7	1313	84.7	38.4	265	7503
M150	2015	139	63.7	28.9	8.00	203.2	47.2	1198	49.2	22.3	150	4248
M122	2216	153	47.1	21.4	8.00	203.2	36.2	919	40.3	17.9	122	3455
M90	2216	153	34.7	15.7	7.25	184.2	32.7	830	30.4	13.7	90	2549
M60	2216	153	23.2	10.5	7.25	184.2	23.1	587	22.3	10.1	60	1699
ME	2015	139	10.2	4.6	4.38	111.3	25.4	645	7.8	3.5	24	680
M22	2216	153	8.5	3.9	5.25	133.4	16.3	414	8.2	3.7	22	623
MD	2015	139	6.4	2.9	4.38	111.3	16.7	424	5.4	2.5	15	425
M9	2015	139	3.8	1.7	4.38	111.3	10.9	277	3.8	1.7	9.0	255
M7	2015	139	3.0	1.4	4.38	111.3	9.1	231	3.2	1.5	7.0	198
ML6	2015	139	2.5	1.2	4.38	111.3	7.9	200	2.9	1.3	6.0	170
M6	2216	153	2.3	1.0	3.21	81.5	11.8	300	2.3	1	6.0	170
M4	2216	153	1.5	0.7	3.21	81.5	8.7	221	1.7	0.8	4.0	113
M2	2216	153	0.6	0.3	2.50	63.5	5.9	149	0.75	0.34	1.6	45

## GASKIT® FIXED FLOW PRESSURE REDUCING REGULATORS

### TYPICAL APPLICATIONS:

Compact, fixed flow, piston regulator used for calibration gases and industrial hygiene monitors. GASKIT® regulators are capable of regulating a broad range of media compatible with materials of construction. The model shown is all brass with a C-10 inlet connection, a 3/16" hose barb outlet and shut off valve.

### GASKIT® PRESSURE REDUCING REGULATORS OFFER:

- Compact size (1.18" diameter x 3.43" high)
- Factory preset flow settings from 0.25 liters/min to 9.0 liters/min
- Models are available for both corrosive and non-corrosive service
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Numerous optional features are available

### SPECIFICATIONS:

- Standard Preset Control Pressure: 60 PSIG
  - Other preset control pressures optional
- Maximum Inlet Pressure: 3500 PSIG
- Leak Rate: Bubble tight
- Standard Shut Off Valve: None
  - Roatary/Multi-turn optional
  - Bayonet/Toggle optional

### PORTING:

- Inlet Porting:
  - C10 (5/8-18 UNF)
  - 1/8" FNPT
  - 1/8" MNPT
  - 1/4" FNPT
  - All CGA Connections Available: CGA 165, 180, 320, 510, 580, 600, etc.
- Outlet Porting:
  - 3/16" Hose Barb
  - 1/4" hose barb
  - 1/8" FNPT
  - 1/8" MNPT

### OPTIONAL ITEMS:

- Gauges
- Anodized Colors for Aluminum bodies & Bonnets
- Private Label



GK10454-01

RMI Part No.	Flow	Inlet	Outlet	Metal
GK-10454-01	0.3 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-02	0.5 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-03	1.0 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-04	1.5 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-05	2.0 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-06	2.5 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-07	5.0 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-08	6.0 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-09	9.0 LPM	C10	3/16 HOSE BARB	Brass/Ni-PL
GK-10454-10	0.3 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-11	0.5 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-12	0.7 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-13	1.0 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-14	1.5 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-15	2.5 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-16	5.0 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-17	7.0 LPM	C10	3/16 HOSE BARB	303SS

RMI Part No.	Flow	Inlet	Outlet	Metal
GK-10576-01	0.3 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-02	0.5 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-03	1.0 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-04	1.5 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-05	2.0 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-06	2.5 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-07	5.0 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-08	6.0 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-09	9.0 LPM	CGA 600	3/16 HOSE BARB	Brass/Ni-PL
GK-10576-10	0.3 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-11	0.5 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-12	0.7 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-13	1.0 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-14	1.5 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-15	2.5 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-16	5.0 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-17	7.0 LPM	CGA 600	3/16 HOSE BARB	303SS

## C10 VALVES

The C10 valves for calibration applications are commonly used on small portable cylinders that can be disposable or refillable. Both valve designs a burst disc style PRD for increased reliability. We can also supply versions designed to mate with different inlet thread connections for special applications.



C10 Aluminum



C10 SS

RMI Part No.	Body Material/Sealsflow	Inlet	Outlet	Pressure Rating
GK-11553-1	BRASS/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-2	303 SS /VITON	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-3	ALUMINUM/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-4	BRASS/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-5	ALUMINUM/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-6	ALUMINUM/NI-PLATED/VITON	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-7	ALUMINUM/VITON	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-8	303 SS /BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11597-1	BRASS/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-2	303 SS /VITON	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-3	ALUMINUM/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-4	BRASS/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-5	ALUMINUM/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-6	ALUMINUM/NI-PLATED/VITON	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-7	ALUMINUM/VITON	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-8	303 SS /BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG