

**LNG**  
**& Natural Gas**  
**Equipment**



# Foreword

This catalog briefly describes the RegO® LNG Equipment available from RegO® as a result of condensing information in this catalog, some highly technical and special application material has been omitted. Proper application, installation and maintenance of the product is essential. Buyers should obtain further information if there are any doubts or questions. All information contained in this catalog is subject to change by RegO® without notice. Additional product information is available from RegO® or authorized product distributors. Illustrations and drawings of individual products are representative of “product groups” and all products within a product group are similar in construction.

## Warning

Never use any product on oxygen service if another gas has been previously used on the product. All RegO® Products are mechanical devices that will eventually become inoperative due to wear, corrosion and aging of components made of materials such as fluoropolymers. The environment and conditions of use will determine the safe service life of these products. Periodic inspection and maintenance are essential to avoid serious injury and property damage.

Many RegO® products are manufactured for storage, transport, transfer and use of toxic flammable and dangerous liquids and gases. Such substances should be handled by experienced and trained personnel only, using accepted governmental and industrial safety procedures.

## Materials

RegO® Products may make suggestions for a material to use with a specific media. These suggestions will be based on technical compatibility resources through associations and manufacturers. RegO® does not guarantee the material to be compatible with the specific media – this is the responsibility of the user. Users must test under their own operating conditions to determine the suitability of any material in a particular application.

## Notice

Installation, usage and maintenance of all RegO® Products must be in compliance with all RegO® instructions as well as requirements and provisions of NFPA 57, NFPA 30A, NFPA 59A, CGA, ASME, DOT, ANSI and all applicable federal, state, provincial and local standards, codes, regulations and laws.

Inspection and maintenance on a periodic basis is essential and should be performed only by qualified personnel.

Be sure all instructions are read and understood before installation, operation and service.

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# Short Stem LNG Valves T9450 Series & T9460 Series

## Application

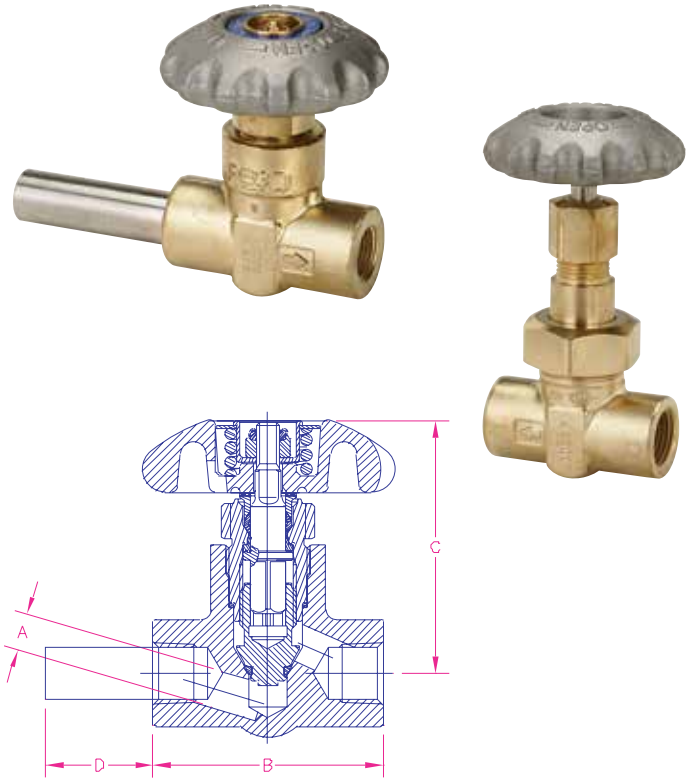
The T9450 and TES9400 series valves are designed for use on portable LNG cylinders and other in-line shut-off valve applications. Approved for TPED in accordance with EN1626.

## Features

- Spring loaded stem seal automatically adjusts for any gasket wear, eliminating the need to constantly retighten the packing nut.
- Non-rising stem and low profile allow the valve to fit into tight areas and still provide easy access.
- Unique pressure-sealed moisture barrier helps prevent freeze up at LNG temperatures.
- Conical swivel seal design helps prevent seat galling from over torquing.
- Maximum working pressure is 600 PSIG. (41.37 Bar)
- Working temperature range is -320°F to +165°F (-196°C to +74°C)
- 100% Factory Tested

## Materials

Body .....	Brass
Bonnet .....	Brass
Seat Disc .....	CTFE
Stem Seal Gasket.....	PTFE
Handwheel.....	Aluminum
Spring .....	Stainless Steel
Upper Stem .....	Brass
Lower Stem .....	Manganese Bronze



## Ordering Information

Part Number	Inlet	Outlet	Orifice A	Length B	Height (Approx.) C	Tube D	C <sub>v</sub> Factor
T9452	¼" F.NPT	¼" F.NPT	.250	2½"	2¾"	None	.99
T9453	⅜" F.NPT	⅜" F.NPT	.406				1.08
T9454	½" F.NPT	½" F.NPT	.406				1.79
TES8452	¼" F.NPT	¼" F.NPT	.250	2½"	4"	None	.99
TES8453	⅜" F.NPT	⅜" F.NPT	.406				1.76
TES8454	½" F.NPT	½" F.NPT	.406				1.79
TES8464	.675 Tube	⅜" F.NPT	.406	2½"	4"	1⅛"	1.76
						2⅛"	
						3⅛"	

## Extended Stem Retrofit Kits

### Application

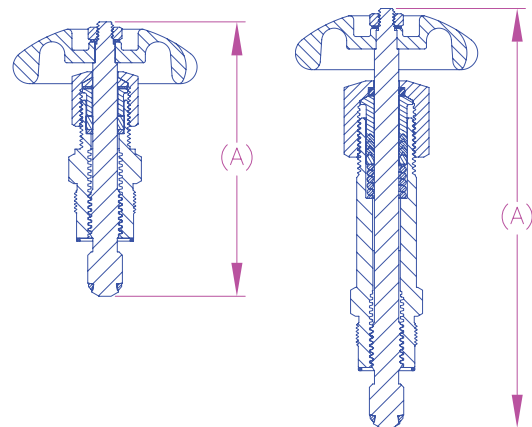
These retrofit kits can be used to convert the 9450 and 9460 series short stem shut off valves into extended stem style. The conversion can be done without removing the valve from your system. Available in two stem lengths. These kits help to prevent cold in the handwheel.

### Materials

Body .....	Brass
Seat Disc .....	CTFE
Handwheel.....	Aluminum
Packing.....	PTFE
Stem .....	Stainless Steel
Stem Seal Gasket.....	PTFE

### Ordering Information

Part Number	Stem Length A	Style
ES8450R	4"	Extended Stem, Std. Bonnet, Manual Packing
BK9450R	6.5"	Extended Bonnet and Stem, Spring Loaded Packing



# ES8450 Series LNG Extended Stem Valves BK9450 & BK9470 Series Extended Bonnet Valves

## Application

These valves are designed for use as a trycock valve or hose drain valve on LNG bulk tanks. These valves can be used likewise for other cold gas applications requiring extended stem valves as LNG Fueling.

## Features

- Union bonnet.
- One piece stainless steel stem
- Conical seat design.
- Maximum working pressure is 600 psig. (41.37 Bar)
- Working temperature is -320°F to +165°F (-196°C to +74°C).
- 100% Factory Tested

### ES8450 Series specific feature:

- Manual torque compression packing.

### BK9450 and BK9470 Series specific feature:

- Extended bonnet and spring loaded packing.

### BK9470 Series specific feature:

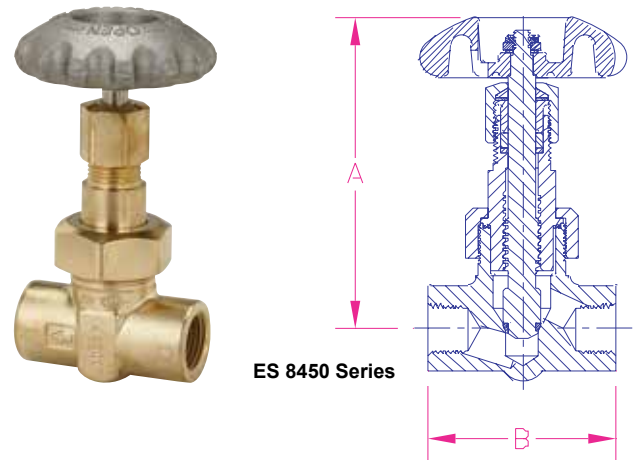
- 304 St. Stl Tube brazed into one or both ends.

## Materials

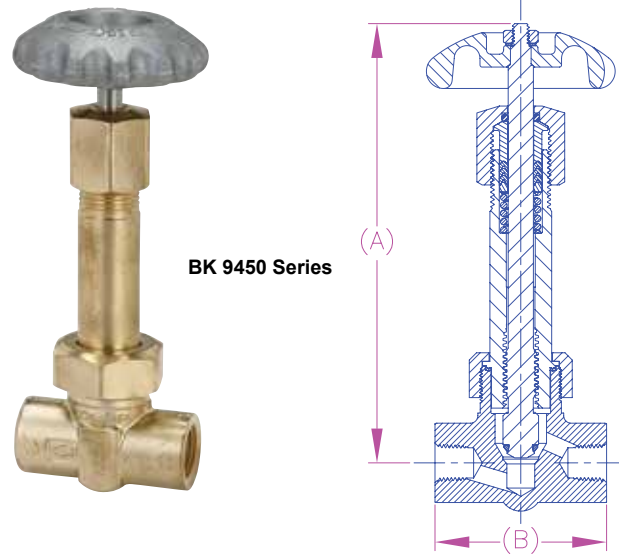
Body and Bonnet ..... Brass  
 Stem ..... Stainless Steel  
 Seat Disc ..... CTFE  
 Handwheel..... Aluminum  
 Packing and Bonnet Gasket..... PTFE

## Conversion Kit

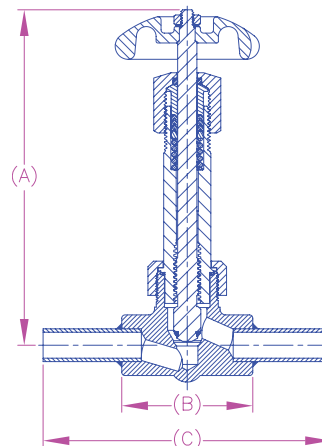
BK 9450-KIT is a bonnet and stem assembly kit to convert ES 8450 Series and previous ES 9450 Series to the BK 9450 style.



ES 8450 Series



BK 9450 Series



BK 9470 Series

## Ordering Information

Part Number	Inlet/Outlet Connections	Height "A"	Body Width "B"	Width with Tube "C"	Cv
ES 8452	1/4" FNPT	4"	2.5"		0.70
ES 8453	3/8" FNPT	4"			1.10
ES 8454	1/2" FNPT	4"			1.10
BK 9452	1/4" FNPT	6.5"			0.70
BK 9453	3/8" FNPT	6.5"		1.10	
BK 9454	1/2" FNPT	6.5"		1.10	
BK 9453FA	5/8" OD tubing x 3/8" FNPT	6.5"		4.0"	1.10
BK 9475A	5/8" OD tubing both ends	6.5"		5.5"	1.10

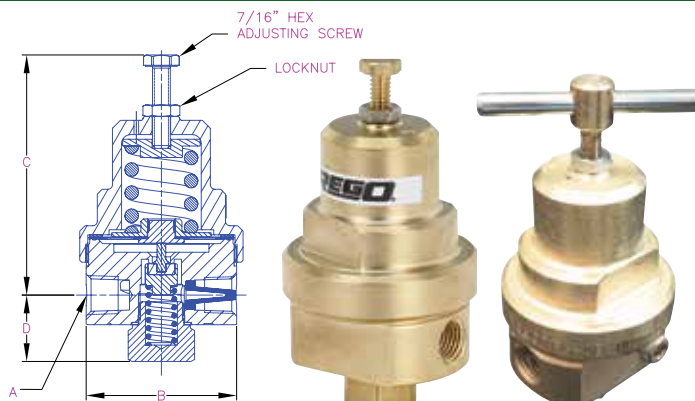
# LNG Regulators RG Series

## Application

The RG series LNG regulators are primarily designed to maintain pressure on liquid within LNG containers. They may also be used in LNG lines, vaporizer and converter applications. They are especially useful in installations where space and cost limitations are important.

## Features

- All parts are copper alloy (brass), PTFE and stainless steel—materials selected specifically for compatibility with LNG temperatures.
- Body and bonnet machined from solid brass bar stock.
- PTFE seat helps assure a positive shut-off at LNG temperatures.
- High and low pressure regulators are the same compact size—designed to fit in close quarters.
- Interchangeable with existing LNG regulator units.
- Inlet filter helps prevent foreign material from entering the regulator.
- Locknut is provided to maintain adjusting screw setting.
- Maximum inlet pressure of 550 PSIG. (37.92 Bar)
- 100% Factory Tested



## Materials

Body .....	Brass
Bonnet .....	Brass
Seat Retainer.....	Brass
Seat .....	PTFE
Springs .....	Stainless Steel
Diaphragm Gasket.....	PTFE
Backcap Gasket .....	Copper
Diaphragm .....	Bronze

## Ordering Information

Part Number	Inlet / Outlet Connections (F.NPT) A	Width B	C	D	Pressure Setting (PSIG)	Operating Range (PSIG)
RG022A	1/4"	2 1/16"	3"	1"	22	0-30
RG125A					125	25-250
RG300A					300	125-350
RG901AG					90	30-250

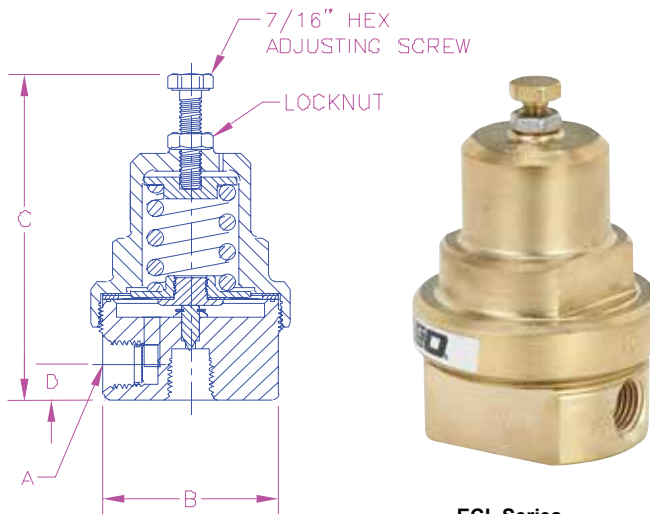
# LNG Economizers ECL & ECR Series

## Application

The ECL & ECR series LNG economizers are primarily designed to utilize the gas pressure in a liquid LNG cylinder that would otherwise be lost to the atmosphere through the pressure relief valve. They may also be used in LNG lines, vaporizer and converter applications. They are especially useful in installations where space and cost limitations are important.

## Features

- All parts are copper alloy (brass), PTFE and stainless steel—materials selected specifically for compatibility with LNG temperatures.
- Body and 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 and low pressure economizers are the same compact size—designed to fit in close quarters. The compact high pressure design has no loss of capacity.
- Interchangeable with existing LNG economizer units.
- Inlet filter helps prevent foreign materials from entering the economizer.
- Locknut is provided to maintain adjusting screw settings.
- Maximum inlet pressure of 550 PSIG. (37.92 Bar)
- 100% Factory Tested



## Materials

Body .....	Brass
Bonnet .....	Brass
Seat .....	Stainless Steel
Springs .....	Stainless Steel
Gasket .....	PTFE

## Ordering Information

\*Contact factory for additional settings.

Part Number	Inlet / Outlet Connections (F.NPT) A	Width B	C	D	Pressure Setting (PSIG)	Operating Range (PSIG)
ECL22	1/4"	2 1/16"	3"	3/8"	22	10-150
ECL70					70	
ECL140					140	
ECR140					140	10-150
ECL325					325	150-350

# Heavy Duty Natural Gas Line Regulator 1780 Series (Ideal for LNG Engine Fuel Applications)

## Application

The 1780 Series Regulators are designed for final line pressure regulation on Natural Gas Fuel distribution systems. The 1780 Series Regulators have the same valve design, brass body, and internal parts as the premium BR-1780 Series. Flow performance is likewise equal to the BR-1780 Series.

## Features

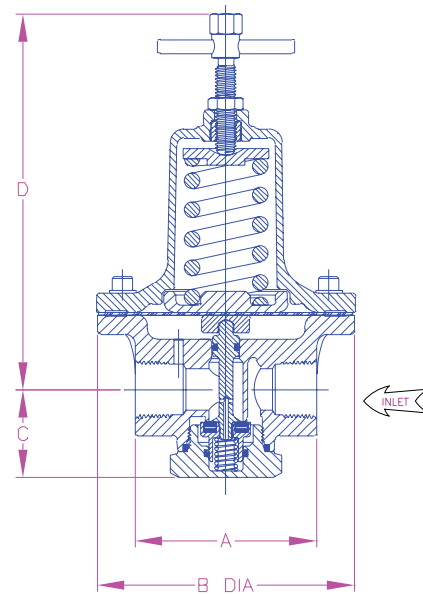
- Maintains a steady downstream pressure across a range of inlet pressure commonly provided by a LNG bulk tank or cylinder.
- Large seat and diaphragm areas provide high capacity with sensitive control of delivery pressure with low falloff.
- Two 1/4" FNPT delivery pressure gauge ports are located (plugged) on each side of the valve.
- Two bonnet drain/vent holes to allow for different mounting orientation.
- T-handle adjusting screw.
- Maximum inlet pressure is 435 psig. (30 Bar)
- Available in four delivery pressure ranges.
- Temperature range: -40° F to +165 F. (-40°C to +74°C)
- 100% Factory Tested

## Materials

Body ..... Forged Brass  
 Bonnet ..... Nickel Plated Aluminum  
 Diaphragm ..... Nitrile with PTFE liner  
 Springs and Fasteners ..... Stainless Steel  
 Other valve parts ..... Brass  
 Seat Disc & O-Rings ..... Viton is standard



1780 Series



1780 SER

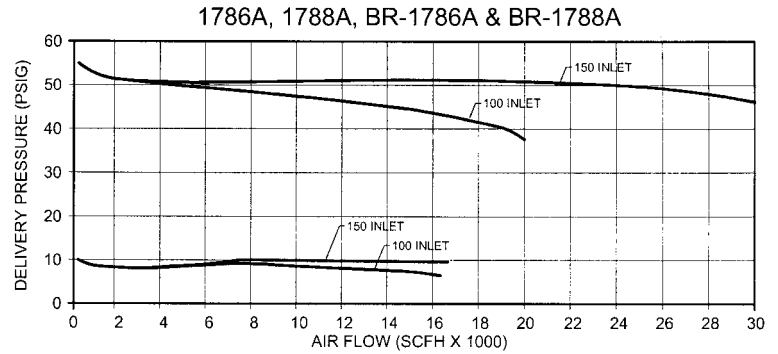
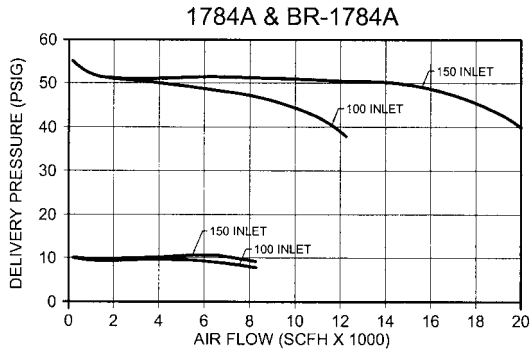
## Ordering Information

Part Number	Delivery Pressure Range	Pressure Gauge*		Inlet & Outlet (F.N.P.T.)	Dimensions				C <sub>v</sub>
		Range (PSI)	P/N		"A"	"B"	"C"	"D"	
1784A	5-55 psig	1-100	1286	1/2"	2.82"	3.62"	1.38"	5.47"	3.1
1784B	40-110 psig	1-200	S1679						
1784C	100-200 psig	1-400	15578						
1784D	175-300 psig								
1786A	5-55 psig	1-100	1286	3/4"	3.31"	4.69"	1.60"	6.84"	4.8
1786B	40-110 psig	1-200	S1679						
1786C	100-200 psig	1-400	15578						
1786D	175-275 psig								
1788A	5-55 psig	1-100	1286	1"	3.31"	4.69"	1.60"	6.84"	5.5
1788B	40-110 psig	1-200	S1679						
1788C	100-200 psig	1-400	15578						
1788D	175-275 psig								

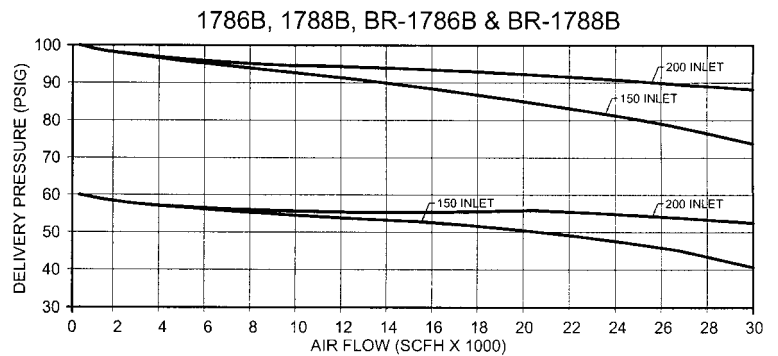
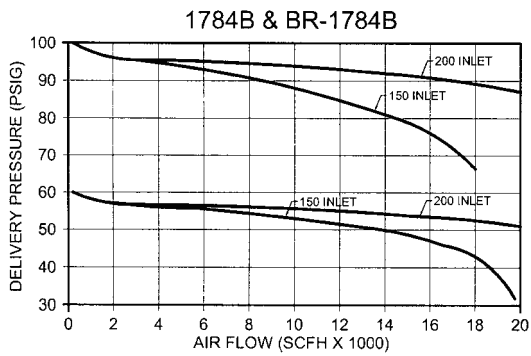
\*Regulator sold without gauge. Order gauge separately.

# Heavy Duty Natural Gas Line Regulators Performance Curves 1780 Series & BR-1780 Series

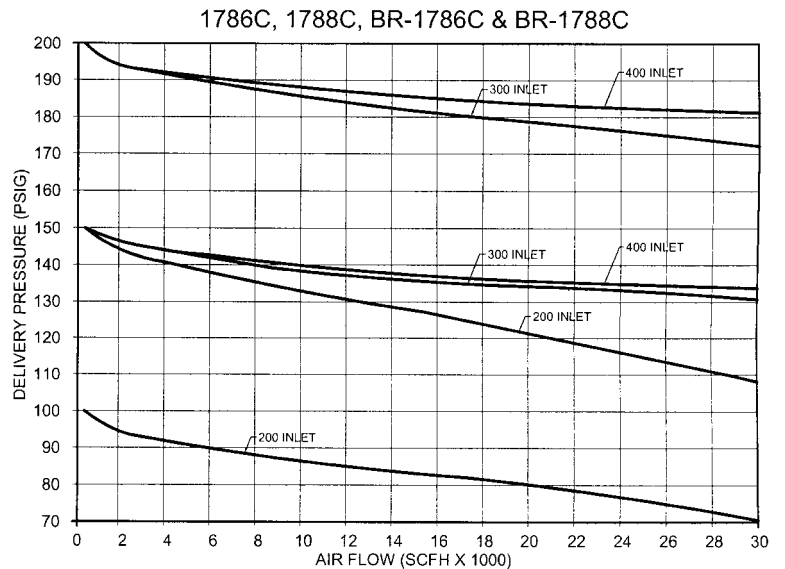
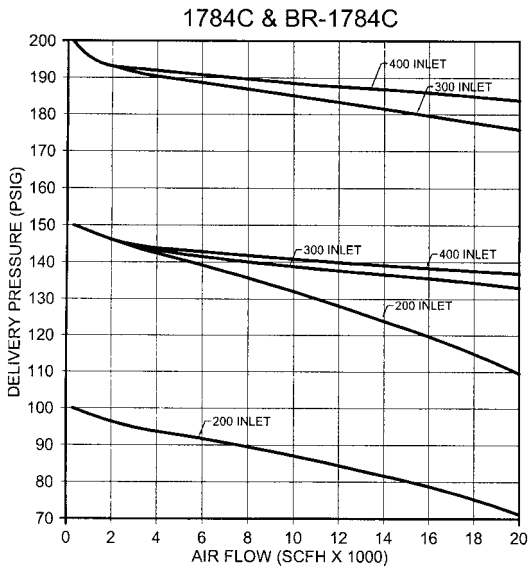
"A" spring range 5 - 55 psig



"B" spring range 40 - 110 psig



"C" spring range 100 - 200 psig



## Gas Conversion Table

Service	Multiply Air Capacity By:
Natural Gas	1.25



# Heavy Duty Natural Gas Brass Final Line Pressure Regulator BR-1780 Series

## Application

The BR-1780 Series Regulators are designed for final line pressure regulation. The BR-1780 Series Regulators have a balanced seat, and offer a tamper resistant adjustment screw cap. Flow performance is impressive as well offering up to 30,000 SCFH for the ¾" and 1" model and up to 20,000 SCFH for the ½" model.

## Features

- Maintains a steady downstream pressure across a range of inlet pressure commonly provided by a LNG bulk tank or cylinder.
- Large seat and diaphragm areas provide high capacity with sensitive control of delivery pressure with low falloff.
- Two ¼" 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 covering adjusting screw for tamper protection.
- Maximum inlet pressure is 435 psig. (30 Bar)
- Available in four delivery pressure ranges.
- Temperature range: -40° F to +165° F. (-40° to +74°C)
- 100% Factory Tested



BR-1784



BR1786 and BR1788

## Materials

Body ..... Forged Brass  
 Bonnet ..... Cast bronze for BR-1786/1788  
    Forged brass for BR-1784  
 Diaphragm ..... Nitrile with PTFE liner  
 Springs, fasteners, and adjusting screw ..... Stainless Steel  
 Other valve parts ..... Brass  
 Seat Disc & O-Rings ..... Viton is standard

## Maintenance and Options Kits

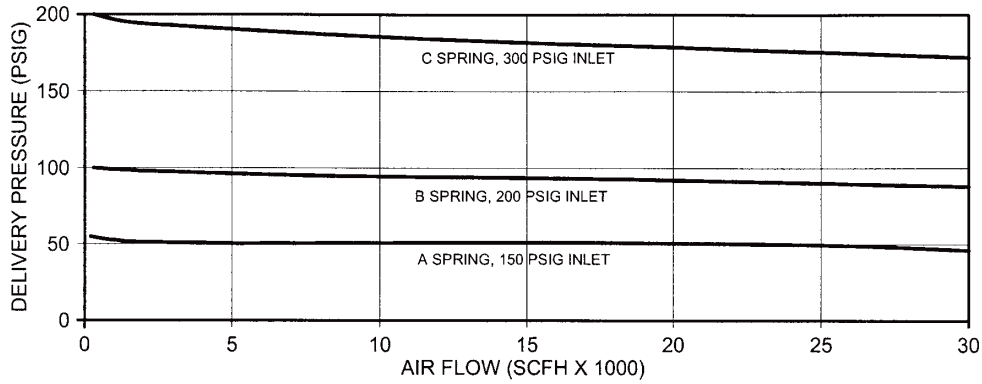
Regulator Models	BR1784	BR1786	BR1788
<b>Repair Kit Part Number</b>	<b>BR1784-80</b>	<b>BR1786-80</b>	<b>BR1788-80</b>
<b>Spring Kit Part Numbers:</b>			
"A" spring 5-55 psig	<b>BR1784-7SKA</b>	<b>BR1786-7SKA</b>	<b>BR1788-7SKA</b>
"B" spring 40-110 psig	<b>BR1784-7SKB</b>	<b>BR1786-7SKB</b>	<b>BR1788-7SKB</b>
"C" spring 100-200 psig	<b>BR1784-7SKC</b>	<b>BR1786-7SKC</b>	<b>BR1788-7SKC</b>
"D" spring 175-275 psig	<b>BR1784-7SKD</b>	<b>BR1786-7SKD</b>	<b>BR1788-7SKD</b>
T-Handle Screw Option Kit	<b>BR1784ST</b>	<b>BR1786ST</b>	<b>BR1788ST</b>

# Heavy Duty Natural Gas Brass Final Line Pressure Regulator BR-1780 Series

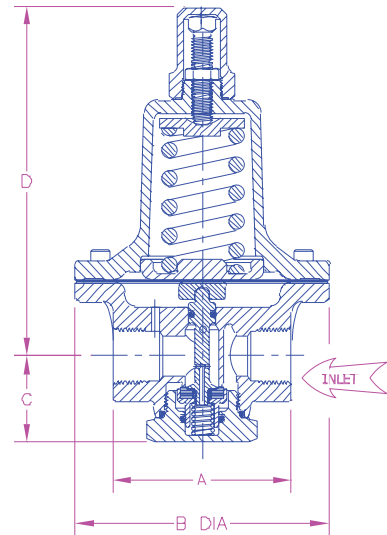
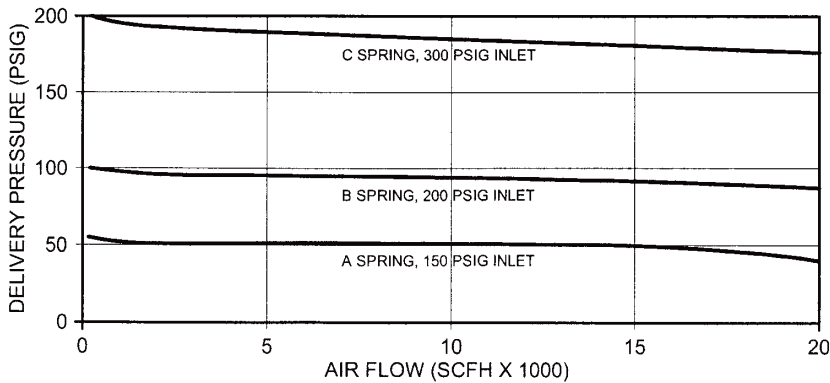
## Flow Performance

See the RegO® Flow Performance Curves section of the catalog for more detailed flow curves.

BR-1786 & BR-1788



BR-1784



## Ordering Information

Part Number	Delivery Pressure Range	Pressure Gauge*		Inlet & Outlet (F.N.P.T.)	Dimensions				C <sub>v</sub>
		Range (PSI)	P/N		"A"	"B"	"C"	"D"	
BR-1784A	5-55 psig	1-100	1286	½"	2.82"	3.62"	1.38"	5.21"	3.1
BR-1784B	40-110 psig	1-200	S1679						
BR-1784C	100-200 psig	1-400	15578						
BR-1784D	175-300 psig	1-400	15578	¾"	3.31"	4.69"	1.60"	6.46"	4.8
BR-1786A	5-55 psig	1-100	1286						
BR-1786B	40-110 psig	1-200	S1679						
BR-1786C	100-200 psig	1-400	15578	1"	3.31"	4.69"	1.60"	6.46"	5.5
BR-1786D	175-275 psig	1-400	15578						
BR-1788A	5-55 psig	1-100	1286						
BR-1788B	40-110 psig	1-200	S1679	1"	3.31"	4.69"	1.60"	6.46"	5.5
BR-1788C	100-200 psig	1-400	15578						
BR-1788D	175-275 psig	1-400	15578						

\*Regulator sold without gauge. Order gauge separately.

# Natural Gas Low Pressure Second Stage Regulators LV4403B66L05

## Application

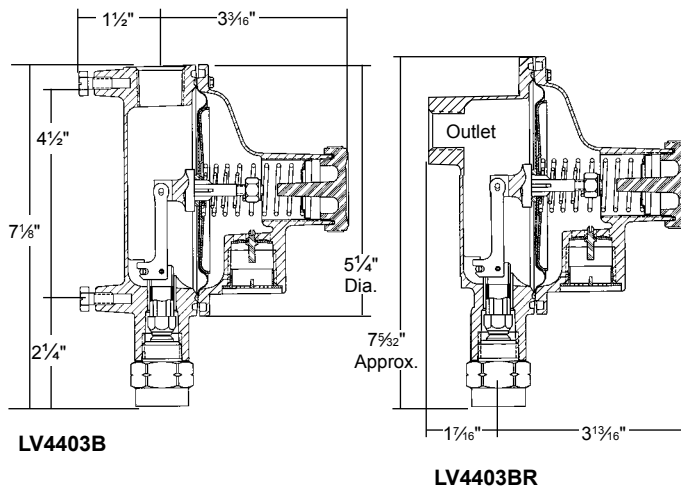
Designed to reduce first stage pressure of 5 to 20 PSIG down to burner pressure, normally 5-7" w.c. Ideal for medium commercial installations, multiple cylinder installations and normal domestic loads.

## Features

- Large vent helps prevent blockage and has 1/4" F.NPT for vent piping.
- With 15 PSIG inlet pressure, regulator is designed to not pass more than 2 PSIG with the seat disc removed.
- Incorporates integral relief valves.
- Replaceable valve orifice and valve seat disc.
- Straight line valve closure reduces wear on seat disc.
- Unique bonnet vent profile minimizes vent freeze over when properly installed.
- Large molded diaphragm is extra sensitive to pressure changes.
- Built in pressure tap has plugged 1/8" F.NPT outlet. Plug can be removed with a 3/16" hex allen wrench.
- Select brown finish.

## Backmount Design

Mounts directly to house line piping. Eliminates need for union joints, elbows, and mounting brackets. Quick and easy to install.



## Materials

Body ..... Die Cast Zinc  
 Bonnet ..... Die Cast Zinc  
 Nozzle Orifice ..... Brass  
 Spring ..... Steel  
 Valve Seat Disc ..... Resilient Rubber  
 Diaphragm ..... Integrated Fabric and Synthetic Rubber



LV4403B Series



## Ordering Information

Part Number	Inlet Connection	Outlet Connection	Orifice Size	Factory Delivery Pressure	Adjustment Range	Bonnet Vent Position	Vapor Capacity BTU/hr. Propane**
LV4403B4	1/2" F. NPT	1/2"	#28 Drill	5" w.c. at 10 PSIG Inlet	3.8" to 7.7" w.c.	Over Inlet	935,000
LV4403B46							
LV4403B46R*							
LV4403B66	3/4" F. NPT	3/4" F. NPT	#28 Drill	5" w.c. at 10 PSIG Inlet	3.8" to 7.7" w.c.	Over Inlet	935,000
LV4403B66R*							

\* Backmount design

\*\* Maximum flow based on 10 PSIG inlet and 9" w.c. delivery pressure.



# Natural Gas Low Pressure Second Stage Regulators LV4403F66 Series

## Application

Designed to reduce inlet pressure of from 1-3 bar (PSI 14.5 - 43.5) to a delivery pressure of 5-7" wc (12.45 - 17.43mbar).

## Features

- 90 degree right angle inlet to outer connection for standard meter installations.
- Large vent helps to prevent blockage and has 3/4" F. NPT for vent piping.
- Straight line valve closure reduces wear on seat disc
- Unique bonnet vent profile minimizes vent freeze over when properly installed.
- Large molded diaphragm is extra sensitive to pressure changes.
- Built in pressure tap has plugged 1/8" F. NPT outlet. Plug can be removed with a 3/16" hex allen wrench.
- Select Brown Finish

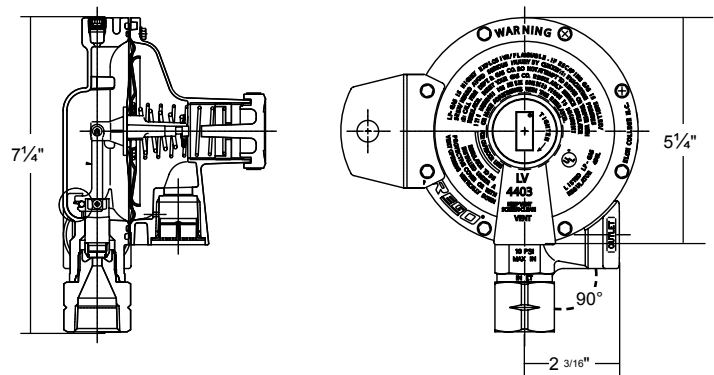
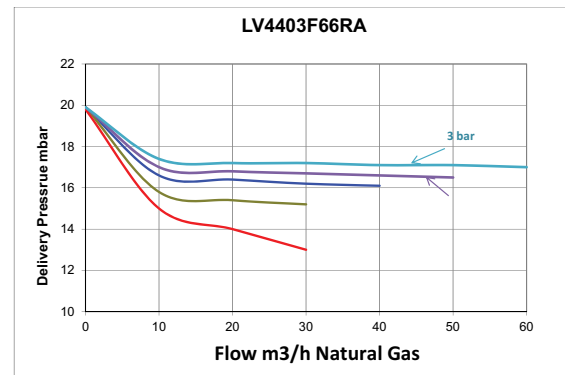
## Right Angle Design

Can mount directly to vapor meter. It is also suitable for mounting directly to the house piping. It will retrofit into existing installations that are currently using a 90 degree, right angle regulator.



## Materials

Body ..... Die Cast Zinc  
 Bonnet ..... Die Cast Zinc  
 Nozzle Orifice ..... Brass  
 Spring ..... Steel  
 Valve Seat Disc ..... Resilient Rubber  
 Diaphragm ..... Integrated Fabric and Synthetic Rubber



## Ordering Information

Part Number	Inlet Connection	Outlet Connection	Orifice Size	Factory Delivery Pressure mbar	Adjustment Range mbar	Bonnet Vent Position	Vapor Capacity m3/hr. Natural Gas
LV4403F66RA	3/4" F. NPT	3/4" F. NPT	3/16"	17.4	15-22.4	Over Inlet	30.5
LV4403F66RAB						9.00	
LV4403F66RA9							

# RegO® - LNG Angle Pressure Relief Valve AR Series

## Application

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

## Features

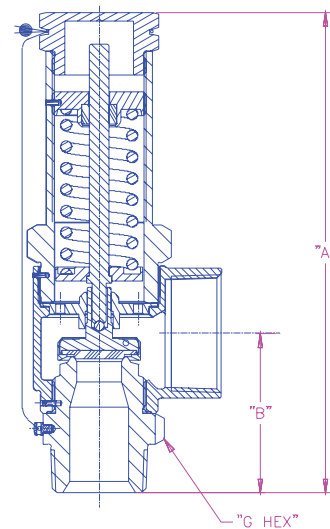
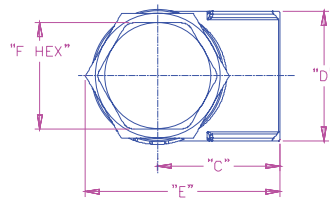
- High flow rates are approved by ASME rigorous testing to Code VIII.
- The ninety degree configuration provides relief of LNG gases directly avoiding flow through the spring.
- Bubble tight seat provides 100% shut off when reseating or static mode.
- A variety of inlets and pressure settings assure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

## Materials

Body .....	Bronze ASTM 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.....	Hostafion TFM1600 (Teflon)
Ball.....	Stainless Steel
Upper Gasket .....	PTFE ASTM D4894
Lower Gasket .....	Copper ASTM B152-17
Spring .....	Stainless Steel ASTM A313
Screw.....	Brass ASTM B16
Grooved Pin.....	Stainless Steel ASTM A581
Cable & Tie Assy .....	Stainless Steel & Lead



AR Series



## Ordering Information

Part Number	Inlet Inches DN (mm)	Outlet Inches DN (mm)	Ends	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)	E Inches (mm)	ASME Flow Capacity SCFM/Air @ 250 PSI *	Weight Lbs (Kg)
AR4106A	¾" (20)	1" (25)	Thread NPT	6.03" (153.16)	1.97" (50.04)	1.63" (41.40)	1.63" (41.40)	2.49" (63.25)	450	2.75 (1.25)
AR4108A	1" (25)	1¼" (32)		6.88" (174.75)	2.37" (60.20)	2.00" (50.80)	1.90" (48.26)	3.01" (76.45)	1,003	3.75 (1.70)
AR4112A	1½" (38)	2" (50)		9.64" (244.86)	3.20" (81.28)	2.45" (62.23)	2.60" (66.04)	3.89" (98.81)	2,277	8.00 (3.63)

\*Different PSI settings are available

# RegO® - LNG Diverter (3-Way) Valve DR Series

## Application

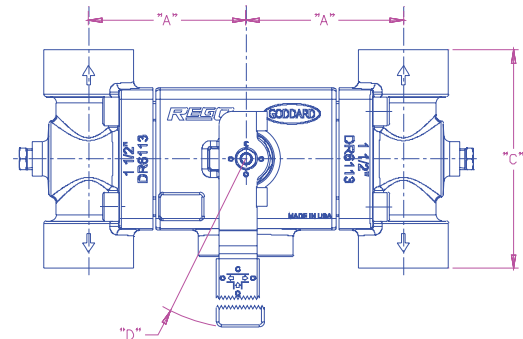
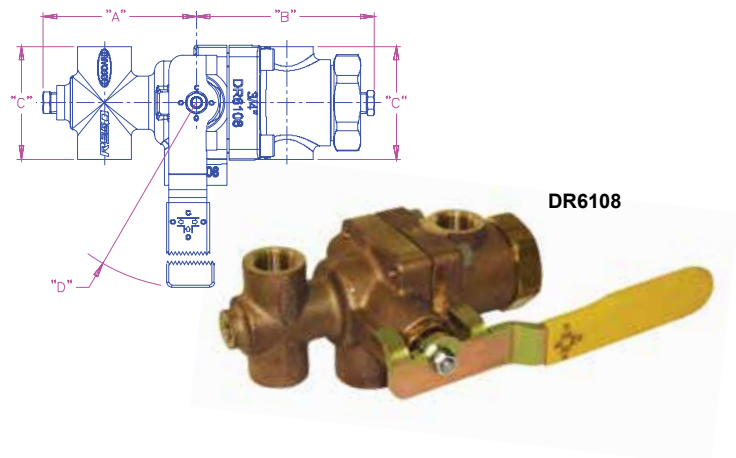
The Diverter Valve DR Series, provide a simple solution for the isolation of pressure relief devices during routine change out of a Relief Valve without evacuating the LNG vessel. Excellent for protecting bulk LNG liquid vessels, transport trailers and industrial pipelines, and LNG systems.

## Features

- High flow rates complement our AR series pressure relief valves.
- Valve side selection is accomplished with a heavy duty control arm clearly labeled for positive isolation.
- RegO® needle valves accessorize for easy bleed of gas before removing pressure relief devices.
- Fitted with threaded top Relief Valve ports and bottom Burst Disk connections.
- Pressure Rating: 600 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 C36000
Lever.....	Cadmium Plated Steel
Packing.....	PTFE
Stem.....	Stainless Steel ASTM A582 UNS S30300
Packing Nut.....	Brass ASTM B16 UNS C36000
Lock Washer.....	Stainless Steel



## Ordering Information

Part Number	Inlet Inches DN (mm)	Outlet Inches DN (mm)	Connection Type	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)	Height Inches (mm)	Weight Lbs (Kg)
DR6108	1"	¾"	Thread NPT	4" (101.7)	4.65" (118.3)	2.94" (74.90)	R 7.36" (187.1)	5.18" (63.25)	10" (4.50)
DR6112	1½"	1"		5.94" (150.9)	-	5.70 (145.0)	R 7.36" (187.1)	5.770" (146.6)	28" (12.70)
DR6113	1½"	1½"		5.94" (150.9)	-	5.70 (145.0)	R 7.36" (187.1)	5.770" (146.6)	30" (13.60)

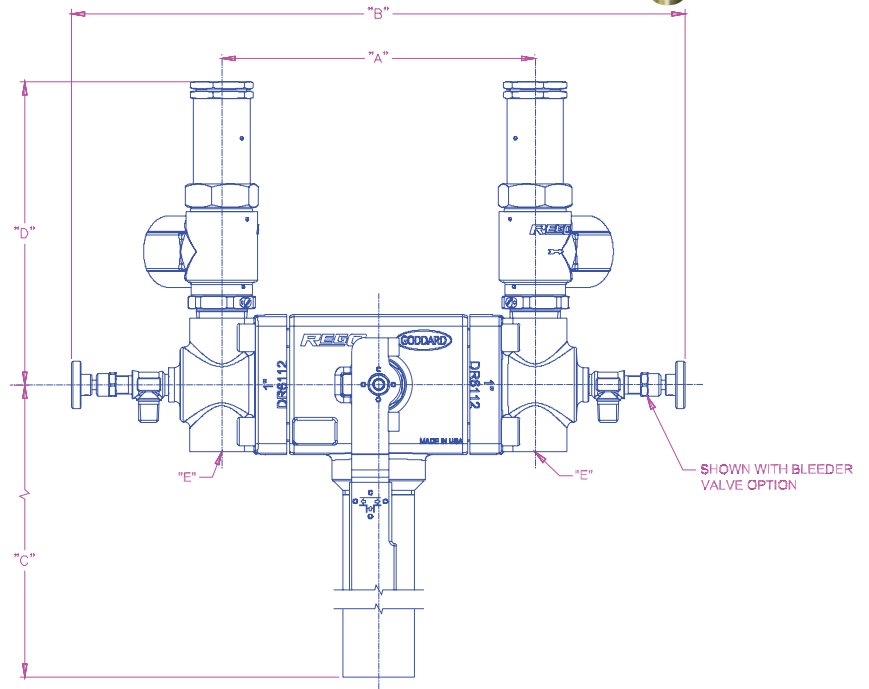
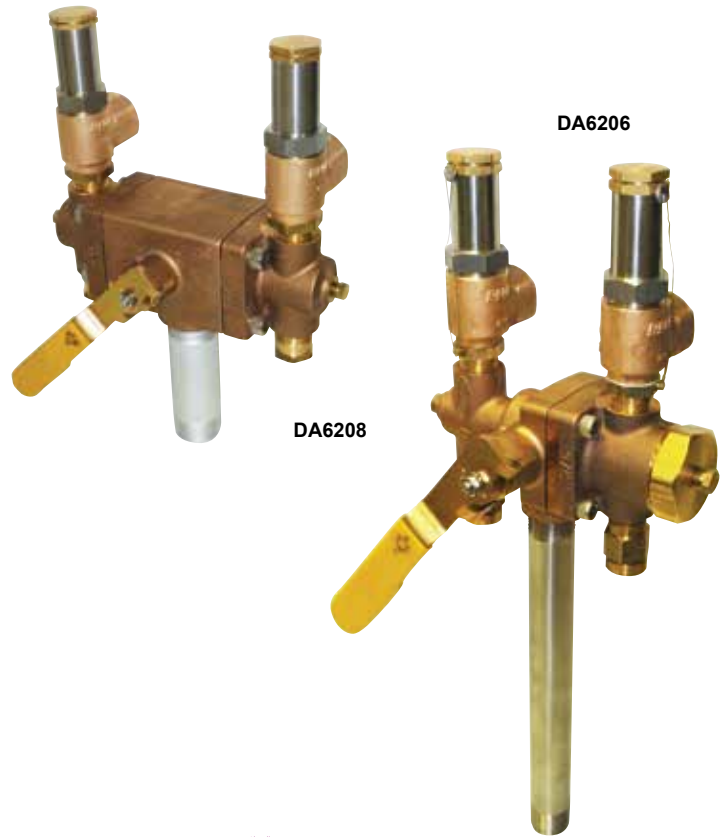
# RegO® - LNG Safety Assembly – Relief Valve, Diverter & Burst Disk - DA Series

## Application

RegO® provides a complete unitized solution for pressure relief devices assembled in a factory setting, ready for attachment to LNG bulk tanks. Ideal for OEM applications where pre-fabricated assemblies are favored to streamline constructions. Excellent for protecting bulk LNG liquid vessels, transport trailers, industrial pipelines and LNG systems.

## Features

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



## Ordering Information

Part Number	Inlet Inches DN (mm)	Connection Type	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)	E Inches (mm)
DA6206	1"	Thread NPT	4.76" (120.9)	13.08" (332.2)	9.75" (247.7)	7.00" (177.8)	¾" NPT
DA6208	1½"		8.33" (211.6)	16.30" (414)	15.75" (400.1)	8.06" (204.7)	1" NPT

# RegO® - Bronze & Stainless Steel Globe Valve for LNG Service BB & SK Series

## Application

The SK & BB Series globe valves are designed for handling of LNG through bulk tanks, trucks, trailers, iso-containers and piping configurations. Our time tested spring loaded stem packing and superior seat design provide for long life and easy maintenance.

## Features

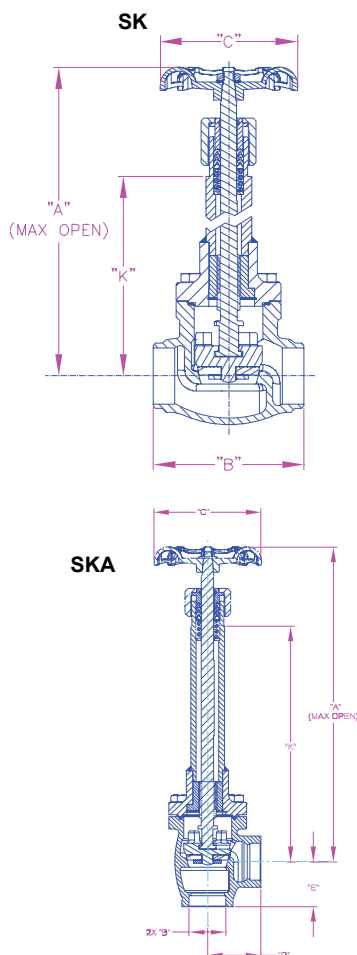
- Superior Flow: Provides high Cv for rapid and reliable loading and unloading.
- V-Ring spring loaded packing: provides extended service life without constant packing adjustment.
- Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat, longer service life.
- Ideal for loading & unloading LNG bulk tanks and trucks. The 1½" & 2" valves are designed to be operator friendly, they open and close completely with only four 360° turns.
- Connections: Socket Weld and Buttweld.
- Sizes: ¼" to 2".
- Bonnet Type: Bolted.
- Pressure Rating: 720 PSI (50 bar) Class 300.
- Temperature Rating: -325°F (-198°C) to +150°F (+65°C).
- Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations.

## Materials

Bonnet for BB Series .....	Brass UNS C37700
Body for BB Series .....	Bronze ASTM B61
Body & Bonnet for SK Series .....	Stainless Steel ASTM A351
Stem .....	Stainless Steel ASTM A351
External Tube .....	Stainless Steel
Spring .....	Stainless Steel ASTM A313
Packing .....	PTFE
Gasket .....	PTFE 25% Glass Fill
Seat Disk .....	PCTFE ASTM D1430
Seat Retainer .....	Brass ASTM B16
Bonnet Screws .....	Stainless Steel A320
Handwheel .....	Chromated Coated Ductile Iron ASTM A395

## Ordering Information

Part Number	Size Inches	Size mm	Connection	A	B	C	K	Cv	Weight		
SK9402BW	¼"	8	Buttweld	14.40	2.68	3.00	10.65	1.7	8.30		
SK9404BW	½"	15						5.0			
SK9406BW	¾"	20						9.4			
SK9408BW	1"	25			14	8.30					
SK9412BW	1½"	40			14.60	4.75	4.75	10.42		28.3	12.90
SK9416BW	2"	50			16.21	5.75	5.25	11.11		53	21.60
SK9402SW	¼"	8	Socket Weld	14.40	2.68	3.00	10.65	1.7	8.30		
SK9404SW	½"	15						5.0			
SK9406SW	¾"	20						9.4			
SK9408SW	1"	25			14	8.30					
SK9412SW	1½"	40			14.60	4.75	4.75	10.42		28.3	12.90
SK9416SW	2"	50			16.21	5.75	5.25	11.11		42	21.60
SKA9412SE	1½" 90°	40		14.60	-	4.75	10.42	53	11.50		
BB9402T	¼"	8	Threaded	14.40	2.68	3.00	10.65	1.7	8.30		
BB9404T	½"	15			2.88			5.0			
BB9406T	¾"	20			3.55			9.4			
BB9408T	1"	25			3.75	14	8.30				
BB9412T	1½"	40			14.60	4.73	4.75	10.42		28.3	12.90
BB9416T	2"	50			16.21	5.83	5.25	11.11		53	21.60
BB9412F	1½"	40	Flange	14.60	6.50	4.75	10.42	-	-		
BB9416F	2"	50		14.60	6.50	5.25	11.11	-	-		
BB9402S	¼"	8		16.21	8.00	5.25	11.11	-	-		
BB9404S	½"	15	SBT	14.40	2.68	3.00	10.65	1.7	8.30		
BB9406S	¾"	20			2.88			5.0			
BB9408S	1"	25			3.55			9.4			
BB9412S	1½"	40			3.75	14	12.90				
BB9416S	2"	50			14.60	4.73	4.75	10.42		28.3	21.60
					16.21	5.83	5.25	11.11		53	21.60





# Stainless Steel Globe Valve for LNG Service 210 Series

## Application

The 210 Series globe valves are designed for handling of LNG through large size bulk vessels, trucks, trailers, iso-containers and piping configurations.

## Features

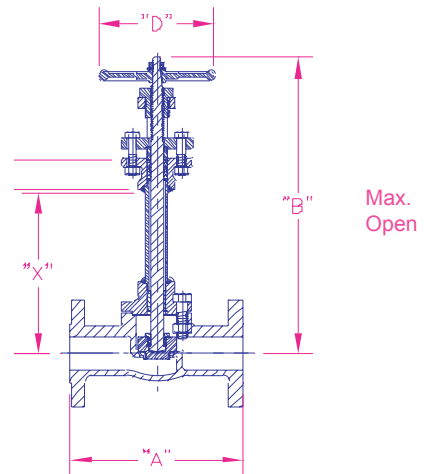
- Our investment cast stainless steel is specified by leading industrial gas companies for transportation, storage tank, pipelines & plants.
- Special bonnet extensions can be supplied for cold box applications.
- High Cv for rapid and reliable loading and unloading.
- Connections: Flange, Threaded, Socket Weld and Butt weld.
- Sizes: ½" to 4". (15mm - 100mm)
- Bonnet: Bolted.
- Pressure Rating: 720 PSI (50 bar) Class 300 .
- Temperature Rating: Cold, Non-Shock -325°F (-198°C) to +150°F (+65°C).
- 100% Factory Tested.
- Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations. Valves for Hydrogen Service can be supplied.



210 Series

## Materials

Body & Bonnet.....	Stainless Steel ASTM A351 J92600
Stem .....	Stainless Steel ASTM A479 S30400
External Tube .....	Stainless Steel ASTM A511/A249 S30403
Packing.....	PTFE
Gasket .....	PTFE 25% Glass Fill
Seat Disc .....	PCTFE ASTM D1430
Seat Retainer.....	Brass ASTM A479 S30400
Bonnet Screws .....	Stainless Steel ASTM F880 S30400
Handwheel.....	Ductile Iron ASTM A395 F32800



## Ordering Information

Part Number	Size Inches	Size mm	Connection	Inches				Cv	Weight Lbs (kg)
				A	B	C	K		
GS-00210W-24F	3	80	RF Flange	9.5"	30.5"	10"	19.06"	60	70 (31.75)
GS-00210W-32F	4	100		11.5"	36.75"	12"	21.68"	175	95 (43.09)
GS-00210W-24W3A	3	80	Buttweld SCH10	12"	30.5"	10"	19.06"	60	55 (24.95)
GS-00210W-32W3A	4	100		13.5"	36.75"	12"	21.68"	175	80 (26.29)
GS-00210W-24W3J	3	80	Buttweld SCH40	12.5"	30.5"	10"	19.06"	60	55 (24.95)
GS-00210W-32W3J	4	100		14"	36.75"	12"	21.68"	175	80 (26.29)

# RegO® - LNG Fill Manifold CFM, AFM, PFM & SFM Series

## Application

RegO® high quality brazed and welded assemblies are ideally suited for the original equipment manufacturer of bulk LNG 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 construction are available as production unit.

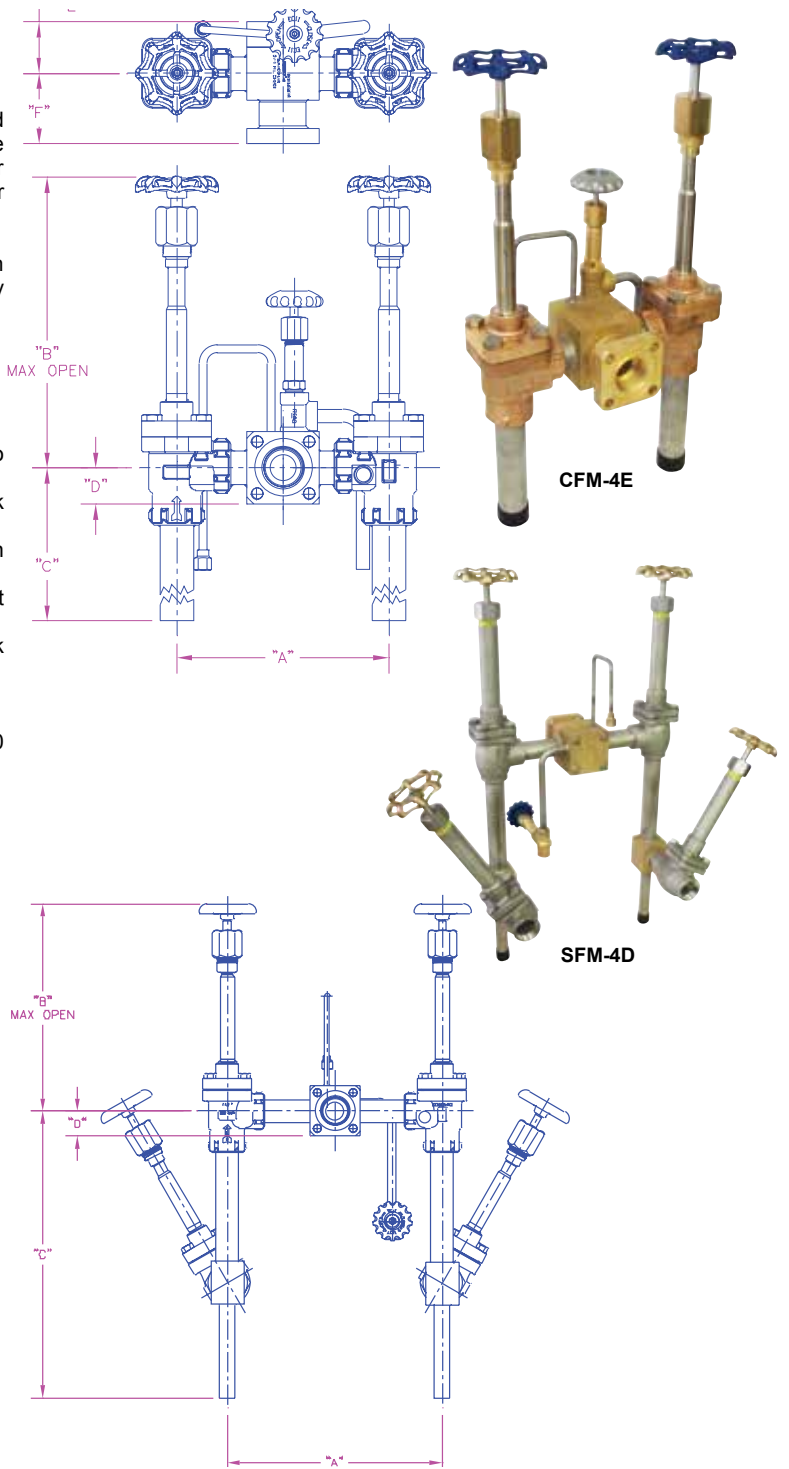
Safe and reliably used in LNG Systems. In addition RegO® can custom design configurations that are welded and brazed in a factory setting.

## 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.
- 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.

## Materials

Globe Valve ..... Bronze or Stainless Steel  
 Check Valve..... Brass  
 Bleed Valve..... Brass  
 Tube ..... 304L Stainless Steel or Copper



## Ordering Information

Part Number	Size Inches	Size mm	Bonnet Type	Pipe Material	A Inches	B Inches	C Inches	D Inches	E Inches	F Inches
CFM00002D	1"	25	Union	Stainless Steel	10.25	14.64	7.5	1.75	2.5	3.4
CFM00004D	1½"	40				Bolted				
CFM00004E			13	9.5						
AFM00004D			14.63	20	8					
PFM00004D			2.54	8						
SFM00004D				Stainless Steel						

# Natural Gas “V”-Ring Seal Globe and Angle Valves

## Application

Specifically designed to assure positive shut-off and long, maintenance free service life in vapor service.

The high quality construction and wide variety of sizes make them highly suited for use with Natural Gas, LP-Gas, anhydrous ammonia and in the chemical and petrochemical industries.

## Features

“V”-ring spring-loaded pressure stem seal provides for leak-proof operation. No packing to retighten or replace.

- Circular bridge in the globe design and a dropped seat in the angle design achieve greater flow with less pressure drop.
- Swivel seat disc assembly minimizes the seat disc from grinding on the body seat. The seat disc stops rotating as soon as it touches the body seat. This feature provides for good seat alignment and assures long seat life.
- ¼” F. NPT plugged bosses on the side of the valve body allow attachment of a hydrostatic relief valve or vent valve.
- “V”-ring stem seal virtually eliminates hard to turn handles frequently encountered with packed type seals.
- Heavy duty rolled ACME stem threads provide quick action and long service life.
- Pressure Rating: 400 WOG
- Temperature Rating: -40° F (-40° C) to +160° F (+74°C)

## Materials

Body .....	Ductile Iron
Bonnet (7034, 7505-7508).....	Steel
Bonnet (7509-7518).....	Ductile Iron
Valve Stem .....	Stainless Steel
Wiper Ring.....	Synthetic Rubber
Seat Disc .....	See Ordering Chart
“V”-Rings .....	Teflon
Handwheel.....	Ductile Iron
Spring .....	Stainless Steel



## Ordering Information

Part Number				Inlet and Outlet Connection	Port Diameter	Flow at 1 PSIG Pressure Drop (Cv) (GPM/Propane)***		Accessories	
Buna N Seat Discs		Teflon Seat Discs*				Globe	Angle	Hydrostatic Relief Valve	Vent Valve
Globe	Angle	Globe	Angle						
-	-	TA7034P	TA7034LP	½” F. NPT	¾”	10.0	14.8	SS8001U	TSS3169
A7505AP	A7506AP	TA7505AP	TA7506AP	¾” F. NPT		12.0	17.7		
A7507AP	A7508AP	TA7507AP	-	1” F. NPT	1”	17.8	22.0		
A7509BP	A7510BP	TA7509BP	TA7510BP	1¼” F. NPT	1¼”	36.5	54.0		
A7511AP	A7512AP	TA7511AP	TA7512AP	1½” F. NPT	1½”	43.0	55.5		
A7511FP	-	TA7511FP	-	1½” Flange**		46.0	-		
A7513AP	A7514AP	TA7513AP	-	2” F. NPT	2”	75.0	88.5		
A7513FP	A7514FP	TA7513FP	TA7614FP	2” Flange**		78.0	133.0		
A7517AP	A7518AP	TA7517AP	-	3” F. NPT	3½”	197.0	303.0		
A7517FP	A7518FP	TA7517FP	-	3” Flange**					

\* Teflon seat discs on valves built to order.

\*\* 300# ANSI R.F. Flange.

\*\*\* To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in chart by square root of pressure drop. Example: 7514FP @ 9 PSIG = 133 x √9 = 399 GPM/propane. For NH<sub>3</sub> flow, multiple propane flow by .90.



# Extended Bonnet Bronze Gate Valve for LNG Service 322 and 326 Series

## Features

- **Top Entry:** This union bonnet valve can be permanently installed in the line and serviced from the top
- **Construction:**
  - Bronze cast body and Internals
  - Rugged construction for long life
  - Straight through construction for high CV
  - Designed with unique KOLD-SEAL™
  - Standard split wedge design provides better sealing and cycle life
- **Sizes:** ½" - 3" (15mm - 80mm)
- **Ends:** Threaded (FNPT), Sil Braze Tube (SBT), Silver Brazed Pipe (SBP) or with stainless steel pipe nipples brazed in
- **Service:** Liquefied and vaporized atmospheric gases, LNG
- **Temperature Rating:** -325°F - 150°F (-196°C + 65°C)
- **Pressure Rating:** (Cold, Non-shock)
  - 322 Series 400 PSIG
  - 326 Series 600 PSIG

Designed to MSS SP-80 and ASME B31.3  
Series 1.5" to 3" PED Approved per EN 10204, 3.1

**Ideal for LNG supply and storage handling applications.  
Straight-through flow for highest CV rating in the industry.**

**Also available with GRAFOIL® packing**



# Extended Bonnet Bronze Gate Valve for LNG Service 322 and 326 Series

## Ordering Information

### 322 Series

Bronze Gate Valves  
400 PSIG COLD WORKING PRESSURE

Part Number	NPT Size Inches	NPT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated CV
B-000322-20T4	2½"	65 mm	Threaded	19.00	8.64	372.00
B-000322-24T4	3"	80 mm	Threaded	28.00	121.73	588.00

Part Number	SBT Size Inches*	SBT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated CV
B-000322-4S4	½"	15 mm	Silver Braze	1.75	0.80	19.80
B-000322-6S4	¾"	20 mm	Silver Braze	2.25	1.02	36.00
B-000322-8S4	1"	25 mm	Silver Braze	3.50	1.59	60.80
B-000322-12S4	1½"	40 mm	Silver Braze	7.50	3.41	152.00
B-000322-16S4	2"	50 mm	Silver Braze	11.25	5.11	245.00
B-000322-20S4	2½"	65 mm	Silver Braze	17.00	7.73	372.00
B-000322-24S4	3"	80 mm	Silver Braze	24.00	10.91	588.00

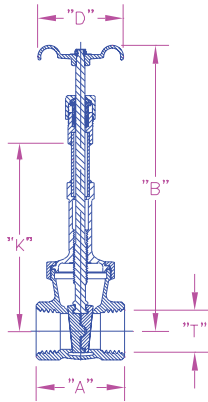
\*Nominal Size

### 326 Series

Bronze Gate Valves  
600 PSIG COLD WORKING PRESSURE

Part Number	NPT Size Inches	NPT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated CV
B-000326-4T6	½"	15 mm	Threaded	1.75	0.80	19.80
B-000326-6T6	¾"	20 mm	Threaded	2.25	1.02	36.00
B-000326-8T6	1"	25 mm	Threaded	4.00	1.82	60.80
B-000326-12T6	1½"	40 mm	Threaded	8.25	3.75	152.00
B-000326-16T6	2"	50 mm	Threaded	12.50	5.68	245.00

# Extended Bonnet Bronze Gate Valve for LNG Service 322 and 326 Series



## 322 Series

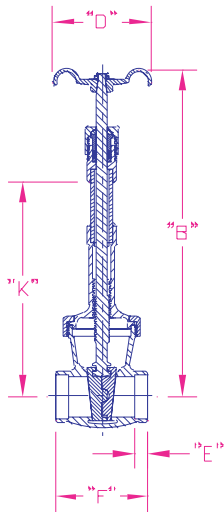
MAWP: 400 PSIG Non-Shock Cold  
Temperature Rating +150° F to -325°F

Dimensional Data

All dimensions are in inches

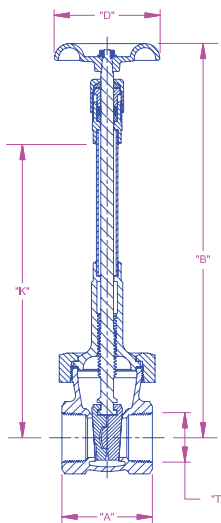
### Threaded End (NPT)

Size	"A"	"B"	"D"	"K"
2½"	4.68"	22.5"	5.25"	14.5"
3"	5.12"	24.87"	6.12"	16.31"



### Sil Braze End

Size	"A"	"B"	"D"	"K"	"E"
½"	2.5"	9.38"	2.37"	5.5"	.38"
¾"	3"	10.56"	2.75"	6.12"	.40"
1"	3.25"	12.38"	3"	7.68"	.43"
1½"	4"	17"	4"	10.87"	.62"
2"	4.5"	19.62"	4.75"	12.38"	.65"
2½"	5.25"	22.5"	5.25"	14.5"	.78"
3"	6"	24.87"	6.12"	16.31"	.82"



## 326 Series

MAWP: 600 PSIG Non-Shock Cold  
Temperature Rating +150° F to -325°F

Dimensional Data

All dimensions are in inches

### Threaded End (NPT)

Size	"A"	"B"	"D"	"K"
½"	2.34"	9.37"	2¼"	5.5"
¾"	2.5"	10.56"	2¾"	6.12"
1"	2.34"	12.37"	3"	7.6"
1½"	3.43"	17"	4"	10.87"
2"	3.81"	19.62"	4¾"	12.37"

# Stainless Steel Gate Valve for LNG Service 110 Series

## Features

- **Top Entry:** This valve can be permanently installed in the line and serviced from the top
- **Soft Seated:** PCTFE Seat provides a bubble tight seal and is replaceable
- **Construction:** Stainless steel body and bonnet
- **Sizes:** ½" - 6" (15mm - 150mm)
- **Ends:** RF Flange, Butt weld, Socket weld, Threaded (FNPT)
- **Service:** LNG
- **Temperature Rating:** -325°F - 150°F (-196°C +65°C)
- 100% Factory Tested
- **Pressure Rating:** (Cold, Non-shock)  
Class 150 valve - 275 PSIG (19 bar)  
Class 300 valve - 720 PSIG (50 bar)

½" - 6" Class 150  
PED Approved, Approved for US and Canada  
½" - 6" Class 300  
PED Approved, Approved for US and Canada

110 Series



## Ordering Information

### Stainless Body • RF Flange Ends

150# Part Number	300# Part Number	Valve Size		Ends	Weight 150#		Weight 300#		Estimated C <sub>v</sub>
		Inches	MM		Lbs.	Kg	Lbs.	Kg.	
GS-00110W-8F	-	1"	25 mm	Flange	15	6.80	-	-	30.00
GS-00110W-12F	GS-00110W-12F3	1½"	40 mm		35	15.88	45	20.41	85.00
GS-00110W-16F	GS-00110W-16F3	2"	50 mm		35	15.88	50	22.68	100.00
GS-00110W-24F	GS-00110W-24F3	3"	80 mm		65	29.48	85	35.56	310.00
GS-00110W-32F	GS-00110W-32F3	4"	100 mm		90	40.82	120	54.43	700.00
GS-00110W-48F	GS-00110W-48F3	6"	150 mm		150	68.04	200	90.72	850.00

150# ANSI Class (275 PSIG Cold Working Pressure) 300# ANSI Class (720 PSIG Cold Working Pressure)

### Stainless Body • Butt Weld, Socket Weld, Threaded Ends

150# Part Number	300# Part Number	Valve Size		Ends	Weight		Estimated C <sub>v</sub>
		Inches	MM		Lbs.	Kg.	
GS-00110W-4WA	-	½"	15 mm	Butt Weld SCH10	10	4.54	7.00
GS-00110W-4S3	GS-00110W-4S3	½"	15 mm	Socket Weld	15	6.80	7.00
GS-00110W-4T	-	½"	15 mm	Threaded	10	4.54	7.00
GS-00110W-6WA	-	¾"	20 mm	Butt Weld SCH10	10	4.54	23.00
GS-00110W-6S3	GS-00110W-6S3	¾"	20 mm	Socket Weld	15	6.80	23.00
GS-00110W-8WA	-	1"	25 mm	Butt Weld SCH10	10	4.54	30.00
GS-00110W-8S3	GS-00110W-8S3	1"	25 mm	Socket Weld	15	6.80	30.00
GS-110W-8T	-	1"	25mm	Threaded	10	4.54	30.00
GS-00110W-12WA	-	1½"	40 mm	Butt Weld SCH10	30	13.61	85.00
GS-00110W-12S3	GS-00110W-12S3	1½"	40 mm	Socket Weld	35	15.88	85.00
GS-00110W-16W3A	GS-00110W-16W3A	2"	50 mm	Butt Weld SCH10	35	15.88	100.00
GS-00110W-16W3J	GS-00110W-16W3J	2"	50 mm	Butt Weld SCH40	35	15.88	100.00
GS-00110W-16S	-	2"	50 mm	Socket Weld	30	13.61	100.00
GS-00110W-24W3A	GS-00110W-24W3A	3"	80 mm	Butt Weld SCH10	65	29.48	310.00
GS-00110W-24W3J	GS-00110W-24W3J	3"	80 mm	Butt Weld SCH40	65	29.48	310.00
GS-00110W-32W3A	GS-00110W-32W3A	4"	100 mm	Butt Weld SCH10	80	40.82	700.00
GS-00110W-32W3J	GS-00110W-32W3J	4"	100 mm	Butt Weld SCH40	80	40.82	700.00
GS-00110W-48WA	GS-00110W-48W3A	6"	150 mm	Butt Weld SCH10	120/150*	54.43/68.04*	850.00
GS-00110W-48WJ	GS-00110W-48W3J	6"	150 mm	Butt Weld SCH40	120/150*	54.43/68.04*	850.00

150# ANSI Class (275 PSIG Cold Working Pressure) 300# ANSI Class (720 PSIG Cold Working Pressure)

\* Second number indicates valve for 300# part number.

Service: 300#-720 PSI Non-shock Cold • Service: 150#-275 PSI Non-shock Cold • Temperature Rating +150°F - 325°F

# RegO® ASME & Non ASME Relief Valves

## Application

These relief valves are specifically designed for thermal safety relief applications and LNG liquid containers.

## Features

- 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

Body .....	Stainless Steel
Spring .....	Stainless Steel
Seat Retainer .....	Stainless Steel
Adjusting Screw .....	Stainless Steel
Pipe-Away Adapter .....	Stainless Steel

## Materials PRV and B-Style

Body .....	Brass
Spring .....	Stainless Steel
Seat Retainer .....	Brass
Adjusting Screw .....	Brass
Pipe-Away Adapter .....	Brass

## Color Identification

22 PSIG	Yellow	230 PSIG	Blue
35 PSIG	Purple	350 PSIG	Orange
50 PSIG	White	450 PSIG	Pink
100 PSIG	Gray	500 PSIG	Light Blue
150 PSIG	Red		

Other Settings Available

## Flow Performance

- PRV and SS style flow at 0.783 SCFM Air/PSIA at 110% of set pressure.
- B-9425N has a flow of 6.7 SCFM Air/PSIA at 120% of set pressure.
- B-9426N has a flow of 11.0 SCFM Air/PSIA at 120% of set pressure.

## Non ASME Ordering Information

Style	Size	Inlet M.NPT 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"	Stainless Steel	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"	Stainless Steel	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
PRV	9434	1/2"	Brass	17-600	2.8"	7/8"	.062	B-9412-4	1/2"
SS	9434	1/2"	Stainless Steel	17-600	2.8"	7/8"	.062	SS-9412-4	1/2"
B-	9425	3/4"	Brass	50-300	3.4"	1 1/4"	.43	B-3131-10	1"
B-	9426	1"	Brass	75-300	5.5"	2 3/8"	.62	B-3132-10	1 1/4"

## ASME Ordering Information

Part Number	Inlet A	Height B	Wrenching Hex C	Orifice Size
PRV 19432	1/4"	2.6	7/8"	.062 sq. inch
PRV29432				
PRV 19433	3/8"	2.6	7/8"	.062 sq. inch
PRV29433				
PRV 19434	1/2"	2.8	7/8"	.062 sq. inch
PRV29434				



**WARNING:** Inspection and maintenance of pressure relief valves is very important. Failure to properly inspect and maintain pressure relief valves could result in personal injuries or property damage. The useful safe service life of a pressure relief valve may be significantly affected by the service environment.

## Drain Hole Option

Relief valves without pipeaway typically provided with drain holes, leave blank. **P** - for relief valves without drain hole, for example PRV9432TP350



# RegO® - LNG Swing Check Valve 840 & 886 Series

## Application

RegO® stainless steel and bronze check valves provide an excellent positive shut off for delivery vehicles and pipe lines. Our swing check valves are available in a variety of sizes, diameters, end connections and pressure ratings. Safe and reliably used in LNG Systems

## Features

- High Cycle life and superior sealing
- These valves can be permanently installed in the line and services from the top.
- Designed to prevent back flow in LNG systems.
- Sizes: 840 Bronze Series ½" to 2" – 886 Stainless Steel ½" to 4"
- Ends: 840 Bronze Series: Threaded (F.NPT), Silver Brazed Tube (SBT) and SCH 10, SCH 40 & SCH 80 threaded back brazed pipe nipples.
- Pressure Rating: (Cold, Non-shock) SFM Series 725 PSI (50 bar) – CFM Series 600 PSI (41 Bar).
- Temperature Rating: -325°F (-198°C) to +165°F (+74°C).
- 100% Factory tested.

## Materials

### 840 Series – Bronze - Soft Seated

Body ..... Bronze ASTM B61 UNS C92200  
 Seat Disc ..... PCTFE ASTM D1430  
 Disc Holder Copper Alloys ASTM B98 C65500 and ASTM B21 C46400  
 Disc Nut..... Copper Alloys ASTM B98 C65500  
 Arm..... Sil Bronze C87300  
 Cap..... Bronze B61 C9200  
 Gasket ..... TFE 25% Glass Fill

### 886 Series – Stainless Steel - Soft Seated

Body ..... Stainless Steel ASTM A351 CF3M J92800  
 Seat ..... PCTFE ASTM D1930  
 Arm ..... Stainless Steel ASTM A351 CF3M J92800  
 Cap..... Stainless Steel ASTM A351 CF3M J92800  
 Gasket ..... TFE 25% Glass Fill  
 Bolts..... Stainless Steel ASTM A320 S30400

### 886GF Series – Stainless Steel - Soft Seated – Grafoil®

Body ..... Stainless Steel ASTM A351 CF8M SA351 CF3M  
 Seat ..... PCTFE ASTM D1930  
 Arm ..... Stainless Steel ASTM A351 CF3M  
 Cap..... Stainless Steel ASTM A351 CF3M  
 Gasket ..... GTB Grafoil®  
 Bolts..... Stainless Steel ASTM A320 S30400



## Materials

### 846M Series – Bronze - Metal Seated

Body ..... Bronze ASTM B61 UNS C92200  
 Seat ..... Copper Alloys ASTM B98 C65500  
 Arm..... Silicon Copper ASTM B584 C87300  
 Cap..... Bronze B61 C9200  
 Gasket ..... TFE 25% Glass Fill

### 886M Series – Stainless Steel - Metal Seated

Body ..... Stainless Steel ASTM A351 CF8M SA351 CF3M  
 Seat ..... Stainless Steel ASTM A351 CF3M ASTM A479 S31603  
 Arm ..... Stainless Steel ASTM A351 CF3M  
 Cap..... Stainless Steel ASTM A351 CF3M  
 Gasket ..... TFE 25% Glass Fill  
 Bolts..... Stainless Steel ASTM A320 S30400

### 886MGF Series – Stainless Steel - Metal Seated – Grafoil®

Body ..... Stainless Steel ASTM A351 CF8M SA351 CF3M  
 Seat ..... Stainless Steel ASTM A351 CF3M ASTM A479 S31603  
 Arm ..... Stainless Steel ASTM A351 CF3M  
 Cap..... Stainless Steel ASTM A351 CF3M  
 Gasket ..... GTB Grafoil®  
 Bolts..... Stainless Steel ASTM A320 S30400

## Ordering Information

Part Number	Material	Size Range	Bonnet Type	Ends	Seat	Gasket Material	Pressure Range PSI
B-000840-xxT	Bronze	½" to 2"	Union	NPT	Soft	PCTFE	400
B-000840-xxS				Silver Brazed			
B-00846M-xxT6				NPT	Metal		600
B-00846M-xxS6				Silver Brazed			
S-0886GF-xxS	Stainless Steel	½" to 1½"	Bolted	Socket Weld	Soft	Grafoil®	400
S-000886-xxS					Metal	725 (50 Bar)	
S-00886M-xxS		Buttweld		PCTFE			
S-00886M-xxWx							Socket Weld
S-886MGF-XXW3A		2" to 3"					

# Limited Warranty and Limitation of Liability



## LIMITED WARRANTY

RegO® warrants products and repair kits manufactured by it to be free from defects in materials and workmanship under normal use and service for a period of 12 months from the date of installation or operation or 18 months from the date of shipment from the factory, whichever is earlier. If within thirty days after buyer's discovery of what buyer believes is a defect, buyer notifies RegO® thereof in writing, RegO®, at its option, and within forty-five days, will repair, replace F.O.B. point of manufacture, or refund the purchase price of that part or product found by it to be defective. Failure of buyer to give such written notice within thirty days shall be deemed an absolute and unconditional waiver of any and all claims of buyer arising out of such defect.

This warranty does not extend to any product or part that is not installed and used in accordance with RegO's printed instructions, all applicable state and local regulations, and all applicable national standards, such as those promulgated by NFPA, DOT, CGA, and ANSI. This warranty does not extend to any product or part that has been damaged by accident, misuse, abuse or neglect, nor does it extend to any product or part which has been modified, altered, or repaired in the field.

Except as expressly set forth above, and subject to the limitation of liability below, RegO® makes NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, with respect to its products and parts, whether used alone or in combination with others. RegO® disclaims all warranties not stated herein.

## LIMITATION OF LIABILITY

RegO's total liability for any and all losses and damages arising out of any cause whatsoever shall in no event exceed the purchase price of the products or parts in respect of which such cause arises, whether such cause be based on theories of contract, negligence, strict liability, tort or otherwise.

RegO® shall not be liable for incidental, consequential or punitive damages or other losses. RegO® shall not be liable for, and buyer assumes liability for, all personal injury and property damage connected with the handling, transportation, possession, further manufacture, other use or resale of products, whether used alone or in combination with any other products or material.

If RegO® furnishes technical advice to buyer, whether or not at buyer's request, with respect to application, further manufacture or other use of the products and parts, RegO® shall not be liable for technical advice and buyer assumes all risks of such advice and the results thereof.

NOTE: Some states do not allow the limitation or exclusion of incidental or consequential damages, so the above limitations or exclusions, wholly or partially, may not apply. The portions of this limited warranty and limitation of liability shall be considered severable and all portions which are not disallowed by applicable law shall remain in full force and effect.

## WARNING

All RegO® products are mechanical devices that will eventually become inoperative due to wear, corrosion and aging of components made of materials such as rubber, etc. The environment and conditions of use will determine the safe service life of these products. Periodic inspection and maintenance are essential to avoid serious injury and property damage.

Many RegO® products are manufactured components which are incorporated by others on or in other products or systems used for storage, transport, transfer and otherwise for use of toxic, flammable and dangerous liquids and gases. Such substances must be handled by experienced and trained personnel only, using accepted governmental and industrial safety procedures.

## NOTICE TO USERS OF PRODUCTS

The Limited Warranty stated above is a factory warranty to the first purchasers of RegO® products. Since most users have purchased these products from RegO® distributors, the user must within thirty (30) days after the user's discovery of what user believes is a defect, notify in writing the distributor from whom he purchased the product/parts. The distributor may or may not at the distributor's option, choose to submit the product/parts to RegO® pursuant to its Limited Warranty. Failure by buyer to give such written notice within thirty (30) days shall be deemed an absolute and unconditional waiver or buyer's claim for such defects. Acceptance of any alleged defective product/parts by RegO's distributor for replacement or repairs under the terms of RegO's Limited Warranty in no way obligates RegO® to the terms of the above warranty.

Because of a policy of continuous product improvement, RegO® reserves the right to change designs, materials or specifications without notice.

EUROPEAN PED/TPED CERTIFICATION			
The following product categories have received PED/TPED certification by the notified body Tüv, #0036			
Valve number	Maximum Connection Size	DN	PED Category
9560 series	1"	25	SEP
9500 series	1"	25	SEP
BK8400 series	2"	50	II
BK9400 series	2"	50	II
T9450 series	½"	15	TPED
T9460 series	½"	15	TPED
1682 series	¼"	8	SEP
BR-&1780 series	1"	25	SEP
RG series	¼"	8	SEP
ECL series	¼"	8	SEP
PRV9430 & PRV19430 series	½"	15	IV
SS9430 & PRV29430 series	½"	15	IV

## Canadian Registration Numbers

The majority of products in this catalog are registered with the Canadian Department of Labor under the following reference Number: 0\* 7770.5\*\*  
 \* Represents Fitting Categories: A, C, G, H  
 \*\* Represents Province code number



## Notes



**3181 Lear Drive Burlington, NC 27215 USA Phone (336) 226-3244 Fax (336) 227-6294  
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**[www.regoproducts.com](http://www.regoproducts.com)**