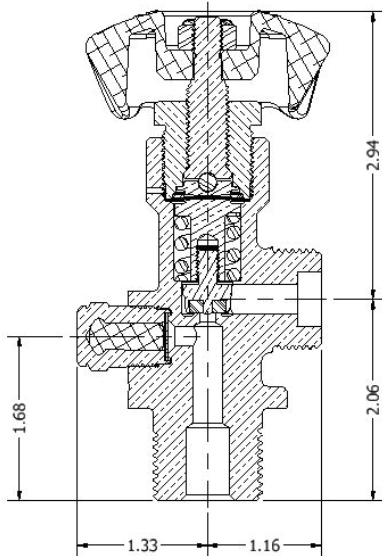


## Specialty Gas Valves

**8074 Series**

## Brass Diaphragm Packless Cylinder Valves



The 8074 Series Brass Diaphragm Packless Valves are designed for a variety of high purity and high pressure applications, Ultra high purity mixtures, pharmaceutical and pure gas applications.

**Key Features & Benefits**

- New smooth operating stem ensures ease of operation during filling and use
- Precisely machined internal components meet the most stringent international valve performance standards
- Superior anti-extrusion seat for longer life
- Rated at 3000 PSI cylinder service pressure
- Available with unitized pressure relief device having fuse-metal backed or unbacked burst disc
- 100% Helium leak tested
- Inlet and outlet thread configurations are available for a broad spectrum of customer, country and code specifications
- Pressure Relief Device (PRD) is a unitized plug design that provides excellent flow characteristics, ensures proper assembly and tamper resistance
- Inlet tapped (1/4" NPT) for dip tube as required

## 8074 Series

### Brass Diaphragm Packless Cylinder Valves

Design Specifications		
	English	Metric
Maximum Working Pressure	3000 PSI	207 Bar
Operating Temperature	-50° F to +130° F	-45° C to +54° C
Storage Temperature	-60° F to +149° F	-51° C to +65° C
Operating Torque	20-40 in.-lbs.	2.3-4.5 N-m
Closing Torque	40 in.-lbs.	4.5 N-m
Leak Rate	1x10 <sup>-7</sup> atm cc/s	1x10 <sup>-7</sup> Bar mL/sec
Handwheel nut Installation torque	25-45 in.-lbs.	2.8-5.0 N-m
PRD Installation Torque	35-45 ft.-lbs.	47-61 N-m
Cv Flow Factor	.36	.36
Minimum Cycle Life	2000 Minimum	2000 Minimum

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
A-A-59860	U.S. General Services Administration Standards for Gas Cylinder Valves

Materials of Construction	
Part Description	Materials of Construction
Body	Brass C37700/Chrome Plating When Applicable
Bonnet	Brass C36000/Chrome Plating When Applicable
Handwheel	Aluminum A380
Handwheel Nut	Steel Class 8, Zinc Plating
Stem	Brass C48500
Seat holder	Brass C36000
Seat	Nylon 6/6
<b>Pressure Relief Device</b>	
Plug	Brass C36000; Chrome Plating When Applicable
Rupture Disc	Nickel Alloy 201; Copper C22000
Seal Gasket	Copper C11000
Diaphragm	Stainless Steel/Hastelloy (Gas Wetted)
Spring Retainer	Brass C36000
Spring	Stainless Steel
Stem Bearing Button	Brass C48500
Ball Bearing	Stainless Steel

## Specialty Gas Valves

## 8074 Series

## Brass Diaphragm Packless Cylinder Valves

Ordering Information				
Sherwood Part Number	Gas Service @ 70° F	CGA Outlet	Outlet Thread Size	Inlet Thread Size
<i>Oxidizing Mixtures</i>				
807429661-XXX	0 PSI-3000 PSI	296	.803-14 UNS RH Int.	3/4" NGT
807429651-XXX	0 PSI-3000 PSI	296	.803-14 UNS RH Int.	1.125"-12 UNF
<i>Carbon Dioxide</i>				
807432061-XX	0 PSI-3000 PSI	320	.825-14 NGO RH Ext.	3/4" NGT
8074320651-XXX	0 PSI-3000 PSI	320	.825-14 NGO RH Ext.	1.125"-12 UNF
<i>Nitrous Oxide</i>				
807432661-XXX	0 PSI-3000 PSI	326	.825-14 NGO RH Ext.	3/4" NGT
8074326651-XXX	0 PSI-3000 PSI	326	.825-14 NGO RH Ext.	1.125"-12 UNF
<i>Carbon Monoxide and Hydrogen</i>				
807435065-XXX	0 PSI-3000 PSI	350	.825-14 NGO LH Ext.	3/4" NGT
807435065-XXX-7	0 PSI-3000 PSI	350	.825-14 NGO LH Ext.	3/4" NGT-7 Threads O/S
807435051-XX	0 PSI-3000 PSI	350	.825-14 NGO LH Ext.	1.125"-12 UNF
807435055-XXX-75	0 PSI-3000 PSI	350	.825-14 NGO LH Ext.	.750"-16 UNF
<i>Oxygen</i>				
807454061-XXX	0 PSI-3000 PSI	540	.903-14 NGO RH Ext.	3/4" NGT
<i>Argon, Helium, Krypton, Neon, Nitrogen and Xenon</i>				
807458061-XXX	0 PSI-3000 PSI	580	.965-14 NGO RH Int.	3/4" NGT
807458051-XXX	0 PSI-3000 PSI	580	.965-14 NGO RH Int.	1.125"-12 UNF
<i>Sulfur Hexafluoride</i>				
807459061-XXX	0 PSI-3000 PSI	590	.965-14 NGO LH Int.	3/4" NGT
807459051-XXX	0 PSI-3000 PSI	590	.965-14 NGO LH Int.	1.125"-12 UNF
807459051-XXX-75	0 PSI-3000 PSI	590	.965-14 NGO LH Int.	.750"-16 UNF
<i>Refrigerant</i>				
807466061-XXX	0 PSI-3000 PSI	660	1.030-14 NGO RH Ext.	3/4" NGT

**Chrome plating:** To order, add letter "A" after the letters 8074 in the Part Number. For example 807454061-XXX becomes 8074A54061-XXX

**Fusible back pressure relief devices:** For 165° F or 212° F nominal melting temperatures, change 1 in the Part Number to 4 (165° F) or 5 (212° F) (ie. 807435061-XXX becomes 807435064-XXX for 165° F, or 807435065-XXX for 212° F).

For valves not listed in the table above, please call for price and availability.