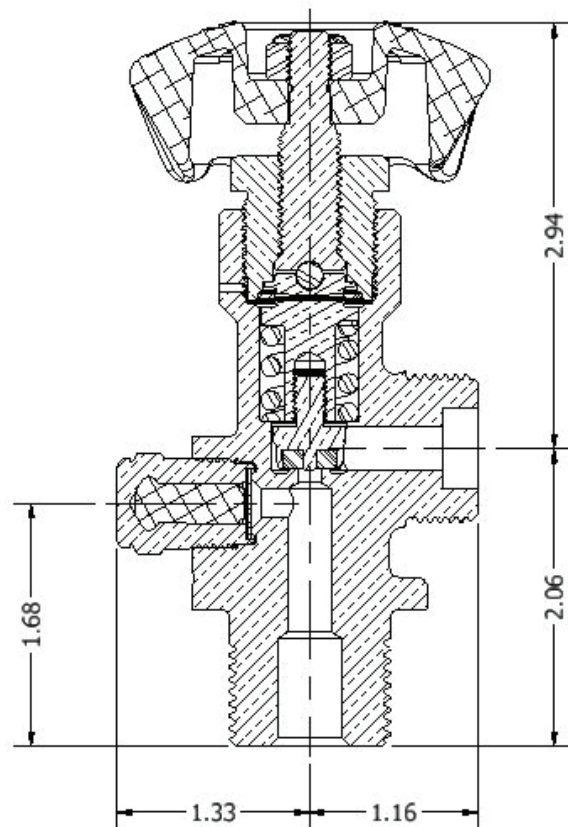


8074 Series Brass Diaphragm Packless Cylinder Valves

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.

- 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



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	1x10⁻⁷ atm cc/s	1x10⁻⁷ 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

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
Pressure Relief Device	
Plug Rupture	Brass C36000; Chrome Plating When Applicable Nickel
Disc Seal	Alloy 201; Copper C22000
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

Sherwood Part Number	Gas Service @ 70° F	CGA Outlet	Outlet Thread Size	Inlet Thread Size
Oxidizing Mixtures				
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
Carbon Dioxide				
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
Nitrous Oxide				
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
Carbon Monoxide and Hydrogen				
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
Oxygen				
807454061-XXX	0 PSI-3000 PSI	540	.903-14 NGO RH Ext.	3/4" NGT
Argon, Helium, Krypton, Neon, Nitrogen and Xenon				
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
Sulfur Hexafluoride				
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
Refrigerant				
807466061-XXX	0 PSI-3000 PSI	660	1.030-14 NGO RH Ext.	3/4" NGT

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**

