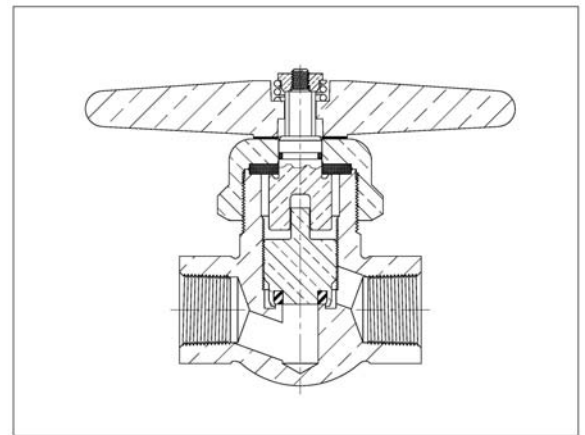




High Pressure Master Shut-Off Valves: 430 Series for Manifold Piping

Design Features

- **Safer** - There is less chance of ignition from oxygen compression due to a toroidal seat insert that minimizes the area of fluoroplastic material subject to oxygen impact forces.
- **Heat Absorbing Metal Surfaces** encapsulating all but the shut-off surface of the seat insert and serving as a heat sink reducing the chance of acetylene ignition.
- **Longer Life of Downstream Equipment** reduces the forces against regulators and other auxiliary equipment due to the sudden surge of high pressure gas when the valve is opened quickly.
- **Controlled Flow** - When the valve is opened quickly, dynamic forces directed against downstream equipment are reduced by a skirt on the lower stem shrouding the raised body seat. Controlled flow feature protects auxiliary equipment from sudden surges of high pressure gas when valve is opened.
- **Full Flow** is achieved when handle is turned two full turns.
- **Interchangeability of parts** - 430C/430CX valve parts are interchangeable with previous model 430B valve parts.
- **Forged Brass Body with Copper Alloy Parts** – 430C lower stem, C64200 aluminum-silicon-bronze not for acetylene; 430CX lower stem, C36000 free cutting brass for acetylene.
- **Pressure Seal Design** with hand wheel spring applies upward force against upper stem and packing to ensure stem seal even at low gas pressures. This pressure seal bonnet design assures positive seal.
- **O-ring Moisture Seal on Upper Stem** protects against environmental contamination.
- **Kel-F Seat Insert and Teflon Packing** has been used successfully for over 30 years in master shut-off valve applications.
- **Large Bar Handle** for ease of operation.
- **Pressure Ratings** – 6000 psig – non-corrosive gases except oxygen; 4840 psig –oxygen; 3000 psig – UL rating at 120F.
- **Aluminum Silicon Bronze lower stem** provides extra long-life and durability during operation.
- **Inert Teflon packing** provides leak-free stem seal, long cycle life and resistance to corrosion.



High Pressure Master Shut-Off Valves: 430 Series

Sherwood Part Number	Outlet Thread Size	Inlet Thread Size	Seat Holder	Pressure Ratings (see notes A,B,C below)
430C-F	1"-11½" NPSM R.H. (Male)	1"-11½" NPSM R.H. (Male)	P430CX12-10	A
430 CW-F*	1"-11½" NPSM, (Male)	1"-11½" NPSM, (Male)	P430CX12-10	B
430C-M	½"-14 NPT (Female)	½"-14 NPT (Female)	P430CX12-10	A
430CW-M*	½"-14 NPT (Female)	½"-14 NPT (Female)	P430CX12-10	B
430C-MS	½" Pipe Socket Weld	½" Pipe Socket Weld	P430CX12-10	A
430CW-MS*	½" Pipe Socket Weld	½" Pipe Socket Weld	P430CX12-10	B
430C-N	¾"-14NPT (Female)	¾"-14NPT (Female)	P430CX12-10	A
430CW-N*	¾"-14NPT (Female)	¾"-14NPT (Female)	P430CX12-10	B
430C-NS	¾" Pipe Socket Weld	¾" Pipe Socket Weld	P430CX12-10	A
430CW-NS*	¾" Pipe Socket Weld	¾" Pipe Socket Weld	P430CX12-10	B
430CX7-M	½" Pipe Socket Weld	½" NPT (Female)	P430CX12-10	B
430CWX1-F	1"-11½NPSM (Male)	1"-11½NPSM (Male)	P430CX1-10A	A
430CX1-F	1"-11½NPSM (Male)	1"-11½NPSM (Male)	P430CX1-10A	E
430CX1-10-F	1"-11½NPSM (Male)	1"-11½NPSM (Male)	P430CX1-10A	B
430CWX1-M*	½"-14 NPT (Female)	½"-14 NPT (Female)	P430CX1-10A	A
430CX1-M	½"-14 NPT (Female)	½"-14 NPT (Female)	P430CX1-10A	B
430CWX1-MS*	½ " Pipe Socket Weld	½ " Pipe Socket Weld	P430CX1-10A	A
430CX1-MS	½ " Pipe Socket Weld	½ " Pipe Socket Weld	P430CX1-10A	B
430CWX1-N*	¾" – 14NPT (Female)	¾"-14NPT (Female)	P430CX1-10A	A
430CX1-N	¾" – 14NPT (Female)	¾" – 14NPT (Female)	P430CX1-10A	B
430CWX1-NS*	¾" Pipe Socket Weld	¾" Pipe Socket Weld	P430CX1-10A	A
430CX1-NS	¾" Pipe Socket Weld	¾" Pipe Socket Weld	P430CX1-10A	B
430CWX9-FM	½"-14 NPT (Female)	1"-11 ½ NPSM (Male)	P430CX12-10	B
430CWX10-F*	1"-11 ½ NSPM, LH (Male)	1"-11 ½ NSPM, LH (Male)	P430CX12-10	C
430CX10-F	1"-11 ½ NSPM, LH (Male)	1"-11 ½ NSPM, LH (Male)	P430CX12-10	E
430CX7-M	½"-14NPT (Female)	½" Pipe Socket Weld	P430CX12-10	E
430CX7-N	¾" Pipe Socket Weld	¾"-14 NPT (Female)	P430CX12-10	D
430CX8	¾" Pipe Socket Weld	¾" Pipe Socket Weld	P430CX12-10	D
430CX9-FM	1"-11 1/2" NPSM R.H. (Male)	1/2" NPT (Female)	P430CX12-10	

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High Pressure Master Shut-Off Valves: 430 Series for Manifold Piping

PRODUCT NOTES:

* "CW" valves include Brass Washer P430CX13-20.

Seat Holder Notes:

- P430CX12-10 (Aluminum Silicon bronze) - not for acetylene or MAPP gases
- P430CX1-10A (Brass) – for all non-corrosive non-liquefied gases.

Pressure Ratings Notes:

- A. 6000 psig at 70F except 5500 psig @ 120F for oxygen and 3000 psig @ 120F for UL applications.
- B. This 6000 psig valve should be cleaned for oxygen service with oxygen pressure not exceeding 5500 psig @ 120F.
- C. 3000 psig @ 120F; UL recognized component
- D. 3000 psig @ 120F
- E. 5500 psig @ 120F for oxygen and 3000 psig @ 120F for UL
- F. (W) indicates a 2nd seal restricting moisture intrusion. Useful in cold (freezing) environments.

Other Notes:

- Lower stem available in brass for use with acetylene.
- Satisfactory for 6000 PSI service (non-corrosive), with exceptions of oxygen which is 4840 PSI at 70°F maximum.

Replacement Parts Kit

To order, use part number P430C-32.

Contains one of each component listed below.

P430-13	Handwheel Gasket
P1200-7	Handwheel Nut
P1200-11	Handwheel Spring
P430B-6T	Teflon Packing
P430CX12-21K	Lower Stem and Seal Insert Assembly
P430B-27-13	Stem "O" Ring

US Patent No. 4211386
 UK Patent No. 2045399
 Canadian Patent No. 1114802
 France Patent No. 8006854
 Other Patents Pending

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Installation Instructions for Sherwood Pressure Seal Globe Valves

430C, 430CX1, 430CX7, 430CX9, 430CX10, 430CW, 430CWX1, 430CWX9, 430CWX10

CAUTION: *These instructions apply to valves removed from the system in which they were installed or to installed valves in depressurized systems. Never perform any maintenance operations involving removal of the packing nut without first depressurizing the system.*

PLEASE NOTE:

- The Model 430C, 430CX7, 430CX9, 430CX10, 430CW, 430CWX9, and 430CWX10 valves are designed for use with argon, carbon dioxide, compressed air, helium, hydrogen, L.P. gases (propane, butane, etc.), nitrogen, nitrous oxide, and oxygen. These valves are not to be used in oxygen over 4840 psi at 70°F (5500 psi at 120°F)
- These valves are only UL recognized for 3000 psi or less.
- The Model 430CX1 and 430CWX1 valves are general purpose valves designed for use with acetylene, MAPP (stabilized methylacetylene-propadiene), as well as the gases listed above.
- On valves with pipe thread and connections, always tighten these joints by applying a wrench to the octagonal ends of the body. Never apply a wrench elsewhere because this may deform the body.

For valves with socket ends, it will be necessary to remove internal parts before soldering into the line. The following disassembly instructions should always be used in such cases:

DISASSEMBLY INSTRUCTIONS:

1. Unscrew the nut at the top of the stem.
2. Remove Handle, Spring and Gasket.
3. Remove the Bonnet from the Body. This, in turn, will allow removal of the Upper Stem with O-ring and Packing. Leave these parts assembled.
4. On 430CW, 430CWX1, 430CWX9, and 430CWX10 valves, remove the lower brass Packing Washer.
5. Remove the Lower Stem Assembly by turning counterclockwise using the Upper Stem Assembly.

ASSEMBLY INSTRUCTIONS:

1. Using a small swab, apply Flourolube (Hooker HO-124 or Halocarbon Products Corp. series 700/100) sparingly in one full stroke across the Lower Stem Assembly full thread length and place in Body.
2. Lubricate exposed surfaces of O-ring with Flourolube.
3. Screw Lower Stem Assembly into Body until it bottoms on the body seat using the Upper Stem Assembly.
4. On 430CW, 430CWX1, 430CWX9, and 430CWX10 valves, install the lower brass Packing Washer into the internal recess.
5. Ensure that the Packing is properly positioned in the recess in the top of the Body.
6. Similarly, as in (1), lubricate the Bonnet threads.
7. Screw the Bonnet onto the Body. Install to 150 Ft-lbs of torque.
8. Install Handle Gasket and Handle.
9. Using Handle, open valve fully.
10. Install Spring and Nut.
11. Tighten Nut securely.

REPLACEMENT PARTS KIT:

Catalog # P430C-32 (not for acetylene or MAPP gases)

Catalog # P430CX1-32 (for acetylene or MAPP gases)

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