

The BelGAS<sup>CP</sup> P7200 series valve is a pneumatically operated open yoke control valve that is designed to control a variety of fluids at pressures up to 4000 PSIG. The control valve has a NACE compliant optional construction to withstand severely corrosive mediums associated with the oil and gas industry. A wide variety of trim size, material, and flow characteristics are available to handle different mediums and applications.

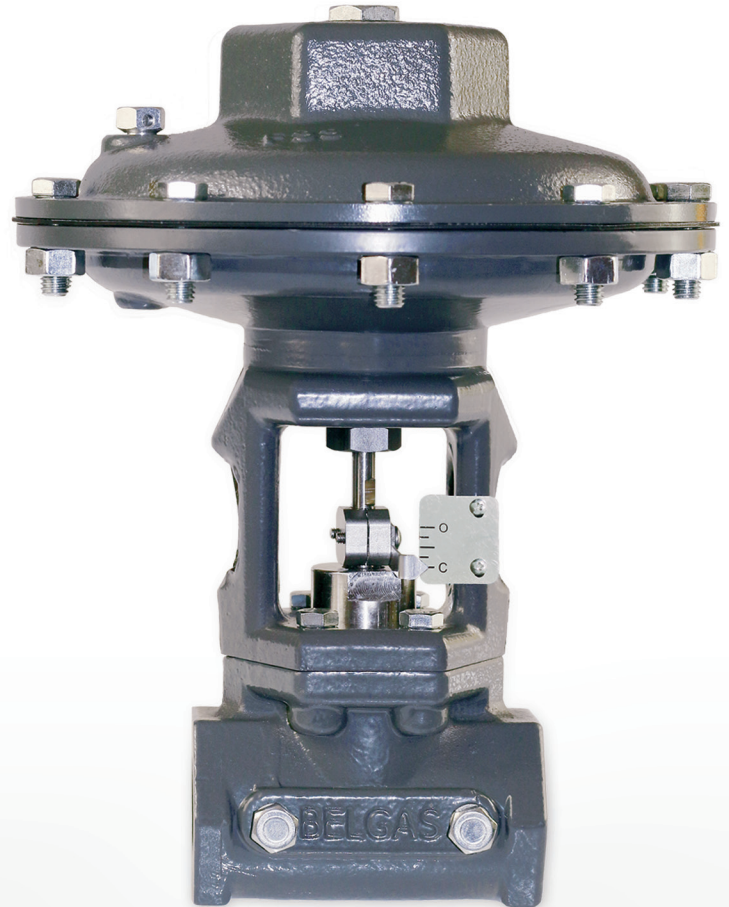
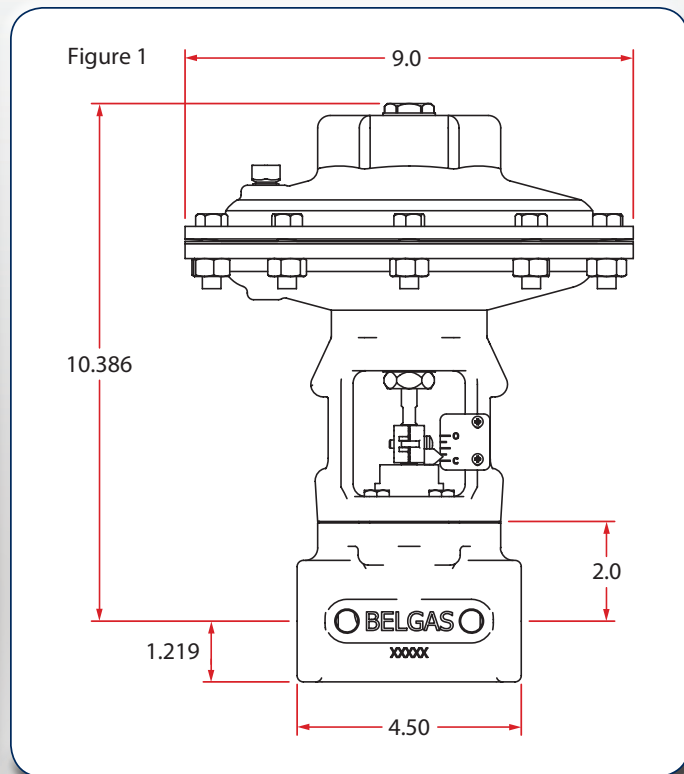
### Applications

- Separators
- Treaters
- Knockouts

### Features

- **Open Yoke Design:** The open yoke allows for the position of the stem to be visible during use from any angle. An I/P or electro-pneumatic positioner can be mounted to the actuator.
- **Field Reversible Actuator:** The actuator is capable of withstanding up to 45 PSIG and can be switched between "Fail Close" to "Fail Open" with no additional parts. 10 PSIG, 20 PSIG, and 30 PSIG springs are available for a range of applications.
- **Trim Variety:** Nominal (Linear) and Quick Opening (On/Off) trim options are available for a range of applications. The trim is available in Steel, Hardened Stainless Steel, or Tungsten Carbide.
- **Sour Gas Service:** NACE MR0175 compliant materials are available to ensure functionality in sour gas applications.

### Dimensional Data (in.)



### Specifications

<b>Body Pressure Rating</b>	4000 PSIG (Max)
<b>Temperature Range</b>	-40° to 200°F (-40° to 93°C)
<b>Shut-off Classification</b>	ANSI Class IV
<b>Actuator Air Pressure</b>	45 PSIG (Max)

### Materials of Construction

Part	Standard Material	NACE Compliant
Body	LCC Steel	LCC Steel
Actuator	ASTM A395	ASTM A395
Stuffing Box	ASTM A105	316 Stainless Steel
Stem	Nitronic® 50	Nitronic® 50
Cage	ASTM A108	316 Stainless Steel
Seat	ASTM A681	17-4PH Stainless Steel or Tungsten Carbide

## P7200 Part Number Matrix and Repair Kits

P72	00	08	S	5	G				
<b>Style</b>									
Open Yoke	00								
<b>Body Size</b>									
1"		08							
<b>End Connections</b>									
Female NPT			S						
<b>ANSI Class (Pressure Rating)</b>									
ANSI 1500 (FNPT 4000 PSIG Working Pressure @200°F)				5					
<b>Materials of Construction (Body/Actuator)</b>									
LCC Steel/Cast Iron					S				
LCC Steel/Cast Iron <sup>N</sup>					N				
<b>Body Style</b>									
Tapped Globe (4000 PSIG WP)					G				
<b>Spring Range</b>									
10 PSIG Spring							10		
20 PSIG Spring							20		
30 PSIG Spring (It is recommended to use 30 PSIG springs on 1" units with a 1/2" trim size.)							30		
<b>Actuator Configuration</b>									
Pressure Opening (PO)								R	
Pressure Closing (PC)								D	
<b>Diaphragm/Seal Material</b>									
Nitrile									0
Fluorocarbon									2
<b>Trim (Seat/Ball, All Stems are Nitronic® 50)</b>									
17-4PH/17-4PH 0.250 Linear <sup>N</sup>									14L
17-4PH/17-4PH 0.375 Linear <sup>N</sup>									16L
17-4PH/17-4PH 0.500 Linear <sup>N</sup>									18L
Tool Steel/WC 0.250 Linear									24L
Tool Steel/WC 0.375 Linear									26L
Tool Steel/WC 0.500 Linear									28L
WC/WC 0.250 Quick Opening <sup>N</sup> (Tungsten Carbide Insert in Stainless Steel Seat)									34S
WC/WC 0.375 Quick Opening <sup>N</sup> (Tungsten Carbide Insert in Stainless Steel Seat)									36S
WC/WC 0.500 Quick Opening <sup>N</sup> (Tungsten Carbide Insert in Stainless Steel Seat)									38S
WC/WC 0.250 Quick Opening (Tungsten Carbide Insert in Steel Seat)									44S
WC/WC 0.375 Quick Opening (Tungsten Carbide Insert in Steel Seat)									46S
WC/WC 0.500 Quick Opening (Tungsten Carbide Insert in Steel Seat)									48S

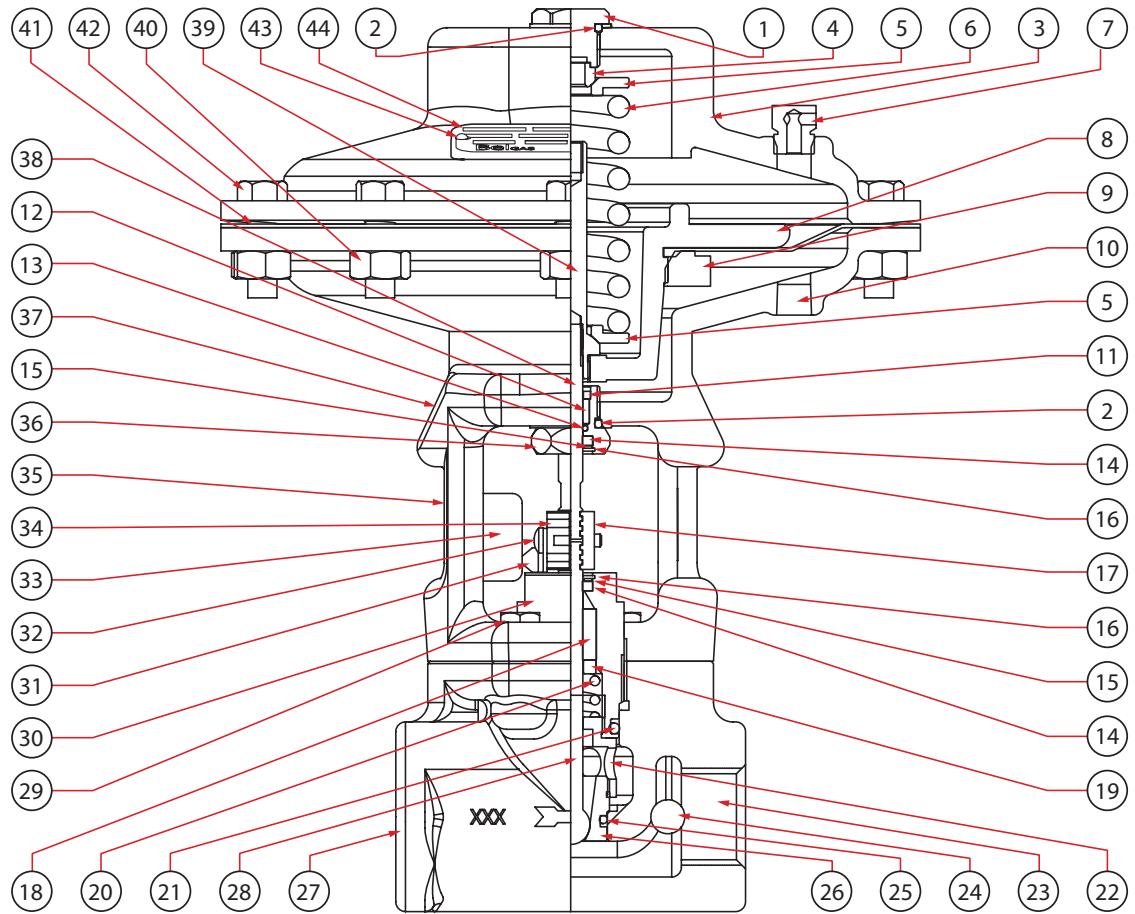
Trim Repair Kit		971P72
<b>Trim (Seat/Ball, All Stems are Nitronic® 50)</b>		
17-4PH/17-4PH 0.250 Linear <sup>N</sup>		14L
17-4PH/17-4PH 0.375 Linear <sup>N</sup>		16L
17-4PH/17-4PH 0.500 Linear <sup>N</sup>		18L
Tool Steel/WC 0.250 Linear		24L
Tool Steel/WC 0.375 Linear		26L
Tool Steel/WC 0.500 Linear		28L
WC/WC 0.250 Quick Opening <sup>N</sup> (Tungsten Carbide Insert in Stainless Steel Seat)		34S
WC/WC 0.375 Quick Opening <sup>N</sup> (Tungsten Carbide Insert in Stainless Steel Seat)		36S
WC/WC 0.500 Quick Opening <sup>N</sup> (Tungsten Carbide Insert in Stainless Steel Seat)		38S
WC/WC 0.250 Quick Opening (Tungsten Carbide Insert in Steel Seat)		44S
WC/WC 0.375 Quick Opening (Tungsten Carbide Insert in Steel Seat)		46S
WC/WC 0.500 Quick Opening (Tungsten Carbide Insert in Steel Seat)		48S

O-ring Repair Kit			
971P72	5		
<b>Type</b>			
Elastomer Repair Kit	5		
<b>Product Size</b>			
P7200 1"		1	
P7200 2"		2	
<b>Elastomer Material</b>			
Nitrile			0
Fluorocarbon			2

<sup>N</sup>For the unit to be NACE compliant it must have the proper combinations of materials.

# P7200 Parts List

Figure 2

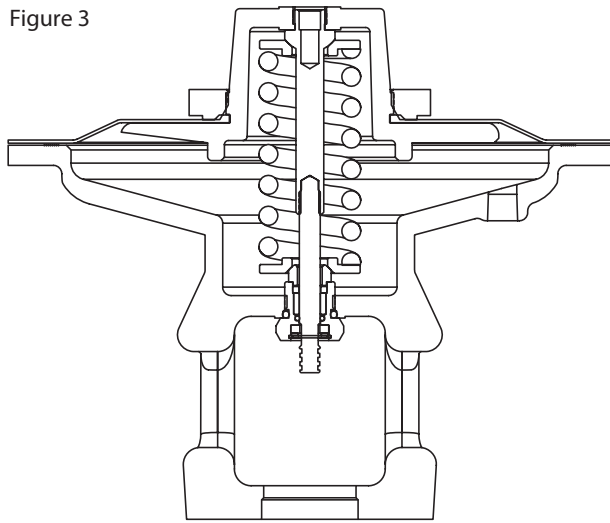


Item	Description	Qty.	Part Number
1	Upper Adjustment Screw	1	648-597-000
2	Adjustment Screw O-ring	2	See Repair Kits
3	Bonnet	1	604-566-000
4	Pivot	1	694-004-000
5	Spring Plate	2	638-107-000
6	Spring	1	10 PSIG 655-803-000
			20 PSIG 655-804-000
			30 PSIG 655-805-000
7	Breather Plug	1	639-144-000
8	Diaphragm Plate	1	638-106-000
9	Diaphragm Ring	1	634-229-000
11	Lower Adjustment Screw Insert	1	665-228-000
12	Lower Adjustment Screw Bushing	1	608-097-000
13	Lower Adjustment Screw O-ring	1	See Repair Kits
14	Felt Wiper	2	662-252-000
15	Felt Wiper Washer	2	662-251-000
16	Retaining Ring	2	693-034-000
17	Stem Clamp Block	1	815-019-000K
18	V-Packing	1	See Repair Kits
19	Packing Washer	1	662-250-000
20	Stuffing Box Spring	1	Eligloy 655-801-000
			302 SS 655-802-000
21	Stuffing Box O-ring	1	See Repair Kits
22	Cage	1	Stainless Steel 704-022-000
			Steel 704-022-001

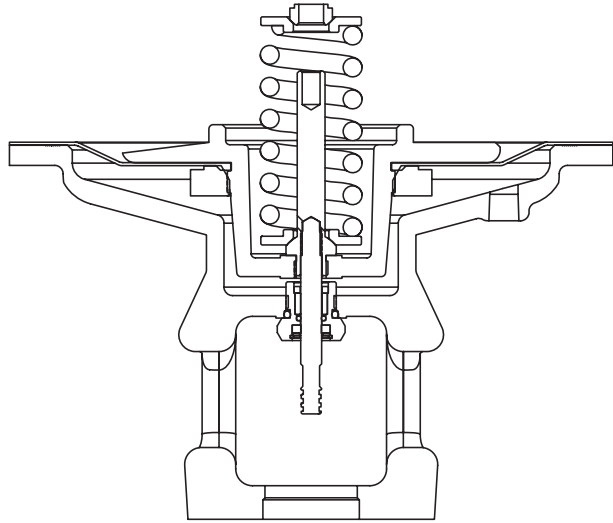
Item	Description	Qty.	Part Number
24	High Pressure Plug	2	639-150-000
25	Seat O-ring	1	See Repair Kits
26	Seat	1	See Repair Kits
27	Body	1	664-612-000
28	Plug Stem Assembly	1	See Repair Kits
29	Body Screws	4	648-463-012
30	Stuffing Box	1	Stainless Steel 639-156-000
			Steel 639-156-001
31	Travel Indicator	1	711-002-000
32	Stem Clamp Screws	1	815-019-000K
33	Travel Indicator Scale	1	711-003-000
34	Stem Clamp Block	1	815-019-000K
35	Travel Indicator Screws	2	648-000-378
36	Lower Adjustment Screw	1	648-596-000
37	Yoke	1	629-272-000
38	Upper Stem	1	689-030-000
39	Diaphragm Stem	1	689-031-000
40	Actuator Nuts	10	634-216-000
41	Diaphragm	1	Nitrile 618-121-000K
			Fluorocarbon 618-121-001K
42	Actuator Screws	10	648-463-002
43	Nameplate Drive Screw	2	648-573-000
44	Nameplate	1	632-571-000
45	Stem Clamp Pin	1	815-019-000K
46	Instruction Sheet	1	541-250-000

## How to Convert from PO to PC

Figure 3



Direct Acting (Pressure Close)



Reverse Acting (Pressure Open)

**Warning!** Bleed system pressure to 0 PSIG or isolate the valve before disassembling or performing any maintenance on the valve or valve actuator.

### To Convert from Direct Acting to Reverse Acting

1. Unscrew the two screws from the position indicator clamp and set aside.
2. Remove the adjustment screw from the bonnet.
3. Unscrew the actuator screws from around the bonnet and yoke.
4. Lift the bonnet up and off the yoke.
5. Lift the diaphragm and diaphragm plate straight up off the yoke.
6. Set aside the pivot, spring plates, and spring.
7. It is recommended to inspect the parts for any damage.
8. While holding the wrench flat on the upper stem, unscrew the diaphragm stem and diaphragm plate.
9. Re-install the upper stem into the opposite side of the diaphragm stem.
10. Place the upper stem through the lower adjustment screw in the yoke.
11. Place a spring plate over the stem, then the spring and the other spring plate. The pivot can either be placed on the spring plate now or with the adjustment screw.
12. Place the bonnet over the spring and torque the actuator screws to 25 ft-lbs.
13. Install the adjustment screw.
14. Reattach the position indicator clamp.

**Caution!** To prevent damage to sealing surfaces ensure that the valve plug is in the "UP" position while disassembling and assembling.

### To Convert from Reverse Acting to Direct Acting

1. Unscrew the two screws from the position indicator clamp and set aside.
2. Remove the adjustment screw from the bonnet. The pivot may come out with the adjustment screw.
3. Unscrew the actuator screws from around the bonnet and yoke.
4. Lift the bonnet up and off the yoke.
5. Set aside the pivot, spring plates, and spring.
6. Lift the diaphragm and diaphragm plate straight up off the yoke.
7. It is recommended to inspect the parts for any damage.
8. While holding the wrench flat on the upper stem, unscrew the diaphragm stem and diaphragm plate.
9. Re-install the upper stem into the opposite side of the diaphragm stem.
10. Place the pivot on the lower adjustment screw.
11. Place a spring plate on the pivot, then the spring and the other spring plate.
12. Place the upper stem through the previous parts and the lower adjustment screw in the yoke.
13. Place the bonnet over the diaphragm and torque the actuator screws to 25 ft-lbs.
14. Install the adjustment screw.
15. Reattach the position indicator clamp.

Contact your BelGAS<sup>CP</sup> representative or go to [www.BelGASCP.com](http://www.BelGASCP.com) to learn more about our products.



Control Products

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Better.**

8019 Ohio River Blvd.  
Newell, WV 26050  
Toll Free: 800-727-5646  
sales@belgas.net  
www.BelGASCP.com

2221 SE 69th Street  
Oklahoma City, OK 73149  
Toll Free: 800-833-3127