

PSX3 Series Slam Shut Valve

The BelGAS PSX3 Series Slam Shut is available for use wherever instantaneous termination of pressure transference is desired. Operating on preset values, the PSX3 automatically stops downstream flow should pressure traveling through exceed the upper or lower set limits. If the PSX3 is tripped, due to an over or under pressure condition, a manual reset is required to allow flow through the pipeline again.

Over/Under pressure closure devices protect downstream operations and equipment should the pressure traveling through the device exceed the set point. It also assures the customer that when gas pressure drops below the set point for maintaining pilot light or critical flow, gas flow is shut down until an inspection and a manual reset takes place.

The PSX3 comes in either internal or external pressure registration, with easy conversion between the two.

Applications

- Industrial/Commercial
- Gas Engines
- Service Regulators



Specifications

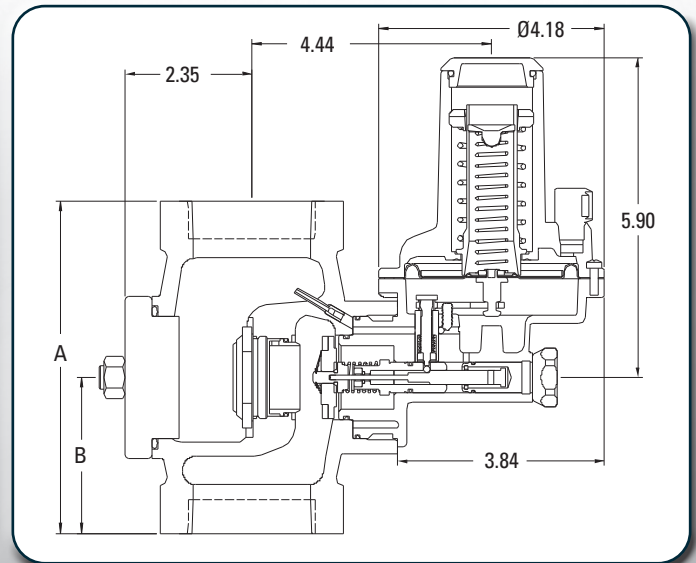
Maximum Inlet ¹	25 PSIG	
Maximum Operating Pressure ²	16 PSIG	
Pressure Ranges	See Spring Range Table	
Lead Seal and Wire	Available	
Port Sizes	1.25" NPT, 1.5" NPT, 1.5x2" NPT, 2" NPT, 2" 125FF	
Orifice Size	1.188"	
Connections	Vent ³	1/4" NPT
	Sensing Port ⁴	1/4" NPT
	Tube ID Dia.	5/32"
Temperature Ranges	-20°F to 180°F (-29°C to 82°C)	
Approximate Weight	11 lb (5 kg)-NPT	
	18 lb (8.2 kg)- 2" 125FF	

- 1) Pressure and temperature restrictions listed for this product must not be exceeded.
- 2) Under the diaphragm, without external damage and without operating failure
- 3) Plastic vent assembly with mounted screen provided.
- 4) Metal plug provided for internal pressure registration option.

Materials of Construction

Adjusting Screws	Brass
Body	Ductile Cast Iron
Bonnet	Aluminum
Housing	Aluminum
Diaphragm	Nitrile
Molded Seat Assembly	Nitrile and Aluminum
Orifice	Aluminum

Dimensions



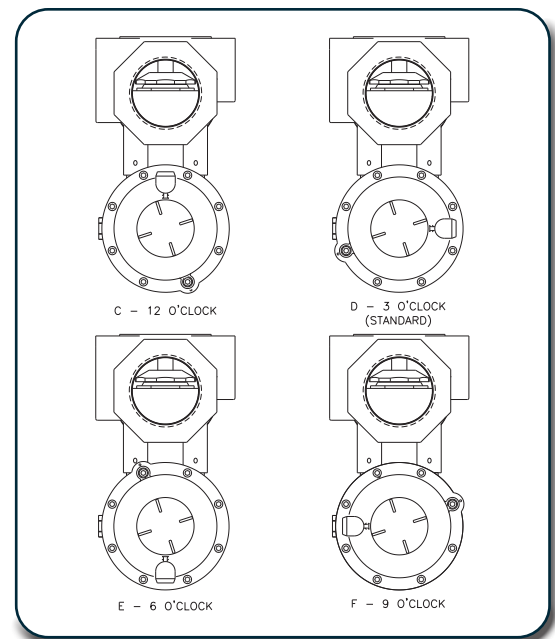
Port Sizes

Port Size	A	B
1.25" NPT	6.13	2.87
1.5" NPT	6.13	2.87
1.5-2" NPT	6.13	2.87
2" NPT	6.13	2.87
2" 125FF	10	5

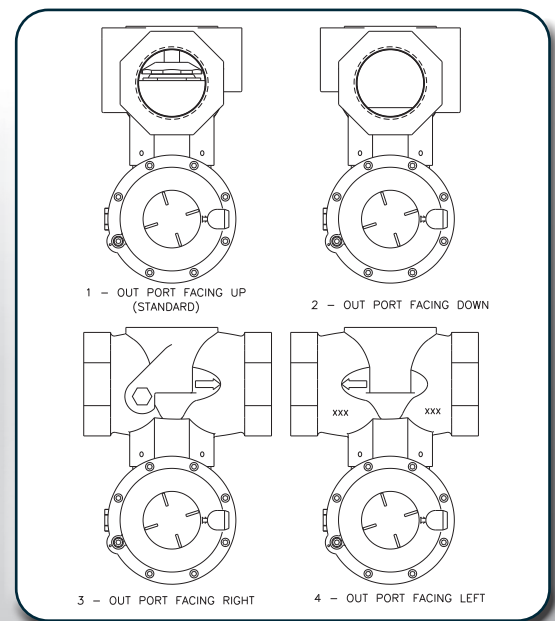
PSX3 Part Matrix

PSX3					F			0
	↑	↑	↑	↑	↑	↑	↑	↑
								Port Size
12								1.25" NPT
14								1.5" NPT
15								1.5 x 2" NPT
16								2" NPT
								Pressure Registration
0								Internal
1								External
								Under Pressure Range
								PSIG BAR
0								None None
1								2-12" W.C.* 0.005-0.030
2								4-30" W.C.* 0.010-0.075
3								10" W.C.-2.3 PSIG 0.025-0.159
4								1.5-10.8 PSIG 0.103-0.745
								Over Pressure Range
								PSIG BAR
5								12-25" W.C. 0.030-0.062
6								20-52" W.C. 0.050-0.129
7								1.4-3.9 PSIG 0.097-0.269
8								3.8-8.7 PSIG 0.262-0.600
9								5.8-16 PSIG 0.400-1.103
								Special Construction
0								None
E								125FF (Only Available in 2")
								Port Orientation
								1 Up (Standard)
								2 Down
								3 Right
								4 Left
								Bonnet Vent
								C 12 O'Clock
								D 3 O'Clock (Standard)
								E 6 O'Clock
								F 9 O'Clock

Bonnet/Vent Orientation

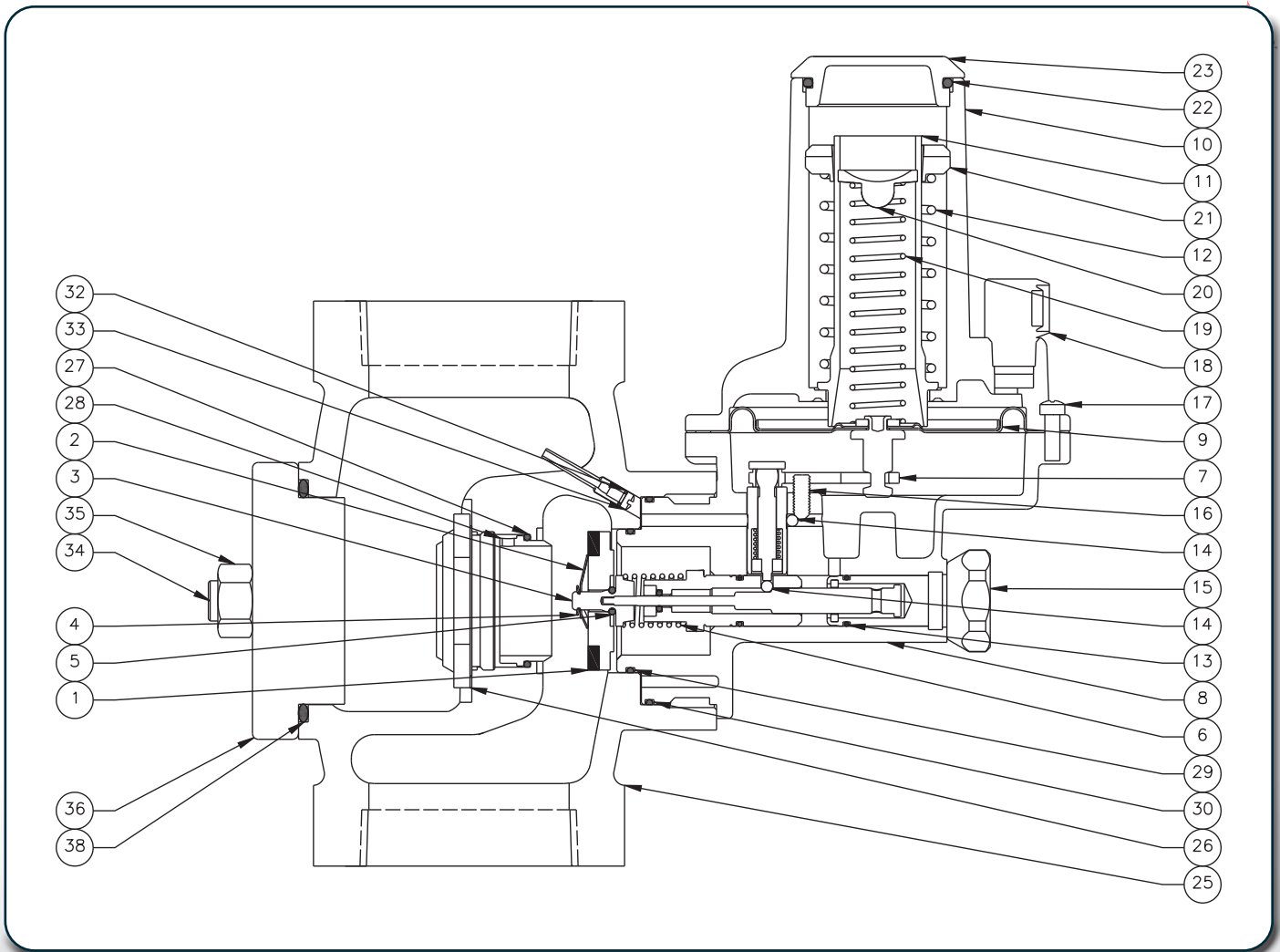


Body Orientation



*For minimum trip springs set lower than 14" W.C., running the unit with external pressure registration will yield more accurate results at lower supply pressures.

PSX3 Series Spring Ranges											
Set Point (PSIG)			Spring Range		Wire Diameter (In)		Part Number		Spring Color		
Min	Nominal	Max	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	
0.145	0.290	0.435	2-12" W.C.	12-25" W.C.	0.043	0.067	655-830-000	655-831-000	White	Black	
>0.435	0.508	0.725		20-52" W.C.		0.080		655-832-000		Brown	
>0.725	0.870	1.160	4-30" W.C.	1.4-3.9 PSIG	0.055	0.091	655-827-000	655-835-000	Blue	Red	
>1.160	1.450	1.885									
>1.885	2.321	3.626	10" W.C.-2.3 PSIG	3.8-8.7 PSIG	0.067	655-829-000	655-833-000	Silver	Green	Orange	
>3.626	4.351	5.802	1.5-10.8 PSIG	5.8-16 PSIG	0.125	655-828-000	655-834-000	Pink			
>5.802	7.252	10.153					0.138				
>10.153	14.504	15.954									



PSX3 Slam Shut Valve Series Parts List

Item	Description	Part Number	QTY
1	Valve Disk Assembly	810-061-000	1
2	Star Spring	655-824-000	1
3	Shaft	651-125-000	1
4	Retaining Ring, E-Style	693-041-000	1
5	O-Ring	649-000-206	1
6	Valve Closing Spring	655-826-000	1
7	Trip Release Spring Assembly	823-006-000	1
8	Housing Assembly	802-141-000	1
9	Diaphragm Assembly	804-302-000	1
10	Bonnet	604-569-000	1
11	Guide	626-137-000	1
12	Max Tripping Spring	See Spring Range Table	1
13	O-Ring	649-361-000	1
14	SS Ball	601-036-000	2
15	Resetting Knob Assembly	817-015-000	1
16	Cone Point Set Screw	648-618-000	1
17	Machine Screw	648-619-000	8
18	Vent Assembly	836-004-000	1
19	Min Tripping Spring	See Spring Range Table	1
20	Min Trip Adjusting Screw	648-616-000	1
21	Max Trip Adjusting Screw	648-617-000	1
22	O-Ring	649-396-003	1
23	Bonnet Cap	610-115-000	1

PSX3 Slam Shut Valve Series Parts List

24	Plug (Internal Registration- Not Shown)	639-099-000	2
25	1.25" NPT Iron Body	805-406-000	1
	1.5" NPT Iron Body	805-406-001	
	1.5 x 2" NPT Iron Body	805-406-003	
	2" NPT Iron Body	805-406-002	
	2" 125FF Iron Body	805-406-008	
26	1.188" Orifice	688-016-005	1
27	O-Ring	649-396-002	1
28	Backseat	650-224-000	1
29	O-Ring	649-269-000	1
30	O-Ring	649-000-201	1
31	Set Screw (Not Shown)	648-000-425	4
32	Gasket (External Registration)	624-133-000	1
33	Plug Screw (External Registration)	648-622-000	1
34	Bolt	648-467-019	2
35	Hex Nut	634-000-202	2
36	Hydrostatic Plate	CT2-664-309	1
37	Adjusting Screw Tool (Not Shown)	671-011-000	1
38	O-Ring	649-000-152	1

Repair Kit

P71-PSX-000 Diaphragm Assembly (Item 9), O-Rings (Items 5,29, and 30), and Plug (Item 24)