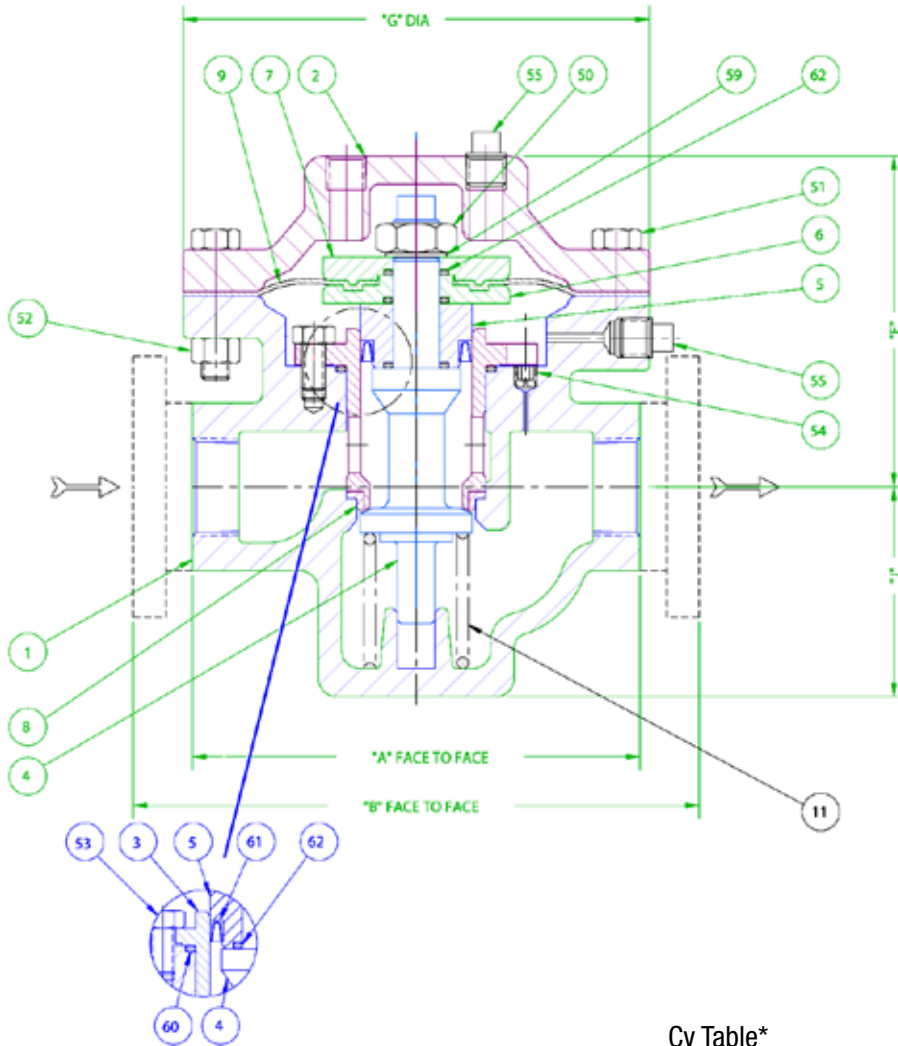


# BD Series 4



## About This Valve

Same as BD3 except with a bottom return spring for proportional band control. Used when a "Closed Loop" or feedback to regulator is generated.



ITEM NO.	QTY REQ.	DESCRIPTION
62	3	STEM SEAL
61	1	PISTON SEAL
60	1	CYLINDER SEAL
59	1	BELLEVILLE WASHER
55	2	PIPE PLUG
54	1	INTERNAL PLUG
53	3	CYLINDER BOLT
52	8	BODY NUT
51	8	BODY BOLT
50	1	STEM NUT
11	1	MAIN SPRING
11	1	MAIN SPRING
9	1	MEMBRANE
8	1	SEAT
7	1	UPPER MEMBRANE PLATE
6	1	LOWER MEMBRANE PLATE
5	1	PISTON
4	1	STEM
3	1	CYLINDER
2	1	COVER
1	1	BODY

### Dimensions

Dimensions are subject to change.  
Contact factory for certification

Cv Table\*

Size	1/2"	3/4"	1"	1.5"	2"	3"	4"
PRV with elastomeric membrane	4.0	8.0	12.0	24.0	48	120	175

Valve Size	"A" Screwed Ends	"B" Flanged Ends								"E" Dim.	"G" Dim.	"J" Dim.
		125# C.I./D.I.	150# C.S./S.S.	150# Bronze	250# C.I./D.I.	300# C.S./S.S.	300# Bronze	600# C.S./S.S.	1500# C.S./S.S.			
1/2"	6"		8 3/8"	9 5/8"		8 3/8"	9 5/8"			4 7/16"	6 1/4"	2 13/16"
3/4"	6"		8 3/8"	9 5/8"		8 3/8"	9 5/8"			4 7/16"	6 1/4"	2 13/16"
1"	6"		8 3/8"	9 5/8"		8 3/8"	9 5/8"			4 7/16"	6 1/4"	2 13/16"
1 1/2"	9 7/8"		12 1/2"	11 1/2"		12 1/2"	11 1/2"	13 1/2"		5 1/2"	7"	3 3/4"
2"	9 7/8"		12 1/2"	11 1/2"		12 1/2"	11 1/2"	13 1/2"		5 1/2"	8"	4"
2 1/2"		10 7/8"	10 7/8"	10 7/8"	11 1/2"	11 1/2"	11 1/2"			9"	10"	5 1/4"
3"		12"	12"	12"	12 1/2"	12 1/2"	12 1/2"			9 5/32"	10 3/4"	5 5/16"
4"		14"	14"	14"	14 1/2"	14 1/2"	14 1/2"			9 5/32"	10 3/4"	5 5/16"

### General Specifications:

- Sizes:** 1/2 in. through 4 in.
- Body Materials:** Cast Iron, Carbon Steel, Bronze, Stainless Steel, Hastelloy®, Alloy 20
- Trim Materials:** 17-4 PH or 316L S.S., Monel, Hastelloy®, Stellite, others
- Diaphragm Materials:** 6-ply special composition (Teflon, Viton, Teflon) Virgin Teflon, Viton, Neoprene, Buna N, EPR, Fluorosilicone, Beryllium Copper, Stainless Steel, others.
- Seats:** Extensive selection includes: Polyurethane, Virgin TFE, Viton, C-TFE (KEL-F), Reinforced TFE
- Cv Rating:** Controllable Cv Range, 4 to 220
- Set Points:** To Inches of Water Column (With Pilot)
- Max. Inlet & Outlet Pressure:** 3000 psig @100°F
- Actuators:** Elastomeric Membrane, Metal Membrane

- Temperature Limits:** -425° to 600°F
- End Connections:** Threaded, Flanged, Socket Weld, Butt Weld, Tube, Tri-Clamp, DIN, BSP, Others
- Cv Rangeability:** 1000 : 1 (with polyurethane seat)
- Sensitivity:** 1/8 in. W.C.
- Dynamic Response:** 10 cps (cycles per second)
- Trim:** Top Entry, Balanced, Quick-Change, Single Seat
- Inlet Sensitivity Effect:** Minimal due to balanced design. Outlet pressure changes by 3 to 8 psig for every 100 psig variation in inlet pressure, inversely.
- Sensing:** Internal or external
- Ratio-Loaded Configuration:** Available for controlling set point when control signal is too low.

\*Contact factory for metal membrane or reduced Cv trim.