

# 3-Way Pneumatic Control Valves with Multispring Diaphragm Actuator for Mixing & Diverting Application- Available in 'A' Port Closed or 'B' Port Closed.

DATA SHEET  
PV-5116A/B

(Normally Supplied in 'A' Port Closed Position)  
Field Reversible from 'A' Port Closed to 'B' Port Closed Design.

## SPECIFICATION

Size	: 20 mm (3/4") to 150 mm (6").
Unified Flanges	: As per ANSI Cl. 150/300 and PN 16.
Pressure Rating	: As per ANSI Cl. 150, Cl. 300, PN 16 & PN 25.
Pressure Temp. Rating.	: As per ASME B16.34.
Gland Packing	: Carbon filled Teflon for temp upto 220°C.
Design Standard	: ASME B16.34.
Leakage	: As per ANSI-FCI-70-2 Cl. IV (0.01% of Kv) for 5116A Series and Class VI Bubble tight for 5116B Series.
Face to Face	: As per DIN 3202. Part I Series F1. (All materials)
Testing Standard	: ANSI-FCI-70-2.
Type of Plug	: On-Off or Linear.
Seat	: Screwed type replaceable.
Body & Bonnet Material	: CS-ASTM A216 WCB (DIN 1.0619 GS-C 25). SS-ASTM A351CF8M(DIN1.4410) (G-X10 Cr.Ni MO189) SS-ASTM A351CF8(DIN1.4301) SG Iron-IS 1865 Grade SG 400/15A.
Plug Material	: SS AISI 420/316.
Seat Ring	: SS AISI 420/316.
Spindle	: 410/316 Ground, Burnished and Hard Chromed.
Studs	: ASTM A193 Gr. B7.
Hex. Nuts	: ASTM A194 Gr. 2H.
Body Packing	: Cr. Ni Foil coated with graphite.
Rangeability	: Linear 50:1.
Fluid	: Air, Water, Steam, Gas, etc.



## ACTUATOR

Pneumatic diaphragm type Multi Spring Reversible.	
Pressure chambers	: Steel pressing to IS 513CRCD.
Diaphragms	: Nylon inserted high Neoprene, rollform type.
Temperature	: -20°C to +80°C
Springs	: EN 47 , Cr. V. Steel.
Max. Pres. over Diaphragm	: Upto 4.5 bar
Yoke	: Cast carbon steel castings one piece.
Spindle	: Guided through Teflon bearing, leakage prevented by Synthetic seal, protected by rubber bellow.
Note	: 5116A are Metal Seated Valves . 5116B are Soft Seated Valves.

## SPECIFICATION TABLE FOR TYPE 5116A/B- NORMALLY 'A' PORT CLOSED, ALTERNATIVELY 'B' PORT CLOSED

		Pressure Table								
Actuator Number	Spring Range	Control Pressure	Sizes (mm)							
			20	25	40	50	65	80	100	150
			Port sizes (mm)							
	Bar	Bar	21/25	27/27	40/40	50/50	65/60	80/75	101/101	150/150
MSD -250	A - 0.2 - 1.0	1.2	3.2	2.6	0.3	-	-	-	-	-
	B - 0.4 - 1.2 @	1.6	12.6	10.6	3.8	-	-	-	-	-
	C - 0.8 - 2.4 @	2.7	31.3	26.8	11.0	-	-	-	-	-
	D - 1.5 - 2.5 @	4.0	40	40.0	23.5	-	-	-	-	-
MSD-400	A - 0.2 - 1.0	1.2	8.7	7.3	2.4	1.2	-	-	-	-
	B - 0.4 - 1.2 @	1.4	23.7	20.2	8.1	4.9	2.5	1.4	-	-
	C - 0.8 - 2.4 @	2.7	40.0	40.0	19.4	12.3	6.9	4.3	2.6	-
	D - 1.5 - 3.0 @	4.5	-	-	40.0	22.0	14.8	9.5	5.9	-
MSD-800	A - 0.2 - 1.0	1.2	-	-	-	-	2.5	1.4	0.7	-
	B - 0.4 - 1.2 @	1.4	-	-	-	-	7.0	4.4	2.6	-
	C - 0.8 - 2.4 @	2.7	-	-	-	-	15.9	10.3	6.5	-
	D - 1.5 - 3.0 @	4.5	-	-	-	-	40.0	29.6	19.0	-

Note: (1) @VP(PTP), EPL, FRG needed to be installed on the valve.  
 (2) 5116A/B Valve sizes upto 40mm can be used for Diverting application, for size above 50mm Use 5119A/B Valves.  
 (3) Higher size valves are available with MSD 1600 Actuator Refer to AVCON.