

3-Way Pneumatic Control Valves with Multispring Actuator for Mixing Duty -Thermic Fluid Application

DATA SHEET
PV-5116A/CSF

Available In 'A' port Closed Or 'B' Port Closed Configuration
(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 100 mm (4").
Unified Flanges	: As per ANSI Cl. 150 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	: Glass filled Graphited Teflon for 380°C with Cooling Finned Bonnet .
Design Standard	: ASME B16.34.
Leakage	: As per ANSI-FCI-70-2 Cl. IV(0.01% of Kv)
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)
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	: Hot Thermic Fluid, Hot Water, Hot Steam, 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.

SPECIFICATION TABLE FOR TYPE 5116A-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
			Port sizes (mm)						
	Bar	Bar	21/25	27/27	40/40	50/50	65/60	80/75	101/101
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	2.1	0.8	0.3	-
	C - 0.8 - 2.4@	2.7	31.3	26.8	11.0	6.8	-	-	-
	D - 1.5 - 2.5@	4.0	40	40.0	23.5	19.7	-	-	-
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	-	-	-	-	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),EVP(ETP) Plus FRG needed to be installed on the Valve.
(2) For Hot Thermic Fluid application, maximum working pressure limit is upto 10 bar only.
(3) 5116A/CSF Valve sizes upto 40 MM can be used for Diverting application. For sizes 50 MM and above use 5119A/CSF