

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

DATA SHEET  
PV-5119A/WCBF

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.)

## SPECIFICATIONS

Sizes	: 20mm (3/4") to 150mm (6").
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 B 16.34.
Gland Packing	: Glass filled Graphited Teflon for 420°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(DIN1.4408) (GX6 Cr. Ni Mo1810) 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.
Note	: 5119A are Metal Seated Valves.



## 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.

## SPECIFICATION TABLE FOR TYPE 5119A/WCBF- NORMALLY 'A' PORT CLOSED, ALTERNATIVELY 'B' PORT CLOSED.

Differential 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	75/75	90/90	140/140
MSD -250	A - 0.2 - 1.0	1.2	1.6	1.3	0.4	-	-	-	-	-
	B - 0.4 - 1.2 @	1.6	6.3	5.3	3.6	2.2	-	-	-	-
	C - 0.8 - 2.4 @	3.2	15.6	13.4	9.6	7.0	-	-	-	-
	D - 1.5 - 2.5 @	4.0	32	27.5	19.5	15.4	-	-	-	-
MSD-400	A - 0.2 - 1.0	1.2	4.3	3.6	2.4	1.3	0.5	-	-	-
	B - 0.4 - 1.2 @	1.6	11.6	10.1	7.0	5.1	3.2	-	-	-
	C - 0.8 - 2.4 @	3.2	26.7	22.9	16.2	12.7	8.7	5.3	3.5	-
	D - 1.5 - 3.0 @	4.5	-	-	-	-	18.4	11.5	7.8	-
MSD-800	A - 0.2 - 1.0	1.2	-	-	-	-	-	-	-	-
	B - 0.4 - 1.2 @	1.6	-	-	-	-	8.8	5.4	3.5	-
	C - 0.8 - 2.4 @	3.2	-	-	-	-	19.9	12.5	8.5	-
	D - 2.1 - 3.0 @	5.1	-	-	-	-	40.0	35.6	24.5	-

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) Higher size valves are available with MSD 1600 Actuator Refer to AVCON.