

# 2-Way Pneumatic Control Valves with Multispring Diaphragm Actuator (Normally Closed Design), For Thermic Fluid Application.

DATA SHEET  
PV-5112A/WCBF

Field Reversible from Normally Closed to Normally Open, or Normally Open to Normally Closed Type.

## SPECIFICATIONS

Sizes	: 15 mm (½") 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 B 16.34.
Gland Packing	: Glass filled Graphite 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).
Plug Material	: SS AISI 420.
Seat Ring	: SS AISI 420.
Spindle	: 410 Ground, Burnished and Hard Chromed.
Studs	: ASTM A193 Gr. B7.
Hex. Nuts	: ASTM A 194 Gr. 2H.
Body Packing	: Cr. Ni Foil coated with graphite.
Rangeability	: Equal Percentage 30:1 Linear 50:1.
Fluid	: Hot Thermic Fluid, Hot water, Hot Steam etc.



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 bar
Yoke	: Cast carbon steel castings one piece.
Spindle	: Guided through a Teflon bearing, leakage prevented by Synthetic seal, protected by rubber bellow.
Note	: 5112A/WCBF are Metal Seated Valves.

## ACTUATOR

Pneumatic diaphragm type Multi Spring Reversible.  
Pressure chambers : Steel pressing to IS 513CRCD.

## SPECIFICATION TABLE FOR TYPE 5112A/WCBF- NORMALLY CLOSED VALVES

		Pressure Table									
Actuator Number	Spring Range	Control Pressure	Sizes (mm)								
			15	20	25	40	50	65	80	100	150
			Port sizes (mm)								
	Bar	Bar	18	22	25	40	50	65	80	100	150
MSD -250	A - 0.2 - 1.0	1.2	8.10	4.8	3.3	-	-	-	-	-	-
	B - 0.4 - 1.2 @	1.4	25.8	16.8	12.6	3.8	-	-	-	-	-
	C - 0.8 - 2.4 @	2.7	40	40	31.4	11.3	-	-	-	-	-
	D - 1.5 - 2.5 @	3.3	40	40	40	36.7	-	-	-	-	-
MSD-400	A - 0.2 - 1.0	1.2	18.6	11.9	8.5	2.3	1.1	-	-	-	-
	B - 0.4 - 1.2 @	1.4	40	31	23.7	8.3	4.9	2.6	1.4	-	-
	C - 0.8 - 2.4 @	2.7	-	40	40	20.2	12.6	7.2	4.5	2.7	-
	D - 1.7 - 2.7 @	3.3	-	-	-	40	26.1	15.2	9.8	6.1	-
MSD-800	A - 0.2 - 1.0	1.2	-	-	-	8.3	5.0	2.6	1.5	-	-
	B - 0.4 - 1.2 @	1.4	-	-	-	20.4	12.7	7.2	4.5	2.7	1.9
	C - 0.8 - 2.4 @	2.7	-	-	-	40	28.2	16.5	10.6	6.6	2.7
	D - 2.1 - 3.0 @	3.3	-	-	-	-	40.0	40.0	30.5	19.4	5.8
	E - 2.0 - 4.0 @	4.5	-	-	-	-	-	-	-	-	8.0

Note: (1) @VP(PTP),EPL , 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.