

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.

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 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.

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

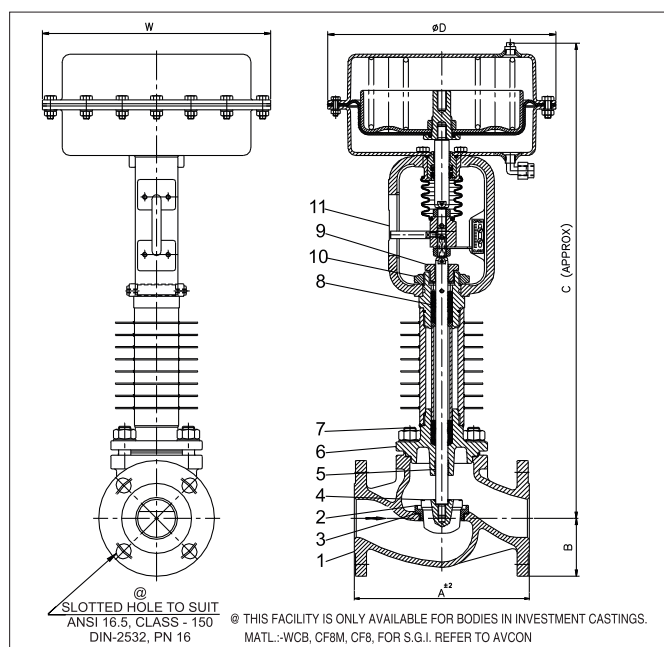
Note: (1) @VP(PTP),EPL , FRG needed to be installed on the valve.
(2) For Hot Thermic Fluid application, maximum working pressure limit is upto 10 bar only.
(3) Higher size valves are available with MSD 1600 Actuator Refer to AVCON.

2/2 WAY FINNED BONNET (WCBF) PNEUMATIC CONTROL VALVES WITH MULTI SPRING DIAPHRAGM ACTUATOR (NC).

BILL OF MATERIAL

Item	Parts	Material
1	Body	CS ASTM A216, Gr. WCB
2	Seat	SS AISI 420
3	Gasket	Cr.Ni Foil coated with graphite.
4	Plug	SS AISI 420
5	Duro Bush	PTFE Lined & coated, SS as backed.
6	Bonnet	CS ASTM A216, Gr. WCB
7	Studs/ Nuts	IS 1363, ASTM A193, Gr.B7 IS 1363, ASTM A 194, Gr.2H
8	Gland Packing	Graphited PTFE
9	Gland Nut	SS AISI 304
10	Yoke Nut	CS ASTM A216, Gr. WCB
11	Actuator	Multi Spring* Pneumatic Diaphragm.

* Refer to actuator leaflet for details of components.



TECHNICAL DATA TABLE

Valve Size MM	15	15	15	15	20	20	20	20	25	40	40	50	65	80	100	150
Port Sizes 2-way	3	5	12	18	5	7	12	22	25	25	40	50	65	80	100	150
Kv. M ³ /hr.	0.1	0.16	0.25	4.0	0.4	1.0	1.5	6.3	10	10	25	40	63	100	160	400
Travel	20	20	20	20	20	20	20	20	30	30	30	30	30	30	30	50
Actuator MSD	250	250	250	250	250	250	250	250	250	400	400	400	400	800	800	800

DIMENSIONS (IN MM)

Catalogue Number	Size Inch	Pneumatic Actuator	A	B	C	ØD	W	Wt.Kg. (Approx.)	Envelop Size LXHXW (Approx.)	Box Wt. Kg. (Approx.)
5112A155/WCBF	½	250	130	44.5	545	250	250	14.0	515 x 275 x 275	17.0*
5112A205/WCBF	¾	250	150	49	545	250	250	15.0	520 x 275 x 275	18.0*
5112A255/WCBF	1	250	160	54	576	250	250	18.0	580 x 275 x 275	22.0*
5112A355/WCBF	1 ½	250	200	63.5	589	250	250	22.0	605 x 275 x 275	26.0*
5112A365/WCBF	1 ½	400	200	63.5	616	350	350	29.0	695 x 380 x 380	37.0*
5112A505/WCBF	2	400	230	76	625	350	350	35.0	725 x 380 x 380	45.0*
5112A655/WCBF	2 ½	400	290	89	685	350	350	42.0	760 x 380 x 380	57.0**
5112A805/WCBF	3	800	310	95.5	865	405	405	84.0	1000 x 450 x 450	104.0**
5112A1005/WCBF	4	800	350	114.5	872	405	405	95.0	1025 x 450 x 450	115.0**
5112A1505/WCBF	6	800	480	139.5	1025	405	405	122.0	1315 x 450 x 450	138.0**

Note

* Weight of cardboard + PUF Box Packing. Which may change for Export when packed in wooden box.

** Weight of Wooden Box Packing.

Note:

Technical specifications, details & dimensions are subject to change without prior notice. Dimensions in the table are approximate subject to final confirmation by AVCON.

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