

2/2-Way Motorised Control Valves with Electric Actuator

For Thermic Fluid Application (On-Off and Control duty)

(Motorised to Open or Motorised to Closed Type.)

DATA SHEET
MV-5512A/WCBF

SPECIFICATIONS

Sizes	: 15mm (½ ") 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 B16.34.
Gland Packing	: Carbon filled Teflon for temp. upto 380°C with Cooling Finned Bonnet.
Design Standard	: ASME B16.34.
Leakage	: As per ANSI-FCI-70-2 Cl.IV (0.01% of Kv) for 5512A 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, Equal percentage or Linear.
Seat	: Screwed type replaceable.
Body & Bonnet Material	: CS-(ASTM A 216 WCB (DIN 1.0619 GS-C 25). SS-(ASTM A351 CF8M (DIN1.4408) (GX6 Cr.Ni MO1810) SS-(ASTM A351 CF8(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	: 5512A are Metal Seated Valves.



Electric Motor	: Single phase, permanent split phase capacitor type class 'F' insulated motor.
Electric Supply	: 220/240, 110, 24 Volts 50/60 Hz, AC.
Switching cycles	: Upto 240 cys per hour for small size valves and for large size valves refer to AVCON. (Switching cycles is meant for duration of less than 0.1 second).
Actuator Yoke	: Steel rods with position indicator assembly or Cast Carbon Steel casting.
Stem Tension	: Through belleville packed spring.
Valve Position on Failure of Electricity.	: Stayput
Control Suitability	: Actuator is suitable for On-Off, Anticipatory, PI, PID Control system.

ACTUATOR

Electric Actuator	: Series KN
Housing	: Aluminium Silicon alloy heat treated.
Gears	: Steel hobbled, toughened gears.

For further details of Actuator refer to Actuator leaflet 'KN' series.

SPECIFICATION TABLE

Catalogue Number	Size	Orifice Size	Flow Factor Kv	Safe Working Pressure.	Actuator				Stroke (Approx.)	Travel time (Approx.)
	(mm)	(mm)	M ³ /hr.	Bar	KN-05	KN-07	KN-10	KN-25		
					Working Pressure (Bar)				mm	Secs.
5512A155/WCBF x KN 05	15	18	4.0	40	40	-	-	-	20	48
5512A205/WCBF x KN 05	20	22	6.3	40	40	-	-	-	20	49
5512A255/WCBF x KN 05	25	25	10	40	35	-	-	-	20	48
5512A405/WCBF x KN 05	40	40	25	40	20	-	-	-	20/30	48
5512A505/WCBF x KN 05/07	50	50	40	40	10	40	-	-	30	80
5512A655/WCBF x KN 07	65	65	63	40	-	30	-	-	30	80
5512A805/WCBF x KN 07/10	80	80	100	40	-	7	20	-	30	60
5512A1005/WCBF x KN10/25	100	100	160	40	-	-	12	14	30	60
*5512A1505/WCBF x KN10/25	150	150	400	40	-	-	4	7	50	100

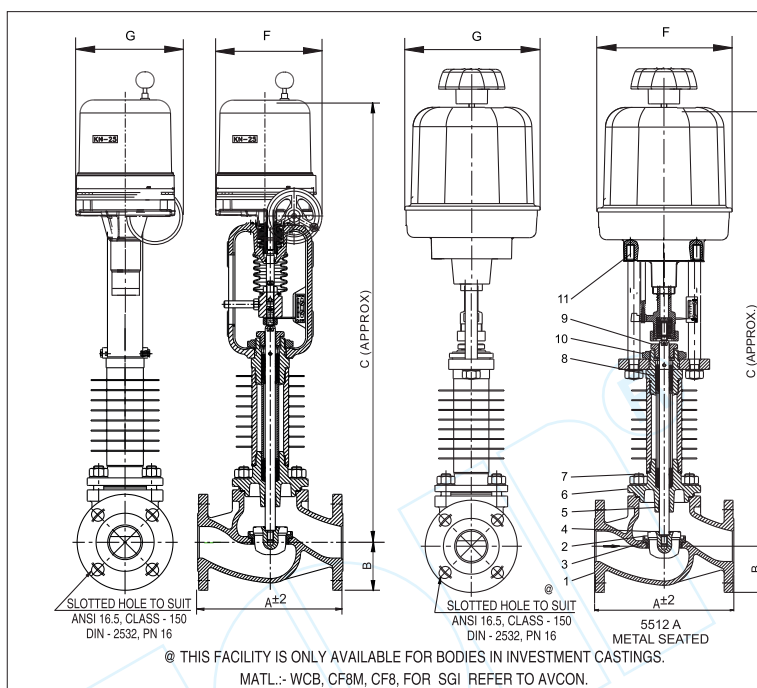
*Under development

2/2 WAY FINNED BONNET (WCBF) CONTROL VALVES WITH ELECTRIC ACTUATOR.

BILL OF MATERIAL

Item	Parts	Material
1	Body	SS ASTM A351CF8/CF8M CS ASTM A216, Gr. WCB, SGI.
2	Seat	SS AISI 420/ SS AISI 316
3	Gasket	Cr.Ni Foil coated with graphite.
4	Plug	SS AISI 420/ SS AISI 316
5	Duro Bush	PTFE Lined & coated, SS backed.
6	Bonnet	SS ASTM A351CF8/CF8M CS ASTM A216, Gr. WCB SGI
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	Electric Actuator

◆ Refer to actuator leaflet for details of components.



TECHNICAL DATA TABLE

Valve size in mm	15	20	25	40	50	65	80	100	150
Port Sizes 2-way	18	22	25	40	50	65	80	100	150
Kv. M ³ /hr.	4	6.3	10	25	40	63	100	160	400
Travel	20	20	20	20	30	30	30	30	30
	30	30	30	30	30	30	30	30	50
Electric Actuator	KN 05	KN 05	KN 05	KN 05	KN 05	KN 07	KN 07	KN 10	KN 10
						KN 07	KN 10	KN 25	KN 25

DIMENSIONS (IN MM)

Catalogue Number	Size	Electric Actuator	A	B	C	F x G or ØD	Wt. Kg. (Approx.)	Envelope Size LxHxW (Approx.)	Box Wt. Kg. (Approx.)
	Inch								
5512A155/WCBF x KN 05	½	KN 05	130	44.5	553	Ø178	9.0	648 x 240 x 167	11.0*
5512A205/WCBF x KN 05	¾	KN 05	150	49	553	Ø178	10.0	652 x 240 x 167	12.0*
5512A255/WCBF x KN 05	1	KN 05	160	54	608	Ø178	12.5	712 x 240 x 167	13.0*
5512A405/WCBF x KN 05	1 ½	KN 05	200	63.5	621	Ø178	17.0	735 x 240 x 167	22.0*
5512A505/WCBF x KN 05	2	KN 05	230	76	730	Ø178	23.0	856 x 203 x 203	31.7*
5512A501/WCBF x KN 07		KN 07			835	Ø225	32.0	961 x 250 x 250	41.0*
5512A655/WCBF x KN 07	2 ½	KN 07	290	89	835	Ø178	34.0	894 x 203 x 203	44.0**
5512A805/WCBF x KN 07	3	KN 07	310	95.5	755	Ø225	40.0	994 x 250 x 250	51.0**
5512A801/WCBF x KN 10		KN 10			855	Ø225	55.0	1070 x 250 x 250	66.0**
5512A1005/WCBF x KN 10	4	KN 10	350	114.5	930	Ø225	77.0	1095 x 250 x 250	87.0**
5512A1001/WCBF x KN 25		KN 25			1012	Ø260	81.0	1177 x 285 x 285	86.0**
5512A1505/WCBF x KN 10	6	KN 10	480	139.5	988	Ø225	93.0	1178 x 250 x 250	93.0**
5512A1501/WCBF x KN 25		KN 25			1070	Ø260	97.0	1260 x 285 x 285	109.0**

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.

WESTERN		
Mumbai Plot No. 65, Road No. 13, MIDC Marol, Andheri (East), Mumbai - 400 093 Tel.No.: 022-6915 6100 / 83909 17431 E-mail : acplmumbai.sales@avconcontrols.com	Pune SSR ENCLAVE, Plot No. 81, Road No.4, Vasanth Nagar, Nizampet X Roads (Near JNTU College Metro Station), Hyderabad - 500085. Tel.No.: 020-2712 0776 / 2712 0540 E-mail : acplmumbai.sales@avconcontrols.com	Baroda 307, Mangaldeep Complex, Sampatras Colony, Productivity Road, Baroda - 390 005. Tel.No.: 022-6915 6100 / 83909 17431 E-mail : acplmumbai.sales@avconcontrols.com
SOUTHERN		
Chennai 249, First Floor, Tiny Sector Ambattur Industrial Estate, Chennai - 600 058 Tel.No.: 044-4807 4107 / 089393 12809 E-mail : acplmumbai.sales@avconcontrols.com	Hyderabad SSR ENCLAVE, Plot No. 81, Road No.4, Vasanth Nagar, Nizampet X Roads (Near JNTU College Metro Station), Hyderabad - 500085. Tel.No.: 020-2712 0776 / 2712 0540 E-mail : acplmumbai.sales@avconcontrols.com	Bangalore 307, Mangaldeep Complex, Sampatras Colony, Productivity Road, Baroda - 390 005. Tel.No.: 022-6915 6100 / 83909 17431 E-mail : acplmumbai.sales@avconcontrols.com

EASTERN	
Kolkata 720, 7th Floor, 33/1, N.S. Road, Marshall House, Kolkata-700 001. Tel.No.: 033-4068 1180 / 77109 00889 E-mail : acplmumbai.sales@avconcontrols.com	
NORTHERN	
New Delhi Unit No. 708, 7th Floor, 94 Meghdoot, Nehru Place, New Delhi - 110019 Tel.No.: 011-42639736 / 88282 69844 E-mail : acplmumbai.sales@avconcontrols.com	

avcon®
Manufactured by:

AVCON CONTROLS PVT. LTD.

Plot No. 65, Road No.13, MIDC Marol,
Andheri (East), Mumbai - 400 093 (INDIA).
Phone : +91-22-6915 6100.

E-mail : avcon@avconcontrols.com
acplmumbai.sales@avconcontrols.com
Website : www.avconcontrols.com