



JOB NAME:	CONTRACTOR:
JOB LOCATION:	APPROVAL:
ENGINEER:	CONTRACTOR P.O.:
APPROVAL:	REPRESENTATIVE:

MEV300-0* - MEV600-0* - MEV900-0*
30° BALL 60° BALL 90° BALL

V300/600/900 DIRECT MOUNT, 3-PC, 2-WAY STAINLESS STEEL V-BALL VALVE, FULL PORT BALL VALVE WITH VALBIA METAL ELECTRIC ACTUATOR WITH POSITIONER OR POSITIONER W/ BATTERY BACKUP

SIZES 1/2" TO 4"

*022	24V AC/DC W POSITIONER	*023	100-240V AC W POSITIONER
*042	24V AC/DC W POSITIONER & BATTERY BACKUP	*043	100-240V AC W POSITIONER & BATTERY BACKUP

SPECIFICATIONS

The MEV300/MEV600/MEV900 series features a V-ball control stainless steel 3-pc. ball valve, with 30, 60, and 90-degree ball options. The 30-degree ball offers a special combination of 30 to 90 degrees.

The valve is a 1000 psi rated ball valve, with a thermal protection relief hole, and 25% carbon-filled PTFE seats.

The electric positioning actuator is made from die cast aluminum, with a powder coated epoxy, and a NEMA 4 rating. The actuator also features dual motors, two extra limit switches, dome position indicator, manual override, heater/thermostat, a torque limiter, and a 75% duty cycle motor.

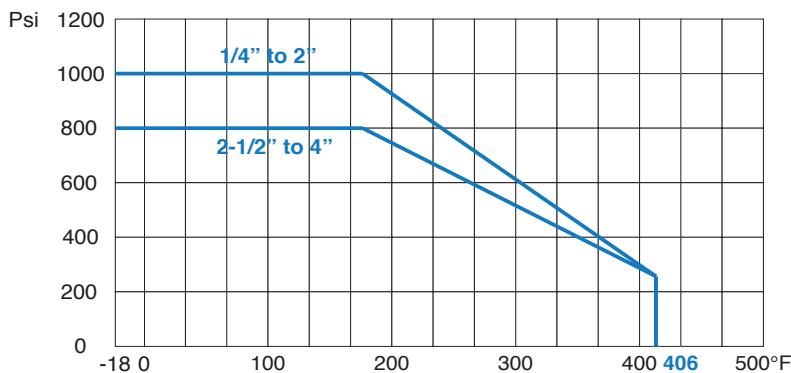
ACTUATOR FEATURES

- Dual Voltages
- 24V AC/DC and 100-240V AC Models Available
- ISO 5211, F03/F05 base with 11mm female drive
- 75% Duty Cycle
- Anti-condensation heater, (when red wire is connected to power)
- High-Strength, Die Cast Aluminum Powder Coated Housing
- Temperature Range -4°F to 131°F
- NEMA 4 Housing
- Two Auxiliary Switches Standard
- Torque limiter standard




VALVE FEATURES

- 3-piece CF8M body
- Full port, sizes 1/2" to 4"
- ISO 5211 mounting pad w/ square stem
- Pressure rating 1/2" to 2" 1000 psi, 2-1/2" to 4" 800 psi
- 25% carbon filled P.T.F.E. ball seats
- Temperature range -18°F to 428°F
- Blow out proof stem, multi-layer V-ring adjustable stem packing
- P.T.F.E. packing and thrust washer

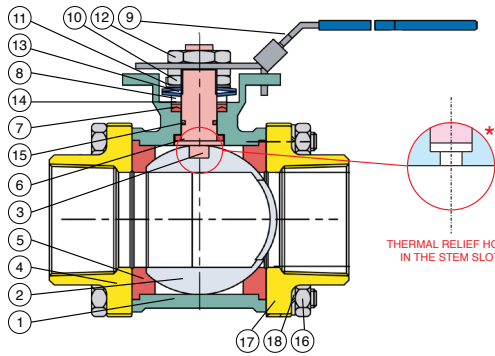
PRESSURE - TEMPERATURE CHART FOR SERIES V300/V600/V900



V300/V600/V900 V-BALL SERIES MODEL OPTIONS

	90° V-BALL	
	NPT	MEV300*
	SW	MEV310*
	60° V-BALL	
	NPT	MEV600*
	SW	MEV610*
30° V-BALL		
NPT	MEV900*	
SW	MEV910*	

BILL OF MATERIALS FOR V300/V600/V600

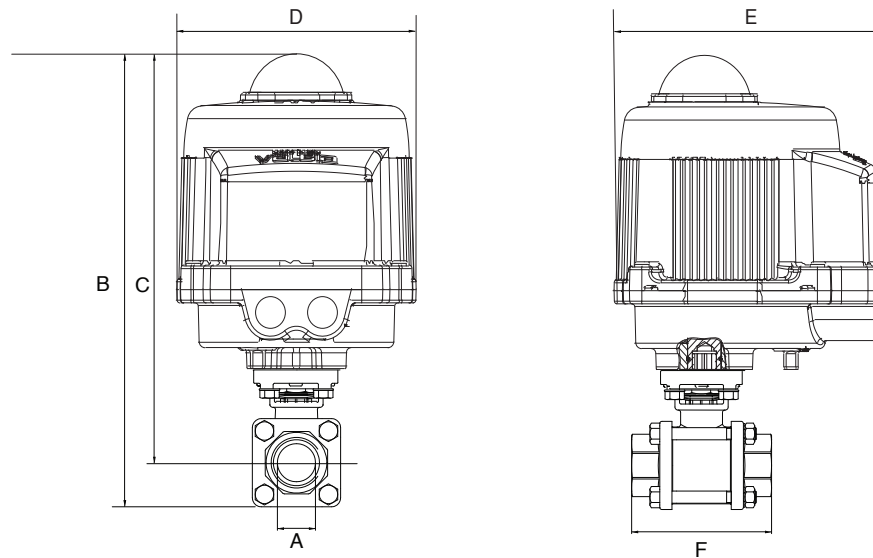


N POS	PART NAME	MATERIAL	N PCS
1	BODY	ASTM A351 Gr. CF8M	1
2	BALL	ASTM A351 Gr. CF8M	1
3	STEM	SS 316	1
4	END CAP	ASTM A351 Gr. CF8M	2
5	SEAT	25% Carbon Filled P.T.F.E.	2
6	THRUST WASHER	15% GF P.T.F.E.	1
7	STEM PACKING	SS 304	1
8	GLAND BUSHING	SS 304	1
9	HANDLE	SS 304	1

N POS	PART NAME	MATERIAL	N PCS
10	STEM NUT	SS 304	1
11	HANDLE WASHER	SS 304	1
12	HANDLE NUT	SS 304	1
13	BELLEVILLE WASHER	SS 304-CSP	2
14	PACKING FOLLOWER	P.T.F.E. + 25% GF	1
15	STEM O-RING	VITON	1
16	BODY BOLT	SS 304	*
17	BOLT WASHER	SS 304	*
18	BOLT NUT	SS 304	*

*VARIES WITH SIZE

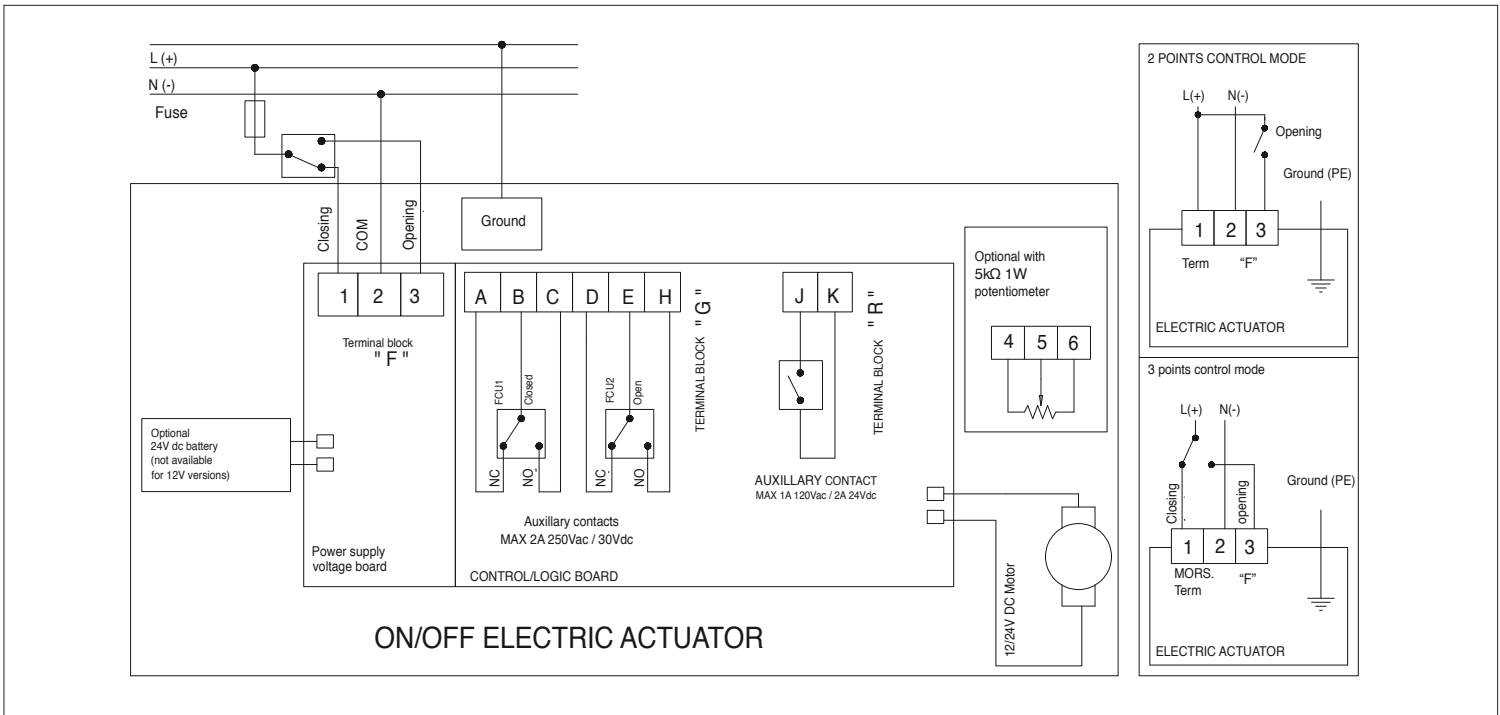
DIMENSIONS



Size	A	B	C	D	E	F	ACT.
1/2"	0.50	11.41	9.29	6.34	7.36	2.50	VB030M
3/4"	0.75	12.17	9.60	6.34	7.36	2.85	VB030M
1"	1.00	13.00	9.94	6.34	7.36	3.19	VB030M
1-1/4"	1.25	13.51	10.15	6.34	7.36	3.72	VB030M
1-1/2"	1.50	15.86	11.60	6.93	7.76	4.25	VB060M
2"	2.00	16.72	11.95	6.93	7.76	4.78	VB060M
2-1/2"	2.50	20.17	13.96	10.63	10.47	6.20	VB110M
3"	3.00	21.10	14.34	10.63	10.47	7.48	VB110M
4"	4.00	24.53	15.74	10.63	10.47	8.86	VB190M

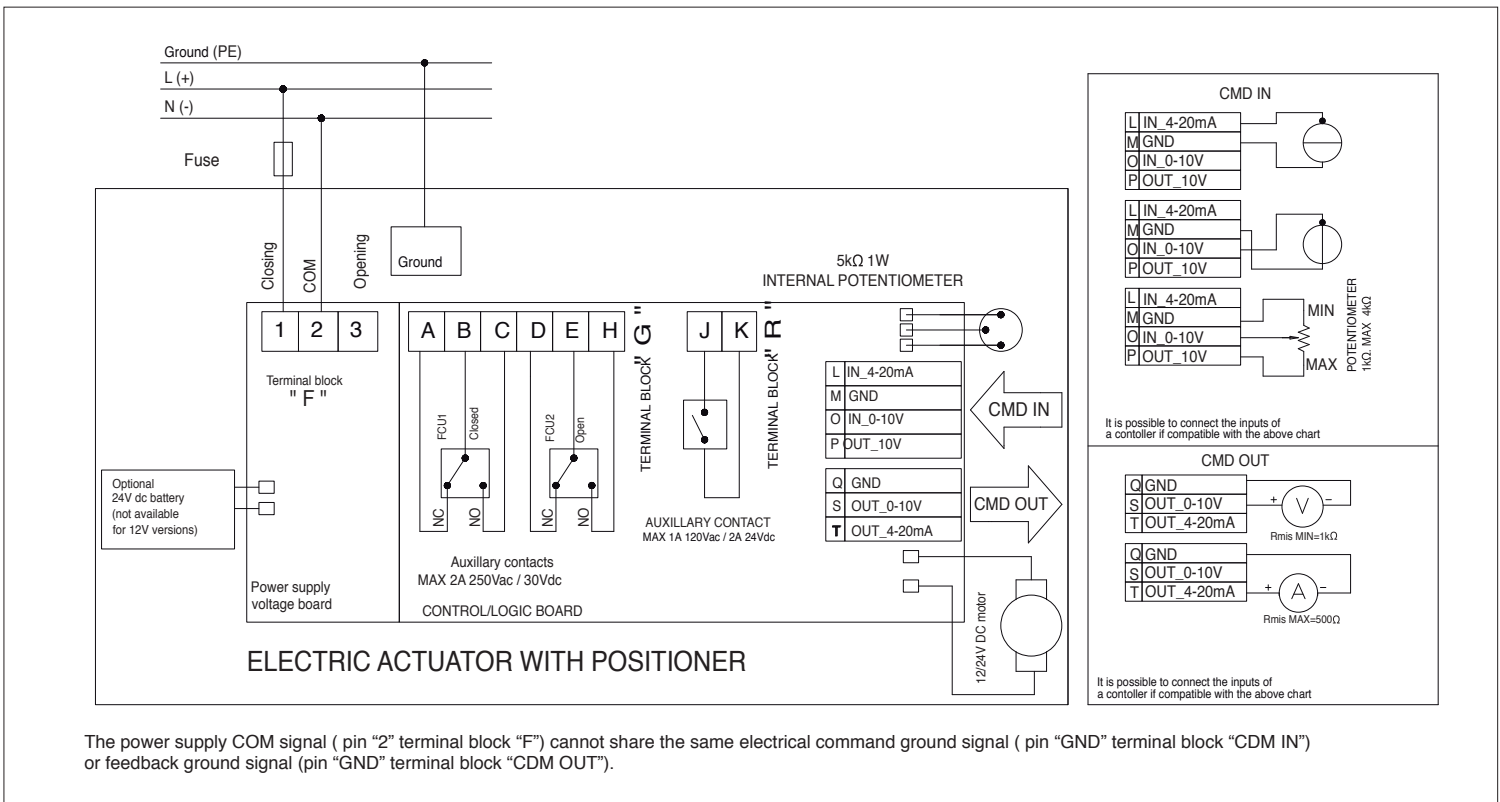
ON/OFF WIRING DIAGRAM

12V AC/DC, 24V AC/DC & 100-240VAC



POSITIONER WIRING DIAGRAM

12V AC/DC, 24V AC/DC & 100-240VAC



The power supply COM signal (pin "2" terminal block "F") cannot share the same electrical command ground signal (pin "GND" terminal block "CDM IN") or feedback ground signal (pin "GND" terminal block "CDM OUT").

CV VERSUS VALVE OPENING PERCENTAGE

Size	V-Ball Angle	Class VI S/O	Low %	Control Zone									Full Open
		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
1/2"	30°	0.00	0.04	0.24	0.47	0.77	1.19	1.84	2.46	3.42	4.63	5.57	
	60°	0.00	0.04	0.29	0.74	1.11	1.83	2.91	4.31	7.01	9.45	12.79	
	90°	0.00	0.06	0.47	0.85	1.27	2.11	3.22	4.77	8.31	11.59	14.72	
3/4"	30°	0.00	0.07	0.29	0.63	1.02	1.56	2.44	3.26	4.52	6.12	7.31	
	60°	0.00	0.07	0.36	0.94	1.48	2.42	3.86	5.26	9.24	12.43	16.27	
	90°	0.00	0.08	0.61	1.10	1.71	2.69	4.27	6.25	10.85	15.30	19.39	
1"	30°	0.00	0.09	0.45	1.25	2.07	3.56	5.32	7.69	10.51	12.85	15.49	
	60°	0.00	0.10	0.70	1.75	2.77	5.14	8.01	11.89	18.71	23.23	32.81	
	90°	0.00	0.11	1.00	2.77	5.10	7.74	12.20	17.32	24.47	26.81	43.88	
1-1/4"	30°	0.00	0.05	0.47	1.35	2.49	4.13	6.11	8.81	11.75	14.86	17.36	
	60°	0.00	0.07	0.66	2.04	3.42	6.45	10.79	15.41	22.34	33.39	43.43	
	90°	0.00	0.08	0.80	2.91	5.52	10.23	17.27	19.51	34.93	51.75	65.82	
1-1/2"	30°	0.00	0.07	0.66	1.87	3.40	5.66	8.36	12.14	16.17	20.45	23.88	
	60°	0.00	0.09	0.93	2.82	4.70	8.89	14.84	21.16	30.73	45.87	59.75	
	90°	0.00	0.10	1.07	4.00	7.45	14.08	23.78	26.77	48.05	71.17	90.50	
2"	30°	0.00	0.09	1.19	3.80	7.53	12.27	17.85	26.45	36.46	48.10	55.84	
	60°	0.00	0.11	1.53	5.79	10.41	20.58	34.10	48.74	69.05	104.23	135.77	
	90°	0.00	0.17	1.90	7.28	13.59	25.37	42.30	55.55	87.04	129.77	167.36	
2-1/2"	30°	0.00	0.09	1.16	4.44	7.91	13.40	20.05	30.44	41.92	69.78	76.95	
	60°	0.00	0.13	1.46	5.91	11.88	23.24	37.94	59.30	83.30	113.64	162.55	
	90°	0.00	0.18	1.86	7.28	16.45	31.15	53.54	77.87	118.29	177.33	239.42	
3"	30°	0.00	0.13	1.21	4.16	9.49	15.97	26.78	38.92	53.30	69.78	85.92	
	60°	0.00	0.15	2.91	6.73	15.81	29.38	46.34	73.58	106.72	149.89	193.22	
	90°	0.00	0.20	4.13	8.66	21.10	41.09	69.31	105.90	161.04	237.24	359.22	
4"	30°	0.00	0.16	1.75	7.84	18.61	35.21	58.61	87.88	127.45	158.53	196.34	
	60°	0.00	0.26	2.22	12.46	33.68	63.00	106.27	160.48	233.98	329.51	437.40	
	90°	0.00	0.35	4.36	19.70	50.31	91.82	157.45	240.50	365.15	546.65	830.90	