



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

EPVF300DA - EPVF600DA - EPVF900DA
30° BALL 60° BALL 90° BALL

VF300/600/900 DIRECT MOUNT, 3-PC, 2-WAY STAINLESS STEEL FLANGED ANSI 150 V-BALL VALVE, FULL PORT BALL VALVE WITH DOUBLE ACTING PNEUMATIC ACTUATOR AND PNEUMATIC ENP-B 4-20 mA POSITIONER
SIZES 1/2" TO 6"

EPVF300SR - EPVF600SR - EPVF900SR
30° BALL 60° BALL 90° BALL

VF300/600/900 DIRECT MOUNT, 3-PC, 2-WAY STAINLESS STEEL FLANGED ANSI 150 V-BALL VALVE, FULL PORT BALL VALVE WITH SPRING RETURN PNEUMATIC ACTUATOR AND PNEUMATIC ENP-B 4-20 mA POSITIONER
SIZES 1/2" TO 6"

SPECIFICATIONS

The EPVF300/600/900 series features a V-ball control stainless steel ANSI 150 split body style flanged 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 275 psi rated ball valve, with a thermal protection relief hole, and 25% carbon-filled PTFE seats. This valve is designed to ANSI 16.5, ANSI 16.10, and ANSI 16.34.

The actuator is made by Valbia, one of the premier actuator manufacturers in the world, and features a standard elevated temperature model equipped with Viton seals.

The ENP-B electro-pneumatic positioner has an IP66, Type 4X enclosure that resists corrosion due to its Epoxy polyester powder coating. This unit is compatible with most controllers and uses a 4-20 mA signal.

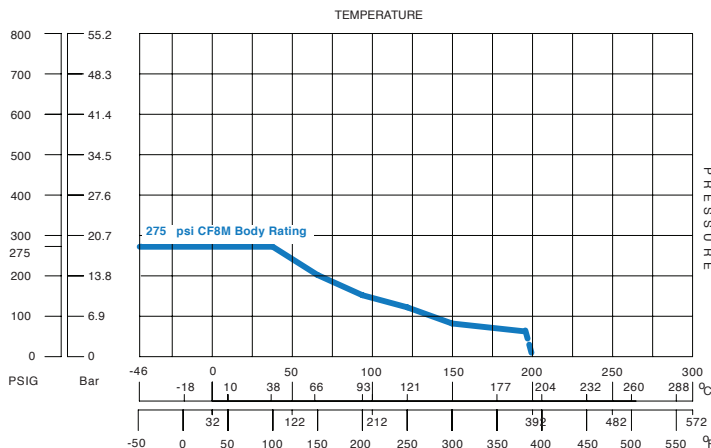
ACTUATOR FEATURES

- Hard anodized extruded aluminum body
- Concentric spring sets
- Die cast aluminum end caps
- Solid steel barstock pinion (not casting)
- 0°-90° rotation adjustment cam
- 0°-90° rotation adjustment bolts
- POM piston guides
- Minimum air pressure rating: 80 psi
- Maximum air pressure rating: 116 psi
- Working temperature: -4°F - 302°F
- No lubrication maintenance required for the entire actuator lifetime
- 100% factory tested

VALVE FEATURES

- Stainless steel, ANSI 150 flanged
- Full port, sizes 1/2" to 6"
- ISO 5211 mounting pad w/ square stem
- 25% carbon filled P.T.F.E. ball seats
- Temperature range -18°F to 392°F
- ANSI 16.5, 16.10 and 16.34
- Blow out proof stem
- Live loaded stem packing design
- Anti-static design
- P.T.F.E. packing and thrust washer

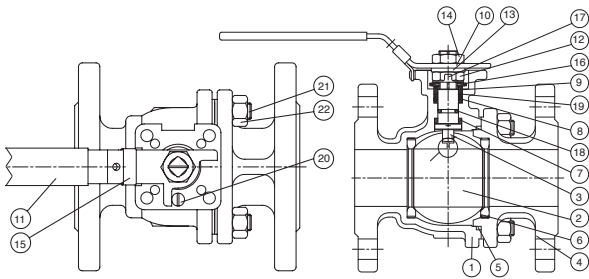
PRESSURE - TEMPERATURE CHART FOR SERIES VF300/VF600/VF900



VF300/VF600/VF900 V-BALL SERIES MODEL OPTIONS

	90° V-BALL
	EPVF300
	60° V-BALL
	EPVF600
	30° V-BALL
	EPVF900

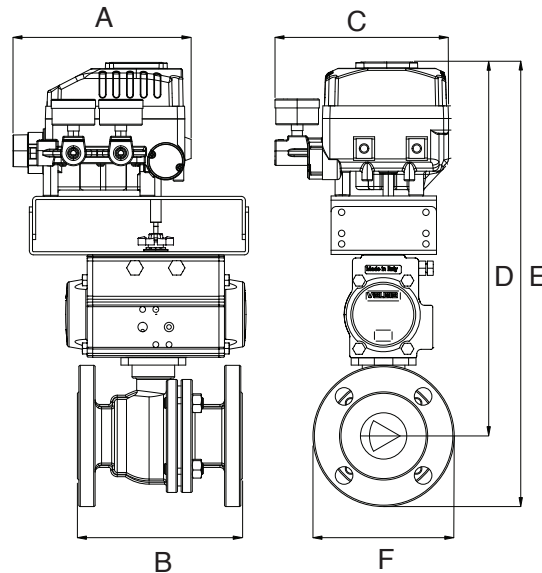
BILL OF MATERIALS FOR VF300/VF600/VF900



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	BODY SEAL	P.T.F.E.	1
6	SEAT	Carbon graphite filled P.T.F.E.	2
7	THRUST WASHER	P.T.F.E.	1
8	STEM PACKING	P.T.F.E.	1
9	GLAND	SS 304	1
10	HANDLE	SS 304	1
11	HANDLE COVER	PLASTIC	1

N POS	PART NAME	MATERIAL	N PCS
12	STEM NUT	SS 304	1
13	HANDLE WASHER	SS 304	1
14	HANDLE NUT	SS 304	1
15	LOCKING PAD	SS 304	1
16	BELLEVILLE WASHER	SS 304	2
17	TAB WASHER	SS 304	1
18	O-RING	VITON	1
19	PACKING FOLLOWER	P.T.F.E. + 25% GF	1
20	STOP PIN	SS 304	1
21	BODY STUD	ASTM A193 GR. B8	4-8
22	BOLT NUT	ASTM A194 GR. 8	4-8

DIMENSIONS



EPVF300DA VF300 with **DA** Actuator & ENP-B Positioner
EPVF600DA VF600 with **DA** Actuator & ENP-B Positioner
EPVF900DA VF900 with **DA** Actuator & ENP-B Positioner

EPVF300SR VF300 with **SR** Actuator & ENP-B Positioner
EPVF600SR VF600 with **SR** Actuator & ENP-B Positioner
EPVF900SR VF900 with **SR** Actuator & ENP-B Positioner

Size	A	B	C	D	E	F	ACT. DA
1/2"	6.65	4.25	6.57	12.09	14.07	3.50	52
3/4"	6.65	4.61	6.57	12.64	15.20	3.88	52
1"	6.65	5.00	6.57	13.17	15.82	4.25	63
1-1/4"	6.65	5.51	6.57	13.45	16.38	4.63	63
1-1/2"	6.65	6.50	6.57	14.35	17.49	5.00	75
2"	6.65	7.01	6.57	14.69	18.18	6.00	75
2-1/2"	6.65	7.48	6.57	16.62	21.04	4.64	100
3"	6.65	7.99	6.57	16.99	21.78	7.50	100
4"	6.65	9.02	6.57	19.85	26.24	9.00	115
6"	6.65	15.51	6.57	22.64	31.44	11.00	125

Size	A	B	C	D	E	F	ACT. SR
1/2"	6.65	4.25	6.57	12.54	14.52	3.50	63
3/4"	6.65	4.61	6.57	13.80	16.36	3.88	75
1"	6.65	5.00	6.57	15.22	17.87	4.25	85
1-1/4"	6.65	5.51	6.57	15.50	18.43	4.63	85
1-1/2"	6.65	6.50	6.57	16.19	19.33	5.00	100
2"	6.65	7.01	6.57	17.10	20.59	6.00	115
2-1/2"	6.65	7.48	6.57	18.45	22.87	4.64	125
3"	6.65	7.99	6.57	20.65	25.44	7.50	160
4"	6.65	9.02	6.57	22.16	28.55	9.00	160
6"	6.65	15.51	6.57	25.73	34.53	11.00	180

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	
6"	30°	0.00	0.30	3.12	13.97	33.15	62.70	104.37	156.53	221.56	282.33	349.70	
	60°	0.00	0.47	5.41	22.15	59.97	112.16	189.24	285.82	416.68	586.83	800.80	
	90°	0.00	0.68	7.79	35.05	89.56	163.55	280.37	428.34	650.32	973.50	1480.08	