



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

EPV300DA - EPV600DA - EPV900DA
EPV310DA - EPV610DA - EPV910DA
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 DOUBLE ACTING PNEUMATIC ACTUATOR AND PNEUMATIC ENP-B 4-20 mA POSITIONER
SIZES 1/2" TO 4"

EPV300SR - EPV600SR - EPV900SR
EPV310SR - EPV610SR - EPV910SR
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 SPRING RETURN PNEUMATIC ACTUATOR AND PNEUMATIC ENP-B 4-20 mA POSITIONER
SIZES 1/2" TO 4"

SPECIFICATIONS

The EPV300/600/900 series electric V-ball packages feature the Valpres 3-piece stainless steel series V300/V600/V900 NPT ball valve with 25% carbon filled PTFE seats, and thermal relief hole in the stem slot. The valves are rated for 1000psi maximum working pressure. The Valbia pneumatic actuator comes with a hard-anodized aluminum body, and powder coat-ed end caps. In addition, all Valbia pneumatic actuators are standardly furnished with elevated temperature seals to 302°F. The patented side loaded limit stops never enter the piston chamber eliminating extra possible leak paths. The assembled package also includes the ENP-B electro-pneumatic positioner that accurately controls the valve stroke in response to an input signal of 4-20mA from the controller.

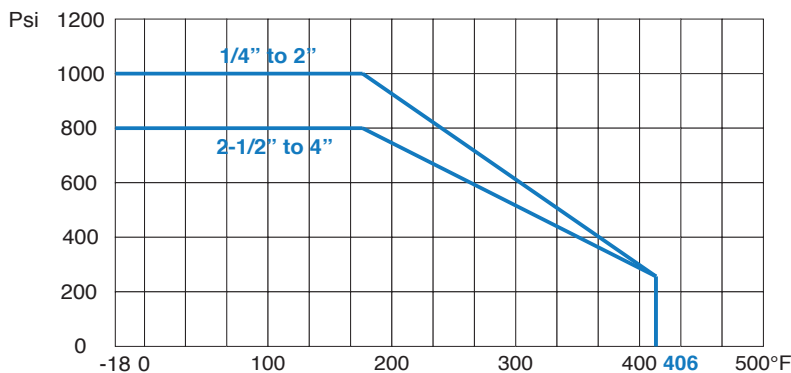
ACTUATOR FEATURES

- 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

- 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

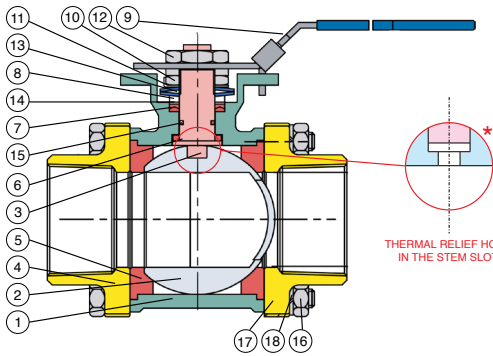
PRESSURE - TEMPERATURE CHART FOR SERIES V300/V600/V900



V300/V600/V900 V-BALL SERIES MODEL OPTIONS

	90° V-BALL	
	NPT	EPV300*
	SW	EPV310*
	60° V-BALL	
	NPT	EPV600*
	SW	EPV610*
30° V-BALL		
	NPT	EPV900*
	SW	EPV910*

BILL OF MATERIALS FOR V300/V600/V600

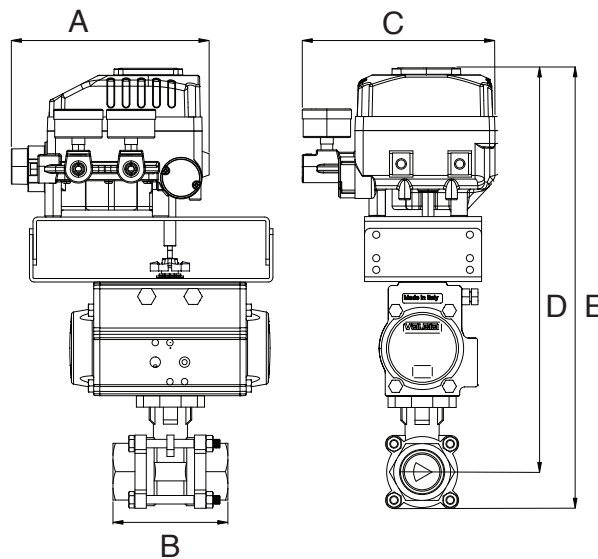


N POS	PART NAME	MATERIAL	N PCS
1	BODY	ASTM A351 Gr. CF8M	1
2	BALL	ASTM A351 Gr. CF8M	1
3	STEM	SS 316	1
4	END CAP	ASTM A351 Gr. CF8M	2
5	SEAT	25% Carbon Filled P.T.F.E.	2
6	THRUST WASHER	15% GF P.T.F.E.	1
7	STEM PACKING	SS 304	1
8	GLAND BUSHING	SS 304	1
9	HANDLE	SS 304	1

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



EPV300DA V300 with **DA** Actuator & ENP-B Positioner
EPV600DA V600 with **DA** Actuator & ENP-B Positioner
EPV900DA V900 with **DA** Actuator & ENP-B Positioner

EPV300SR V300 with **SR** Actuator & ENP-B Positioner
EPV600SR V600 with **SR** Actuator & ENP-B Positioner
EPV900SR V900 with **SR** Actuator & ENP-B Positioner

Size	A	B	C	D	E	ACT. DA
1/2"	6.65	2.50	6.98	10.09	11.01	52
3/4"	6.65	2.85	6.98	10.32	11.32	52
1"	6.65	3.19	6.98	10.66	11.77	52
1-1/4"	6.65	3.72	6.98	11.22	12.58	63
1-1/2"	6.65	4.25	6.98	11.93	13.48	63
2"	6.65	4.78	6.98	12.23	14.09	63
2-1/2"	6.65	6.20	6.98	14.67	16.97	85
3"	6.65	7.48	6.98	15.02	17.74	85
4"	6.65	8.86	6.98	16.11	19.87	100

Size	A	B	C	D	E	ACT. SR
1/2"	6.65	2.50	6.98	10.54	11.46	63
3/4"	6.65	2.85	6.98	10.77	11.77	63
1"	6.65	3.19	6.98	11.82	12.93	75
1-1/4"	6.65	3.72	6.98	12.48	13.84	85
1-1/2"	6.65	4.25	6.98	13.19	14.74	85
2"	6.65	4.78	6.98	13.99	15.85	100
2-1/2"	6.65	6.20	6.98	16.53	18.83	115
3"	6.65	7.48	6.98	17.36	20.08	125
4"	6.65	8.86	6.98	19.78	23.54	160

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	