



Series 13

3-Piece Direct Mount Ball Valve

FILE # A4104
 ISO 9001:2008
 SMITH-COOPER INTERNATIONAL, LLC CO.
 SHARPE VALVES

FEATURES

- 1000 PSI
- 150 WSP*
- Full port
- Vented ball
- ISO 5211 mounting pad
- High cycle stem design
- Patented system allows for stem packing nut adjustments without removing the actuator
- Compact design



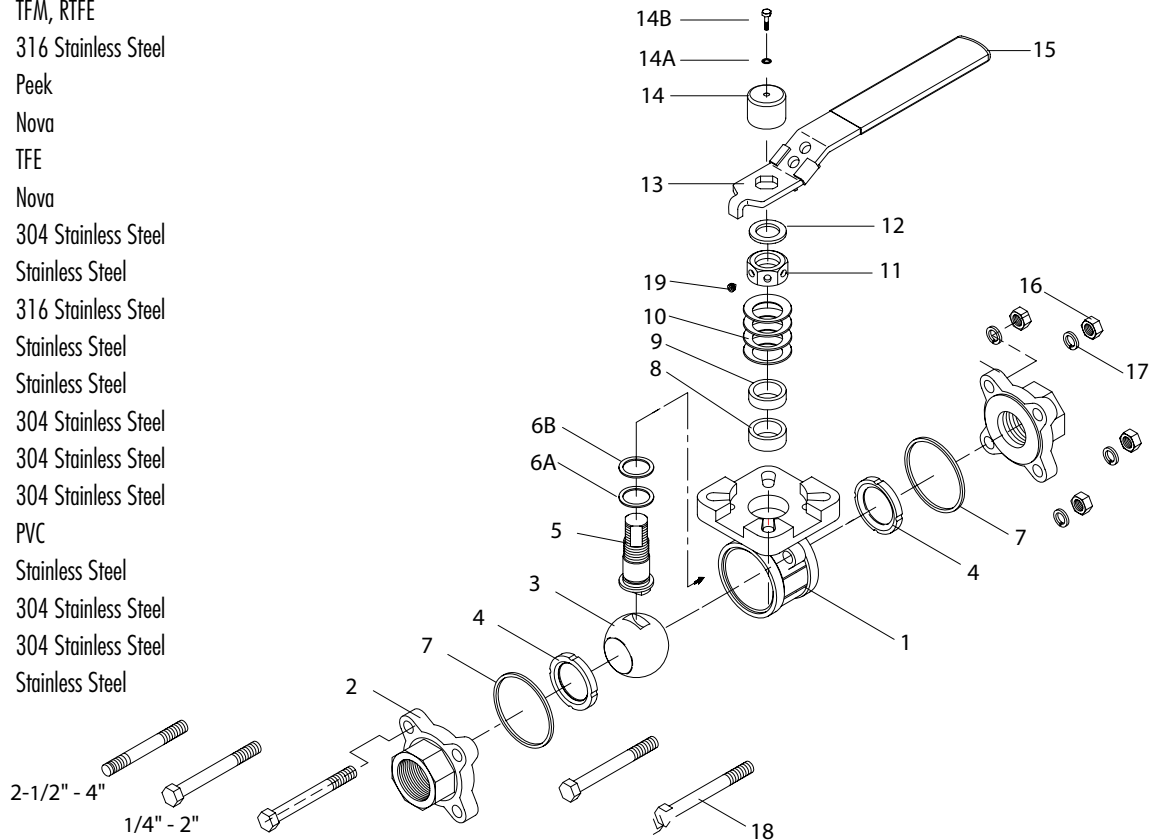
*Mounting bracket must be used for steam applications

MATERIALS

No.	Part Name	Qty	Material
1	Body	1	Carbon Steel ASTM A216 WCB or 316 Stainless Steel ASTM A351 CF8M
2	Ends	2	Carbon Steel ASTM A216 WCB or 316 Stainless Steel ASTM A351 CF8M
3	Ball	1	316 Stainless Steel
4	Seat	2	TFM, RTFE
5	Stem	1	316 Stainless Steel
6A	Thrust Bearing	1	Peek
6B	Thrust Bearing	1	Nova
7	Body Seal	2	TFE
8	Stem Packing	1	Nova
9	Gland Packing	1	304 Stainless Steel
10	Belleville Washers	4	Stainless Steel
11	McNut	1	316 Stainless Steel
12	Handle Washer	1	Stainless Steel
13	Handle	1	Stainless Steel
14	Stem Cover	1	304 Stainless Steel
14A	Washer	1	304 Stainless Steel
14B	Cover Bolt	1	304 Stainless Steel
15	handle sleeve	1	PVC
16	Bolt Nut*	4/8/12	Stainless Steel
17	Bolt Washer*	4/8/12	304 Stainless Steel
18	Bolt*	4/8/12	304 Stainless Steel
19	Set Screw	1	Stainless Steel

* Qty Size

4	1/4" - 2"
8	2-1/2" - 3"
12	4"



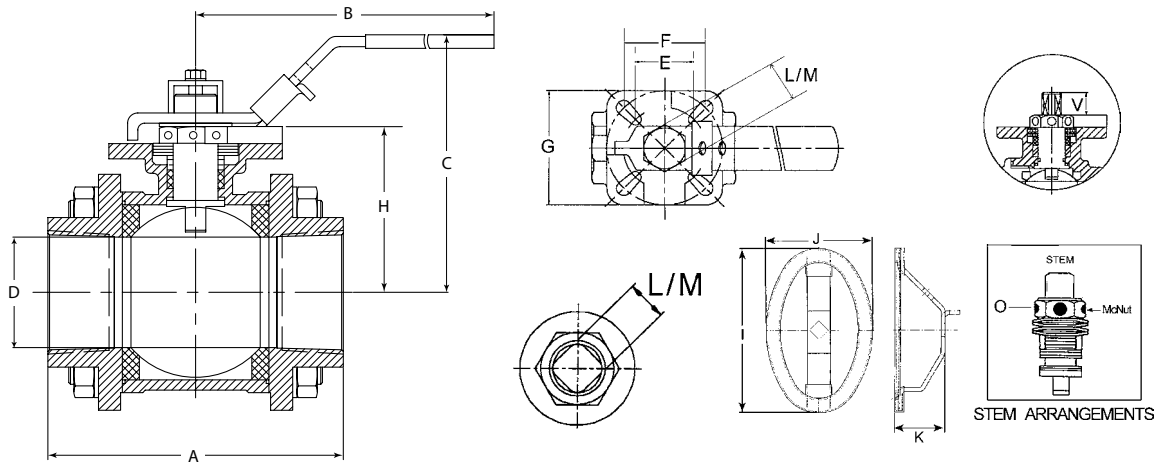


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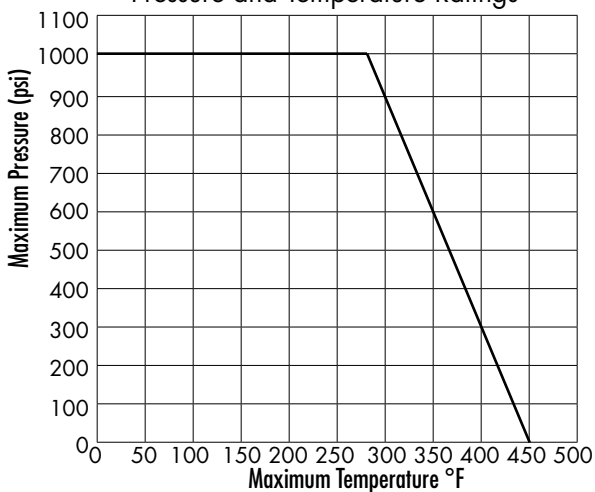
DIMENSIONS



Size IN	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	K IN	L/M IN	O IN	V IN
1/4	2.55	4.93	2.42	0.45	1.00	1.39	1.97	1.50	3.90	2.50	2.50	0.35	9/64	0.43
3/8	2.55	4.93	2.42	0.50	1.00	1.39	1.97	1.50	3.90	2.50	2.50	0.35	9/64	0.43
1/2	2.84	4.93	2.42	0.60	1.00	1.39	1.97	1.50	3.90	2.50	2.50	0.35	9/64	0.43
3/4	3.35	4.93	2.74	0.78	1.17	1.39	1.97	1.85	4.15	2.50	2.50	0.35	9/64	0.45
1	3.62	7.50	3.19	1.00	1.39	1.95	2.75	2.20	4.15	2.50	2.50	0.35	9/64	0.58
1-1/4	4.34	7.50	3.26	1.25	1.39	1.95	2.75	2.55	6.45	4.15	2.50	0.43	9/64	0.63
1-1/2	4.84	7.50	3.47	1.50	1.39	1.95	2.75	2.75	6.45	4.15	2.50	0.43	9/64	0.63
2	5.58	7.50	3.84	2.00	1.39	1.95	2.75	3.15	6.45	4.15	2.50	0.43	9/64	0.63
2-1/2	6.84	9.85	5.90	2.50	1.95	2.84	4.00	3.85	-	-	-	0.87	7/32	0.78
3	7.59	9.85	6.30	3.00	1.95	2.84	4.00	4.25	-	-	-	0.87	7/32	0.78
4	10.77	15.00	6.90	4.00	2.84	3.48	4.90	4.90	-	-	-	0.87	7/32	1.00

TECHNICAL

Pressure and Temperature Ratings



Size IN	CV	Break Away Torque IN / Lbs
1/4	8	40
3/8	8	40
1/2	38	40
3/4	71	80
1	110	110
1-1/4	230	160
1-1/2	350	190
2	600	250
2-1/2	320	500
3	580	720
4	820	800



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ORDERING

Fig: 1/2 - 13 - 6 - 6TE - M - SPN - 050 - DA

Description: 1/2" - 13 - 316 Body Ball & Stem - 316 Threaded Ends - TFM Seat - SPN 050 Actuator - Double Acting

Size	Series	Body Ball & Stem	Ends	Seat	Pneumatic Actuator	Spring Configuration	Electric Actuator	Options												
1/4	13	6	316 Stainless Steel	M	TFM	4X4®	DA	SEA 1	4X4®											
3/8									6	316 Stainless Steel	R	RTFE	X40	Double Acting (No Springs)	SEA 3	P1	High Temp Viton Seals -4°F to 300°F	1	4/12 NEMA 4X 120 VAC	
1/2									4	Carbon Steel			X50	SR1	1 Spring	SEA 4	P2	Low Temp EPDM Actuator -40°F to 176°F	2	4/22 NEMA 4X 240 VAC
3/4									Connection				X60	SR2	2 Springs	SEA 8	P3	Actuator Locking Device	3	4/2A NEMA 4X 24 VAC
1									TE	Threaded			X75	SR3	3 Springs	SEA 13	P4	Reverse Rotation	5	7/12 NEMA 7/9 120 VAC
1-1/4									SW	Socket Weld			X90	SR4	4 Springs		SPN II		6	7/22 NEMA 7/9 240 VAC
1-1/2									BW	Butt Weld (Sch 5, 20 or 40)			X115	SR5	5 Springs		P1	High Temp Viton Seals -4°F to 300°F	8	7/2A NEMA 7/9 24 VAC
2													SPN II	SR6	6 Springs		P2	Low Temp EPDM Actuator -40°F to 176°F		
													050	SR7	7 Springs		P3	Electroless Nickel Treatment		
													075	SR8	8 Springs		P4	Epoxy Coating		
													085	SR9	9 Springs		P5	Actuator Locking Device		
													100	SR10	10 Springs		P6	Reverse Rotation		
			115	SR11	11 Springs		SEA													
			125	SR12	12 Springs		1	220V												
							2	24V												
							3	12 VDC												
							4	24 VDC												
							AS	Auxiliary Switches												
							FP	Feedback Potentiometer												
							CR	Control Relays												
							HT	Heater & Thermostat												
							BD	Breather & Drain												
							PP	Proportional Positioner												
							FT	Feedback Transmitter												
							SC	Speed Control												
							TR	Timers												
							TS	Torque Sensor												