

# Series 12

## Direct Mount 2-Piece Ball Valve

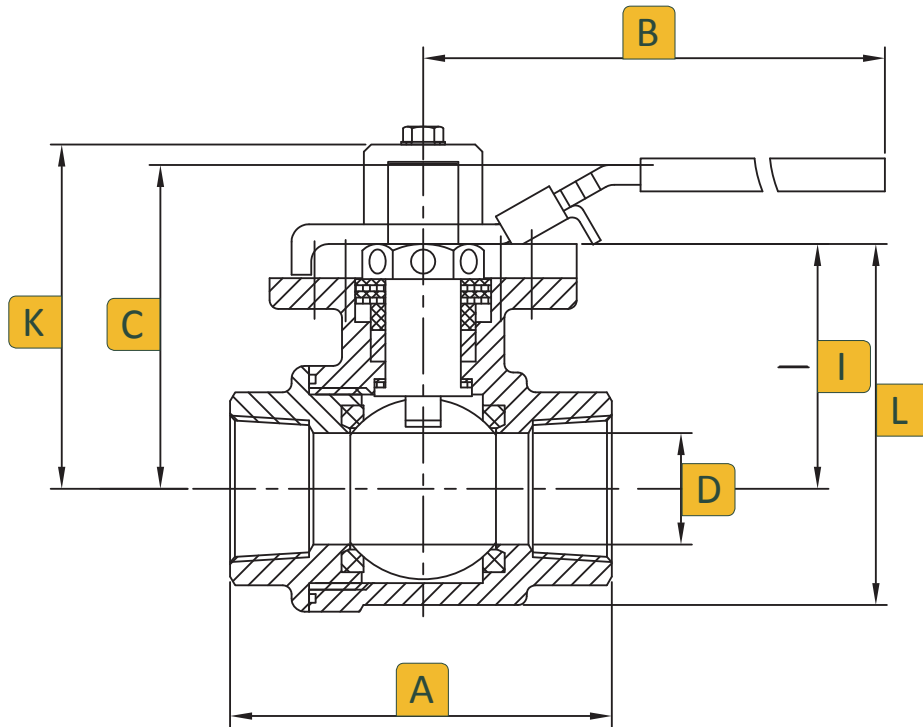
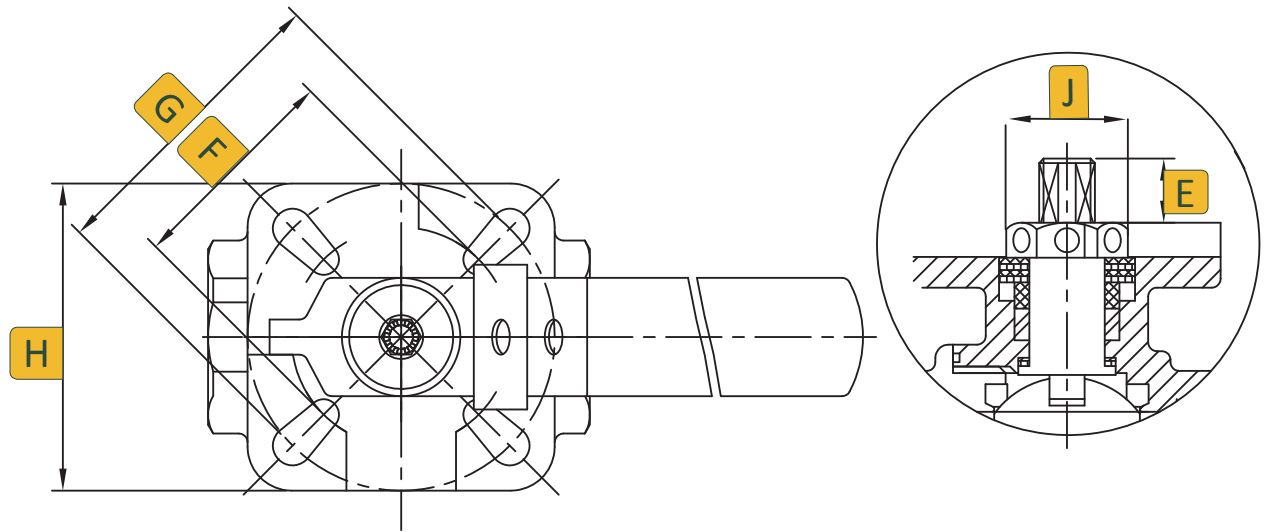


Valves, Automation & Controls

### Features

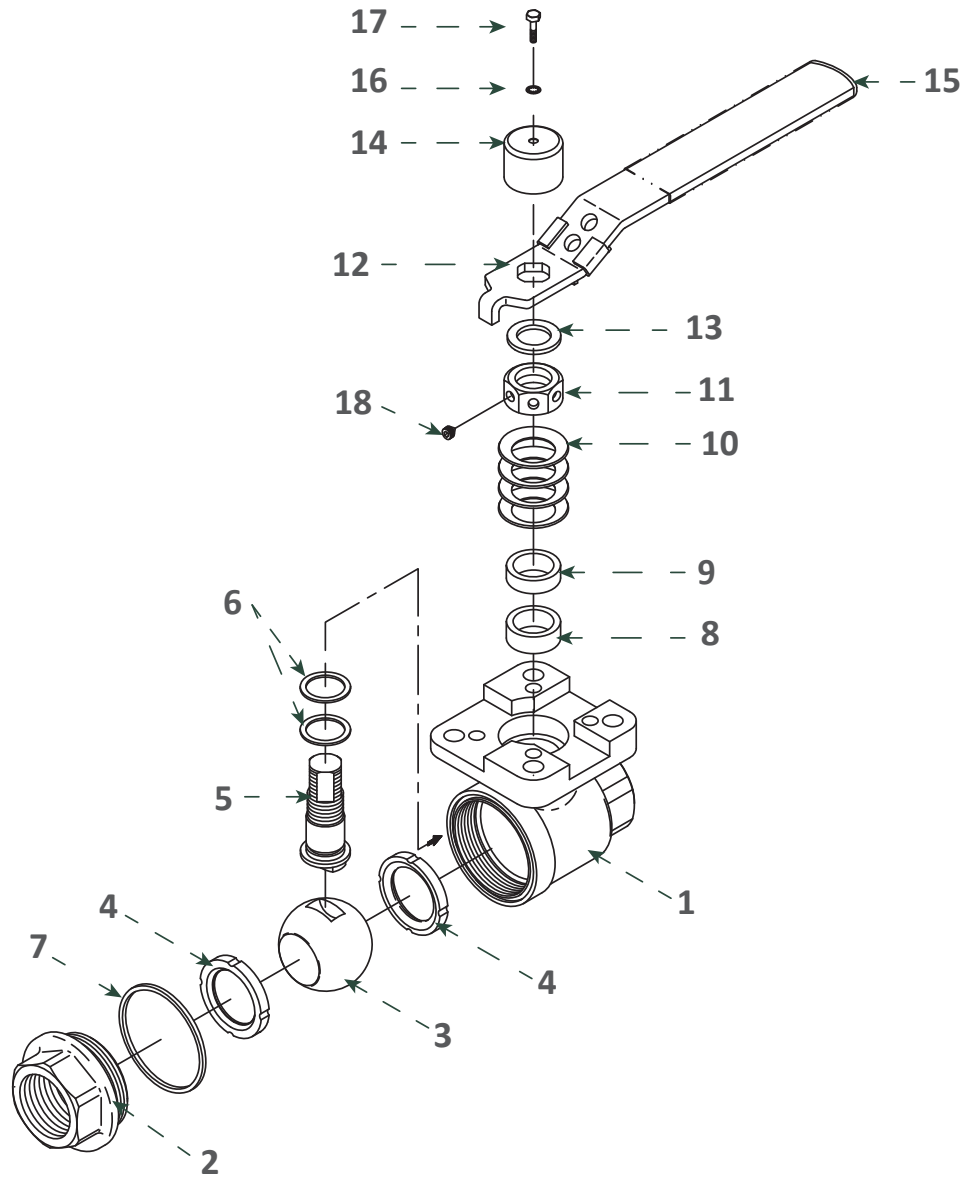
- 2000 psi
- 150 WSP with TFM Seat
- Full port
- ISO 5211 mounting pad
- High cycle stem design
- Patented system allows for stem packing nut adjustments without removing the actuator
- Compact design
- Actuator Options
  - 4X4<sup>®</sup> - Four Piston Actuator
  - SPN II - Two Piston Actuator
  - Electric Actuator





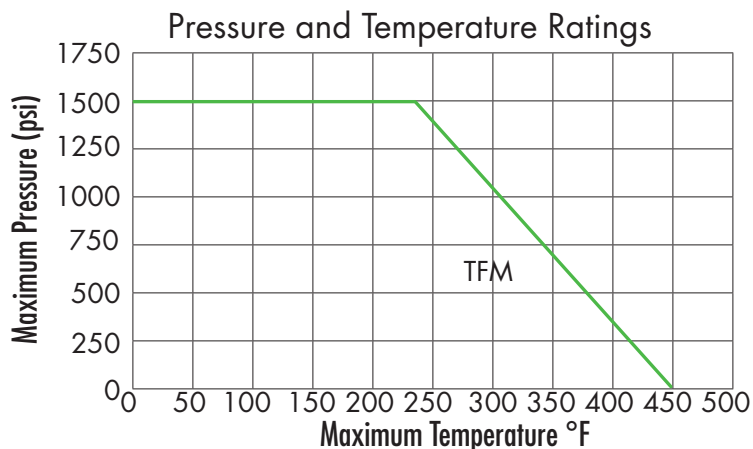
Dimensions (Inches)

Size	A	B	C	D	E	F	G	H	I	J	K	L
1/4	2.80	4.92	2.85	0.46	0.47	1.42	1.97	1.97	1.71	0.67	2.35	2.66
3/8	2.80	4.92	2.85	0.50	0.47	1.42	1.97	1.97	1.71	0.67	2.35	2.66
1/2	2.80	4.92	2.85	0.59	0.47	1.42	1.97	1.97	1.71	0.67	2.35	2.66
3/4	3.09	4.92	2.83	0.79	0.39	1.65	1.97	1.97	1.85	0.75	2.43	2.80
1	3.43	7.48	3.83	1.00	0.48	1.97	2.76	2.76	2.20	0.75	2.82	2.80
1-1/4	4.00	7.48	3.94	1.26	0.62	1.97	2.76	2.76	2.60	0.94	3.54	3.31
1-1/2	4.46	7.48	4.15	1.50	0.62	1.97	2.76	2.76	2.81	0.94	3.64	4.37
2	5.39	7.48	4.51	2.00	0.60	1.97	2.76	2.76	3.17	0.94	4.02	5.07



No.	Part Name	Qty	Material
1	Body	1	Carbon Steel ASTM A216 WCB or 316 Stainless Steel ASTM A351 CF8M
2	End	1	Carbon Steel ASTM A216 WCB or 316 Stainless Steel ASTM A351 CF8M
3	Ball	1	316 Stainless Steel
4	Seat	2	TFM
5	Stem	1	316 Stainless Steel
6	Thrust Washer	1	Peek / Nova
7	Body Seal	2	PTFE
8	Stem Packing	1	RTFE
9	Gland Packing	1	304 Stainless Steel
10	Belleville Washers	4	301 Stainless Steel
11	McNut	1	304 Stainless Steel
12	Handle	1	304 Stainless Steel
13	Handle Washer	1	304 Stainless Steel
14	Stem Cover	1	304 Stainless Steel
15	Handle Sleeve	1	PVC
16	Teeth Washer	1	304 Stainless Steel
17	Stem Bolt	1	304 Stainless Steel
18	Set Screw	1	304 Stainless Steel

Size	CV
1/4	38
3/8	38
1/2	38
3/4	71
1	110
1-1/4	230
1-1/2	350
2	600



## Ordering

Fig: 3/4 - 12 - 6 - 6 - M - X60 - SR2

Description: 3/4" - Series 12 - Stainless Steel - TFM Seat - 4X4® X60 Actuator - 2 Springs

Size	Series	Body	Ball & Stem	Seat	Pneumatic Actuator	Spring	Electric Actuator	Options
1/4	12	6 316 Stainless Steel	6 316 Stainless Steel	M TFM	4X4®	DA Double Acting (No Springs)	SEA 1	4X4®
3/8		4 Carbon Steel						P1 High Temp Viton Seals -15°F to 300°F
1/2								P2 Low Temp EPDM Actuator -40°F to 176°F
3/4								P3 Actuator Locking Device
1								P4 Reverse Rotation
1-1/4								SPN II
1-1/2								P1 High Temp Viton Seals -15°F to 300°F
2								P2 Low Temp EPDM Actuator -40°F to 176°F
								P3 Electroless Nickel Treatment
		P4 Epoxy Coating						
		P5 Actuator Locking Device						
		P6 Reverse Rotation						
		SEA						
		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						
		Solenoids						
		1 4/12 NEMA 4X 120 VAC						
		2 4/22 NEMA 4X 240 VAC						
		3 4/2A NEMA 4X 24 VAC						
		5 7/12 NEMA 7/9 120 VAC						
		6 7/22 NEMA 7/9 240 VAC						
		8 7/2A NEMA 7/9 24 VAC						