

Econo-Groove Series

- 3-Piece Body, Full Port Design
- 1 1/2" to 6" Sizes
- Grooved Ends
- Body: CF8M, 316SS
- RTFE Seats or TFM
- Pressure Rating:
1000 psi / WOG
- Temperature Range:
[-20° F - 400° F]



**6" Model
390**



**End Connections
Can be Combined to
Meet Special Request**

**Models: 190-SS-9-RTT-L 4" & Smaller
390-SS-9-RTT-L 6" Size**

Design Advantages

- ISO 5211 Mounting Pad
- 3-Piece Swing Out Design for easy maintenance
- Improved Seat Material - Extends cycle life and reduces torque
- Blowout Proof Stem
- Locking Device standard for valves with handles

Product - Markets

**HVAC, Plumbing, Fire Protection,
Mining, Waste Water, Oil Industry,
Power Plants, Military, Marine
Chemical Process Industries**



**Shown with Optional
Double Handle**

**4" Model
190**



**1 1/2" Model
190**

Grooved End Connections Used to Quickly Join Mechanical Pipes Together

Design and Technical Data

Econo-Groove Series

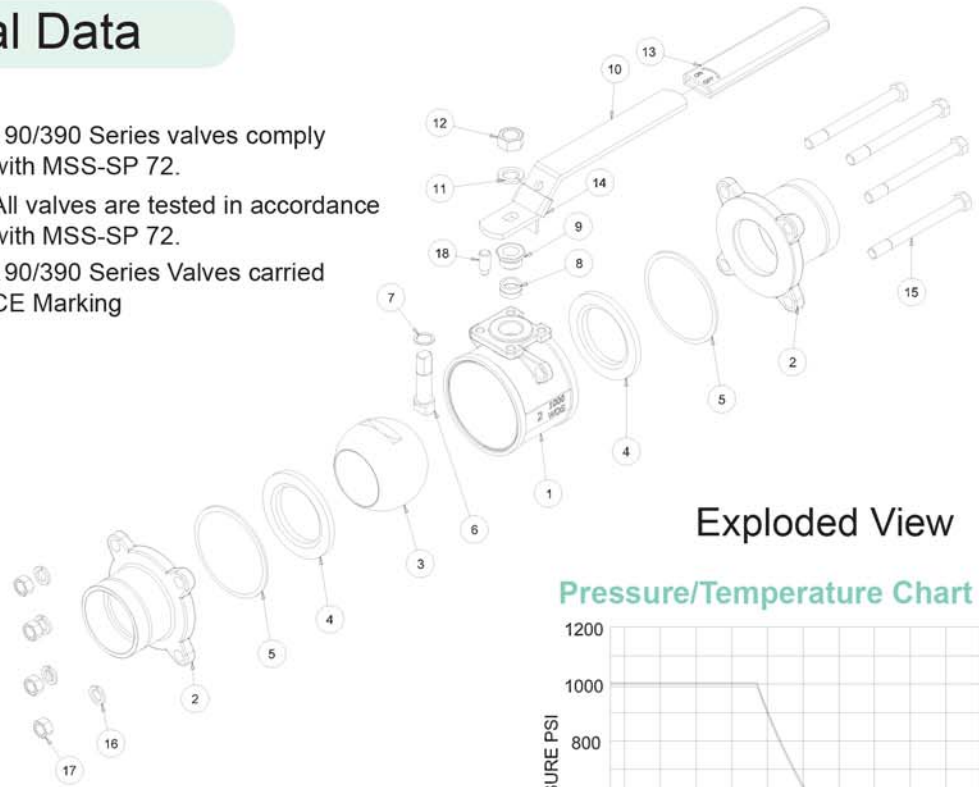
Materials of Construction

Item	Parts	Material
1	Body	ASTM A351 CF8M
2	Cap	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M
4	Ball Seat	RPTFE
5	Joint Gasket	PTFE
6	Stem	SS316
7	Thrust Washer	PTFE
8	Stem Packing	PTFE
9	Gland Nut	SS316
10	Handle	SS316
11	Stem Washer	SS316
12	Stem Nut	SS316
13	Plastic Cover	Plastic
14	Lock Washer	SS316
15	Bolt	SS316
16	Spring Washer	SS316
17	Hex Nut	SS316
18	Stop Pin	SS316

190/390 Series valves comply with MSS-SP 72.

All valves are tested in accordance with MSS-SP 72.

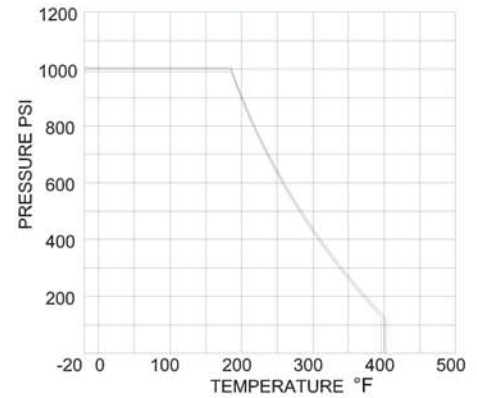
190/390 Series Valves carried CE Marking



Exploded View

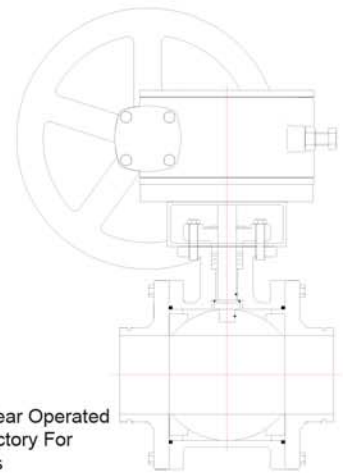
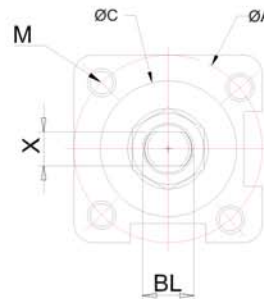
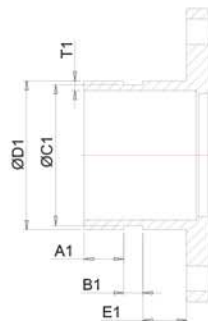
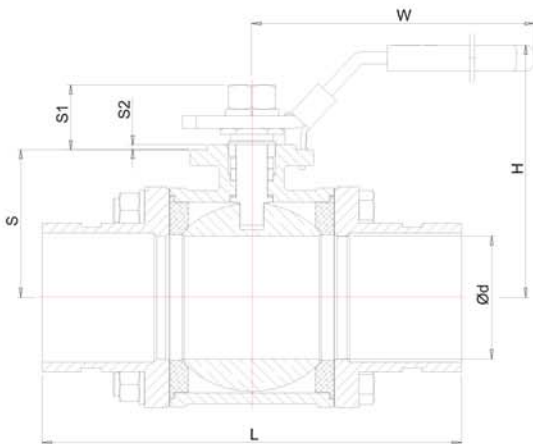
Vacuum service to 20 microns

Pressure/Temperature Chart



Models:

- 1 1/2" - 4" 190-SS-9-RTT-L
- 6" 390-SS-9-FFF-L



Optional Gear Operated Consult Factory For Dimensions

Dimensions and Weights

SIZE	A	A1	B1	C1	D1	E1	T1	BL	C	d	H	L	M	S	S1	S2	W	X	Cv	Torque in-lb	ISO Pattern	Weight Lbs
1 1/2"	1.97	0.625	0.313	1.775	1.9	0.709	0.145	1/2"	1.42	1.50	3.70	6.30	M6	2.05	0.98	0.08	6.50	0.354	210	185	F05	28.2
2"	1.97	0.625	0.313	2.25	2.375	0.709	0.154	1/2"	1.42	1.97	4.06	6.89	M6	2.44	0.91	0.08	6.50	0.354	370	300	F05	5.5
2 1/2"	2.76	0.625	0.313	2.72	2.875	0.709	0.188	3/4"	2.20	2.56	5.24	7.48	M8	3.03	1.62	0.08	8.46	0.472	660	440	F07	8.2
3"	4.02	0.625	0.313	3.344	3.5	0.866	0.188	3/4"	2.80	3.15	5.67	8.66	M10	3.54	1.56	0.00	8.46	0.472	928	770	F10	16.3
4"	4.02	0.625	0.375	4.334	4.5	1.18	0.203	1"	-	3.94	6.97	10.6	M10	4.33	1.85	-	12.8	0.630	1710	1400	F10	28.2
6"	4.92	0.625	0.375	6.455	6.625	1.18	0.219	1.34	-	5.91	-	13.54	1/2-13unc	-	-	-	-	0.906	2100	4600	F12	50.7

