

Features

- High pressure (2000 CWP)
- Fire Safe approved (API 607 6th Edition)
- Full port design for unrestricted flow
- Stainless hand lever with latch locking device
- Actuator ready ISO 5211 direct mounting pad
- 316SS 3-piece investment cast body
- Swing-out center section
- Blow-out proof stem & Anti-static Design
- RTFE (reinforced Teflon) ball seats
- Braided graphite/Viton live loaded and adjustment stem seals
- Silicone free
- Valves tested accordance with API 598

Applications

Stainless steel high pressure ball valves with braided graphite/viton seals are typically used for on-off control of water, air, oil, vacuum and other media compatible with the materials of construction. Unique 3-piece investment cast bolted body design offers the advantage of a swing-out body for easy inline maintenance. Valves can be direct mounted to air or electric actuators using the standard ISO5211 mounting pad, eliminating the need for extra mounting brackets and couplings.

Not suitable for potable water, oxygen or high purity fluid applications.

Operation

Turning the hand lever one quarter-turn (90°) rotates the ball from closed to the open position. A latch locking device allows for pad locking the valve in either the open or closed position for safety lockout applications. The valve is actuator ready with standard ISO 5211 mounting pad and square output shaft.

Construction

Valve Body	316SS ASTM A351, CF8M
Ball	316SS CF8M
Stem	316SS
Ball Seats	RTFE (reinforced Teflon)
Stem Seals	Braided Graphite
Hand Lever	304SS with vinyl cover
Belleville Washers/Adjust. Nut	SUS301
Bolts, Washers and Nuts	304SS



Description

Investment cast 3-piece full port stainless steel body/ball for unrestricted flow and minimum pressure loss. Adjustable live loaded stem seal packing helps compensate for wear, pressure or temperature fluctuations, extending the cycle life of the valve. Blow-out proof stem. Valve body held together with bolts for easy maintenance.

Standards

- Fire Safe: API 607 6th Edition
- Testing: API 598
- Threaded Connection: ASME B1.20.1 (NPT)/ ISO 228-1/ BS21
- Pressure/ Temperature Rating: ASME B16.34
- Marking: MSS SP-25
- CE-PED 2014/68/UE

Construction Features



Pressure-Temperature Rating

Pressure Rating*: 2000 PSI (138 Bar) CWP non-shock

Temperature Rating: -4 to 392° F (-20 to 200°C)

Options

- Air Actuators
- Electric Actuators
- Manual Limit Switch

Specifications (English units)

Stock Number	Pipe Size (NPT)	Orifice Diameter (inch)	Cv	Pressure* (PSI)	Torque (inch lbs)	ISO5211 Mount	Weight (lbs)
551602A	1/4	0.45	14.2	2000	62.0	F04/F05	2.6
551603A	3/8	0.49	16.7	2000	62.0	F04/F05	2.6
551604A	1/2	0.59	24.1	2000	97.4	F04/F05	2.9
551606A	3/4	0.79	44.6	2000	150.5	F04/F05	3.5
551608A	1	1.00	72.7	2000	221.3	F04/F05	4.9
551610A	1-1/4	1.25	122.0	2000	283.2	F05/F07	7.3
551612A	1-1/2	1.50	176.3	2000	442.5	F05/F07	10.4
551616A	2	2.00	313.1	2000	575.3	F05/F07	16.1

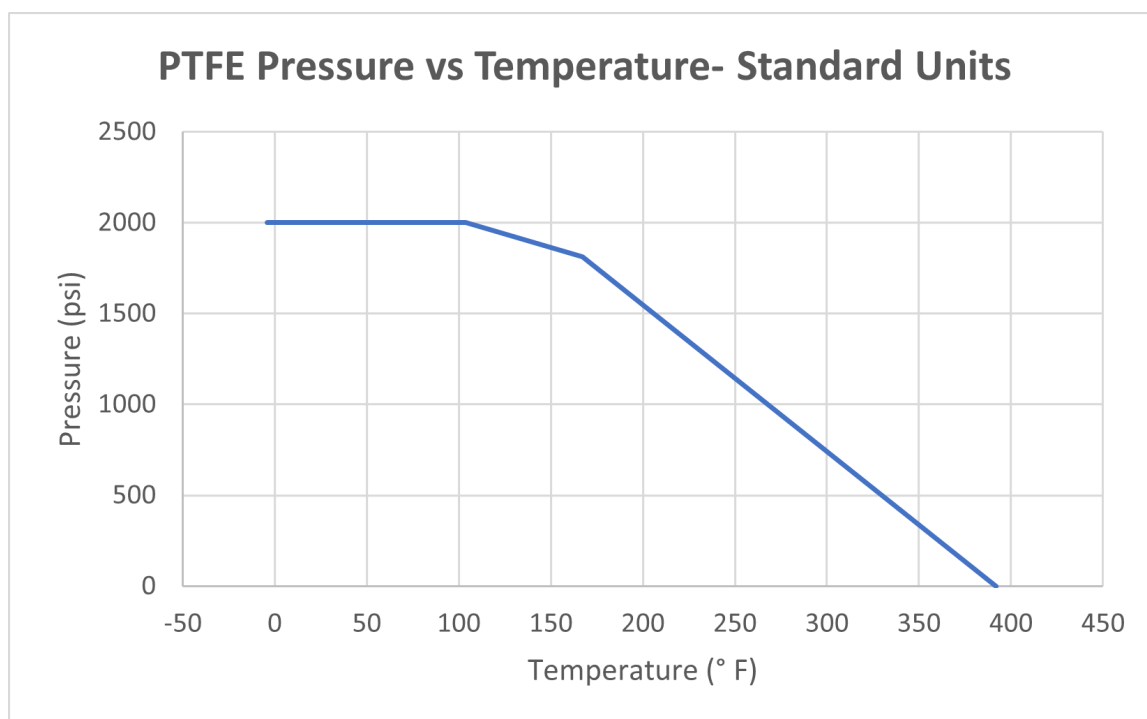
Cv= The GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

* Pressure @ 0-100° F (reduced pressure at higher temperatures—see P/T chart)

• Torque at 0 PSI and 75°F

Pressure/Temp. Chart - 2000 PSI (138 Bar)

P/T Chart (PSI/°F)				
°F	-4	104	167	392
PSI	2000	2000	1812	0



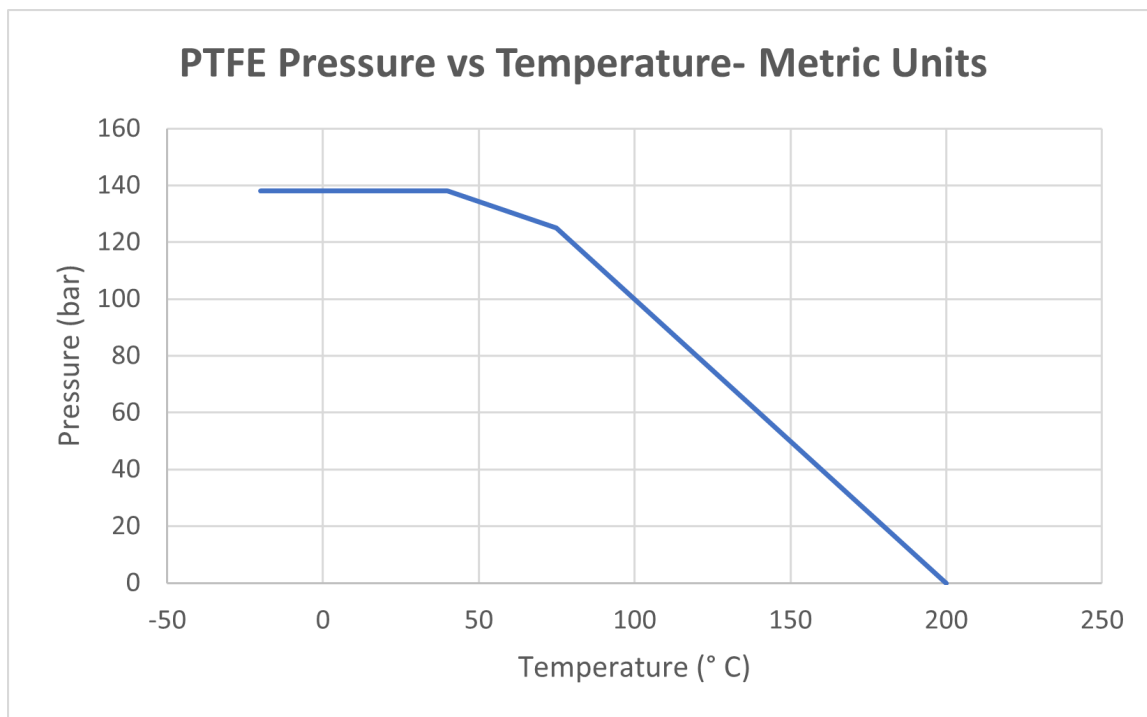
Specifications (Metric units)

Stock Number	Pipe Size (NPT)	Orifice Diameter (mm)	Kv	Pressure* (Bar)	Torque (Nm)	ISO5211 Mount	Weight (Kg)
551602A	1/4	11.5	12.3	138	7.0	F04/F05	1.2
551603A	3/8	12.5	14.4	138	7.0	F04/F05	1.2
551604A	1/2	15.0	20.8	138	11.0	F04/F05	1.3
551606A	3/4	20.0	38.6	138	17.0	F04/F05	1.6
551608A	1	25.0	62.9	138	25.0	F04/F05	2.2
551610A	1-1/4	32.0	105.5	138	32.0	F05/F07	3.3
551612A	1-1/2	38.0	152.5	138	50.0	F05/F07	4.7
551616A	2	50.0	270.8	138	65.0	F05/F07	7.3

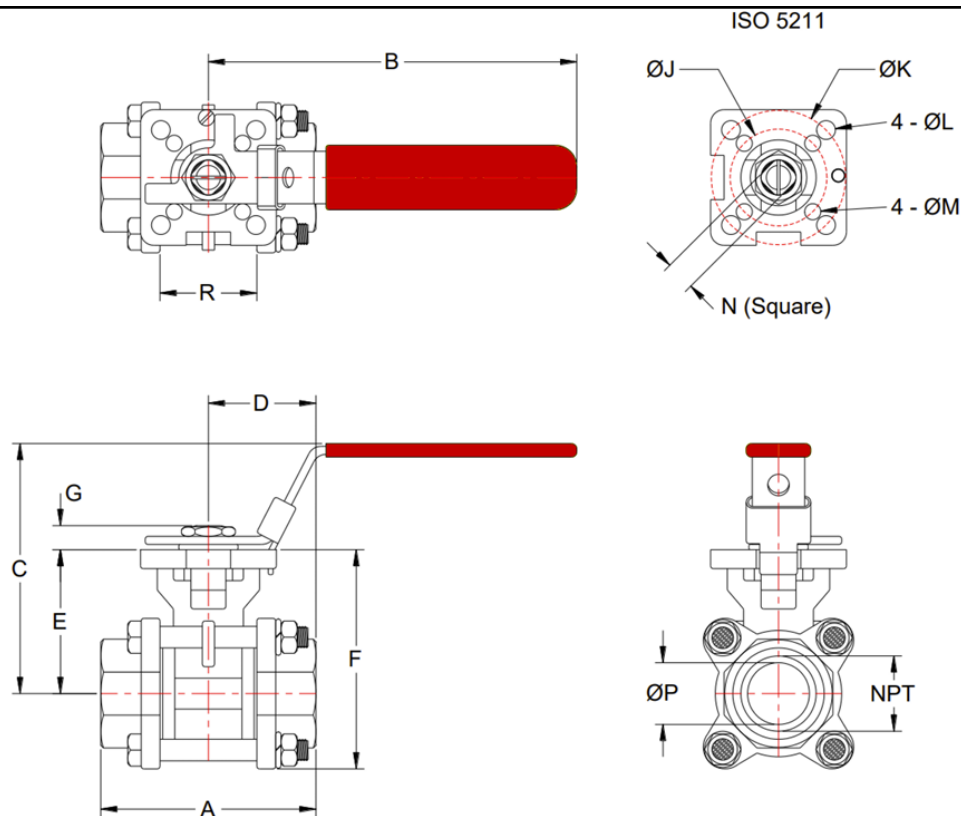
* Pressure range @ -18 to 38° C (reduced pressure for higher temperatures—see P/T chart)

Pressure/Temp. Chart - 2000 PSI (138 Bar)

P/T Chart (BAR/°C)				
°C	-20	40	75	200
Bar	138	138	125	0



Dimensions: (inches)



Pipe		A	B	C	D	E	F	G	J	K	L	M	N	P	R	ISO	Weight
1/4	inch	2.6	4.5	3.1	1.3	1.5	2.8	0.3	1.7	2.0	0.3	0.2	0.4	0.5	0.9	F04/F05	2.6 lb
	mm	65.0	115.0	78.0	32.5	37.5	72.3	8.3	42.0	50.0	7.0	6.0	9.0	11.5	22.2		1.2 kg
3/8	inch	2.6	4.5	3.1	1.3	1.5	2.8	0.3	1.7	2.0	0.3	0.2	0.4	0.5	0.9	F04/F05	2.6 lb
	mm	65.0	115.0	78.0	32.5	37.5	72.3	702	42.0	50.0	7.0	6.0	9.0	12.5	22.2		1.2 kg
1/2	inch	3.0	4.5	3.1	1.5	1.5	2.8	0.3	1.7	2.0	0.3	0.2	0.4	0.6	0.9	F04/F05	2.9 lb
	mm	75.0	115.0	78.0	37.5	37.5	72.3	8.3	42.0	50.0	7.0	6.0	9.0	15.0	22.2		1.3 kg
3/4	inch	3.1	7.4	3.5	1.6	2.0	3.2	0.4	1.7	2.0	0.3	0.2	0.4	0.8	1.3	F04/F05	3.5 lb
	mm	80.0	188.0	89.5	40.0	50.0	80.7	10.6	42.0	50.0	7.0	6.0	11.0	20.0	31.8		1.6 kg
1	inch	3.5	7.4	3.9	1.8	2.4	3.7	0.4	1.7	2.0	0.3	0.2	0.4	1.0	1.5	F04/F05	4.9 lb
	mm	90.0	188.0	99.5	45.0	60.0	94.0	10.6	42.0	50.0	7.0	6.0	11.0	25.0	37.0		101 kg
1-1/4	inch	4.3	7.9	4.7	2.2	3.0	4.5	0.5	2.0	2.8	0.4	0.3	0.6	1.3	1.7	F05/F07	7.3 lb
	mm	110.0	201.0	120.5	55.0	75.3	114.0	13.7	50.0	70.0	9.0	7.0	14.0	32.0	42.5		3.3 kg
1-1/2	inch	4.7	7.9	4.9	2.4	3.1	5.0	0.5	2.0	2.8	0.4	0.3	0.6	1.5	2.0	F05/F07	10.4 lb
	mm	120.0	201.0	124.5	60.0	79.3	126.6	13.7	50.0	70.0	9.0	7.0	14.0	38.0	50.2		4.7 kg
2	inch	5.5	7.9	5.6	2.8	3.8	6.1	0.5	2.0	2.8	0.4	0.3	0.6	2.0	2.6	F05/F07	16.1 lb
	mm	140.0	201.0	141.0	70.0	96.0	156.0	13.7	50.0	70.0	9.0	7.0	14.0	50.0	65.2		7.3 kg