

Features

- FULL PORT 3-way L or T flow pattern
- Stainless hand lever with latch locking device
- Actuator ready ISO5211 direct mounting pad
- 316SS CF8M investment cast body
- 316SS ball and stem
- RTFE (reinforced Teflon) ball seats
- Triple PTFE/Viton live loaded stem seals, adjustable
- Silicone Free
- Valves tested in accordance with API 598
- Anti-static device

Applications

Stainless steel 3-way ball valves with PTFE/Viton seals are typically used to control water, air, oil, vacuum and other media compatible with the materials of construction. Often used as a diverter, selector or mixing valve with a variety of flow path options through the valve. Unique four ball seat design allows for full pressure at any port. Air or electric actuators can be direct mounted using standard ISO5211 mounting pad, eliminating the need for extra mounting brackets and couplings. Suitable for vacuum service to 29inHg.

Operation

Turning the hand lever one quarter-turn (90°) rotates the ball from position one to position two. Latch locking device allows for pad locking the valve in either position. Valves can be set-up in any one of four different flow patterns (T1-T4) in the field by simply moving the handle and stop pin. Remove the hand lever and the valve is actuator ready with standard ISO5211 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	PTFE, Viton
Hand Lever	304SS with vinyl cover
Belleville Washers/Adjust. Nut	304SS



Description

Full port investment cast stainless steel body and ball for maximum flow and minimum pressure drop. 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.

Standards

- Design: API 608
- 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 Conformance– PED 2014/68/UE

Options

- Air Actuators
- Electric Actuators

Construction Features



Pressure-Temperature

Pressure Rating*: 1000 PSI (69 Bar) CWP non-shock, Vacuum 29inHg

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

*See P/T Chart

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diameter (inch)	Cv**	Pressure* (PSI)	Torque (inch lbs)	ISO5211 Mount	Weight (lbs)
3-WAY SS VALVE L-PORT							
552802C	1/4	0.4	5.0	1000	52.2	F03/F05	1.7
552803C	3/8	0.4	7.3	1000	52.2	F03/F05	1.6
552804C	1/2	0.6	8.9	1000	52.2	F03/F05	2.1
552806C	3/4	0.8	18.9	1000	66.4	F05	3.3
552808C	1	1.0	32.0	1000	143.4	F05	5.0
552810C	1-1/4	1.3	41.2	1000	181.4	F05/F07	7.3
552812C	1-1/2	1.5	52.1	1000	309.8	F05/F07	12.1
552816C	2	2.0	79.3	1000	336.3	F05/F07	18.2
3-WAY SS VALVE T-PORT							
552902C	1/4	0.4	5.0	1000	52.2	F03/F05	1.7
552903C	3/8	0.4	7.3	1000	52.2	F03/F05	1.6
552904C	1/2	0.6	8.9	1000	52.2	F03/F05	2.1
552906C	3/4	0.8	18.9	1000	66.4	F05	3.3
552908C	1	1.0	32.0	1000	143.4	F05	5.0
552910C	1-1/4	1.3	41.2	1000	181.4	F05/F07	7.3
552912C	1-1/2	1.5	52.1	1000	309.8	F05/F07	12.1
552916C	2	2.0	79.3	1000	336.3	F05/F07	18.2

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

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

** Cv values for branch path for T-port

• Torque at 0 PSI and 75°F

Flow Path Options

Handle Position

1 2

L-port

Handle Position

1 2

T-port

T1 T2

T3 T4

Handle shown in position 1. For T-port valves, this handle position is for T2 flow path; move stop pin and handle to set-up for flow paths T1, T3 or T4.

Specifications (Metric units)

Stock Number	Pipe Size (NPT)	Orifice Diameter (mm)	Kv**	Pressure* (Bar)	Torque (Nm)	ISO5211 Mount	Weight (Kg)
3-WAY SS VALVE L-PORT							
552802C	1/4	11.0	4.3	69	5.9	F03/F05	0.8
552803C	3/8	11.0	6.3	69	5.9	F03/F05	0.7
552804C	1/2	16.0	7.7	69	5.9	F03/F05	0.9
552806C	3/4	20.0	16.3	69	7.5	F05	1.5
552808C	1	25.0	27.7	69	16.2	F05	2.3
552810C	1-1/4	32.0	35.6	69	20.5	F05/F07	3.3
552812C	1-1/2	38.0	45.1	69	35.0	F05/F07	5.5
552816C	2	50.0	68.6	69	38.0	F05/F07	8.3
3-WAY SS VALVE T-PORT							
552902C	1/4	11.0	4.3	69	5.9	F03/F05	0.8
552903C	3/8	11.0	6.3	69	5.9	F03/F05	0.7
552904C	1/2	16.0	7.7	69	5.9	F03/F05	0.9
552906C	3/4	20.0	16.3	69	7.5	F05	1.5
552908C	1	25.0	27.7	69	16.2	F05	2.3
552910C	1-1/4	32.0	35.6	69	20.5	F05/F07	3.3
552912C	1-1/2	38.0	45.1	69	35.0	F05/F07	5.5
552916C	2	50.0	68.6	69	38.0	F05/F07	8.3

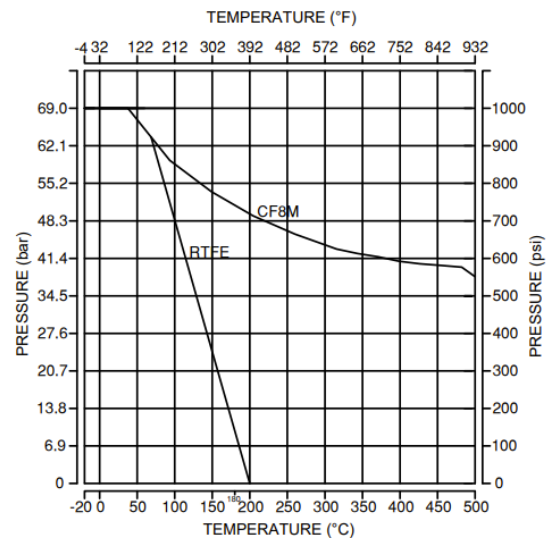
* Pressure range @ -18 to 38° C (reduced pressure for higher temperatures—see P/T chart)

** Kv values for branch path for T-port

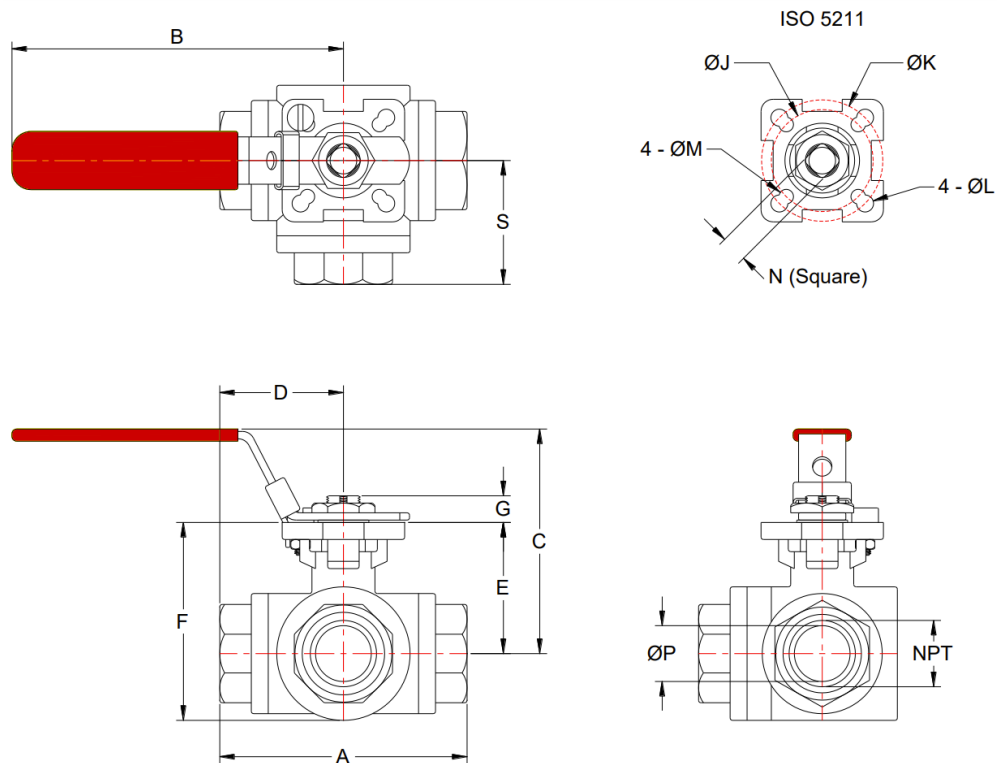
• Torque at 0 Bar and 24°C

Pressure/Temperature Chart

P/T Chart (PSI/°F)					
PSI	1000	1000	900	700	0
°F	-4	104	167	212	392
P/T Chart (BAR/°C)					
BAR	69	69	62	48	0
°C	-20	40	75	100	200



Dimensions:



Pipe Size (NPT)		A	B	C	D	E	F	G	J	K	L	M	N	P	S	ISO	Weight
1/4	inch	2.9	5.2	3.2	1.5	1.5	2.3	0.3	1.4	2.0	0.2	0.2	0.3	0.4	1.5	F03/F05	1.7 lbs
	mm	76.0	132.0	82.0	38.0	38.2	58.0	9.0	36.0	50.0	6.0	6.0	9.0	11.0	38.5		0.8 kg
3/8	inch	2.9	5.2	3.2	1.5	1.5	2.3	0.3	1.4	2.0	0.2	0.2	0.3	0.4	1.5	F03/F05	1.6 lbs
	mm	76.0	132.0	82.0	38.0	38.2	58.0	9.0	36.0	50.0	6.0	6.0	9.0	11.0	38.5		0.7 kg
1/2	inch	3.3	5.2	3.2	1.7	1.8	2.7	0.3	1.4	2.0	0.2	0.2	0.3	0.6	1.8	F03/F05	2.1 lbs
	mm	85.0	132.0	82.0	42.5	45.2	68.8	9.0	36.0	50.0	6.0	6.0	9.0	16.0	45.0		0.9 kg
3/4	inch	3.9	6.5	3.5	1.9	2.2	3.3	0.4	1.7	2.0	0.2	0.3	0.4	0.8	2.0	F05	3.3 lbs
	mm	98.0	166.0	88.0	49.0	56.5	85.0	11.0	42.0	50.0	6.0	7.0	11.0	20.0	51.5		1.5 kg
1	inch	4.4	6.5	4.1	2.2	2.4	3.8	0.4	1.7	2.0	0.2	0.3	0.4	1.0	2.3	F05	5.0 lbs
	mm	112.5	166.0	104.0	56.3	61.9	96.0	11.0	42.0	50.0	6.0	7.0	11.0	25.0	58.0		2.3 kg
1-1/4	inch	4.9	7.8	4.9	2.5	3.1	4.6	0.5	2.0	2.8	0.3	0.4	0.5	1.3	2.5	F05/F07	7.3 lbs
	mm	125.0	198.0	125.5	62.5	78.3	118.0	14.0	50.0	70.0	7.0	9.0	14.0	32.0	63.0		3.3 kg
1-1/2	inch	5.6	7.8	5.3	2.8	3.4	5.4	0.5	2.0	2.8	0.3	0.4	0.5	1.5	2.9	F05/F07	12.1 lbs
	mm	141.0	198.0	135.0	70.5	87.4	137.0	14.0	50.0	70.0	7.0	9.0	14.0	38.0	74.5		5.5 kg
2	inch	6.7	9.9	6.1	3.4	4.2	6.3	0.6	2.8	4.0	0.4	0.4	0.6	2.0	3.4	F05/07	18.2 lbs
	mm	171.0	252.0	155.0	85.5	105.8	161.0	17.0	70.0	102.0	9.0	11.0	17.0	50.0	85.5		8.3 kg