

Features

- Full port design for unrestricted flow
- Stainless hand lever with latch locking device
- Actuator ready ISO5211 direct mounting pad
- 316SS 2-piece investment cast body
- General chemical and industrial applications
- RTFE (reinforced Teflon) ball seats
- Triple RTFE/Viton live loaded stem seals, adjustable
- Silicone free
- Anti-static device
- Valves tested per API 598

Applications

Stainless steel ball valves with RTFE/Viton seals are typically used for on-off control of water, air, oil, vacuum and other media compatible with the materials of construction. The valve utilizes special high cycle life seals with the lowest operating torques. 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. Suitable for vacuum service up to 29inHg.

Pressure-Temperature Range

Pressure Rating*: 275 PSI (19 Bar) CWP non-shock

Vacuum 29inHg, Saturated Steam 125 PSI

Temperature Rating: -4 to 356° F (-20 to 180°C)

*See P/T chart

Construction

Valve Body	316SS ASTM A351, CF8M
Ball	316SS CF8M
Stem	316SS
Ball Seats	RTFE (reinforced Teflon)
Stem Seals	RTFE, Viton
Anti-static Device	Ball to Stem (1/2" - 4") + Stem to Body (3/4" - 4")
Hand Lever	304SS with vinyl cover
Belleville Washers/Adjust. Nut	304SS
Body Studs/Nuts	ASTM A193 Gr. B8/ ASTM A194 Gr. 8



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 ISO5211 mounting pad and square output shaft.

Description

Investment cast 2-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.

Standard Compliance:

End Connection: ANSI Class 150 Flange RF
Face to Face: ANSI B16.10 Class 150
Flange Dimensions: ANSI B16.5 Class 150
Pressure Testing: API 598, EN12266
Direct Mounting Pad: ISO5211, square stem

Options

- Air Actuators
- Electric Actuators

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diameter (inch)	Cv	Pressure* (PSI)	Torque (inch lbs)	ISO5211 Mount	Weight (lbs)
553004	1/2	0.59	15	275	43	F03/F05	3.9
553006	3/4	0.79	35	275	78	F03/F05	4.9
553008	1	1.00	60	275	116	F03/F05	6.6
553012	1-1/2	1.50	125	275	213	F05/F07	12
553016	2	2.00	240	275	226	F05/F07	21
553024	3	3.15	580	275	679	F07/F10	39
553032	4	4.00	1020	275	1065	F07/F10	62

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 72°F

Specifications (Metric units)

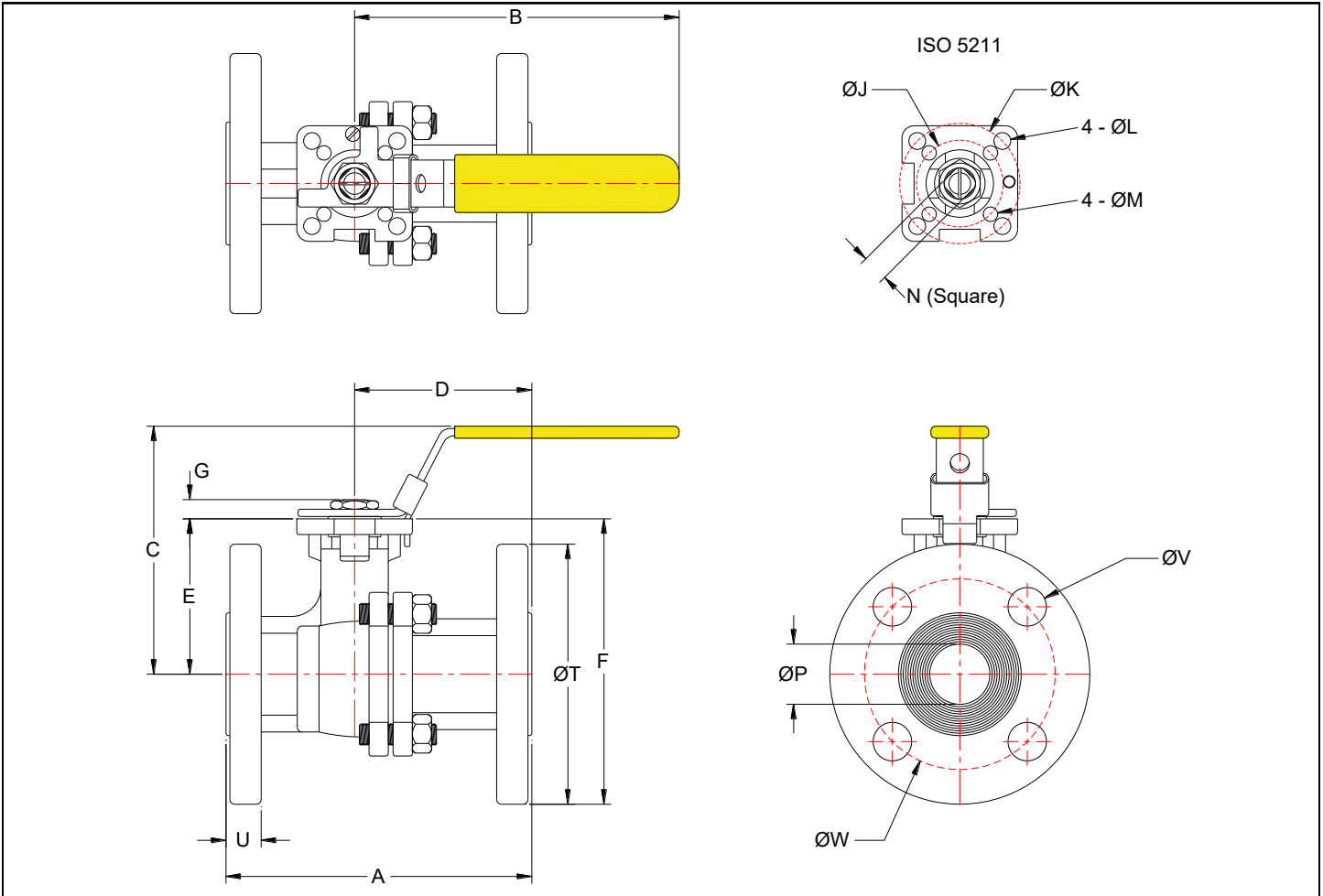
Stock Number	Pipe Size (inch)	Orifice Diameter (mm)	Kv	Pressure* (Bar)	Torque (Nm)	ISO5211 Mount	Weight (Kg)
553004	1/2	15	13	19	4.9	F03/F05	1.77
553006	3/4	20	30	19	8.8	F03/F05	2.22
553008	1	25	52	19	13.1	F03/F05	3.00
553012	1-1/2	38	108	19	24	F05/F07	5.44
553016	2	50	207	19	25.6	F05/F07	8.40
553024	3	80	501	19	76.7	F07/F10	17.46
553032	4	98	882	19	120	F07/F10	27.46

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

Pressure/Temperature Charts

P/T Chart (PSI/°F)								
PSI	275	275	275	260	240	225	215	100
°F	0	50	100	150	200	250	300	340
P/T Chart (BAR/°C)								
Bar	19	19	19	18	16.5	15.5	14.8	7
°C	-18	10	38	66	93	121	149	166

Dimensions:



Pipe Size		A	B	C	D	E	F	G	J	K	L	M	N	P	T	U	V	W	ISO	Weight
1/2	inch	4.25	4.35	3.41	2.46	1.89	3.64	0.33	1.42	1.97	0.28	0.24	0.35	0.59	3.50	0.44	4) 0.63	2.38	F03/F05	3.9 lb
	mm	108	110.5	86.5	62.5	48	92.5	8.5	36.0	50	7	6	9	15	89	11.2	4) 16	60.5		1.76 kg
3/4	inch	4.61	4.39	3.79	2.60	2.09	4.05	0.33	1.42	1.97	0.28	0.24	0.35	0.79	3.88	0.50	4) 0.63	2.76	F03/F05	4.9 lb
	mm	117	111.6	96.2	66	53.5	102.8	8.5	36.0	50	7	6	9	20	98.6	12.7	4) 16	70		2.24 kg
1	inch	5.00	5.35	3.98	2.92	2.52	4.65	0.37	1.42	1.97	0.28	0.24	0.35	0.98	4.25	0.56	4) 0.63	3.12	F03/F05	6.60 lb
	mm	127	136	101	74.1	64	118	9.5	36.0	50	7	6	9	25	108	14.3	4) 16	79.2		3.00 kg
1-1/2	inch	6.50	7.80	4.72	3.67	2.99	5.49	0.55	1.97	2.76	0.35	0.28	0.55	1.50	5.00	0.69	4) 0.63	3.88	F05/F07	12.65 lb
	mm	165	198	120	93.2	76	140	14	50.0	70	9	7	14	38	127	17.5	4) 16	98.6		5.74 kg
2	inch	7.01	7.80	5.00	3.92	3.33	6.33	0.54	1.97	2.76	0.35	0.28	0.55	1.97	6.00	0.75	4) 0.75	4.75	F05/F07	18.50 lb
	mm	178	198	127	99.6	84.5	161	13.7	50.0	70	9	7	14	50	153	19.1	4) 19	120.7		8.40 kg
3	inch	7.99	10.4	6.65	4.21	4.57	8.32	0.71	2.76	4.02	0.47	0.39	0.67	2.99	7.50	0.94	4) 0.75	6.00	F07/F10	38.50 lb
	mm	203	265	169	107	116	211	18	70.0	102	12	10	17	76	191	23.9	4) 19	152.4		17.46 kg
4	inch	9.02	12.8	8.70	4.37	6.08	10.58	0.71	2.76	4.02	0.47	0.39	0.67	3.94	9.00	0.94	8) 0.75	7.50	F07/F10	60.50 lb
	mm	229	325	221	111	155	269	18	70.0	102	12	10	17	100	229	23.9	8) 19	190.5		27.46 kg