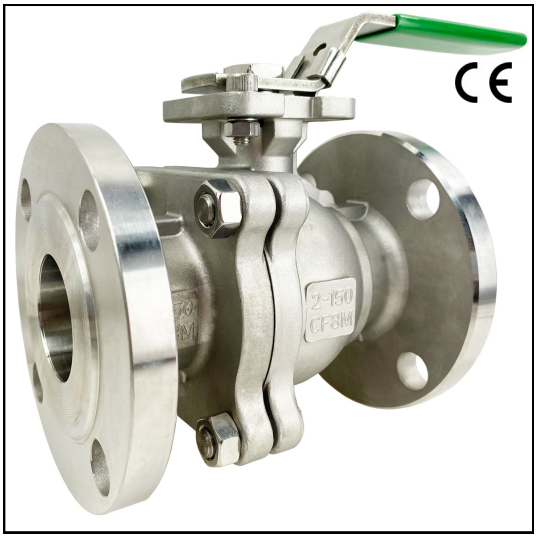
Stainless Steel Ball Valves

ANSI 150# Flanged, Full Port
1" to 4" Pipe

SERIES
5530

Features

- Fire safe approved (API 607)
- Fugitive Emission approved (API 641)
- Pipeline use approved (API 608)
- Fugitive Emission Stem Seal approved (API 622)
- 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
- RTFE (reinforced Teflon) ball seats
- Braided graphite stem seals
- Valves tested per API 598



Applications

Stainless steel ball valves with braided graphite seals are typically used for on-off control of water, air, oil, vacuum and other media compatible with the materials of construction. Also for use in pipeline, firesafe and low-emission applications. 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. Steam service up to 75 PSI.Suitable for vacuum service up to 29inHg.

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

Operation

Turning the hand lever one quarter-turn (90º) 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.

Construction

Valve Body	316SS ASTM A351, CF8M
Ball	316SS CF8M
Stem	316SS
Ball Seats	RTFE (reinforced Teflon)
Stem Seals	Braided Graphite (Slade 3300i), Viton
Hand Lever	304SS with vinyl cover
Belleville Washers/Adjust. Nut	304SS
Body Studs/Nuts	ASTM A193 Gr. B8/ ASTM A194 Gr. 8

Description

Dual-certified 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:

Fire Safe: API 607(VI)/ISO10497(III)

Fugitive Emission: API 641 (I)

Pipeline Use: API 608

Stem Packing: API 622

Construction: ASME B16:34

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

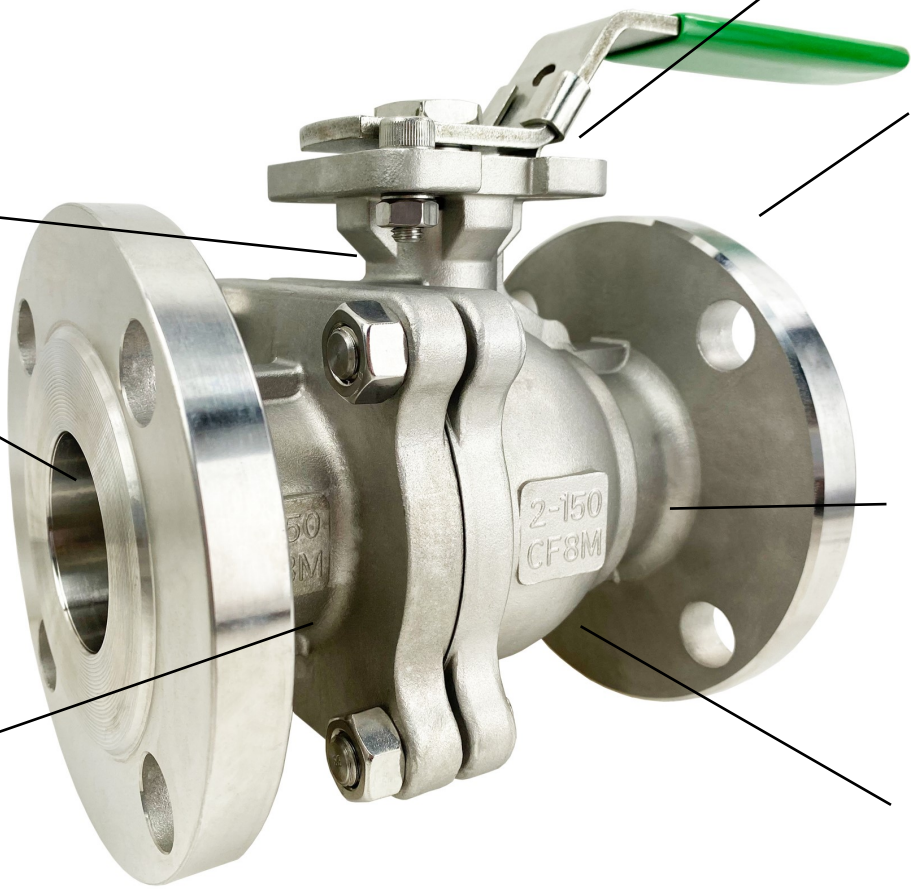
Marking: MSS-SP 25

CE Mark: PED 2014/68/UE

Options

- Air Actuators
- Electric Actuators

Features

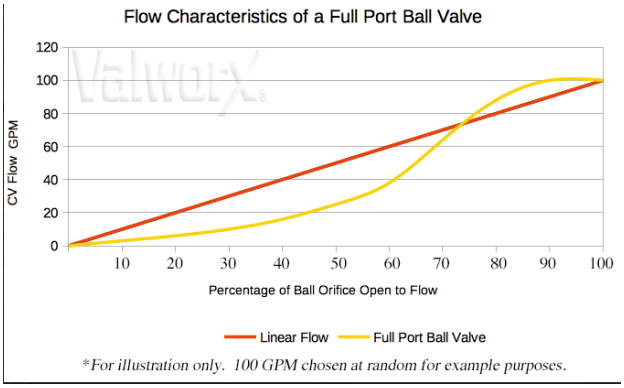


Pressure-Temperature Range

Pressure Rating*: 275 PSI (19 Bar) CWP non-shock
Saturated Steam 75 PSI, 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)
553008A	1	1.00	60	275	99.1	F04/F05	6.2
553012A	1-1/2	1.50	125	275	203.6	F05/F07	13.3
553016A	2	2.00	240	275	269.1	F05/F07	19.4
553024A	3	3.15	580	275	584.2	F07/F10	40.6
553032A	4	4.00	1020	275	1062.1	F07/F10	66.1

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 72°F

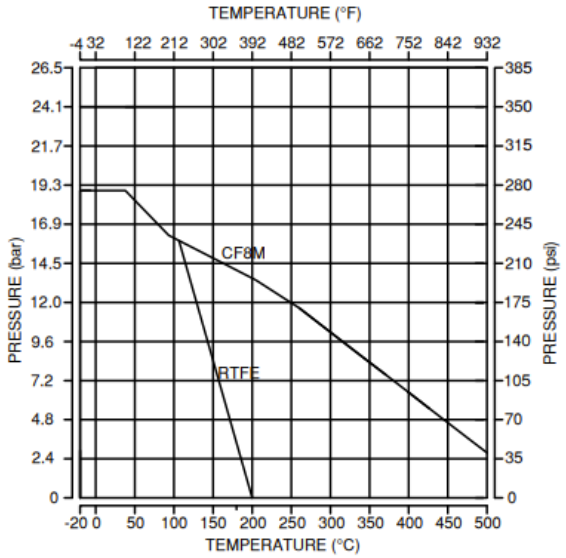
Specifications (Metric units)

Stock Number	Pipe Size (inch)	Orifice Diameter (mm)	Kv	Pressure* (Bar)	Torque (Nm)	ISO5211 Mount	Weight (Kg)
553008A	1	25	52	19	11.2	F04/F05	2.8
553012A	1-1/2	38	108	19	23.0	F05/F07	6.0
553016A	2	50	207	19	30.4	F05/F07	8.8
553024A	3	80	501	19	66.0	F07/F10	18.4
553032A	4	98	882	19	120.0	F07/F10	30.0

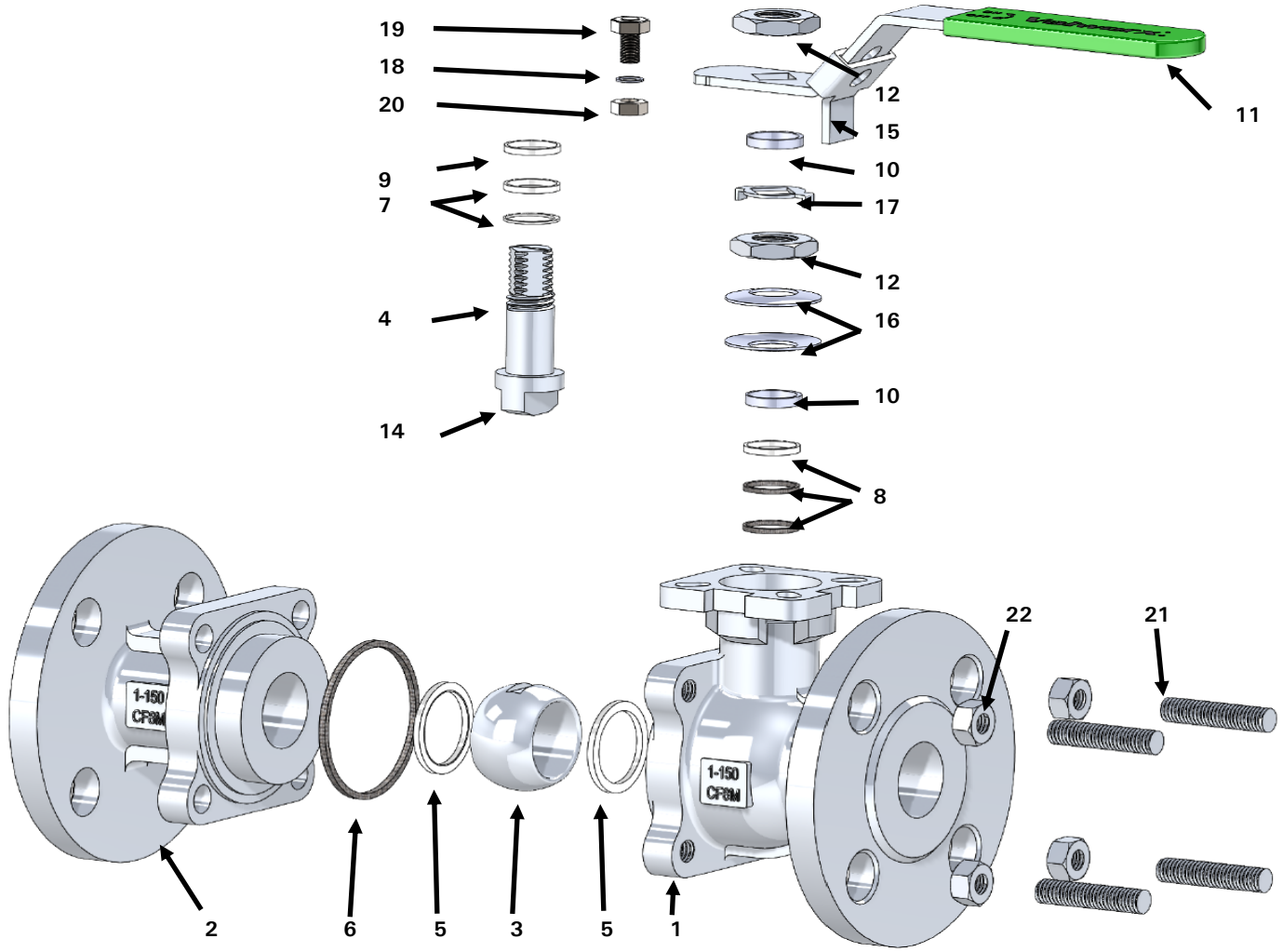
* Pressure range @ -18 to 38° C (reduced pressure at higher temperatures—see P/T chart)

Pressure/Temperature Charts

P/T Chart (PSI/°F)					
PSI	275	275	210	125	0
°F	-4	100	248	302	392
P/T Chart (BAR/°C)					
Bar	19	19	14.5	8.4	0
°C	-20	38	120	150	200



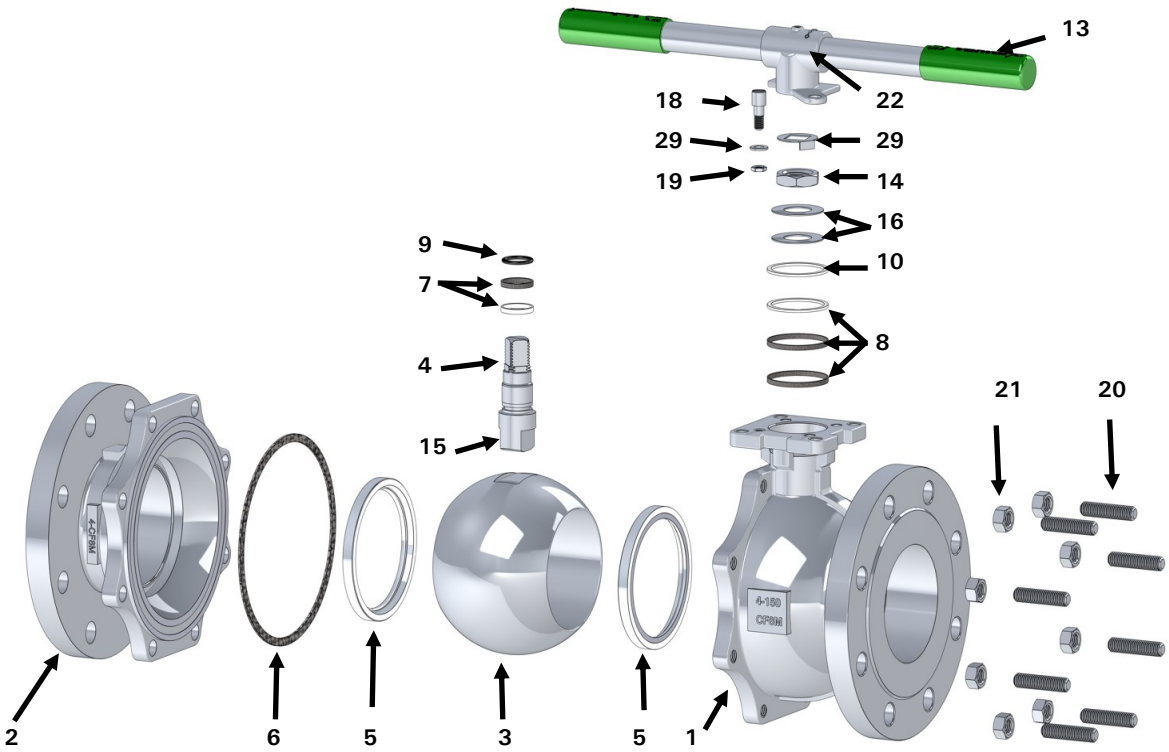
Exploded View-(1-2")



#	Part Name	Material	Qty
1	Body	ASTM A351 CF8M	1
2	Cap	ASTM A351 CF8M	1
3	Ball	ASTM A182 F316	1
4	Stem	ASTM 276 316	1
5	Seat	RTFE	2
6	Body Seal	Graphite + SS316	1
7	Thrust Washer	Graphite	2
8	Stem Packing	Braided Graphite(Slade3300i)	1 Set
9	Stem O-Ring	Viton	1
10	Gland	ASTM A276 304	2
11	Handle	ASTM A276 304/ Plastic	1

#	Part Name	Material	Qty
12	Stem Nut	ASTM A276 304	1
13	Handle Nut	ASTM A276 304	1
14	Anti-Static Device	ASTM A276 316	2
15	Locking Device	ASTM A276 304	1
16	Belleville Washer	ASTM A276 304	1 Set
17	Tab Washer	ASTM A276 304	1
18	Pin Washer	ASTM A276 304	1
19	Stop Pin	ASTM A276 304	1
20	Pin Nut	ASTM A276 304	1
21	Body Stud	ASTM A193 B8	1 Set
22	Body Nut	ASTM A194 8	1 Set

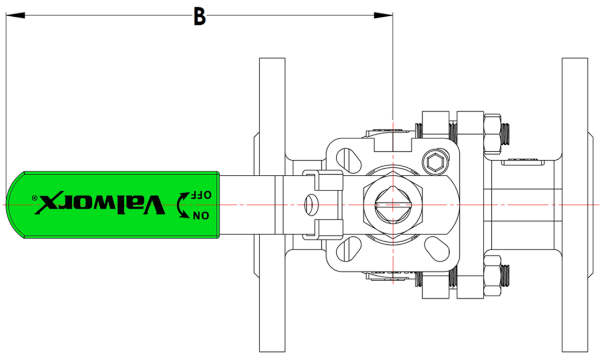
Exploded View-(3-4")

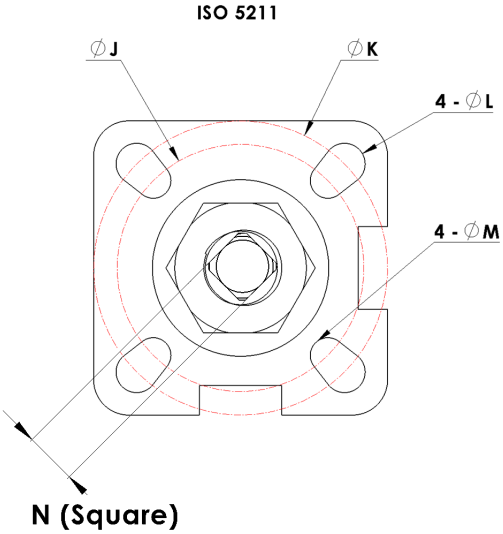


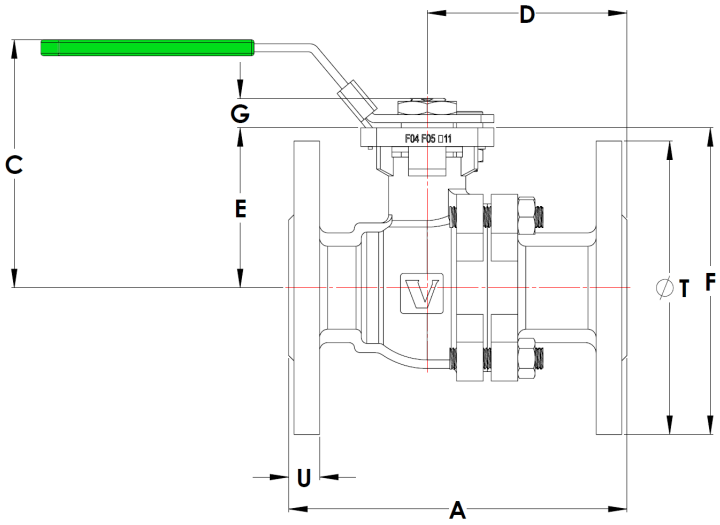
#	Part Name	Material	Qty
1	Body	ASTM A351 CF8M	1
2	Cap	ASTM A351 CF8M	1
3	Ball	ASTM A182 F316	1
4	Stem	ASTM A276 316	1
5	Seat	RTFE	2
6	Body Seal	Graphite + SS316	1
7	Thrust Washer	Graphite/PTFE 25%G.F.	1
8	Stem Packing	Braided Graphite(Slade 330i)/PTFE 25%G.F.	1 Set
9	Stem O-Ring	Viton	1
10	Gland	ASTM A276 304	1
11	Steel Pipe	ASTM A276 304	1
12	Screw	ASTM A276 304	2
13	Handle Cover	Plastic	2

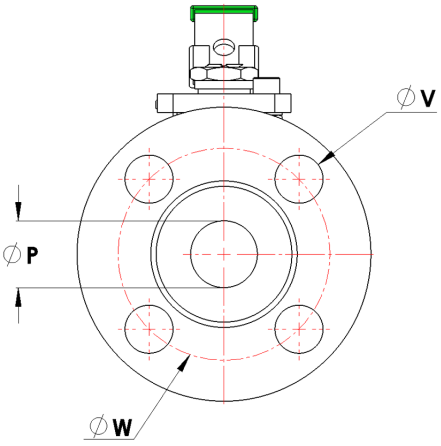
#	Part Name	Material	Qty
14	Stem Nut	ASTM A276 304	1
15	Anti-Static Device	ASTM A276 316	2
16	Belleville Washer	ASTM A276 304	1 Set
17	Tab/Pin Washer	ASTM A276 304	2
18	Stop Pin	ASTM A276 304	1
19	Pin Nut	ASTM A276 304	1
20	Body Stud	ASTM A193 B8	1 Set
21	Body Nut	ASTM A194 8	1 Set
22	Handle Adapter	ASTM A351 CF8	1

Dimensions:



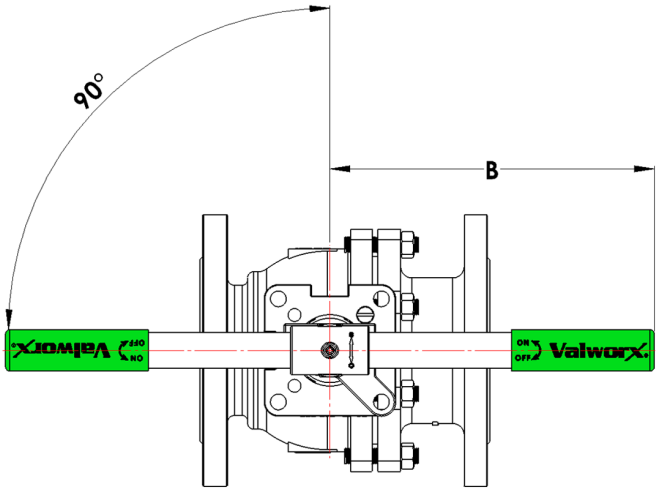


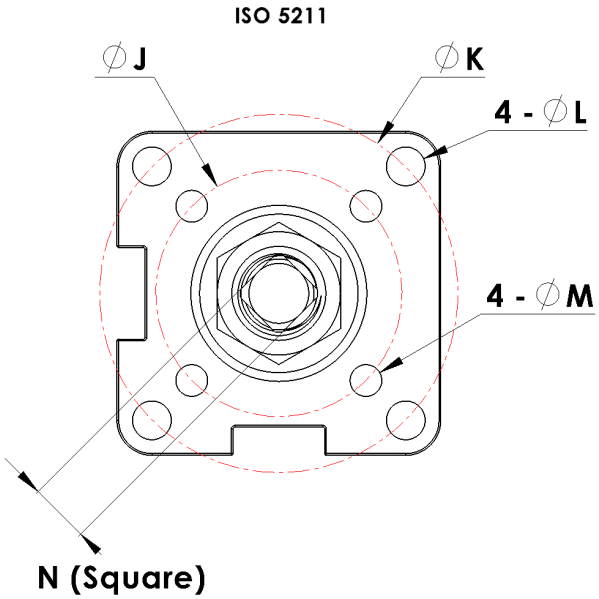


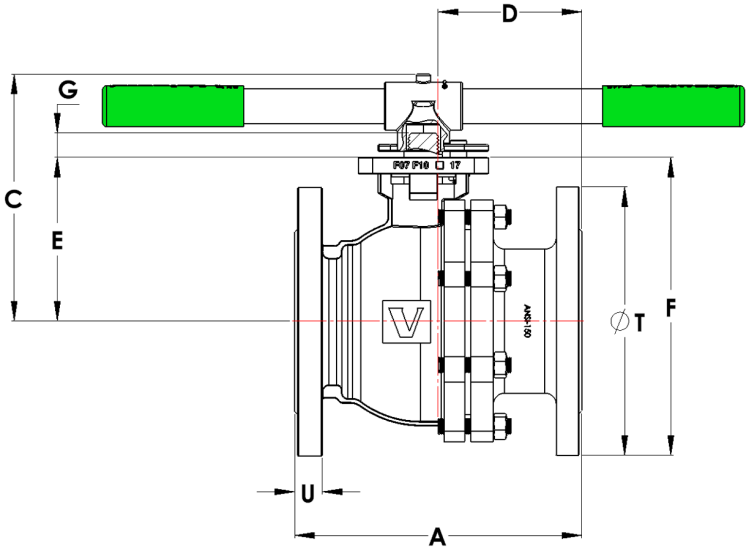


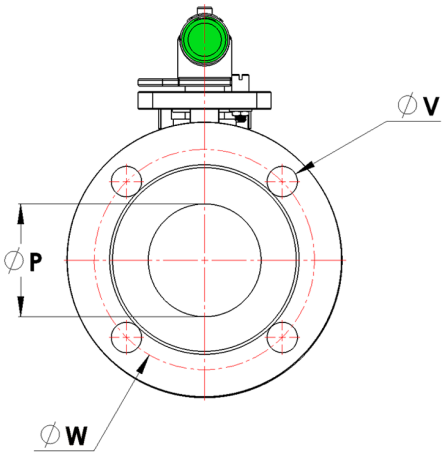
Pipe Size		A	B	C	D	E	F	G	J	K	L	M	N	P	T	U	V	W	ISO	Weight
1	inch	5.0	5.7	3.7	3.0	2.4	4.5	0.4	2.0	1.7	0.3	0.2	0.4	1.0	4.3	0.4	4) 0.6	3.1	F04/F05	6.2 lb
	mm	127.0	145.0	93.0	75.0	60.0	115.0	10.0	50.0	42.0	7.0	6.0	11.0	25.0	110.0	9.6	4) 16.0	79.4		2.8 kg
1-1/2	inch	6.5	7.5	4.8	3.6	3.1	5.5	0.6	2.8	2.0	0.4	0.3	0.6	1.5	4.9	0.5	4) 0.6	3.9	F05/F07	13.3 lb
	mm	165.0	190.0	123.0	92.0	78.0	140.5	14.0	70.0	50.0	9.0	7.0	14.0	38.0	125.0	12.7	4) 16.0	98.4		6.0 kg
2	inch	7.0	7.5	5.2	3.8	3.4	6.4	0.6	2.8	2.0	0.4	0.3	0.6	2.0	5.9	0.6	4) 0.6	4.8	F05/F07	19.4 lb
	mm	178.0	190.0	132.0	96.2	87.0	162.0	14.0	70.0	50.0	9.0	7.0	14.0	50.0	150.0	14.3	4) 16.0	120.7		8.8 kg

Dimensions:









Pipe Size		A	B	C	D	E	F	G	J	K	L	M	N	P	T	U	V	W	ISO	Weight
3	inch	8.0	8.9	6.5	4.0	4.6	8.3	0.7	2.8	4.0	0.4	0.4	0.7	3.1	7.5	0.7	4) 0.8	6.0	F07/F10	40.6 lb
	mm	203.0	225.0	165.0	102.0	116.0	211.0	17.0	70.0	102.0	11.0	9.0	17.0	78.0	190.0	17.5	4) 19.0	152.4		18.4 kg
4	inch	9.0	8.9	7.5	4.5	5.5	10.0	0.8	2.8	4.0	0.4	0.4	0.7	3.9	9.1	0.9	8) 0.8	7.5	F07/F10	66.1 lb
	mm	229.0	225.0	190.0	115.0	140.0	255.0	19.0	70.0	102.0	11.0	9.0	17.0	100.0	230.0	22.3	8) 19.0	190.5		30.0 kg