

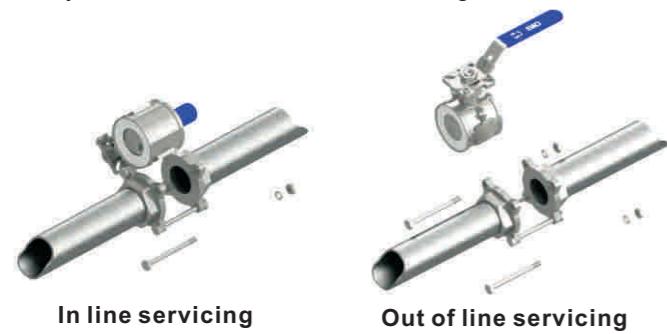
1. Top Mounting Pad

Two sets of ISO5211 mounting patterns are available to accommodate a great range of actuators. Machined flat surface ensures correct alignment of actuator to the stem top for minimum side loading during operation



2. 3 Pieces Valve Body Design

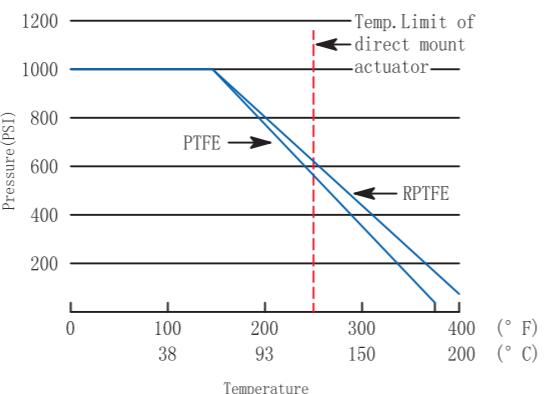
easy for in line and out of line servicing.



In line servicing

Out of line servicing

Design: ANSI/ASME B16.34
Face to Face: Manufacturer's
Pressure Testing: API 598
Max Working Pressure: 1000PSI
For Steam: 150 psi
Size: 1/2"~4"
Working Temperature: -29 ~180



3. Ball



Balls are precision machined and mirror finished for bubble-tight shut off with less operating torque. ball edges have machined curvatures to reduce seat wear and provide a high cycle life.



4. Seat

seat designed to ensure bi-directional, bubble-tight sealing while providing the lowest possible torque. This seat design reduces friction, minimizes seat wear and reduces operating torque.



5. Stem

The sturdy blow-out proof stem is designed for direct mounting of actuator that meets ISO5211 specifications.

6. High Cycle Stem Design Features

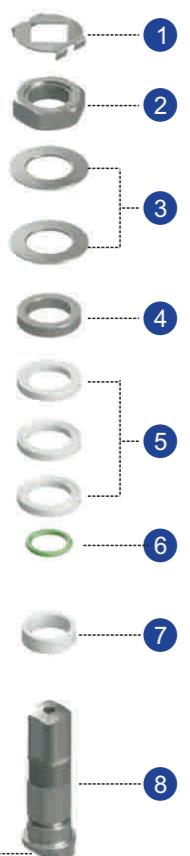
• Live Loading Stem Sealing

The live load seals considerably increase the number of cycles between maintenance adjustment.

• **Anti-Static Device:** To eliminate the possibility of static electrical charges within the valve, two grounding connections are set in the stem to ensure electrical continuity for the entire ball valve.

Three stages of stem sealing for effective control of stem leakage:

- **Pyramidal Body and Stem Seal (1st Stage):** Internal pressure of the valve pushes the pyramidal stem sealing upward. Because of its shape, the sealing expands to fill all the air pockets that might become a potential leakage path in the lower stem area.
- **Viton® O-Ring (2nd Stage):** The elastic nature of the Viton® O-Ring serves as an effective sealing for gaseous medium that might escape the 1st stage sealing.
- **V-Ring Stem Packing (3rd Stage):** Live loading action of the Belleville washer expands the V-Ring stem packing, filling all the air pockets in the outer stem area. It effectively seals internal media within as well as keeping external media from entering the system



PARTS

1. tab lock washer
2. Lock nut
3. Belleville Washers
4. Gland
5. V-Ring Stem Packing
6. O-Ring
7. Pyramidal Stem Seal
8. Stem
9. Anti-Static Device

7. High neck design,easy to install and uninstall actuators

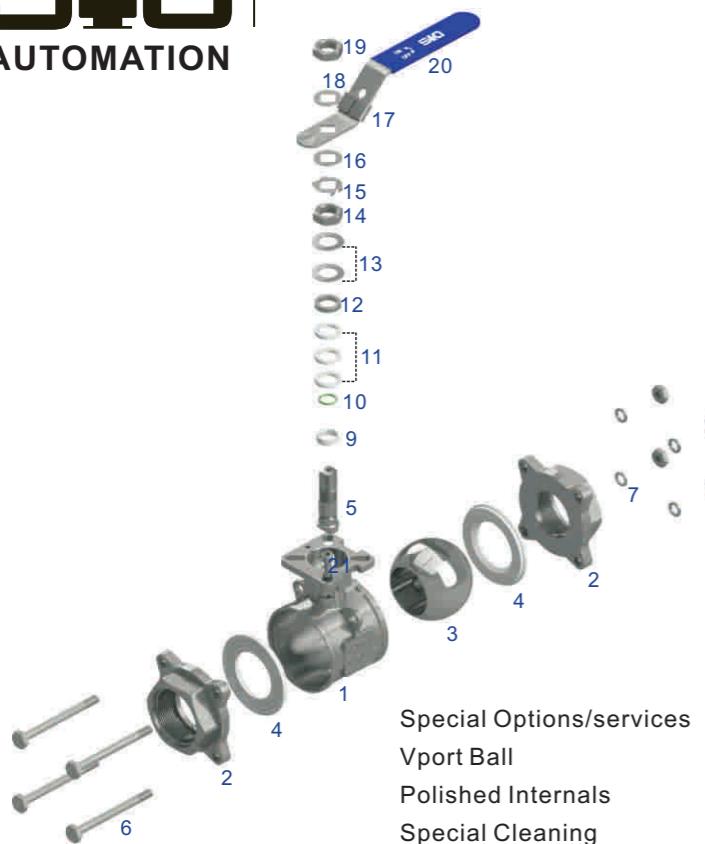


8. End connections

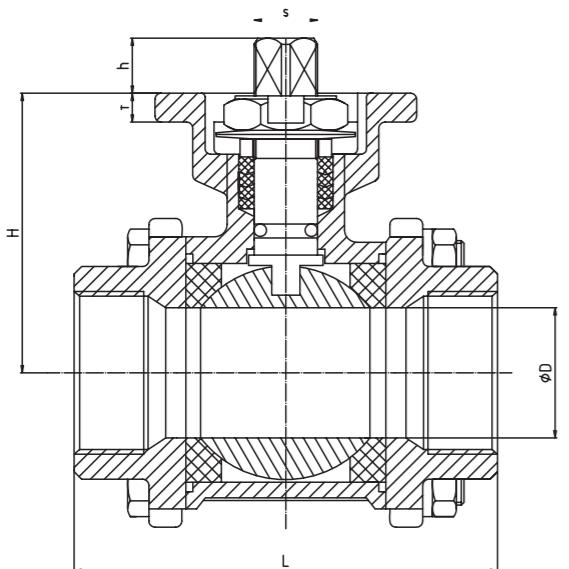
Threaded: ASME B1.20.1 NPT
 BS21 BSP/DIN2999/259/ISO228-1
 JIS B0203/ISO7/1
 BUTT WELD :ASME B16.25(SCH40)
 SOCKET WELD: ASME B16.11
 TUBE ENDS:US/3A
 ANSI FLANGE: ASME B16.50
 DIN FLANGE: DIN2501,PN10-40
 Tri-Clamp



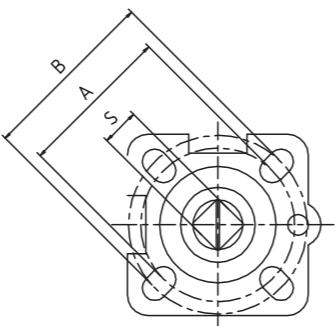
9. Lockable handle with stopper



COMPONENTS AND MATERIALS		
Code	Name	Material
1	Body	ASTMA351 Gr CF8/CF8M
2	End Cap	ASTMA351 Gr CF8/CF8M
3	Ball	SS304/316
4	Seat	RPTFE/TFM
5	Stem	SS304/316
6	Bolt	SS304/316
7	Spring Washer	SS304/316
8	Nuts	SS304/316
9	Pyramidal stem seal	RPTFE/TFM
10	O Ring	Viton
11	V-Ring Stem Packing	RPTFE/TFM
12	Gland	SS304/316
13	Belleville Washer	SS304/316
14	Stem Nuts	SS304/316
15	Tab lock washer	SS304/316
16	washer	SS304/316
17	handle	SS304/316
18	washer	SS304/316
19	Hex Nuts	SS304/316
20	Sleeve	PVC
21	stopper	SS304/316
22	Anti-static device(not shown)	SS304/316



Main Dimension(mm)



Size	Dime	D	H	h	T	L	ISO-5211		S	W(kg)	Torque (N/m)
							A	B			
1/2"		15	41	8	6	70	F03	F04	9	0.62	3
3/4"		20	49	10	6	77	F03	F04	9	0.77	4
1"		25	58	10	6	85	F04	F05	11	1.12	7
1-1/4"		32	64	8	6	104	F04	F06	11	1.79	14
1-1/2"		40	77	16	8	114	F05	F07	14	2.55	21
2"		50	85	16	8	135	F05	F07	14	3.25	29
2-1/2"		65	95	17	8	176	F07	F010	17	7.42	51
3"		80	105	22	10	206	F07	F010	17	10.2	85
4"		100	125	22	10	265	F10	F12	22	15.6	105

Three Pieces Ball Valve with Pneumatic Actuator



With Double Acting Actuator

SIZE	ACT	A	B	C	E	L	D
1/2"	50	155	69	20	70	70	41
3/4"	50	69	69	20	70	77	49
1"	63	168	85	20	83	85	58
11/4"	63	168	85	20	83	104	64
11/2"	75	219	102.5	20	95.5	114	77
2"	75	219	102.5	20	95.5	135	85
21/2"	90	249	115	20	105.5	176	95
3"	90	249	115	20	105.5	206	105
4"	100	274	127.5	20	122	265	125

With Spring Return Actuator (10 springs)

SIZE	ACT	A	B	C	E	L	D
1/2"	50	155	69	20	70	70	41
3/4"	50	69	69	20	70	77	49
1"	63	168	85	20	83	85	58
11/4"	75	219	102.5	20	95.5	104	64
11/2"	90	249	115	20	105.5	114	77
2"	100	274	127.5	20	122	135	85
21/2"	115	315	140	30	132.5	176	95
3"	145	417	176	30	169.5	206	105
4"	145	417	176	30	169.5	265	125

