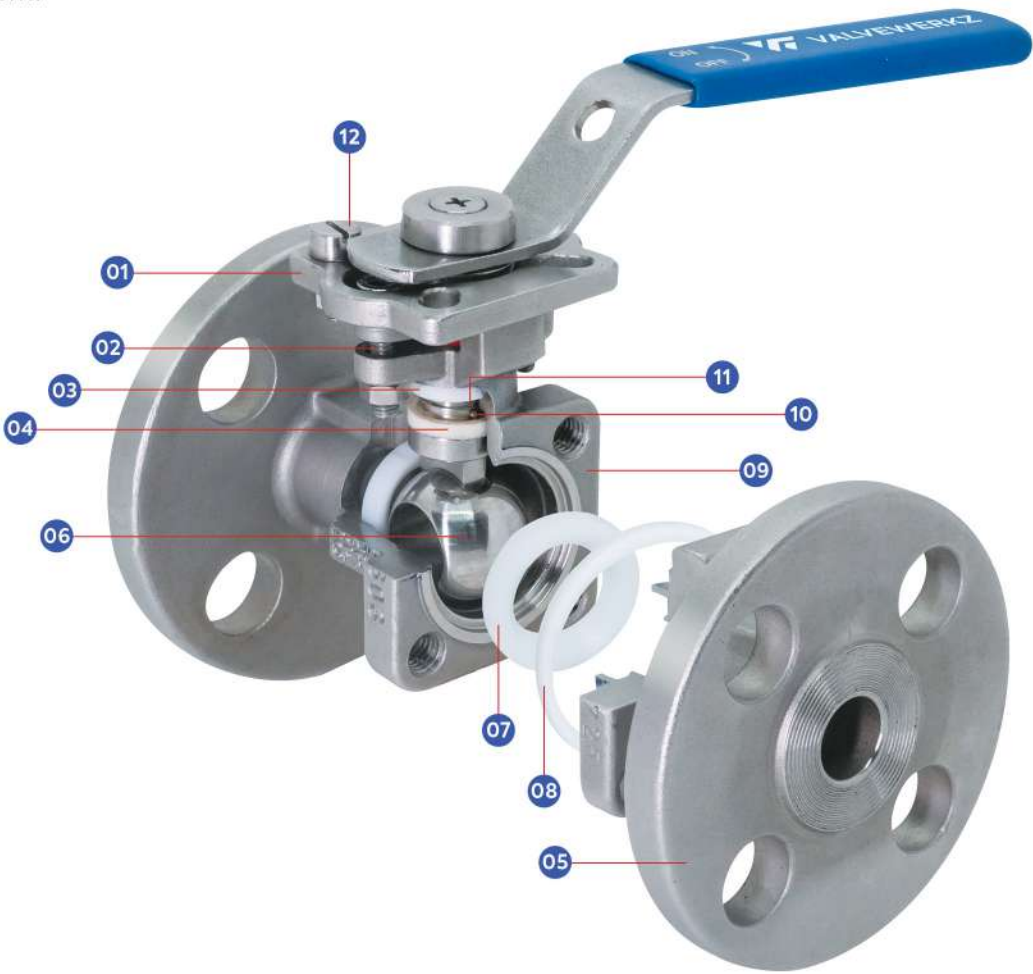


203 SERIES - FLANGE BALL VALVE

The pressing plate-type ball valve consists of a body, end cap, and a ball. The ball is connected to the stem and rotates 90 degrees to enable on-off functionality. It is primarily used for on-off control and emergency shut-off in pipelines. When equipped with a V-port ball, it can also regulate flow for precise adjustment.



Part Name

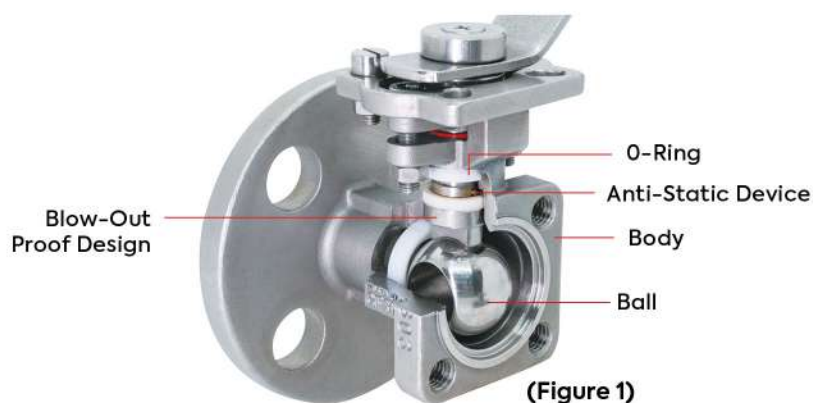
- | |
|--------------------------------|
| 1. ISO5211 Direct Mounting Pad |
| 2. Adjusting Bolt |
| 3. V-Ring Packing |
| 4. O-Ring |

Part Name

- | |
|---------------------------------|
| 5. End Cap |
| 6. Ball |
| 7. Seat(Pressure Relief Groove) |
| 8. Body Gasket |

Part Name

- | |
|------------------------|
| 9. Body |
| 10. Anti-Static Device |
| 11. Belleville Washer |
| 12. Stop Lock Block |

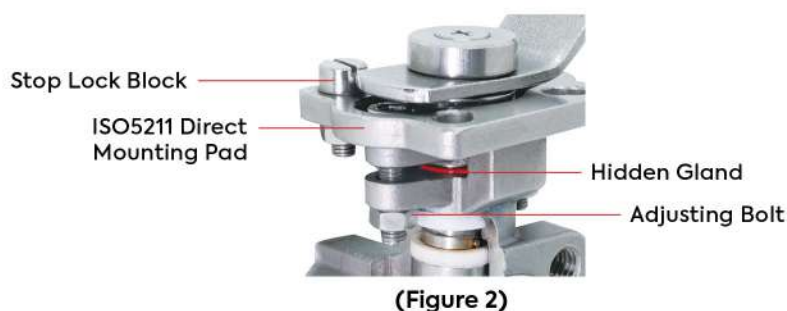


1. Blow-Out Prevention

The stem features an integral shoulder design to prevent blow-out and leakage. (Figure 1)

2. Anti-Static Safety

An anti-static design helps to eliminate safety risks caused by static electricity. (Figure 1)



3. Effective Stem Sealing

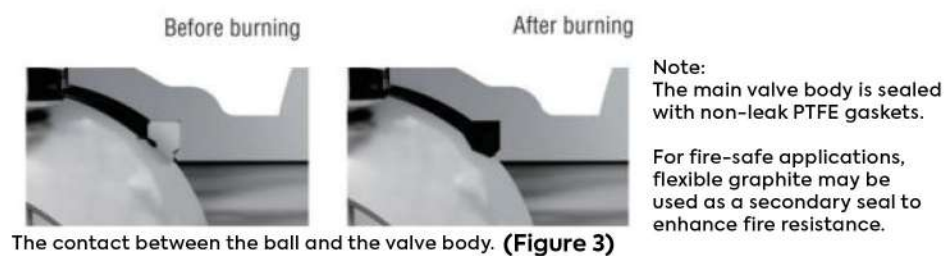
The O-ring on the stem provides reliable self-sealing performance to contain the medium. (Figure 2)

4. Misoperation Prevention

A dedicated limit device is included to prevent accidental or incorrect valve operation. (Figure 2)

5. Fire-Safe Seal Design

The metal-to-metal sealing structure prevents external leakage and offers flame resistance for enhanced safety.



6. Dual Stem Sealing

Designed to meet TA-LUFT emission control standards, providing enhanced sealing reliability. (Figure 3)

7. Self-Adjusting Belleville Washers

Two pre-loaded Belleville washers reduce the need for re-tightening in low-leakage applications by maintaining consistent packing compression. (Figure 1)

8. Adjustable Hidden Gland

Stem packing can be tightened to stop the leakage from stem without removing the actuator from the valve. (Figure 2)

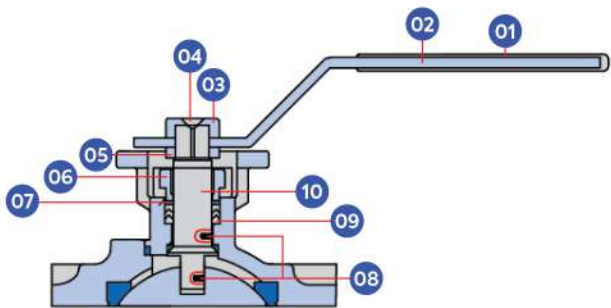


203 Series

2-Piece Body Design

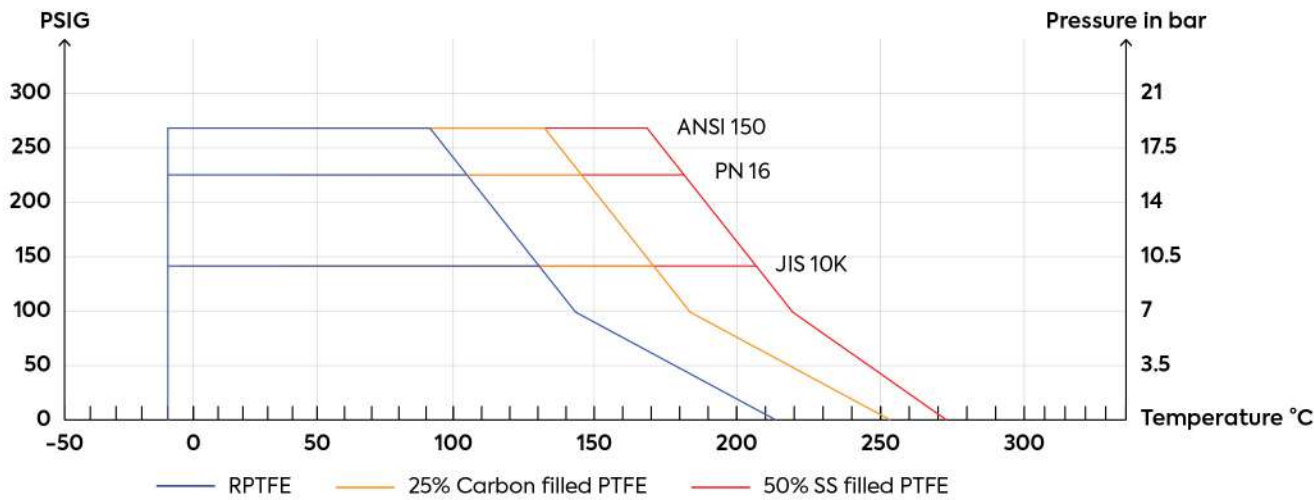
Full Bore	
Sizes ¼" – 6"	
WCB / SS304 / SS316	
203AU	ANSI (ANSI 150 / ANSI 300)
203AD	DIN (PN16 / PN40)
203AJ	JIS (JIS-10K / JIS-20K)
Superior Live Loaded Packing System	
ISO 5211 Direct Mounting Pad	
Blowout-Proof Stem	
Dual Anti-Static Device (Ball-Stem-Body)	
Standard Seat:	
25% Carbon Filled PTFE (max. 250°C)	
Seat Options:	
RPTFE (max. 210°C)	
50% SS Filled PTFE (max. 270°C)	
Patent Pending Product	
Fire Safe Design	

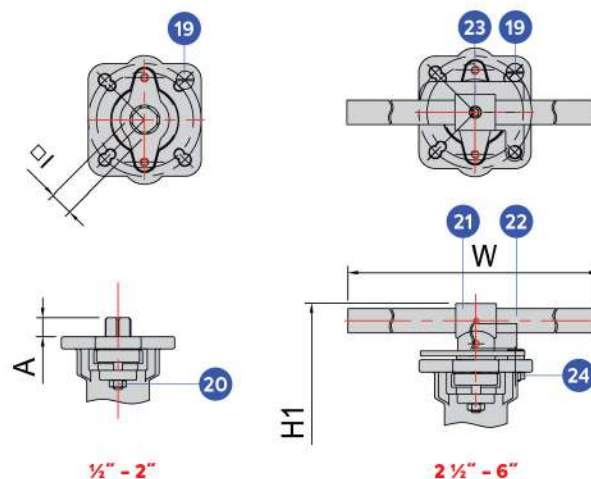
ValveWerkz 203 series flanged ball valves feature a split body design. The high-quality investment castings feature a fully machined bore. The superior live-loaded packing system (includes) Belleville washers, “V” ring packing, and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valves.



Part Name			
1.	Handle Sleeve	6.	Gland
2.	Handle	7.	Bushing
3.	Stem Washer	8.	Anti-Static Device
4.	Handle Bolt	9.	V-Ring Packing
5.	Handle Washer	10.	Stem

Pressure / Temperature Ratings



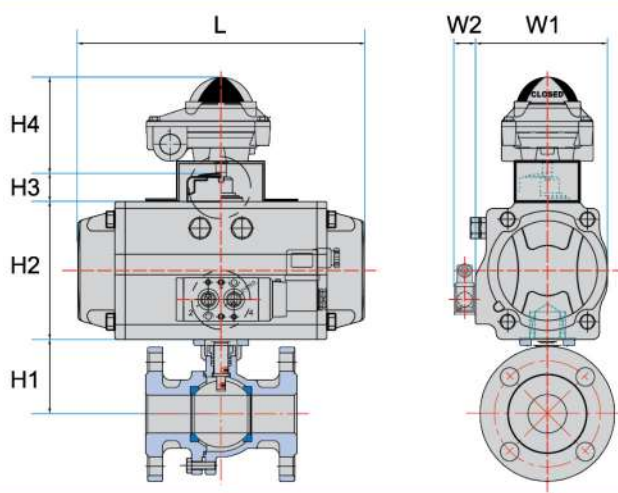


Part Name	Material
13. End Cap	WCB / SS304 / SS316
14. Bolt (½" – 2")	SUS304
15. Stud & Nut (2 ½" – 6")	SUS304
16. Ball	SS304 / SS316
17. Bushing	SUS304
18. Anti-Static Device	Stainless Steel
19. Stop Pin	SUS304
20. Stud & Nut	SUS304
21. Handle Adapter (2 ½" – 6")	SUS304
22. Pipe Handle (2 ½" – 6")	SUS304
23. Handle Bolt (½" – 2")	SUS304
24. Stop Pin Nut	SUS304

*Spare Parts available in Repair Kit. Please refer to page 60 for more details.

Dimensions(mm)

Size(Inch)		A	W	H	H1	□I	L	Ød	Øg	ØC	ØD	t	f	Øh	N	ISO 5211	CV	Weight(kg)
½"	10K PN16 150LB	8	130	50.5	79.5	9	108 115 108	15	51 45 35	70 65 60.3	95 95 89	12.5 16 11.2	1 2 1.6	15 14 16	4	F03 F04	15	1.87
¾"	10K PN16 150LB	8	130	53.8	82.8	9	117 120 117	20	56 58 42	75 75 69.9	100 105 98.4	14.5 18 12.7	1 2 1.6	15 14 16	4	F03 F04	45	2.33
1"	10K PN16 150LB	9.5	168	64.5	96.5	11	127 125 127	25	67 68 50.8	90 85 79.4	125 115 108	14.3 18 11.5	1 2 1.6	19 14 16	4	F04 F05	85	3.68
½"	10K PN16 150LB	9.5	168	70	102	11	140 130 140	32	76 77 64	100 100 88.9	135 140 117	16 18 13	2 3 1.6	19 18 16	4	F04 F05	150	4.76
1 ½"	10K PN16 150LB	14	221	77	110	14	165 140 165	40	81 87 73	105 110 98.5	140 150 127	16.5 18 14.5	2 3 1.6	19 18 16	4	F05 F07	275	5.91
2"	10K PN16 150LB	14	221	85.3	118	14	178 150 178	50	96 102 92	120 125 120.7	155 165 152.4	16.5 18 15.9	2 3 1.6	19 18 19	4	F05 F07	460	7.82
2 ½"	10K PN16 150LB	17	495	111.5	172	17	190 170 190	65	116 122 104.8	140 145 139.7	175 185 177.8	18.7 18 17.6	2 3 1.6	19 18 19	4	F07 F10	700	13.97
3"	10K PN16 150LB	17	495	120.5	181	17	203 180 203	80	126 137 127	150 160 152.4	185 200 190.5	19 20 19.5	2 3 1.6	19 18 19	4	F07 F10	1100	17.03
4"	10K PN16 150LB	22	595	145	206	22	229 190 229	100	151 157 157.2	175 180 190.5	210 220 228.6	19 20 23.9	2 3 1.6	19 18 19	8 8 4	F10	2200	25.27
5"	10K PN16 150LB	27	600	178.5	250	27	365 325 356	125	182.7 187 185.7	210 210 215.9	250 250 254	20 22 23.9	2 3 1.6	23 18 22.4	8	F12 F14	3500	49.67
6"	10K PN16 150LB	27	800	196	267	27	394 350 394	150	215 212 215.9	240 240 214.3	280 285 279	22 22 25.4	2 3 1.6	23 22 22.4	8	F12 F14	5150	70.61



Pneumatic Actuator (Double Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
15	½"	3.3	HP-35	50.5	49	20	90	54	29.5	126	3.49
20	¾"	5.4	HP-50	58.3	73	20	90	72	29.5	144	3.95
25	1"	6.6	HP-50	58.3	73	20	90	72	29.5	144	5.92
32	1 ¼"	13.2	HP-63	77	85	20	90	85	29.5	159	7
40	1 ½"	16.4	HP-63	77	85	20	90	85	29.5	159	7
50	2"	19.6	HP-63	85.3	87	20	90	85	29.5	163	10.58
65	2 ½"	30	HP-75	104	104	20	90	114	29.5	190	17.45
80	3"	36	HP-75	104	104	20	90	114	29.5	190	22.41
100	4"	87	HP-115	145	146	20	90	141	29.5	316	32.35
125	5"	120	HP-145	177.6	178	20	90	172	29.5	414	59.75
150	6"	150	HP-145	196	179	20	90	172	29.5	414	80.69

The selection of the actuators are based on the below conditions:

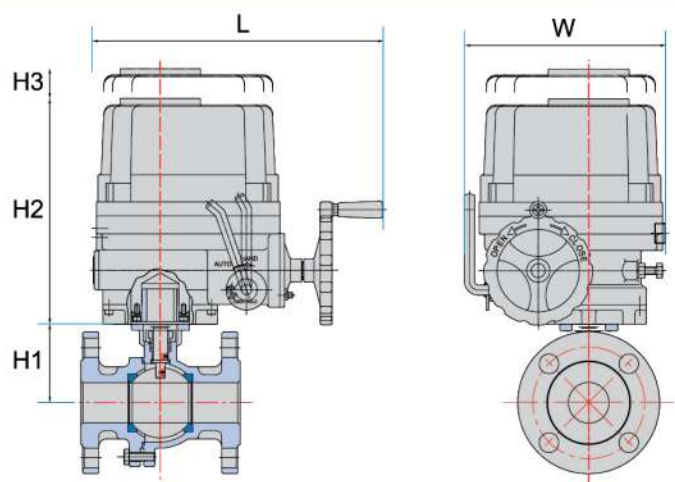
- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

Pneumatic Actuator (Single Acting)

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	H4	W1	W2	L	Weight(kg)
15	½"	3.3	HP-50S (S11)	50.5	73	20	90	72	29.5	144	4.82
20	¾"	5.4	HP-63S (S11)	58.3	87	20	90	85	29.5	163	5.28
25	1"	6.6	HP-63S (S11)	64.5	87	20	90	85	29.5	163	6.63
32	1 ¼"	13.2	HP-75S (S11)	70	104	20	90	96	29.5	180	9.2
40	1 ½"	16.4	HP-75S (S11)	77	104	20	90	96	29.5	180	10.35
50	2"	19.6	HP-88S (S11)	85.3	116	20	90	108	29.5	247	13.82
65	2 ½"	30	HP-100S (S11)	110	128	20	90	128	29.5	268	21.91
80	3"	36	HP-100S (S11)	120.5	128	20	90	123	29.5	268	27.45
100	4"	87	HP-145S (S11)	145	179	30	90	172	29.5	414	42.67
125	5"	144	HP-160S (S11)	177.5	196	30	90	190	29.5	467	70.28
150	6"	150	HP-160S (S11)	196	196	30	90	190	29.5	467	97.64

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%
- Air to Open, Spring to Close



Electric Actuator

DN(mm)	Size(Inch)	Torques	Actuator	H1	H2	H3	W	L	Weight(kg)
15	½"	3.3	HQ-004	50.5	124.3	N/A	88.6	166.6	4.15
20	¾"	5.4	HQ-004	53.8	124.3	N/A	88.6	166.6	4.61
25	1"	6.6	HQ-004	64.5	124.3	N/A	88.6	166.5	5.92
32	1 ¼"	13.2	HQ-004	70	124.3	N/A	88.6	166.6	7.04
40	1 ½"	16.4	HQ-004	77	124.3	N/A	88.6	166.6	8.19
50	2"	19.6	HQ-004	85.3	124.3	N/A	88.6	166.6	10.5
65	2 ½"	32.1	HQ-006	111	137	N/A	105	168	16.68
80	3"	36	HQ-006	120.5	137	N/A	105	126	21.11
100	4"	87	HQ-015	145	268	160	160	338	42.95
125	5"	144	HQ-030	177.5	304	180	180	368	70.75
150	6"	150	HQ-030	196	304	180	180	368	93.69

The selection of the actuators are based on the below conditions:

- Air Supply Pressure : 5.5 bar
- Operating Pressure : 10 bar
- Safety Factor : 30%

REQUEST FOR QUOTE



*For further assistance with placing your order, please contact your local partner.
A sales engineer will be assigned to assist you.

Valve Coding Sheet
203 Series

01

02

03

04

05
F

06

Body Material

Code	Material
C1	WCB
S1	SS304
S2	SS316

Seat Material

Code	Material
T	RPTFE
M	25% Carbon Filled PTFE
G	50% SS Filled PTFE

Rating

Code	Rating
A	ANSI 150
B	ANSI 300
C	PN16
D	PN40
E	JIS-10K
F	JIS-20K

Size

Code	Size
A	½"
B	¾"
C	1"
D	1 ¼"
E	1 ½"
F	2"
G	2 ½"
H	3"
I	4"
J	5"
K	6"
L	8"

Connection

Code	Material
F	Flanged End

Operation

Code	Type
L	Lever
D	Double Acting
	Pneumatic Actuated
S	Single Acting
	Pneumatic Actuated
E	Electric Actuated

Your Valve Ordering Code:

203

01

02

03

04

05
F

06

Example:

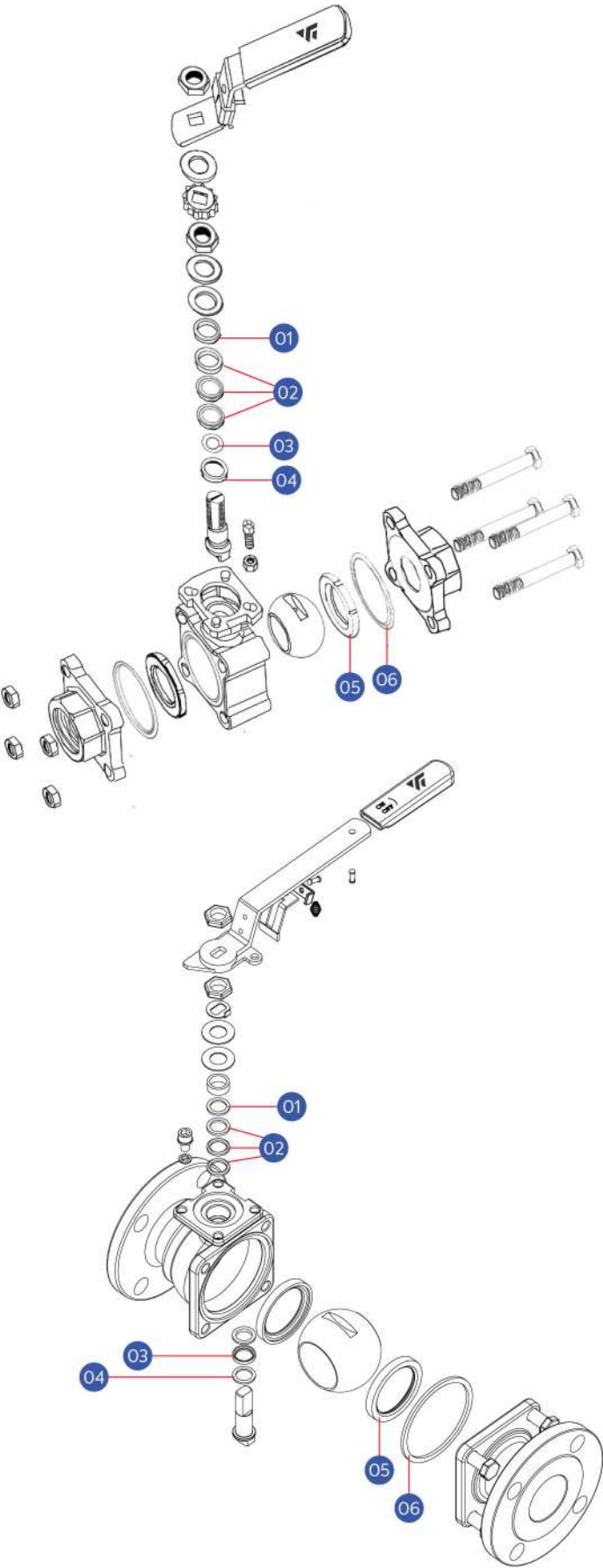
203 Series - S2TABFL full bore.
SS316 Material. RPTFE Seat. Pressure Rating of ANSI 150, ¾ inch size. Flanged End Connection.
Lever Operating type.

*For special material or customisation, please refer to our sales engineer.



SCAN FOR ONLINE ORDERING FORM

Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com



81FS Series

Part Name	Qty
1. Compress Ring	1
2. V-Ring Packing	1 Set (3 pcs)
3. O-Ring	1
4. Stem Washer	1
5. Seat	2
6. Body Gasket	2

203 Series

Part Name	Qty
1. Bushing	1
2. V-Ring Packing	1 Set (3 pcs)
3. Compress Ring	1
4. Stem Seal	1
5. Seat	2
6. Body Gasket	1