



MIZUP METAL CO., LTD.

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MIZUP METAL CO., LTD.



Product Catalogue

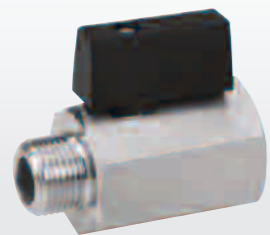
Product Catalogue



www.mizuptw.com

AC Design / 04-27071159

MIZUP METAL CO., LTD.



P. 07
Series 10

101 / 103 / 103-1



P. 09
Series 20

201 / 203AU1 / 203AJ1 / 203AD1
203AU2 / 203AJ21 / 203AD2
204-2 / 204-3 / 204-4 / 204-5
205 / 205S / 206



P. 21
Series 30

301 / 302 / 303 / 304 / 304G
304LV / 305 / 306 / 307 / 336



P. 27
Series 70

701 / 702 / 703 / 704 / 704LV
705 / 706 / 707 / 70KF-NW



P. 33
Series 90

901 / 902 / 903 / 904 / 904LV
905 / 906 / 907 / 90KF-NW



P. 43
Series 95

951 / 952 / 953 / 95K



P. 47
Series MPY/MP

MPY1 / MPY2 / MPY3 / MP271
MP2714 / MP281 / MP282 / MP283
MP371 / MP372 / MP373 / MP381
MP382 / MP383 / MP392



P. 55
**Other Valves
and Valves Parts**

P. 59
Pressure - Temperature Ratings

P. 61
Operating Torque



COMPANY PROFILE

Our company was established in 1983 as MainPillar Enterprise in Taichung, Taiwan. In order to realize quality improvement that had been proposed by the government, we manufactured handmade metal hardware products with registered trademark of YF, which could make the company better known in Taiwan.

To upgrade the level of our products, we started to manufacture stainless flanges in 1988. So as to respond to the demand of domestic and overseas market, we adopted the new CNC Lathe Machine and the CNC Machining Center which enabled mass production, and succeeded building a base of overseas market such as Europe and the USA.

Our products are from industrial valves that what we originally manufactured in earlier time, presently to those for professional usage such as sanitary valves, actuators, semiconductor purity and electronic meter valves. Through our long-term effort to standardize our factory with throughout quality control, we could gain satisfaction of customers, in spite of domestic or foreign countries. As for domestic customers, we make business with those large companies such as Chi-mei (Factory3, 4 and 5), TSMC, AUO, CHUNGHWA PICTURE, Winbond Electronics, ProMOS TECHNOLOGIES, Hannstar and Taiwan Komatsu. As for international customers, we provide OEM products to those well-known brand companies such as TYCO, EBRO, M&M, OHNO, FUJIKIN, KOSO, TOPLINE.



MIZUP METAL CO., LTD.

HISTORY

- 1983** Established as Main Pillar.
- 1988** Began to manufacture stainless steel flanges.
- 1991** Changed the company's Chinese name.
- 1993** Moved to Taichung Industrial Park, began to manufacture stainless steel ball valves.
- 2005** Constructed class 1000 clean room.
- 2007** Established an investment casting foundry in Vietnam.
- 2009** Installed ECB polishing machine.
- 2010** Installed 20x Laser Spot Welding Lathe Machine.
- 2011** Acquired BA-Class Ultrahigh Purity Components Certification.
- 2012** Acquired 203A Series Patent Certification.
- 2015** Built a larger warehouse to meet customers' varieties of requests.
- 2017** Changed company's English name to MIZUP METAL CO., LTD. and LOGO.

MANUFACTURING PROCESS



Casting



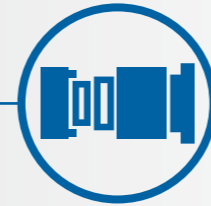
Machining



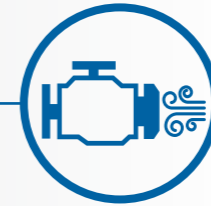
Polishing
(Electro Chemical Buffing)



Ultrasonic Cleaning



Assembling



Leak Testing



Packing / Delivering



ABOUT PRODUCTS

Connection Types

Threaded (BSP, BSPT, NPT) / Socket Weld / Butt Weld / Extended Butt / Flanged / T-clamp / VCR etc.

Working Pressure

Vacuum : 10⁻⁴torr ~ High pressure : 68.94MPa (≒10000PSI)
Flanged : JIS 10K / 20K, ANSI 150LB / 300LB, DIN PN16 / PN40

Working Temperature

-196°C ~ +500°C
-320.8°F ~ +932°F

Materials

A351-CF8, A351-CF8M, A351-CF3M, A216-WCB, A890-CE3MN
(JIS/DIN standards are available for some models.)

Production Quantity

25,000pcs / month (Max)

EQUIPMENTS



1 Room

Class 1000 Clean Room

Specification & Feature

Assemble, testing, and packing process can be all conducted in the clean room.



2 Units

Ultrasonic Cleaning Machine

Specification & Feature

1 unit consists of 6 tanks. Each tank contains either degreaser or pure-water or super-pure-water. Residual oil quantity: 0.5mg/ft² (Min).



2 Units

Electro Chemical Buffing

Specification & Feature

Able to polish 2 units per minute. Physical polish and electro polish can be done simultaneously. Through this process corrosion resistance will increase.



1 Unit

Laser Welding Machine

Specification & Feature

Able to laser weld or repair without causing thermal deformation.

CERTIFICATION

We make every effort to provide high quality and reliable products and services that meet customer needs.



ISO 9001



PED CE



Ultrapurity Components Certification



Patent Certificate of New Ball Valve



BS6364 Cryogenic Test Approval



RoHS Testing Report



REACH (SVHC) Testing Report



MODEL 101

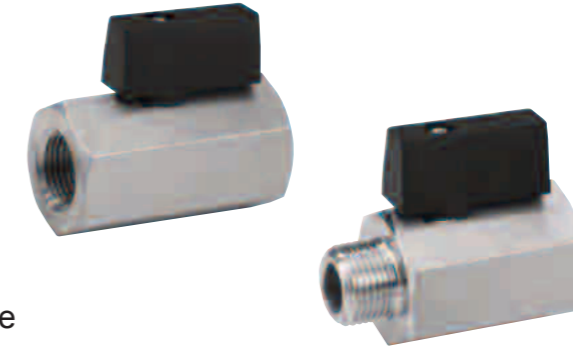
1-Piece Ball Valve
Threaded



Pressure Rating	800WOG
Material	ASTM A351-CF8M
Seat	PTFE
Bore Type	Reduced bore
Additional Feature	• Available with butterfly handle

MODEL 103 / 103-1

1-Piece Mini Ball Valve
Threaded



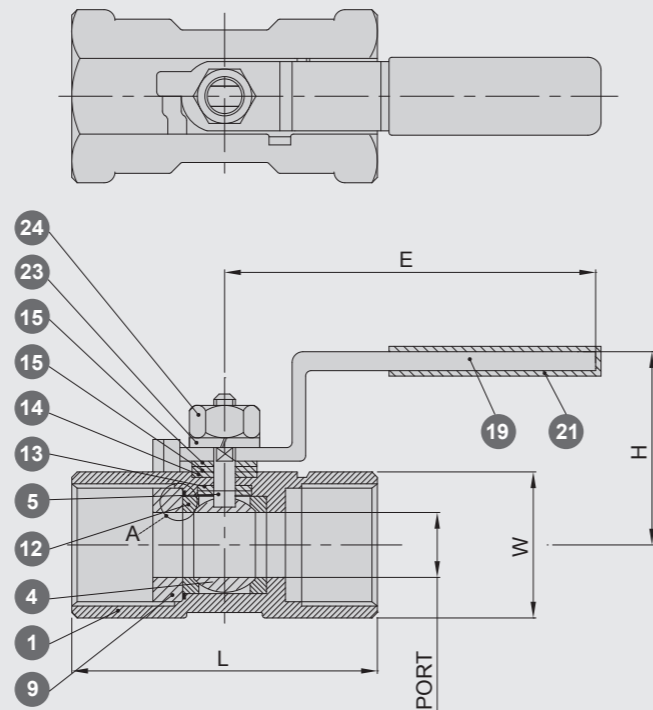
Pressure Rating	800WOG
Material	ASTM A351-CF8M
Seat	PTFE
Bore Type	Reduced bore

MATERIALS LIST

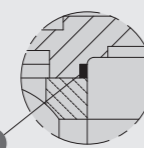
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
4	BALL	1	SUS316
5	STEM	1	SUS316
9	INSERT	1	SUS316
11	BODY SEAL	1	PTFE
12	SEAT	2	PTFE
13	THRUST WASHER	1	PTFE
14	STEM PACKING	1	PTFE
15	GLAND	2	SUS304
19	HANDLE	1	SUS304
21	HANDLE SLEEVE	1	VINYL
23	HANDLE WASHER	1	SUS304
24	HANDLE NUT	1	SUS304

DIMENSIONS(mm)

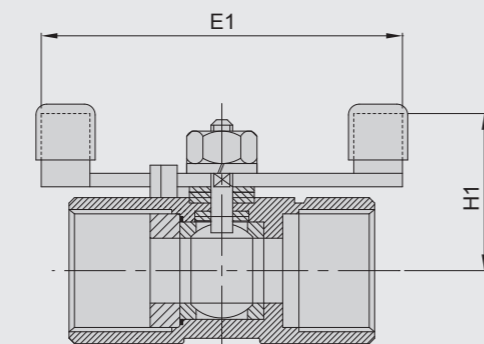
SIZE	PORT	L	E	E1	H	H1	W
1/4"	5	39	68.5	48	29.5	25.5	17
3/8"	7.2	44	79	41	32	27.5	21
1/2"	9.2	56.5	97	54	46	31	25
3/4"	12.5	59	97	54	49	34.5	32
1"	15	71	101	70	53.5	49.5	38
1 1/4"	20	78	101	-	58.5	-	48
1 1/2"	25	83	146	-	65.5	-	53
2"	32	100	146	-	71	-	64



1/4"~1"
A-VIEW



1-1/4"~2"
A-VIEW



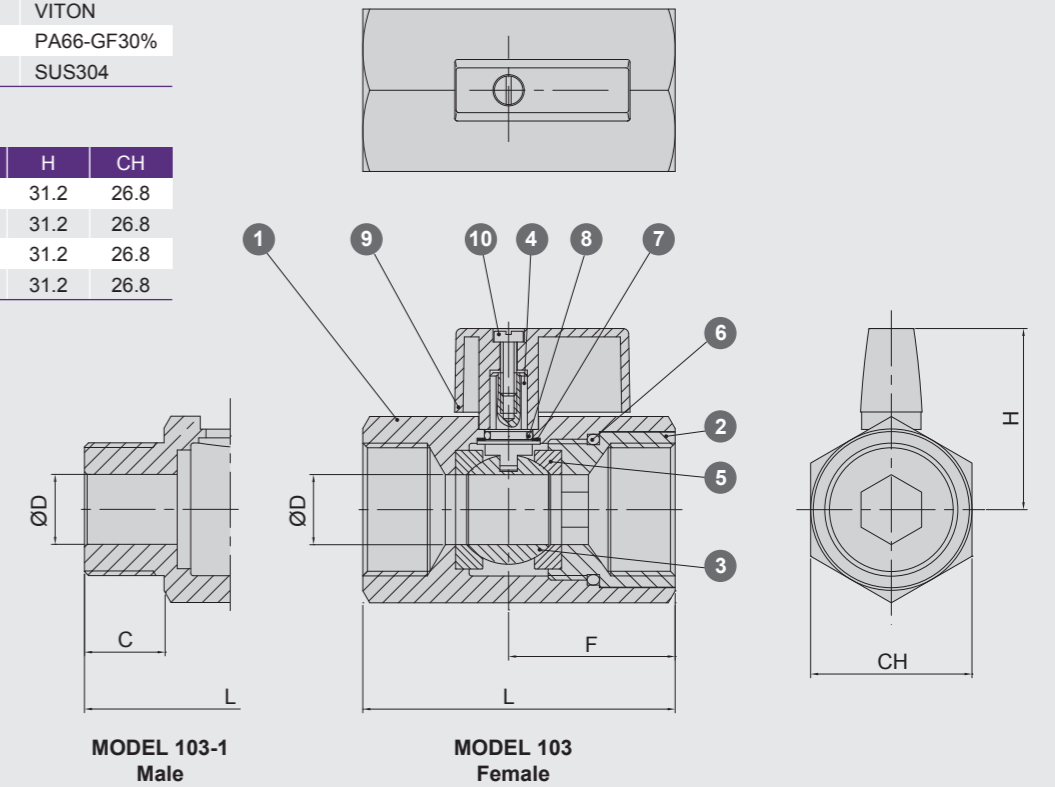
BUTTERFLY HANDLE

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	INSERT	1	SUS316
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	PTFE
6	O-RING	1	VITON
7	STEM SEAL	1	PTFE
8	O-RING	1	VITON
9	HANDLE	1	PA66-GF30%
10	HANDLE BOLT	1	SUS304

DIMENSIONS(mm)

SIZE	C	ØD	F	L	H	CH
1/8"	11	6	27	50	31.2	26.8
1/4"	11	8	27	50	31.2	26.8
3/8"	11	10	27	50	31.2	26.8
1/2"	11	10	27	50	31.2	26.8



MODEL 103-1
Male

MODEL 103
Female



MODEL 201

2-Piece Ball Valve
Threaded



Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	PTFE, TFM1600, 25%, 50%
Bore Type	Full bore

MODEL 204-2

2-Piece 3-Way Ball Valve
Threaded



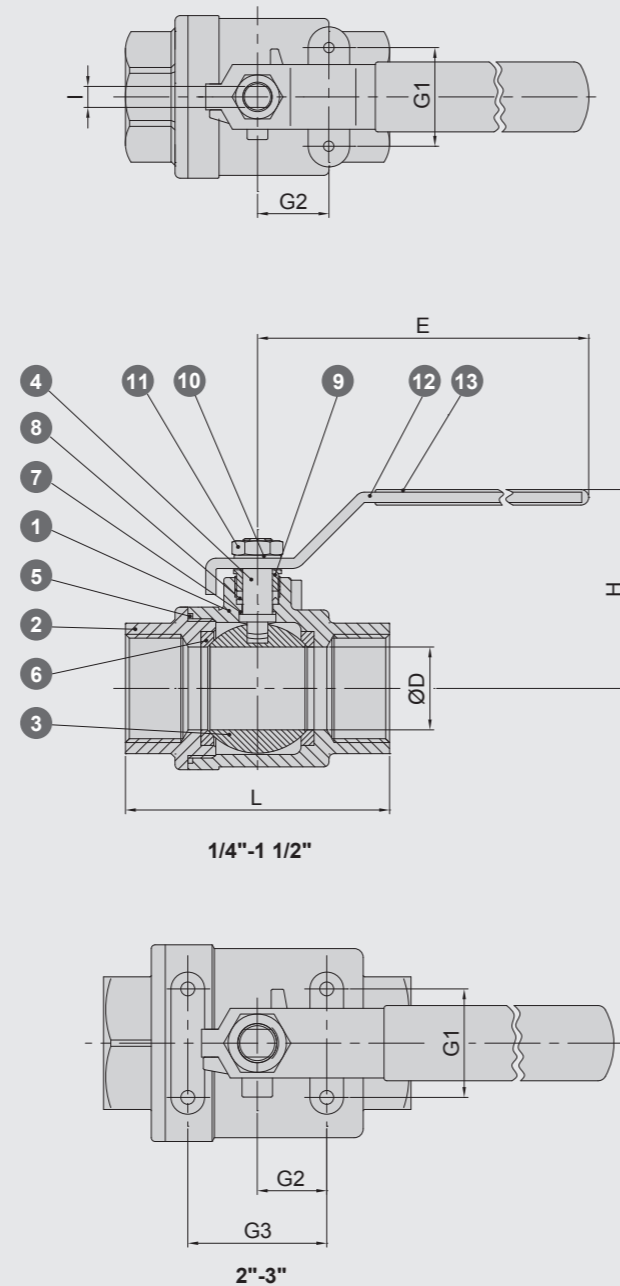
Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	TFM1600
Bore Type	Standard bore
Additional Features	<ul style="list-style-type: none"> L-port, T-port available ISO5211 direct mounting pad

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	1	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAL	1	PTFE
6	SEAT	2	PTFE
7	STEM SEAL	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	SUS304
10	WASHER	1	SUS304
11	STEM NUT	1	SUS304
12	HANDLE	1	SUS304
13	HANDLE SLEEVE	1	VINYL

DIMENSIONS(mm)

SIZE	ØD	E	H	I	L	G1	G2	G3
1/4"	11.4	103	51	5	55	28	12.7	-
3/8"	12.5	103	51	5	55	28	12.7	-
1/2"	15	133	61.5	6.3	65	28	12.7	-
3/4"	20	133	64.5	6.3	75.3	35	22.4	-
1"	25	153	73.5	8	88	35	22.4	-
1 1/4"	32	153	79	8	101	38.1	25.4	-
1 1/2"	38	191	94.5	9.5	110	38.1	25.4	50.8
2"	50	191	103	9.5	124	38.1	25.4	50.8
2 1/2"	65	247	135	12	160	55	35.1	70.2
3"	80	247	144	12	175.3	55	35.1	70.2



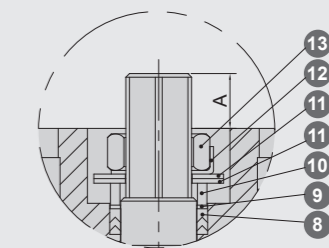
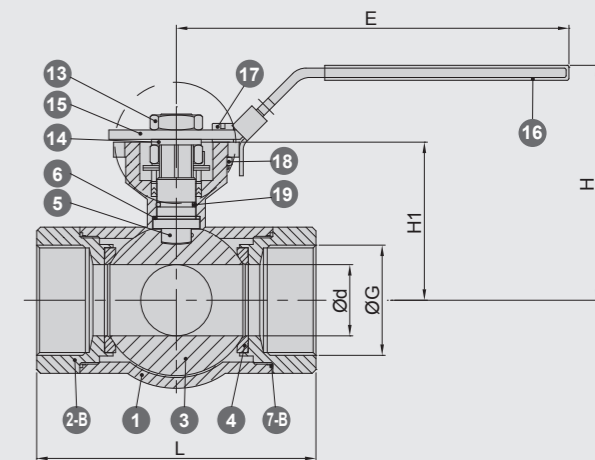
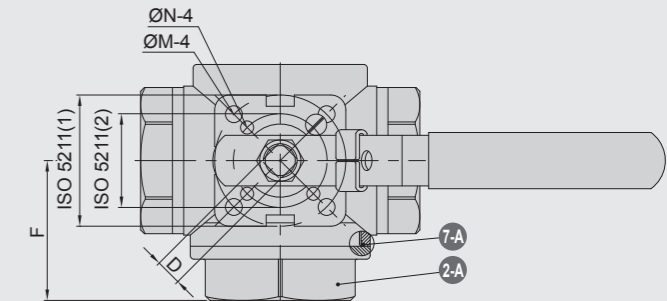
MATERIALS LIST

N0	PART NAME	QTY	MATERIAL
1	BODY	1	CF8M
2-A	CAP	1	CF8M
2-B	CAP	2	CF8M
3	BALL	1	CF8M
4	BALL SEATS	4/1 SETS	TFM1600
5	STEM	1	SUS316
6	THRUST WASHER	1	PTFE
7-A	END SEALS	1	PTFE
7-B	END SEALS	2/1 SETS	PTFE
8	STEM PACKING	1 SETS	PTFE
9	THRUST WASHER	1	TFM1600
10	GLAND BUSH	1	SUS304
11	BELLEVILLE WASHER	2	SUS304
12	STOP	1	SUS304
13	HANDLE NUT	2	SUS304
14	WASHER	1	SUS304
15	HANDLE	1	SUS304
16	HANDLE SLEEVE	1	VINYL
17	LEVER STOP	1	SUS304
18	LEVER STOP NUT	1	SUS304
19	O-RING	1	VITON

DIMENSIONS(mm)

SIZE	d	L	H	D	F	A	N	M	E	H1	ISO 5211 (1)	(2)	G
1/4"	11	75.7	68	9	38.3	8.2	6	6	131	36.8	F04 42	F03 36	PF.PT.NPT
3/8"	11	75.7	68	9	38.3	8.2	6	6	131	36.8	F04 42	F03 36	PF.PT.NPT
1/2"	12.5	75.7	68	9	38.3	8.2	6	6	131	36.8	F04 42	F03 36	PF.PT.NPT
3/4"	16	86.6	74	9	44.7	9.0	6	6	131	44.1	F04 42	F03 36	PF.PT.NPT
1"	20	103	94	11	50.8	11.5	6	7	184	55.1	F05 50	F04 42	PF.PT.NPT
1 1/4"	25	118.2	100	11	57.7	11.5	6	7	184	60.7	F05 50	F04 42	PF.PT.NPT
1 1/2"	32	125.8	114	14	62.6	15.1	7	9	227	75.2	F07 70	F05 50	PF.PT.NPT
2"	38	149	123	14	74.3	15.1	7	9	227	84.4	F07 70	F05 50	PF.PT.NPT

TYPE	PORT	1	2	3	4
T		2 ⊕ ₁ ³	2 ⊕ ₁ ³	2 ⊕ ₁ ³	2 ⊕ ₁ ³
L		2 ⊕ ₁ ³	2 ⊕ ₁ ³	2 ⊕ ₁ ³	2 ⊕ ₁ ³





MODEL 204-3

2-Piece 3-Way
Sanitary Ball Valve
T-Clamp



Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	Cavity filled PTFE
Bore Type	Standard bore
Additional Features	<ul style="list-style-type: none"> • L-port, T-port available • ISO5211 direct mounting pad

MODEL 204-4

2-Piece 4-Way Ball Valve
Threaded



Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	TFM1600
Bore Type	Standard bore
Additional Features	<ul style="list-style-type: none"> • L-port, T-port, X-port available • ISO5211 direct mounting pad

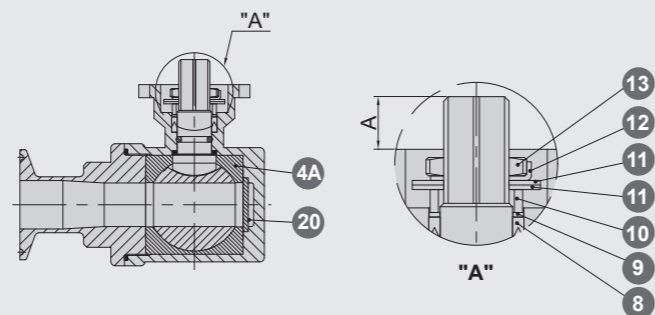
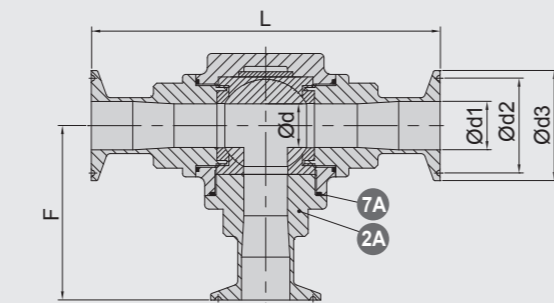
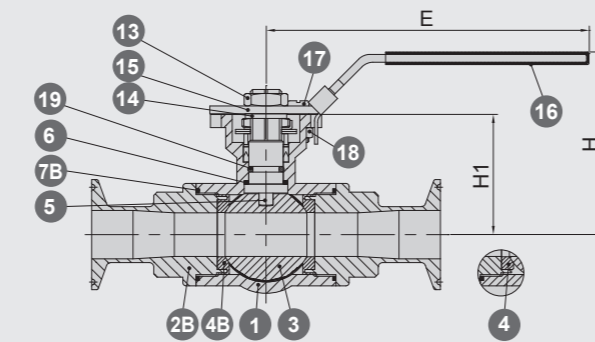
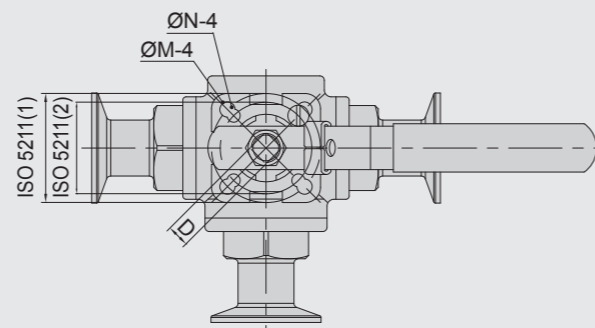
MATERIALS LIST

NO.	PART NAME	QTY	MATERIAL
1	BODY	1	CF8M
2A	CAP	1	CF8M
2B	CAP	2	CF8M
3	BALL	1	CF8M
4	BALL SEATS	4/1 SETS	PTFE
4A	BALL SEATS	2/1 SETS	PTFE
4B	BALL SEATS	2/1 SETS	PTFE
5	STEM	1	SUS316
6	THRUST WASHER	1	PTFE
7A	END SEALS	1	PTFE
7B	END SEALS	2/1 SETS	PTFE
8	STEM PACKING	1 SETS	PTFE
9	THRUST WASHER	1	TFM1600
10	GLAND BUSH	1	SUS304
11	BELLEVILLE WASAER	2	SUS304
12	STOP	1	SUS304
13	HANDLE NUT	2	SUS304
14	WASHER	1	SUS304
15	HANDLE	1	SUS304
16	HANDLE SLEEVE	1	VINYL
17	LEVER STOP	1	SUS304
18	LEVER STOP NUT	1	SUS304
19	O-RING	1	VITON
20	STUFF	1	PTFE

DIMENSIONS(mm)

SIZE	d	d1	d2	d3	L	H	D	F	A	N	M	E	H1	ISO 5211	
														(1)	(2)
1/2"	12.5	9.4	20.32	25	133	68	9	67	8.2	6	6	131	36.8	F04	F03
														42	36
3/4"	12.5	15.75	20.32	25	142	68	9	71	8.2	6	6	131	36.8	F04	F03
														42	36
1"	20	22.1	43.64	50.4	160	94	11	80	11.5	6	7	184	55.1	F05	F04
														50	42
1 1/2"	32	34.8	43.64	50.4	182	114	14	91	15.1	7	9	227	75.2	F07	F05
														70	50
2"	38	47.5	56.34	64	216	123	14	108	15.1	7	9	227	84.4	F07	F05
														70	50

TYPE	PORT	1	2	3	4
T					
L					



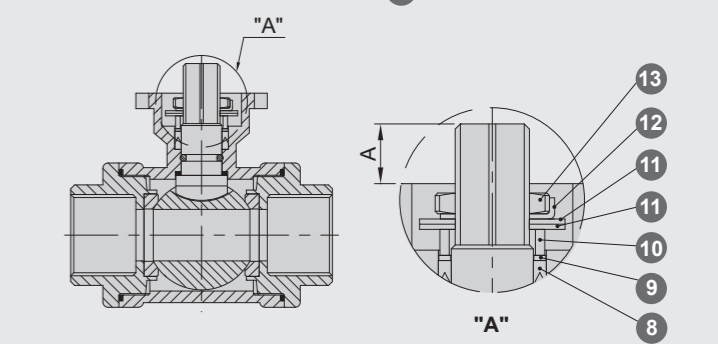
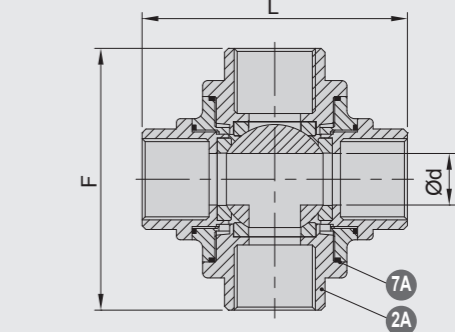
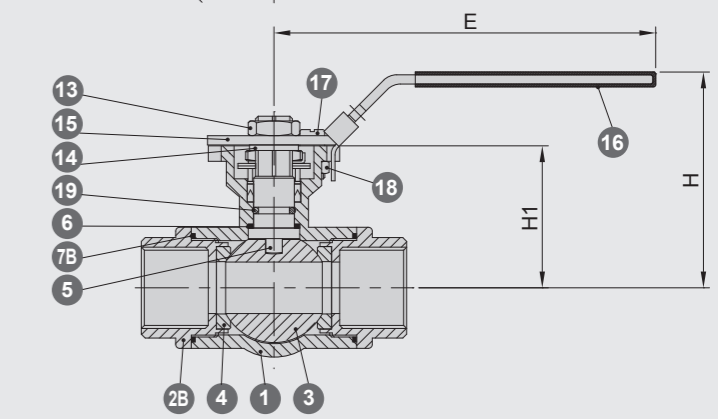
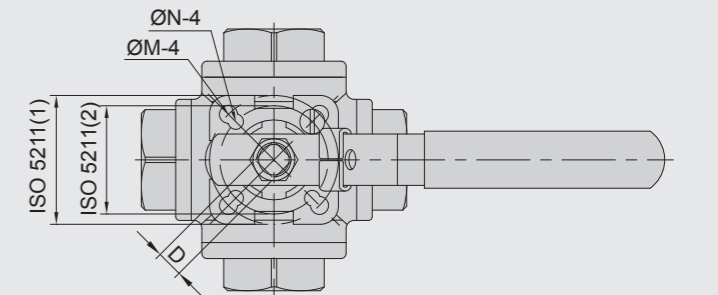
MATERIALS LIST

NO.	PART NAME	QTY	MATERIAL
1	BODY	1	CF8M
2A	CAP	2	CF8M
2B	CAP	2	CF8M
3	BALL	1	CF8M
4	BALL SEATS	4/1 SETS	TFM1600
5	STEM	1	SUS316
6	THRUST WASHER	1	PTFE
7A	END SEALS	2/1 SETS	PTFE
7B	END SEALS	2/1 SETS	PTFE
8	STEM PACKING	1 SETS	PTFE
9	THRUST WASHER	1	TFM1600
10	GLAND BUSH	1	SUS304
11	BELLEVILLE WASAER	2	SUS304
12	STOP	1	SUS304
13	HANDLE NUT	2	SUS304
14	WASHER	1	SUS304
15	HANDLE	1	SUS304
16	HANDLE SLEEVE	1	VINYL
17	LEVER STOP	1	SUS304
18	LEVER STOP NUT	1	SUS304
19	O-RING	1	VITON

DIMENSIONS(mm)

SIZE	d	L	H	D	F	A	N	E	M	H1	ISO 5211	
											(1)	(2)
1/4"	11.8	75.7	68	9	76.5	8.2	6	6	131	36.8	F04	F03
											42	36
3/8"	11.8	75.7	68	9	76.5	8.2	6	6	131	36.8	F04	F03
											42	36
1/2"	12.5	75.7	68	9	76.5	8.2	6	6	131	36.8	F04	F03
											42	36
3/4"	16	86.6	74	9	89.4	9.0	6	6	131	44.1	F04	F03
											42	36
1"	20	103	94	11	101.6	11.5	6	7	184	55.1	F05	F04
											50	42
1 1/4"	25	118.2	100	11	115.4	11.5	6	7	184	60.7	F05	F04
											50	42
1 1/2"	32	125.8	114	14	125.2	15.1	7	9	227	75.2	F07	F05
											70	50
2"	38	149	123	14	148.6	15.1	7	9	227	84.4	F07	F05
											70	50

TYPE	PORT	1	2	3	4	
T						1/4"-3/8" T-PORT Ød-Ø11
L						1/4"-3/8" L-PORT Ød-Ø11
X						1/4"-3/8" X-PORT Ød-Ø8





MODEL 204-5
2-Piece 3-Way Ball Valve
Flanged
(1/2"-3")

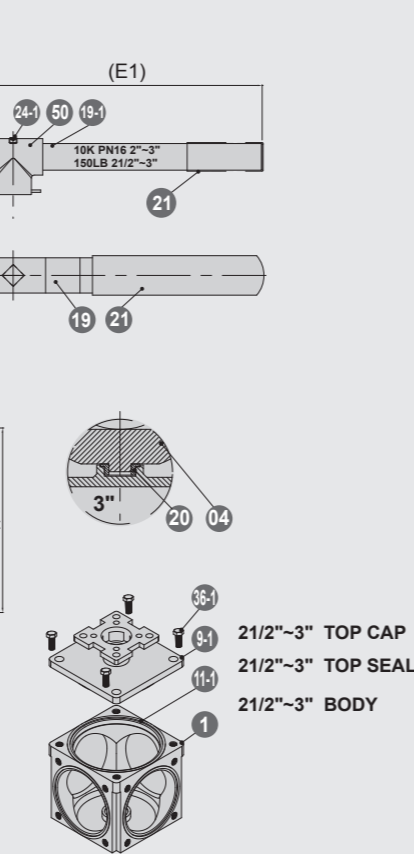
Pressure Rating	ANSI Class 150, JIS 10K, DIN PN16
Material	ANSI Class 150: ASTM A351-CF8M JIS 10K: JIS G5121-SCS14A DIN PN16: EN10213-1.4408
Seat	RPTFE
Bore Type	Full bore
Additional Features	• L-port, T-port available • ISO5211 direct mounting pad

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
4	BALL	1	CF8M
5	STEM	1	SS316
9	END CAP	4	CF8M
9-1	TOP CAP	1	CF8M
11	BODY SEAL	4	PTFE
11-1	TOP SEAL	1	PTFE
12	SEAT	4	RPTFE
13	THRUST WASHER	1	RPTFE
14	STEM PACKING	1SET	RPTFE
15	GLAND	1	SS304
19	HANDLE	1	SS304
19-1	HANDLE	1	SS304
20	BUSHING	1	PTFE
21	HANDLE SLEEVE	1	VINYL
22	STEM NUT	1	SS304
23	HANDLE WASHER	1	SS304
24	HANDLE NUT	1	SS304
24-1	HANDLE NUT	1	SS304
29	BELLEVILLE WASHER	2	SUS301
30	STOP WASHER	1	SS304
31	O-RING	1	VITON
32	PACKING FOLLOWER	1	PTFE+25%GF
33	STOP PIN	1SET	SS304
35	BOLT	16	SS304
36	BOLT WASHER	16	SS304
36-1	BOLT WASHER	4	SS304
50	HANDLE ADAPTER	1	CF8

DIMENSIONS(mm)

SIZE	PORT	L	E	E1	H	H1	H2	H4	D	ØG	ØJ	ØI	T	F	M	ØN	Z1	Z2	ISO 5211	
1/2"	10K	15.0	147.4	186.5	-	89.0	9.0	-	47.8	9.0	95.0	70.0	51.0	12.0	1.0	4	15	6.0	-	42 F04
	PN16	16.0	158.0	186.5	-	89.0	9.0	-	47.8	9.0	95.0	65.0	45.0	16.0	2.0	4	14	6.0	-	42 F04
	150LB	16.0	146.8	186.5	-	89.0	9.0	-	47.8	9.0	89.0	60.5	35.0	11.1	1.60	4	16	6.0	-	42 F04
3/4"	10K	20.0	155.8	218.0	-	98.0	11.0	-	58.2	11.0	100.0	75.0	56.0	14.0	1.0	4	15	7.0	-	50 F05
	PN16	20.0	169.0	218.0	-	98.0	11.0	-	58.2	11.0	105.0	75.0	58.0	18.0	2.0	4	14	7.0	-	50 F05
	150LB	20.0	153.5	218.0	-	98.0	11.0	-	58.2	11.0	98.6	70.0	43.0	11.1	1.60	4	16	7.0	-	50 F05
1"	10K	25.0	168.8	218.0	-	102.0	11.5	-	64.0	11.0	125.0	90.0	67.0	14.0	1.0	4	19	7.0	-	50 F05
	PN16	25.0	185.0	218.0	-	102.0	11.5	-	64.0	11.0	115.0	85.0	68.0	18.0	2.0	4	14	7.0	-	50 F05
	150LB	25.0	170.0	218.0	-	102.0	11.5	-	64.0	11.0	108.0	79.2	51.0	11.1	1.60	4	16	7.0	-	50 F05
1 1/4"	10K	32.0	197.9	235.0	-	118.5	15.2	-	79.0	14.0	135.0	100.0	76.0	16.0	2.0	4	19	9.0	7.0	50 F05 / 70 F07
	PN16	32.0	195.0	235.0	-	118.5	15.2	-	79.0	14.0	140.0	100.0	78.0	18.0	2.0	4	18	9.0	7.0	50 F05 / 70 F07
	150LB	32.0	193.5	235.0	-	118.5	15.2	-	79.0	14.0	117.5	88.9	63.5	12.7	1.60	4	16	9.0	7.0	50 F05 / 70 F07
1 1/2"	10K	40.0	221.4	235.0	-	127.0	14.3	-	88.5	14.0	140.0	105.0	81.0	16.0	2.0	4	19	9.0	7.0	50 F05 / 70 F07
	PN16	38.0	232.0	235.0	-	127.0	14.3	-	88.5	14.0	150.0	110.0	88.0	18.0	2.0	4	18	9.0	7.0	50 F05 / 70 F07
	150LB	38.0	217.0	235.0	-	127.0	14.3	-	88.5	14.0	127.0	98.6	73.2	14.3	1.60	4	16	9.0	7.0	50 F05 / 70 F07
2"	10K	50.0	244.6	251.5	400.0	154.8	17.8	161.4	105.8	17.0	155.0	120.0	96.0	16.0	2.0	4	19	11.0	9.0	70 F07 / 102 F10
	PN16	50.0	253.0	251.5	400.0	154.8	17.8	161.4	105.8	17.0	165.0	125.0	102.0	20.0	2.0	4	18	11.0	9.0	70 F07 / 102 F10
	150LB	50.0	221.0	252.0	-	150.8	17.8	-	105.8	17.0	152.5	120.7	92.0	15.8	1.60	4	19	11.0	9.0	70 F07 / 102 F10
2 1/2"	10K	64.0	270.0	301.5	400.0	166.2	17.5	172.8	117.3	17.0	175.0	140.0	116.0	18.0	2.0	4	19	11.0	9.0	70 F07 / 102 F10
	PN16	65.0	270.0	301.5	400.0	166.2	17.5	172.8	117.3	17.0	185.0	145.0	122.0	18.0	2.0	4	18	11.0	9.0	70 F07 / 102 F10
	150LB	65.0	270.0	301.5	400.0	166.2	17.5	172.8	117.3	17.0	177.8	139.7	104.7	23.3	1.60	4	19	11.0	9.0	70 F07 / 102 F10
3"	10K	76.0	292.2	301.5	400.0	173.8	17.5	180.4	128.0	17.0	185.0	150.0	126.0	18.0	2.0	8	19	11.0	9.0	70 F07 / 102 F10
	PN16	76.0	292.2	301.5	400.0	173.8	17.5	180.4	128.0	17.0	200.0	160.0	138.0	20.0	2.0	8	18	11.0	9.0	70 F07 / 102 F10
	150LB	76.0	292.2	301.5	400.0	173.8	17.5	180.4	128.0	17.0	190.5	152.4	127.0	23.9	1.60	4	19	11.0	9.0	70 F07 / 102 F10



TYPE	PORT	1	2	3	4
T					
L					

MODEL 204-5
2-Piece 3-Way Ball Valve
Flanged
(4"-6")

Pressure Rating	ANSI Class 150, JIS 10K, DIN PN16
Material	ANSI Class 150: ASTM A351-CF8M JIS 10K: JIS G5121-SCS14A DIN PN16: EN10213-1.4408
Seat	RPTFE
Bore Type	Full bore
Additional Features	• L-port, T-port available • ISO5211 direct mounting pad

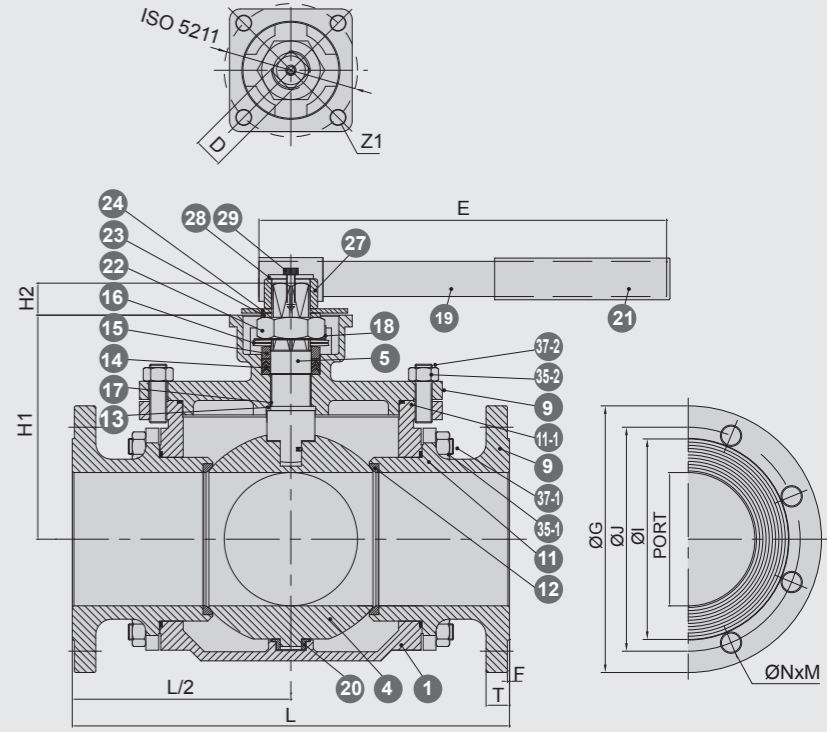
MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	JIS-G5121-SCS14A EN10213-1.4408
4	BALL	1	ASTM A351-CF8M
5	STEM	1	SS316
9	END CAP	4	JIS-G5121-SCS14A EN10213-1.4408 ASTM A351-CF8M
11	BODY SEAL	4	PTFE
11-1	TOP SEAL	1	PTFE
12	SEAT	4	RPTFE
13	THRUST WASHER	1	RPTFE
14	STEM PACKING	1 SET	RPTFE
15	GLAND	1	SS304
16	BELLEVILLE WASHER	2	SS301
17	STEM BUSHING	1	PTFE
18	TAB WASHER	1	SS304
19	HANDLE	1	IRON TUBE
20	BUSHING	1	PTFE
21	HANDLE SLEEVE	1	VINYL
22	STEM NUT	1	SS304
23	WASHER	1	SS304
24	TRIANGLE STOPPER	1	SS304
27	HANDLE ADAPTER	1	SS304
28	HANDLE WASHER	1	SS304
29	HANDLE BOLT	1	SS304
35-1	BODY BOLT	24	SS304
35-2	BODY BOLT	6	SS304
37-1	BOLT NUT	24	SS304
37-2	BOLT NUT	6	SS304

DIMENSIONS(mm)

SIZE	PORT	L	E	H1	H2	D	ØG	ØJ	ØI	T	F	M	ØN	Z1	ISO 5211	
4"	10K	100	368.0	600	159.0	30.0	27.0	210.0	175.0	151.0	18.0	2.0	8	19	14.0	F12 125
	PN16	100	368.0	600	159.0	30.0	27.0	228.6	190.5	157.2	23.9	1.6	8	19	14.0	F12 125
	150LB	100	368.0	600	159.0	30.0	27.0	228.6	190.5	157.2	23.9	1.6	8	19	14.0	F12 125
5"	10K	125	420.0	600	210.0	30.0	27.0	250.0	210.0	182.0	20.0	2.0	8	23	-	F12 125
	PN16	125	416.0	600	210.0	30.0	27.0	250.0	210.0	188.0	22.0	2.0	8	18	14.0	F12 125
	150LB	125	420.0	600	210.0	30.0	27.0	254.0	216.0	186.0	24.0	1.6	8	22.3	14.0	F12 125
6"	10K	150	479.4	800	239.0	36.0	36.0	280.0	240.0	212.0	22.0	2.0	8	23	-	F14 140
	PN16	150	472.6	800	239.0	43.5	36.0	285.0	240.0	212.0	22.0	2.0	8	22	17.5	F14 140
	150LB	150	479.4	800	239.0	43.5	36.0	279.4	241.3	216.0	25.4	1.6	8	22.3	17.5	F14 140

TYPE	PORT	1	2	3	4
T					
L					





MODEL 205

2-Piece High Pressure Ball Valve Threaded



Pressure Rating	2000WOG (1/4"-1") 1500WOG (1 1/4"-2")
Material	ASTM A351-CF8M
Seat	TFM1600
Bore Type	Reduced bore

MODEL 205S

2-Piece Spring Return Ball Valve Threaded



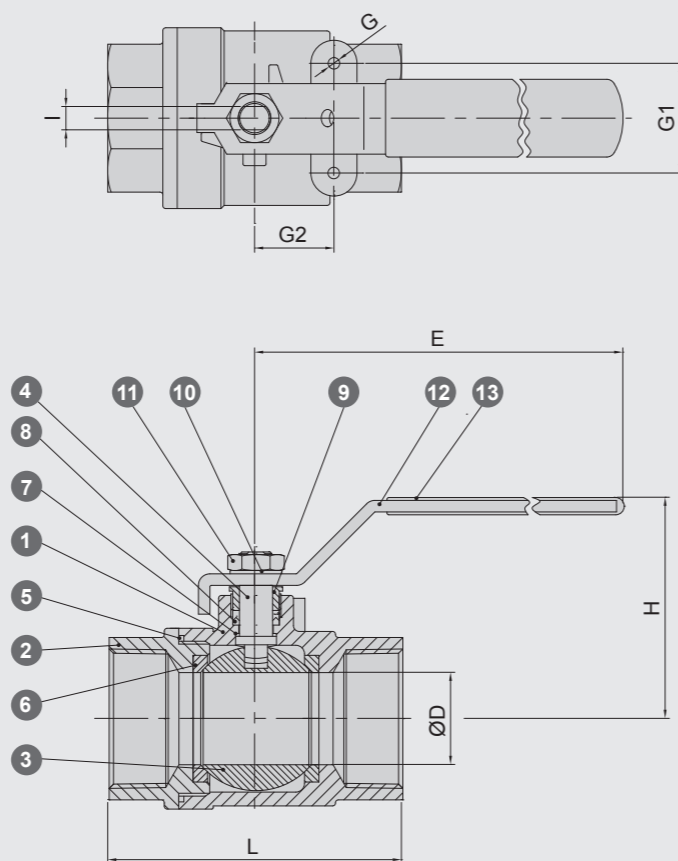
Pressure Rating	2000WOG
Material	ASTM A351-CF8M
Seat	TFM1600
Bore Type	Reduced bore
Additional Feature	• Normally closed

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	1	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAL	1	PTFE
6	SEAT	2	TFM1600
7	STEM SEAL	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	SUS304
10	WASHER	1	SUS304
11	STEM NUT	1	SUS304
12	HANDLE	1	SUS304
13	HANDLE SLEEVE	1	VINYL

DIMENSIONS(mm)

SIZE	ØD	E	H	I	L	G	G1	G2
1/4"	9.5	103	47	5	52	3/16"-UNC	28	12.7
3/8"	9.5	103	47	5	52	3/16"-UNC	28	12.7
1/2"	12.5	133	50	5	62	3/16"-UNC	28	12.7
3/4"	15	133	56	6.3	69	3/16"-UNC	35	22.4
1"	20	153	59	6.3	83	3/16"-UNC	35	22.4
1 1/4"	25	153	69	8	90	3/16"-UNC	38.1	25.4
1 1/2"	32	191	75	8	104	1/4"-UNC	38.1	25.4
2"	38	191	83	9.5	117	1/4"-UNC	38.1	25.4

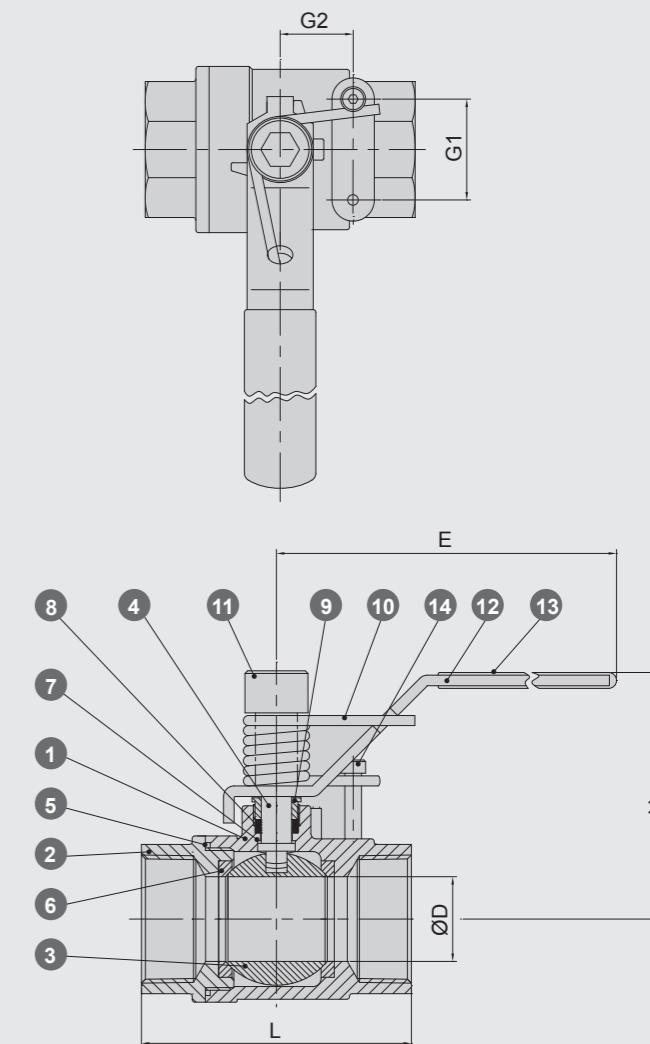


MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	1	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAL	1	PTFE
6	SEAT	2	TFM1600
7	STEM SEAL	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	SUS304
10	SPRING	1	STEEL
11	BOLT	1	STEEL
12	HANDLE	1	SUS304
13	HANDLE SLEEVE	1	VINYL
14	STOPPER BOLT	1	STEEL

DIMENSIONS(mm)

SIZE	ØD	E	H	L	G1	G2
1/4"	9.5	119	58	52	28	12.7
3/8"	9.5	119	58	52	28	12.7
1/2"	12.7	119	61	62	28	12.7
3/4"	15	137	70	69	35	22.4
1"	20	137	73	83	35	22.4
1 1/4"	25	177	86	90	38.1	25.4
1 1/2"	32	177	92	104	38.1	25.4
2"	38	216	104	117	38.1	25.4





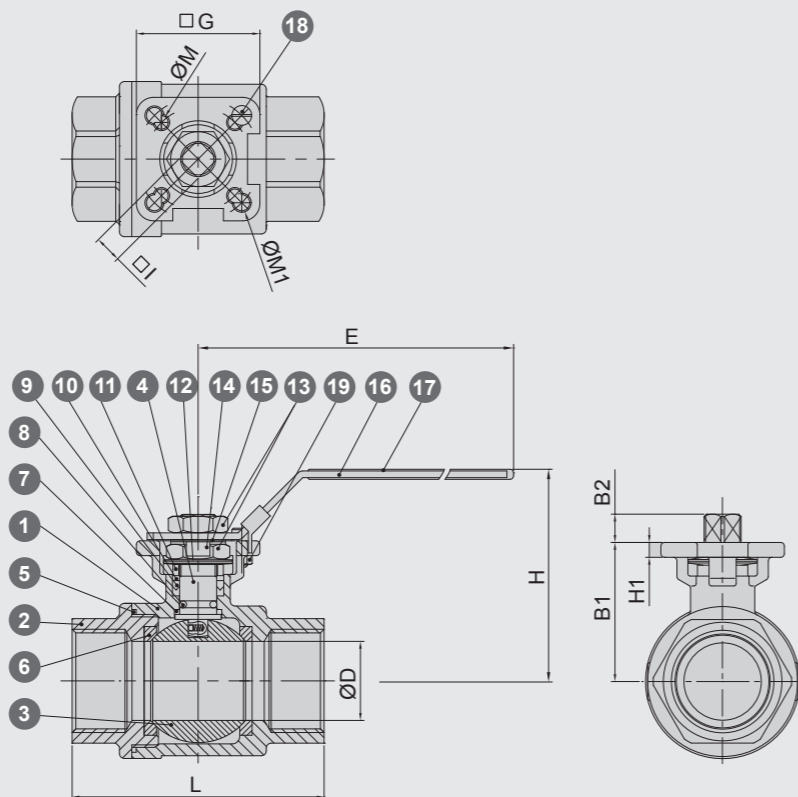
Pressure Rating	PN64 (1/2"-2") PN50 (2 1/2"-3")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600, 25%, 50%
Bore Type	Full bore

MODEL 206

2-Piece ISO 5211
Direct Mounted Ball Valve
Threaded

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	1	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAL	1	PTFE
6	SEAT	2	TFM1600
7	STEM SEAL	1	R.PTFE
8	O-RING	1	VITON
9	V-RING PACKING	1SET	PTFE
10	BUSHING	1	50% S.S. POWDER FILLED PTFE
11	GLAND	1	SUS304
12	BELLEVILLE WASHER	2	SUS304
13	STEM NUT	2	SUS304
14	LOCK SADDLE	1	SUS304
15	WASHER	1	SUS304
16	HANDLE	1	SUS304
17	HANDLE SLEEVE	1	VINYL
18	STOP PIN	1	SUS304
19	STOP PIN NUT	1	SUS304



DIMENSIONS(mm)

SIZE	B1	B2	ϕD	E	$\square G$	H	H1	ϕI	L	ϕM	$\phi M1$	ISO 5211
1/2"	35.6	9	15	128	42	65.9	5	9	65	6	6	F03 F04
3/4"	38.8	9	20	128	42	69.2	5	9	75	6	6	F03 F04
1"	52.2	14	25	167	50	85.6	6	11	88	6	7	F04 F05
1 1/4"	56.5	14	32	167	50	90	6	11	101	6	7	F04 F05
1 1/2"	65.7	15.5	38	215	70	99.6	7	14	109	7	9.2	F05 F07
2"	73.95	15.5	50	215	70	107.8	7	14	123	7	9.2	F05 F07
2 1/2"	94	16.5	65	322	100	146.7	10.5	17	159	9	11	F07 F10
3"	103	16.5	80	322	100	155.7	10.5	17	175	9	11	F07 F10





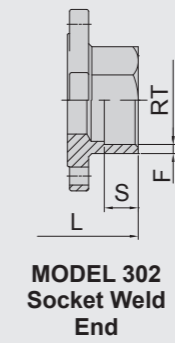
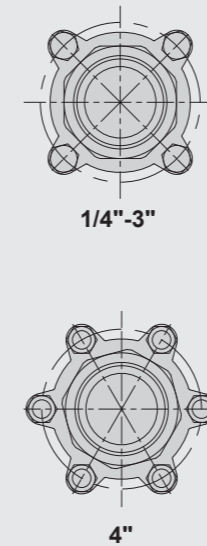
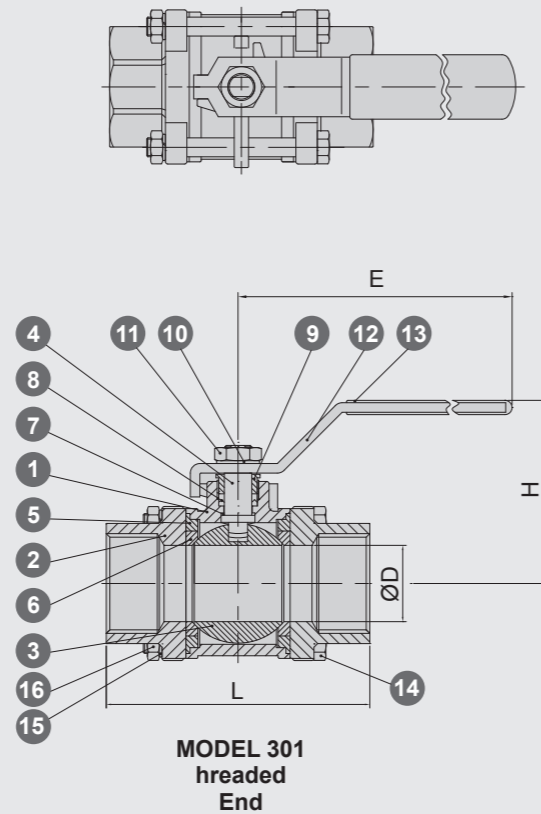
**MODEL
301 / 302 / 303
304 / 304G**
3-Piece Manual
Ball Valve



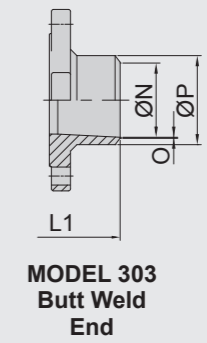
Pressure Rating	1000WOG
Material	ASTM A351-CF8M, ASTM A216-WCB
Seat	PTFE, TFM1600, 25%, 50%
Bore Type	Full bore
Additional Feature	• Available connection: Threaded, Socket weld, Butt weld, Extended butt weld, Grooved end

MATERIALS LIST

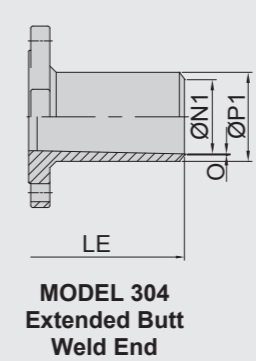
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	2	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	JOINT GASKET	2	PTFE
6	SEAT	2	PTFE
7	STEM SEAL	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	SUS304
10	WASHER	1	SUS304
11	STEM NUT	1	SUS304
12	HANDLE	1	SUS304
13	HANDLE SLEEVE	1	VINYL
14	BOLT	4~6	SUS304
15	WASHER	4~12	SUS304
16	BOLT NUT	4~12	SUS304



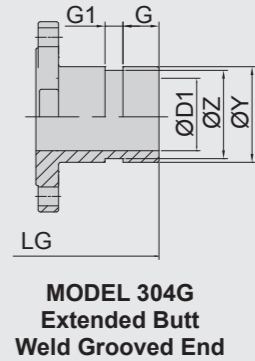
**MODEL 302
Socket Weld
End**



**MODEL 303
Butt Weld
End**



**MODEL 304
Extended Butt
Weld End**



**MODEL 304G
Extended Butt
Weld Grooved End**

DIMENSIONS(mm)

SIZE	ØD	ØD1	E	F	G	G1	H	S	L	L1	LE	LG	ØN	ØN1	O	ØP	ØP1	RT	ØY	ØZ
1/4"	11.6	-	103	3.6	-	-	54	11	61	61	223	-	11.6	11.6	1	18	15	14.2	-	-
3/8"	12.5	-	103	2	-	-	54	11	61	61	223	-	12.5	14	1	18	17	17.7	-	-
1/2"	15	15	133	2	15.9	7.93	55	12	69	69	225	127	17	15.6	1	22.7	21	21.9	20.6	17.8
3/4"	20	20	133	2.6	15.9	7.93	59	14	78	78	225	127	22.5	20.7	1	27.7	26.8	27.3	26.7	23.8
1"	25	25	153	3.2	15.9	7.93	70	14	84	84	244	152.4	26	25.8	1	33.5	34.4	34.1	33.4	30.2
1 1/4"	32	32	153	4.05	15.9	7.93	75	15	104	104	253	152.4	34.4	33.3	1	42.2	43.4	42.8	42.2	39
1 1/2"	38	38	191	3.7	15.9	7.93	84	17	118	119	258	117.8	41.5	40.5	1	48.8	49.8	48.8	48.3	45.1
2"	50	50	191	4.35	15.9	7.93	92	19	129	131	275	203.2	53	51.5	1	61	61	61.3	60.3	57.2
2 1/2"	65	65	247	5.75	15.9	7.93	128	21	162	162	332	228.6	65.8	68	1	77	77	74	73	69.1
3"	80	80	247	5.25	15.9	7.93	137	25	182	182	351	254	81	81	1	91	91	90	88.9	84.9
4"	100	100	295	5.7	15.9	9.53	173	30	230	230	360	304.8	102	101	1	115	115	115.6	114.3	97.3



MODEL 304LV
3-Piece Manual High Purity
Ball Valve
Tube / Pipe



Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	TFM1600
Bore Type	Pipe end: Full bore, Tube end: Standard bore
Additional Features	<ul style="list-style-type: none"> Oil-free product Pipe End: 5S & 10S available Surface roughness: AP Grade (Ra ≤ 0.8μm), BA Grade (Ra ≤ 0.25μm)

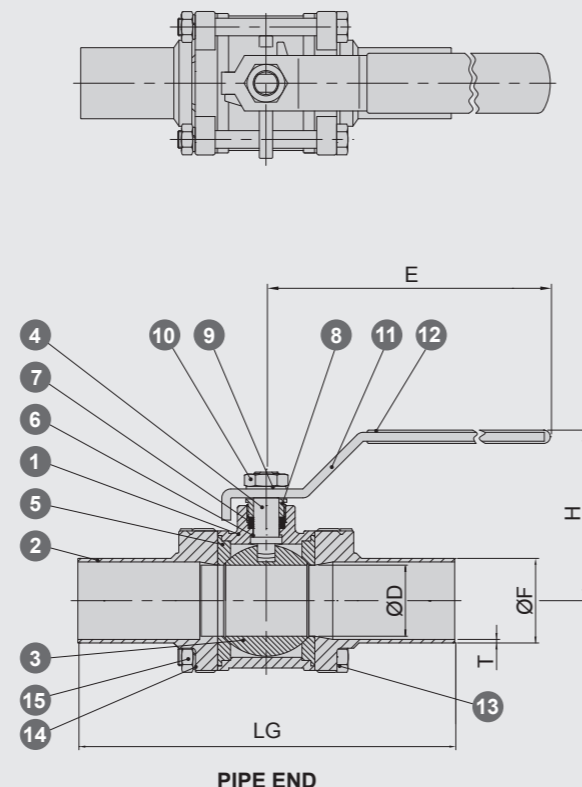
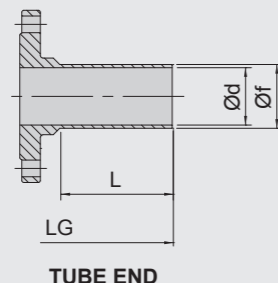
MODEL 305
3-Piece Manual Ball Valve
Flanged



Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	PTFE, TFM1600, 25%, 50%
Bore Type	Full bore
Additional Feature	<ul style="list-style-type: none"> Available connection: ANSI Class 150, JIS 10K, DIN PN40

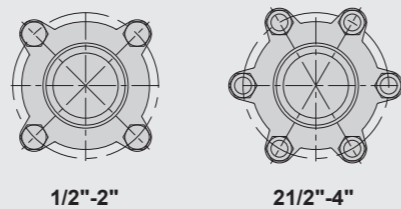
MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	2	CF3M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	STEM SEAL	1	PTFE
7	STEM PACKING	1	PTFE
8	GLAND NUT	1	SUS304
9	STEM WASHER	1	SUS304
10	STEM NUT	1	SUS304
11	HANDLE	1	SUS304
12	HANDLE SLEEVE	1	VINYL
13	BOLT	4~6	SUS304
14	WASHER	4~12	SUS304
15	BOLT NUT	4~12	SUS304



DIMENSIONS(mm)

SIZE	Ød	Øf	ØD	ØF	E	H	L	T		LG
								5S	10S	
1/2"	9.4	12.7	15	21.7	133	55	39	1.65	2.1	150.8
3/4"	15.75	19.05	20	27.2	133	59	41.8	1.65	2.1	155.7
1"	22.1	25.4	25	34	153	70	43.4	1.65	2.8	186.2
1 1/4"	28.5	31.8	32	42.7	153	75	50	1.65	2.8	195.6
1 1/2"	34.8	38.1	38	48.6	191	84	54.4	1.65	2.8	231.6
2"	47.5	50.8	50	60.5	191	92	46.8	1.65	2.8	243.4
2 1/2"	60.2	63.5	65	76.3	247	128	71	2.1	3.0	290.2
3"	72.9	76.2	80	89.1	247	137	72	2.1	3.0	302.2
4"	97.4	101.6	100	114.3	295	173	70	2.1	3.0	326.2

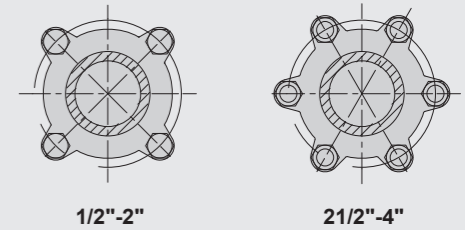
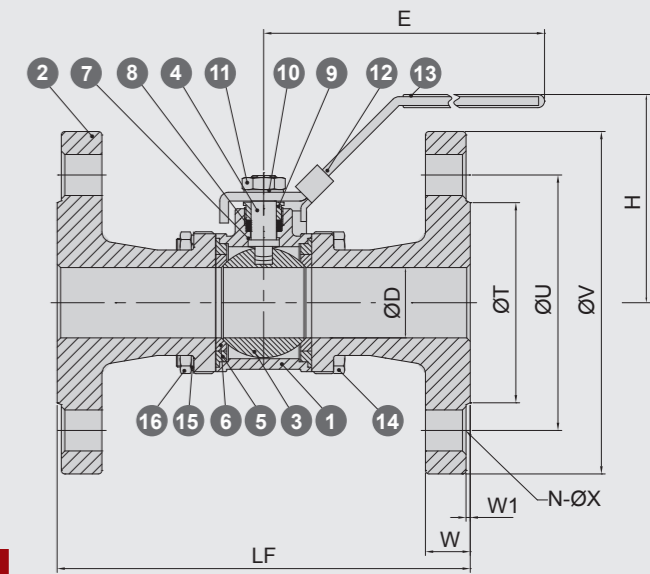


MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	2	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	JOINT GASKET	2	PTFE
6	SEAT	2	PTFE
7	STEM SEAL	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	SUS304
10	WASHER	1	SUS304
11	STEM NUT	1	SUS304
12	HANDLE LOCK	1	SUS304
13	HANDLE SLEEVE	1	VINYL
14	BOLT	4~6	SUS304
15	WASHER	4~12	SUS304
16	BOLT NUT	4~12	SUS304

DIMENSIONS(mm)

SIZE	FLANGED	ØD	E	H	LF	ØT	ØU	ØV	W	W1	ØX	N
1/2"	150 LB				108	35	60.4	89	11.2	1.6	16	
	PN40	15	135	85	131.1	47.3	65	95	16	2	14	4
	10K				108	52	70	95	12	1	15	
3/4"	150 LB				117	43	69.9	98.4	12.7	1.6	16	
	PN40	20	135	89	150	58	75	105	18	2	14	4
	10K				117	58	75	100	14	1	15	
1"	150 LB				127	50.8	79.4	108	14.3	1.6	16	
	PN40	25	175	87	160	69	85	115	18	2	14	4
	10K				127	70	90	125	14	1	19	
1 1/4"	150 LB				146	64	88.9	117.5	15.9	1.6	16	
	PN40	32	175	92	182	78.8	100	140	18	2	18	4
	10K				146	80	100	135	16	2	19	
1 1/2"	150 LB				165	73	98.5	127	17.5	1.6	16	
	PN40	38	211	105	200	90	110	150	18	3	18	4
	10K				165	85	105	140	16	2	19	
2"	150 LB				192	92	120.7	152.4	19.1	1.6	19	
	PN40	50	211	113	230	106	125	165	20	3	18	4
	10K				178	100	120	155	16	2	19	
2 1/2"	150 LB				232	104.8	139.7	177.8	22.3	1.6	19	4
	PN40	65	247	128	290	122	145	185	22	3	18	8
	10K				232	120	140	175	18	2	19	4
3"	150 LB				255	127	152.4	190.5	23.9	1.6	19	4
	PN40	80	247	137	310	138	160	200	24	3	18	8
	10K				255	130	150	185	18	2	19	8
4"	150 LB				290	157.2	190.5	228.6	23.9	1.6	19	
	PN40	100	295	173	350	162	190	235	24	3	23	8
	10K				290	155	175	210	18	2	19	





MODEL 306 / 307

3-Piece Sanitary Ball Valve
T-Clamp / Butt weld



Pressure Rating	1000WOG
Material	ASTM A351-CF8M
Seat	Cavity filled PTFE, Non-cavity filled TFM1600
Bore Type	Standard bore
Additional Feature	• Surface roughness: Ra ≤ 0.4μm

MODEL 336

3-Piece
3/4-Way Sanitary
Ball Valve
T-Clamp



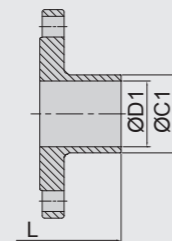
Pressure Rating	1000WOG (1/2"-2") 800WOG (2 1/2"-4")
Material	ASTM A351-CF8M
Seat	Cavity filled PTFE, Non-cavity filled TFM1600
Bore Type	Standard bore
Additional Features	• L-port, T-port, X-port available • ISO5211 direct mounting pad • Surface roughness: Ra ≤ 0.4μm

MATERIALS LIST

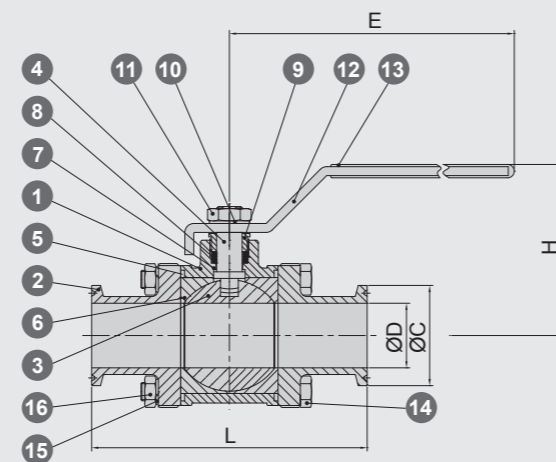
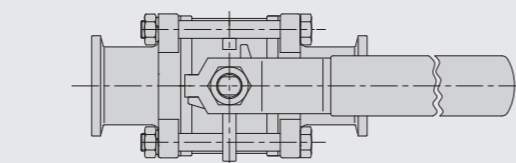
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	2	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAL	2	PTFE
6	SEAT/CAVITY FILLER	2	PTFE
7	STEM SEAL	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	SUS304
10	STEM WASHER	1	SUS304
11	STEM NUT	1	SUS304
12	HANDLE	1	SUS304
13	HANDLE SLEEVE	1	VINYL
14	BOLT	4~6	SUS304
15	WASHER	4~12	SUS304
16	BOLT NUT	4~12	SUS304

DIMENSIONS(mm)

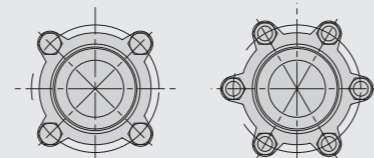
SIZE	ØC	ØD	ØC1	ØD1	E	H	L
1/2"	25	9.5	12.7	9.4	133	54	89.1
3/4"	25	15.9	19.05	15.75	133	59	101
1"	50.4	22.2	25.4	22.2	153	70	114
1 1/2"	50.4	35	38.1	34.8	191	84	140
2"	64	47.5	50.8	47.5	191	92	156
2 1/2"	77.5	60.3	63.5	60.2	247	128	197
3"	90.9	73	76.2	72.9	247	137	229
4"	118.9	97.4	101.6	97.4	295	173	241



MODEL 307
Butt Weld End



MODEL 306
Clamp End



1/2"-2"

2 1/2"-4"

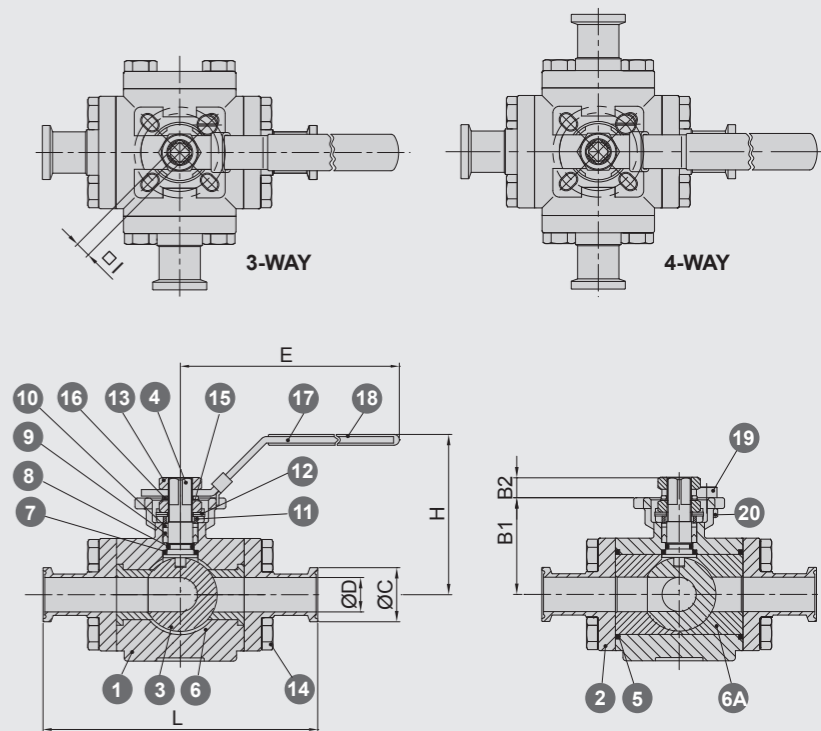
MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	4	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	JOINT GASKET	2	PTFE
6	SEAT /CAVITY FILLER	2	PTFE
6A	SEAT /CAVITY FILLER	2	PTFE
7	STEM SEAL	1	R.PTFE
8	O-RING	1	VITON
9	V-RING PACKING	1SET	PTFE
10	BUSHING	1	50% S.S. POWDER FILLED PTFE
11	GLAND	1	SUS304
12	BELLEVILLE WASHER	2	SUS304
13	STEM NUT	2	SUS304
14	BOLT	16	SUS304
15	LOCK SADDLE	1	SUS304
16	WASHER	1	SUS304
17	HANDLE	1	SUS304
18	HANDLE SLEEVE	1	VINYL
19	STOP PIN	1	SUS304
20	NUT	1	SUS304

DIMENSIONS(mm)

SIZE	B1	B2	ØC	ØD	E	H	ØI	L	ISO 5211
1/2"	41.5	9	25	9.5	128	71.8	9	118	F03 F04
3/4"	44.7	9	25	15.9	128	75.1	9	127	F03 F04
1"	53.6	14	50.4	22.2	167	87	11	152.6	F04 F05
1 1/2"	67.4	15.5	50.4	35	215	101.3	14	175	F05 F07
2"	76.7	15.5	64.5	47.6	215	110.6	14	201.4	F05 F07
2 1/2"	96.6	16.5	77.7	60.3	322	149.3	17	227.7	F07 F10
3"	109.3	16.5	90.9	73	322	162	17	260.6	F07 F10
4"	132	21.5	118.9	97.4	320	185.5	22	290.5	F10

TYPE PORT	1	2	3	4
T				
L				
X				





**MODEL
701 / 702
703 / 704**

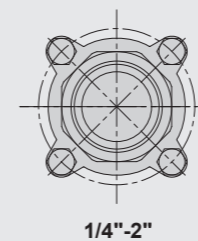
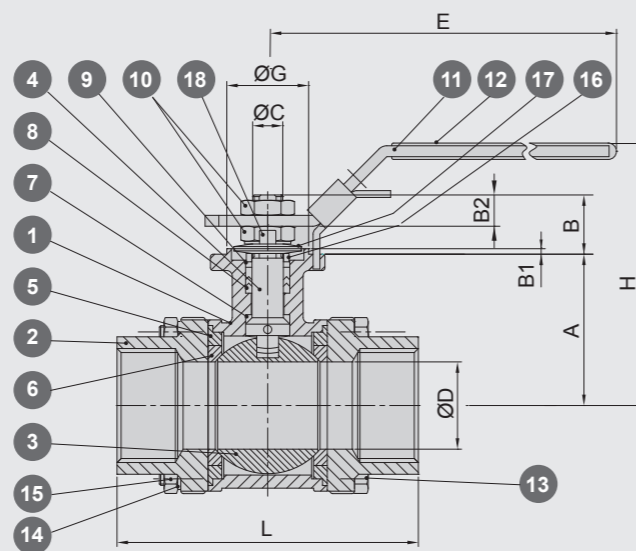
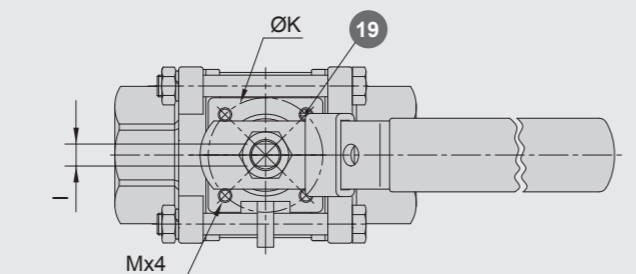
3-Piece Ball Valve



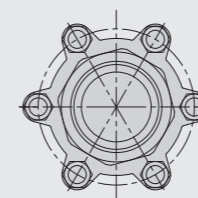
Pressure Rating	PN64 (1/4"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	PTFE, TFM1600, 25%, 50%
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> Available connection: Threaded, Socket weld, Butt weld, Extended butt weld Anti-static device (ball-stem-body) Able to mount actuators with extra parts

MATERIALS LIST

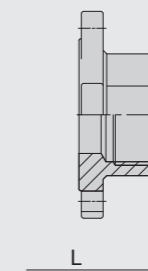
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	JOINT GASKET	2	PTFE
6	SEAT	2	PTFE
7	STEM SEAL	1	R.PTFE
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50% S.S. POWDER FILLED PTFE
10	STEM NUT	2	SUS304
11	HANDLE LOCK	1	SUS304
12	HANDLE SLEEVE	1	VINYL
13	BOLT	4~6	SUS304
14	WASHER	4~12	SUS304
15	BOLT NUT	4~12	SUS304
16	GLAND	1	SUS304
17	BELLEVILLE WASHER	2	SUS304
18	LOCK SADDLE	1	SUS304
19	STOP PIN	1	SUS304



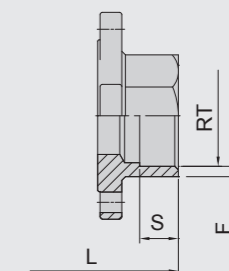
1/4"-2"



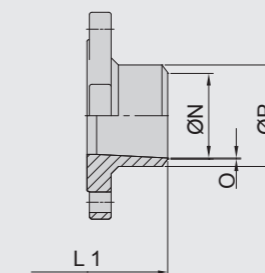
2 1/2"-4"



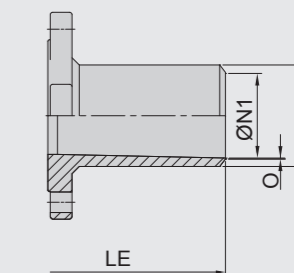
MODEL 701
Threaded
End



MODEL 702
Socket Weld
End



MODEL 703
Butt Weld
End



MODEL 704
Extended Butt
Weld End

DIMENSIONS(mm)

SIZE	A	B	B1	B2	C	ØD	E	F	ØG	H	I	ØK	L	L1	LE	M	ØN	ØN1	O	ØP	ØP1	RT	S	ISO 5211
1/4"	37	18.8	2	9.3	9.5	11.6	136	3.6	25	72	6.3	36	60	70	-	M5	11.6	-	1	18	-	14.2	11	F03
3/8"	37	18.8	2	9.3	9.5	12.5	136	2	25	72	6.3	36	60	70	-	M5	14	-	1	18	-	17.7	11	F03
1/2"	37	18.8	2	9.3	9.5	15	136	2	25	72	6.3	36	69	69	225	M5	17	15.6	1	22.7	21	21.9	12	F03
3/4"	40.3	18.8	2	9.3	9.5	20	136	2.6	25	74	6.3	36	78	78	225	M5	22.5	20.7	1	27.8	26.8	27.3	14	F03
1"	50	20.4	2	10.7	11.1	25	152	3.2	30	92	8	42	84	84	244	M5	26	25.8	1	33.5	34.4	34.1	14	F04
1 1/4"	55.5	20.4	2	10.7	11.1	32	152	5.35	30	98	8	42	104	104	253	M5	34.4	33.3	1	42.2	43.4	42.8	15	F04
1 1/2"	63	26.8	3	12.6	14.3	38	190	5.7	35	109	9.5	50	118	119	258	M6	41.5	40.5	1	49	49.8	48.8	17	F05
2"	71.3	26.8	3	12.6	14.3	50	190	6.1	35	117	9.5	50	129	131	275	M6	53	51.5	1	61	61	61.3	19	F05
2 1/2"	89.9	33.5	3	17	19.1	65	287	7.15	55	147	15	70	185	190	332	M8	69.4	65	1	75.7	77	74	21	F07
3"	99	33.9	3	17	19.1	80	304	7.6	70	156	15	102	205	220	354	M10	82	81	1	91.6	91	90	25	F10
4"	120	33.9	3	17	25.4	100	440	7.85	70	178	15	102	230	269	360	M10	103	101	1	115.8	115	115.6	30	F10



MODEL 704LV

3-Piece High Purity Ball Valve
Tube / Pipe



Pressure Rating	PN64 (3/8"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600
Bore Type	Pipe end: Full bore, Tube end: Standard bore
Additional Features	<ul style="list-style-type: none"> Oil-free product Pipe end: 5S & 10S available Surface roughness: AP Grade (Ra≤0.8μm), BA Grade (Ra≤0.25μm) Anti-static device (ball-stem-body) Able to mount actuators with extra parts

MODEL 705

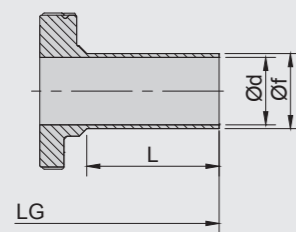
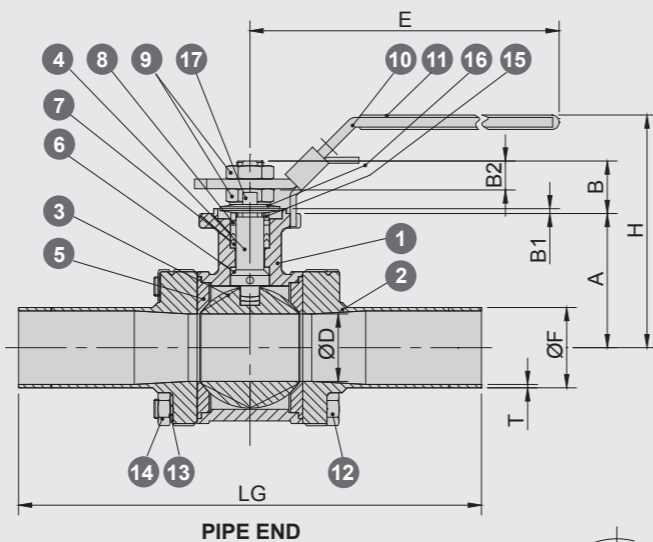
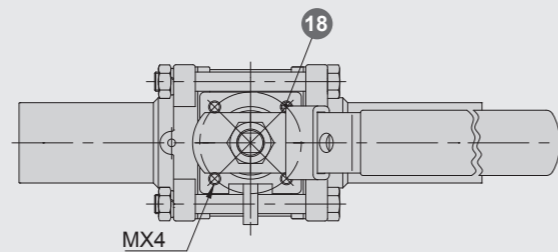
3-Piece Ball Valve
Flanged



Pressure Rating	PN64 (1/2"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	PTFE, TFM1600, 25%, 50%
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> Available connection: ANSI class 150, JIS 10K, DIN PN40 Anti-static device (ball-stem-body) Able to mount actuators with extra parts

MATERIALS LIST

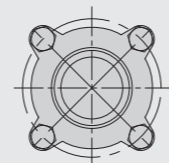
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4409(CF3M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	STEM SEAL	1	R.PTFE
7	V-RING PACKING	1SET	PTFE
8	BUSHING	1	50%S.S.POWDER FILLED PTFE
9	STEM NUT	2	SUS304
10	HANDLE LOCK	1	SUS304
11	HANDLE SLEEVE	1	VINYL
12	BOLT	4~6	SUS304
13	WASHER	4~12	SUS304
14	BOLT NUT	4~12	SUS304
15	GLAND	1	SUS304
16	BELLEVILLE WASHER	2	SUS304
17	LOCK SADDLE	1	SUS304
18	STOP PIN	1	SUS304



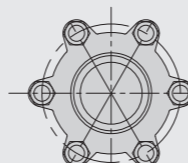
TUBE END

DIMENSIONS(mm)

SIZE	A	B	B1	B2	Ød	Øf	ØD	ØF	E	H	L	T		LG	ISO 5211	
												5S	10S			
3/8"	10A	37	18.8	2	9.3	-	-	9.6	17.3	136	72	-	1.24	1.65	125.4	F03
1/2"	15A	37	18.8	2	9.3	9.4	12.7	15	21.7	136	72	39	1.65	2.1	150.8	F03
3/4"	20A	40.3	18.8	2	9.3	15.75	19.05	20	27.2	136	74	41.8	1.65	2.1	155.7	F03
1"	25A	50	20.4	2	10.7	22.1	25.4	25	34	152	92	43.4	1.65	2.8	186.2	F04
1 1/4"	32A	55.5	20.4	2	10.7	28.5	31.8	32	42.7	152	98	50	1.65	2.8	195.6	F04
1 1/2"	40A	63	26.8	3	12.6	34.8	38.1	38	48.6	190	109	54.4	1.65	2.8	231.6	F05
2"	50A	71.3	26.8	3	12.6	47.5	50.8	50	60.5	190	117	46.8	1.65	2.8	243.4	F05
2 1/2"	65A	89.9	33.5	3	17	60.2	63.5	65	76.3	287	147	71	2.1	3.0	290.2	F07
3"	80A	99	33.9	3	17	72.9	76.2	80	89.1	304	156	72	2.1	3.0	302.2	F10
4"	100A	120	33.9	3	17	97.4	101.6	100	114.3	440	178	70	2.1	3.0	326.2	F10



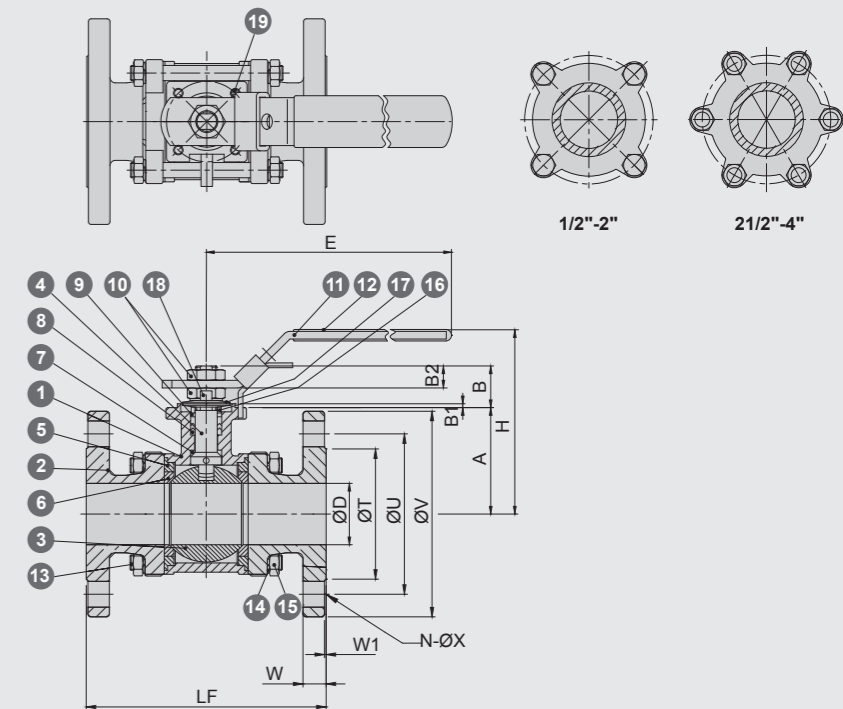
1/2"-2"



2 1/2"-4"

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	JOINT GASKET	2	PTFE
6	SEAT	2	PTFE
7	STEM SEAL	1	R.PTFE
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50%S.S.POWDER FILLED PTFE
10	STEM NUT	2	SUS304
11	HANDLE LOCK	1	SUS304
12	HANDLE SLEEVE	1	VINYL
13	BOLT	4~6	SUS304
14	WASHER	4~12	SUS304
15	BOLT NUT	4~12	SUS304
16	GLAND	1	SUS304
17	BELLEVILLE WASHER	2	SUS304
18	LOCK SADDLE	1	SUS304
19	STOP PIN	1	SUS304



DIMENSIONS(mm)

SIZE	FLANGED	A	B	B1	B2	ØD	E	H	LF	ØT	ØU	ØV	W	W1	ØX	N	ISO 5211
1/2"	150 LB								108	35	60.4	89	11.2	1.6	16		
	PN40	37	18.8	2	9.3	15	136	72	131.1	47.3	65	95	16	2	14	4	F03
	10K								108	52	70	95	12	1	15		
3/4"	150 LB								117	43	69.9	98.4	12.7	1.6	16		
	PN40	40.3	18.8	2	9.3	20	136	74	150	58	75	105	18	2	14	4	F03
	10K								117	58	75	100	14	1	15		
1"	150 LB								127	50.8	79.4	108	14.3	1.6	16		
	PN40	50	20.4	2	10.7	25	152	92	160	69	85	115	18	2	14	4	F04
	10K								127	70	90	125	14	1	19		
1 1/4"	150 LB								146	64	88.9	117.5	15.9	1.6	16		
	PN40	55.5	20.4	2	10.7	32	152	98	182	78.8	100	140	18	2	18	4	F04
	10K								146	80	100	135	16	2	19		
1 1/2"	150 LB								165	73	98.5	127	17.5	1.6	16		
	PN40	63	26.8	3	12.6	38	190	109	200	90	110	150	18	3	18	4	F05
	10K								165	85	105	140	16	2	19		
2"	150 LB								192	92	120.7	152.4	19.1	1.6	19		
	PN40	71.3	26.8	3	12.6	50	190	117	230	106	125	165	20	3	18	4	F05
	10K								178	100	120	155	16	2	19		
2 1/2"	150 LB								232	104.8	139.7	177.8	22.3	1.6	19	4	
	PN40	89.9	33.5	3	17	65	287	147	290	122	145	185	22	3	18	8	F07
	10K								232	120	140	175	18	2	19	4	
3"	150 LB								255	127	152.4	190.5	23.9	1.6	19	4	
	PN40	99	33.9	3	17	80	304	156	310	138	160	200	24	3	18	8	F10
	10K								255	130	150	185	18	2	19	8	
4"	150 LB								290	157.2	190.5	228.6	23.9	1.6	19		
	PN40	120	33.9	3	17	100	440	178	350	162	190	235	24	3	23	8	F10
	10K								290	155	175	210	18	2	19		



MODEL 706 / 707

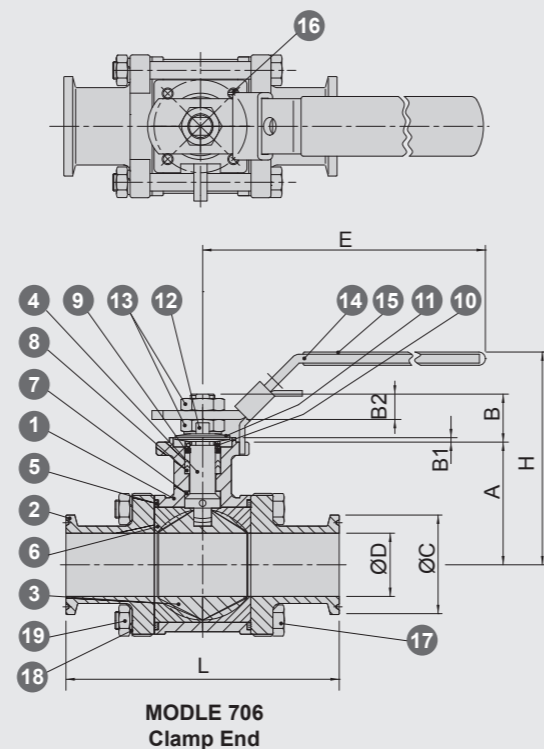
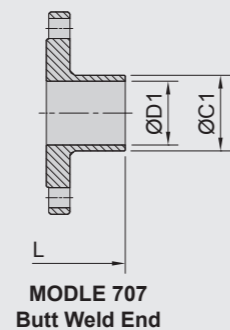


3-Piece Sanitary Ball Valve
T-Clamp / Butt weld

Pressure Rating	PN64 (1/2"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	Cavity filled PTFE, Non-cavity filled TFM1600
Bore Type	Standard bore
Additional Features	<ul style="list-style-type: none"> • Anti-static device (ball-stem-body) • Surface roughness: Ra ≤ 0.4 μm • Able to mount actuators with extra parts

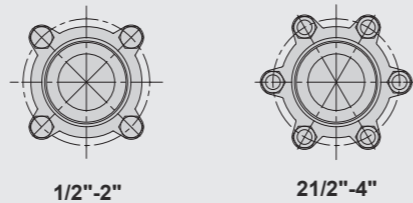
MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAT	2	PTFE
6	SEAT/CAVITY FILLER	2	PTFE
7	STEM SEAL	1	R.PTFE
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50%S.S.POWDER FILLED PTFE
10	GLAND	1	SUS304
11	BELLEVILLE WASHER	2	SUS304
12	LOCK SADDLE	1	SUS304
13	STEM NUT	2	SUS304
14	HANDLE LOCK	1	SUS304
15	HANDLE SLEEVE	1	VINYL
16	STOP PIN	1	SUS304
17	BOLT	4~6	SUS304
18	WASHER	4~12	SUS304
19	BOLT NUT	4~12	SUS304



DIMENSIONS(mm)

SIZE	A	B	B1	B2	ØC	ØD	ØC1	ØD1	E	H	L	ISO 5211
1/2"	37	18.8	2	9.3	25	9.5	12.7	9.4	136	72	89.1	F03
3/4"	40.3	18.8	2	9.3	25	15.9	19.05	15.75	136	74	101	F03
1"	50	20.4	2	10.7	50.4	22.2	25.4	22.2	152	92	114	F04
1 1/2"	63	26.8	3	12.6	50.4	35	38.1	34.8	190	109	140	F05
2"	71.3	26.8	3	12.6	64	47.5	50.8	47.5	190	117	156	F05
2 1/2"	89.9	33.5	3	17	77.5	60.3	63.5	60.2	287	147	197	F07
3"	99	33.9	3	17	90.9	73	76.2	72.9	304	156	229	F10
4"	120	33.9	3	17	118.9	97.4	101.6	97.4	440	178	241	F10



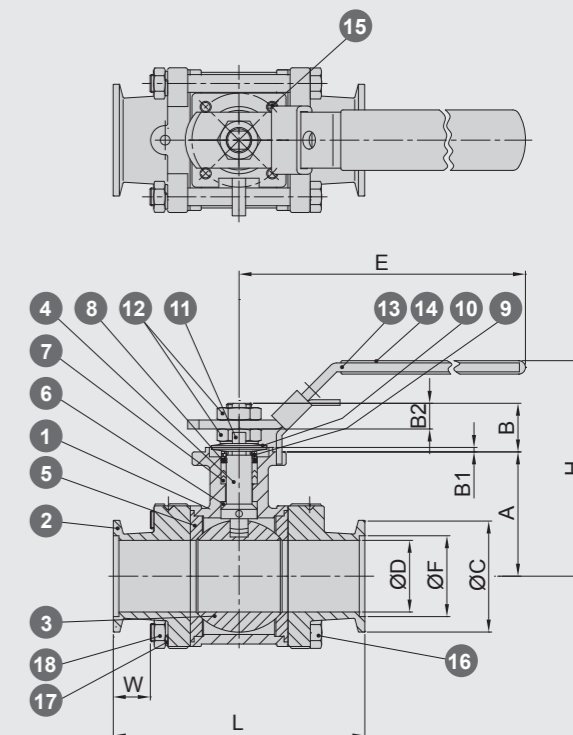
MODEL 70KF-NW
3-Piece Vacuum Ball Valve



Pressure Rating	PN64
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> • Anti-static device (ball-stem-body) • Able to mount actuators with extra parts • Vacuum rated to 1 X 10⁻⁴ Torr

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	PTFE
6	STEM SEAL	1	R.PTFE
7	V-RING PACKING	1SET	PTFE
8	BUSHING	1	50%S.S.POWDER FILLED PTFE
9	GLAND	1	SUS304
10	BELLEVILLE WASHER	2	SUS304
11	LOCK SADDLE	1	SUS304
12	STEM NUT	2	SUS304
13	HANDLE LOCK	1	SUS304
14	HANDLE SLEEVE	1	VINYL
15	STOP PIN	1	SUS304
16	BOLT	4	SUS304
17	WASHER	4	SUS304
18	BOLT NUT	4	SUS304



DIMENSIONS(mm)

SIZE	A	B	B1	B2	ØC	ØF	ØD	E	H	L	W	ISO 5211
NW10 3/8"	37	18.8	2	9.3	30	12.2	9.5	136	72	89	14.5	F04
NW16 1/2"	37	18.8	2	9.3	30	17.2	15	136	72	89	14.5	F04
NW25 1"	50	20.4	2	10.7	40	26.2	22.2	152	92	119	22.5	F04
NW40 1 1/2"	63	26.8	3	12.6	55	41.2	38	190	109	147	23	F05
NW50 2"	71.3	26.8	3	12.6	75	52.2	50	190	117	181	33	F05



**MODEL
901 / 902
903 / 904**

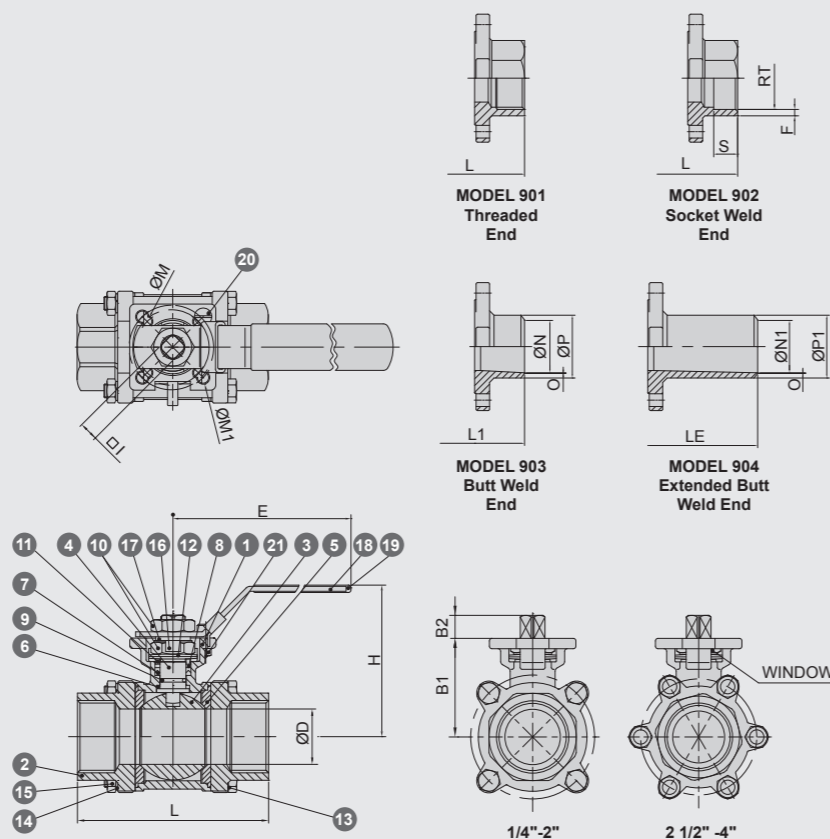
3-Piece Ball Valve



Pressure Rating	PN64 (1/4"-2") PN50 (2 1/2"-4") PN16 (5"-6")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600, 25%, 50%
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> Available connection: Threaded, Socket weld, Butt weld, Extended butt weld ISO5211 direct mounting pad Able to add anti-static device (ball-stem-body)

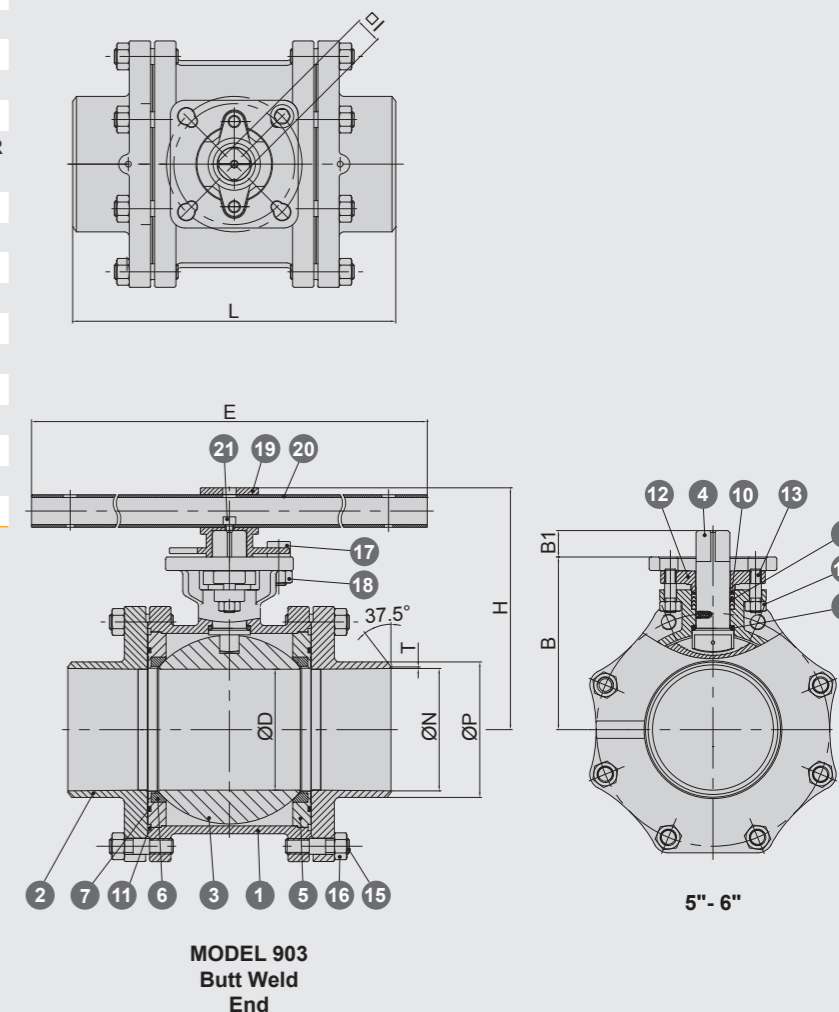
MATERIALS LIST (1/4" - 4")

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	STEM SEAL	1	R.PTFE
7	V-RING PACKING	1SET	PTFE
8	BUSHING	1	50%S.S.POWDER FILLED PTFE
9	O-RING	1	VITON
10	STEM NUT	2	SUS304
11	GLAND	1	SUS304
12	BELLEVILLE WASHER	2	SUS304
13	BOLT	4~6	SUS304
14	WASHER	4~12	SUS304
15	BOLT NUT	4~12	SUS304
16	LOCK SADDLE	1	SUS304
17	WASHER	1	SUS304
18	HANDLE LOCK	1	SUS304
19	HANDLE SLEEVE	1	VINYL
20	STOP PIN	1	SUS304
21	STOP PIN NUT	1	SUS304



MATERIALS LIST (5" - 6")

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4409(CF3M)
3	BALL	1	SUS316
4	STEM	1	630(H1150)
5	JOINT GASKET	2	SUS316
6	SEAT	2	TFM1600
7	SEAL	2	PTFE
8	STEM SEAL	1	PTFE
9	V-RING PACKING	1SET	PTFE
10	BUSHING	1	50%S.S.POWDER FILLED PTFE
11	PACKING	2	PTFE
12	GLAND	1	CF8
13	GLAND BOLT	2	SUS304
14	GLAND NUT	2	SUS304
15	BOLT	16	SUS304
16	NUT	16	SUS304
17	STOP PIN	1	SUS304
18	STOP PIN NUT	1	SUS304
19	HANDLE ADAPTOR	1	CF8
20	PIPE HANDLE	1	SUS304
21	HANDLE BOLT	1	SUS304



DIMENSIONS(mm)

SIZE	B1	B2	ØD	E	F	H	□I	L	L1	LE	ØM	ØM1	ØN	ØN1	O	ØP	ØP1	RT	S	ISO 5211
1/4"	40.2	9	11.6	128	3.6	70.5	9	60	70	-	6	6	11.6	-	1	18	-	14.2	11	F03 F04
3/8"	40.2	9	12.5	128	2	70.5	9	60	70	-	6	6	14	-	1	18	-	17.7	11	F03 F04
1/2"	40.2	9	15	128	2	70.5	9	69	69	225	6	6	17	15.6	1	22.7	21	21.9	12	F03 F04
3/4"	43.4	9	20	128	2.6	73.8	9	78	78	225	6	6	22.5	20.7	1	27.8	26.8	27.3	14	F03 F04
1"	52	14	25	167	3.2	85.4	11	84	84	244	6	7	26	25.8	1	33.5	34.4	34.1	14	F04 F05
1 1/4"	56.5	14	32	167	5.35	90	11	104	104	253	6	7	34.4	33.3	1	42.2	43.4	42.8	15	F04 F05
1 1/2"	65.7	15.5	38	215	5.7	99.6	14	118	119	258	7	9.2	41.5	40.5	1	49	49.8	48.8	17	F05 F07
2"	73.95	15.5	50	215	6.1	107.8	14	129	131	275	7	9.2	53	51.5	1	61	61	61.3	19	F05 F07
2 1/2"	94	16.5	65	322	7.15	145.7	17	185	190	332	9	11	69.4	65	1	75.7	77	74	21	F07 F10
3"	102	16.5	80	322	7.6	154.7	17	205	220	354	9	11	82	81	1	91.6	91	90	25	F07 F10
4"	132	21.5	100	320	7.85	188	22	230	269	360	-	11	103	101	1	115.8	115	115.6	30	F10

DIMENSIONS(mm)

SIZE	B	B1	ØD	E	H	□I	L	ØN	ØP	T	ISO 5211
5" 125A	178.5	27	125	600	250	27	334	126.6	139.8	1.6	F12 F14
6" 150A	196	27	150	800	267.5	27	363	151	168.4	1.6	F12 F14



MODEL 904LV

3-Piece Ball Valve
Tube / Pipe
(3/8" - 4")



Pressure Rating	PN64 (3/8"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600
Bore Type	Pipe end: Full bore, Tube End: Standard bore
Additional Features	<ul style="list-style-type: none"> • Oil-free product • Pipe End: 5S & 10S available • AP Grade (Ra≤0.8μm), BA Grade (Ra≤0.25μm) • ISO5211 direct mounting pad • Able to add anti-static device (ball-stem-body)

MODEL 904LV

3-Piece Ball Valve
Tube / Pipe
(5" - 6")

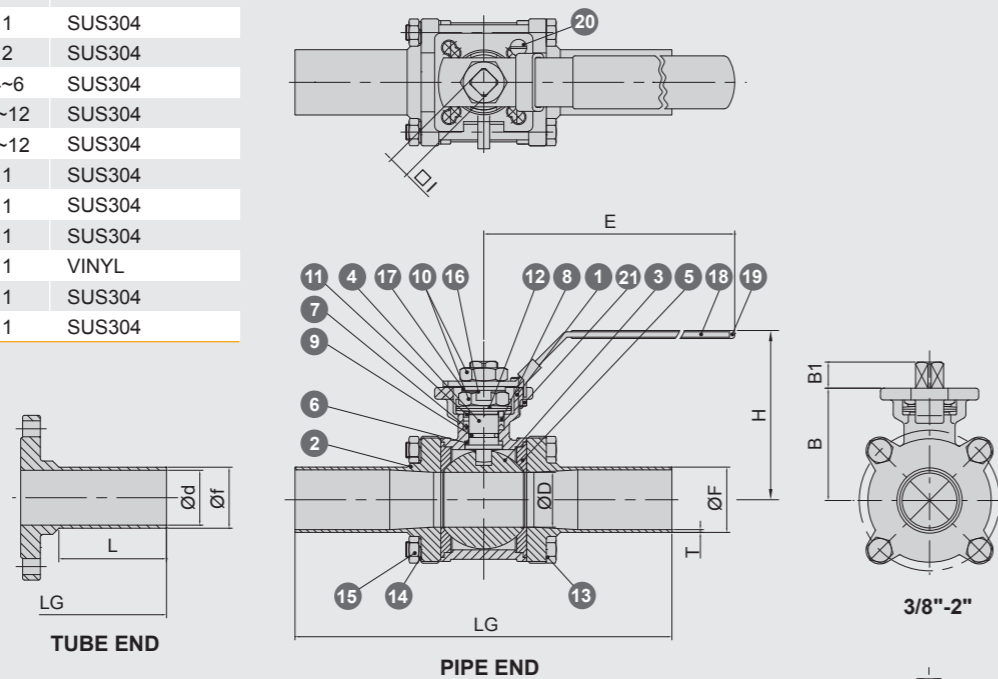
Pressure Rating	PN16 (5"-6")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600
Bore Type	Pipe end: Full bore, Tube End: Standard bore
Additional Features	<ul style="list-style-type: none"> • Oil-free product • Pipe End: 5S & 10S available • AP Grade (Ra≤0.8μm), BA Grade (Ra≤0.25μm) • ISO5211 direct mounting pad • Able to add anti-static device (ball-stem-body)

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408 (CF8M)
2	END CAP	2	1.4409 (CF3M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	STEM SEAL	1	R.PTFE
7	V-RING PACKING	1SET	PTFE
8	BUSHING	1	50%S.S.POWDER FILLED PTFE
9	O-RING	1	VITON
10	STEM NUT	2	SUS304
11	GLAND	1	SUS304
12	BELLEVILLE WASHER	2	SUS304
13	BOLT	4~6	SUS304
14	WASHER	4~12	SUS304
15	BOLT NUT	4~12	SUS304
16	LOCK SADDLE	1	SUS304
17	WASHER	1	SUS304
18	HANDLE LOCK	1	SUS304
19	HANDLE SLEEVE	1	VINYL
20	STOP PIN	1	SUS304
21	STOP PIN NUT	1	SUS304

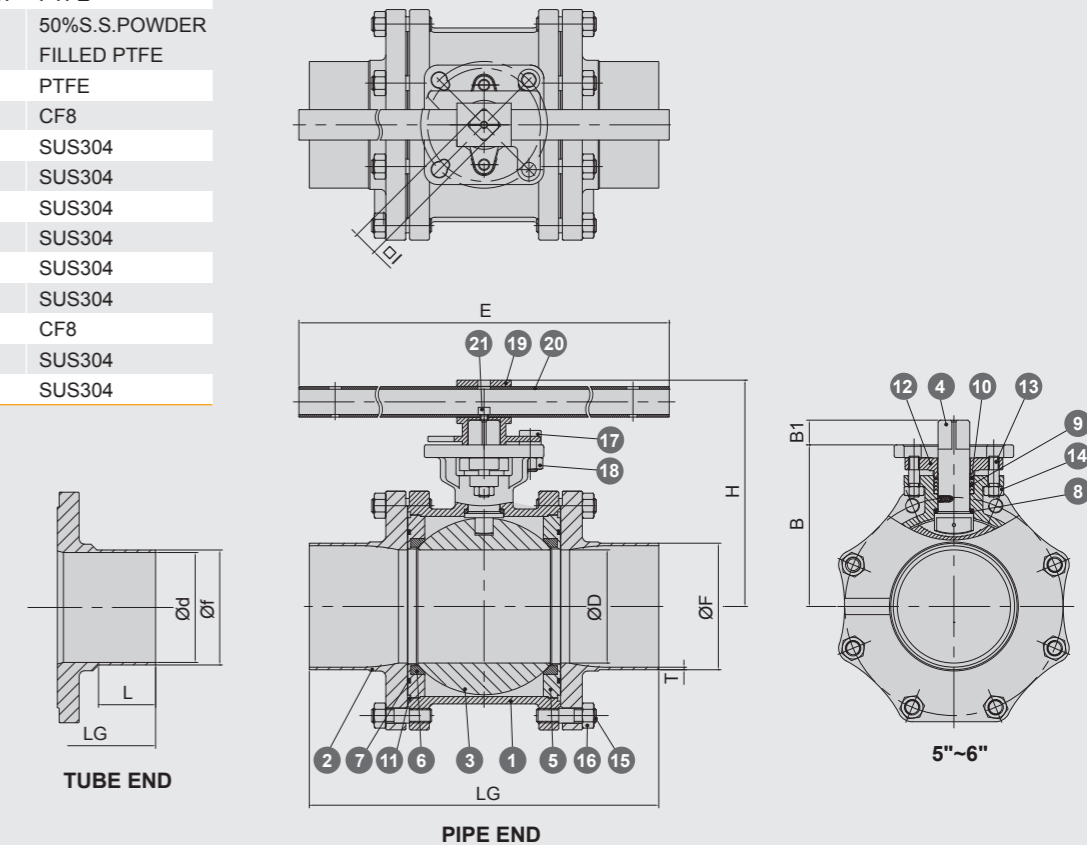
MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408 (CF8M)
2	END CAP	2	1.4409 (CF3M)
3	BALL	1	SUS316
4	STEM	1	630 (H1150)
5	JOINT GASKET	2	SUS316
6	SEAT	2	TFM1600
7	SEAL	2	PTFE
8	STEM SEAL	1	PTFE
9	V-RING PACKING	1SET	PTFE
10	BUSHING	1	50%S.S.POWDER FILLED PTFE
11	PACKING	2	PTFE
12	GLAND	1	CF8
13	GLAND BOLT	2	SUS304
14	GLAND NUT	2	SUS304
15	BOLT	16	SUS304
16	NUT	16	SUS304
17	STOP PIN	1	SUS304
18	STOP PIN NUT	1	SUS304
19	HANDLE ADAPTOR	1	CF8
20	PIPE HANDLE	1	SUS304
21	HANDLE BOLT	1	SUS304



DIMENSIONS(mm)

SIZE	B	B1	Ød	E	Øf	ØD	ØF	H	□	L	T		LG	ISO 5211	
											5S	10S			
3/8"	10A	40.2	9	-	128	-	9.6	17.3	70.5	9	-	1.24	1.65	125.4	F03 F04
1/2"	15A	40.2	9	9.4	128	12.7	15	21.7	70.5	9	39	1.65	2.1	150.8	F03 F04
3/4"	20A	43.4	9	15.75	128	19.05	20	27.2	73.8	9	41.8	1.65	2.1	155.7	F03 F04
1"	25A	52	14	22.1	167	25.4	25	34	85.4	11	43.4	1.65	2.8	186.2	F04 F05
1 1/4"	32A	56.5	14	28.5	167	31.8	32	42.7	90	11	50	1.65	2.8	195.6	F04 F05
1 1/2"	40A	65.7	15.5	34.8	215	38.1	38	48.6	99.6	14	54.4	1.65	2.8	231.6	F05 F07
2"	50A	73.95	15.5	47.5	215	50.8	50	60.5	107.8	14	46.8	1.65	2.8	243.4	F05 F07
2 1/2"	65A	94	16.5	60.2	322	63.5	65	76.3	145.7	17	71	2.1	3.0	290.2	F07 F10
3"	80A	102	16.5	72.9	322	76.2	80	89.1	154.7	17	72	2.1	3.0	302.2	F07 F10
4"	100A	132	21.5	97.4	320	101.6	100	114.3	188	22	70	2.1	3.0	326.2	F10



DIMENSIONS(mm)

SIZE	B	B1	Ød	E	Øf	ØD	ØF	H	□	L	T		LG	ISO 5211	
											5S	10S			
5"	125A	178.5	27	121.4	600	127	125	139.8	250	27	63	2.8	3.4	386	F12 F14
6"	150A	196	27	146.8	800	152.4	150	165.2	267.5	27	63	2.8	3.4	415	F12 F14

MODEL 905
3-Piece Ball Valve
Flanged
(1/2" - 2")



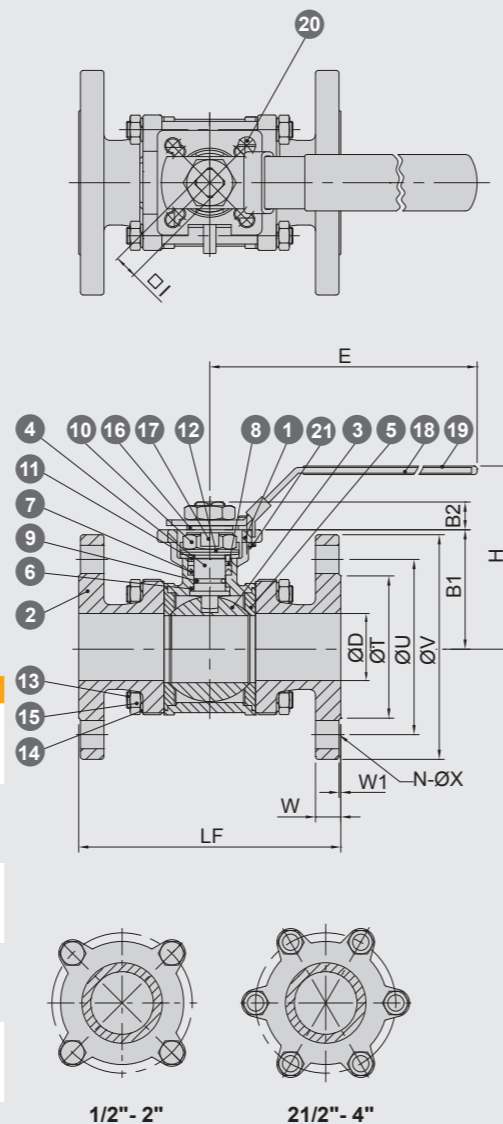
Pressure Rating	PN64 (1/2"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600, 25%, 50%
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> Available connection: ANSI Class 150, JIS 10K, DIN PN40 ISO5211 direct mounting pad 1/2"-2": Needs extra parts to mount an actuator Able to add anti-static device (ball-stem-body)

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	STEM SEAL	1	R.PTFE
7	V-RING PACKING	1SET	PTFE
8	BUSHING	1	50 %S.S.POWDER FILLED PTFE
9	O-RING	1	VITONE
10	STEM NUT	2	SUS304
11	GLAND	1	SUS304
12	BELLEVILLE WASHER	2	SUS304
13	BOLT	4~6	SUS304
14	WASHER	8~12	SUS304
15	BOLT NUT	4~12	SUS304
16	LOCK SADDLE	1	SUS304
17	WASHER	1	SUS304
18	HANDLE LOCK	1	SUS304
19	HANDLE SLEEVE	1	VINYL
20	STOP PIN	1	SUS304
21	STOP PIN NUT	1	SUS304

DIMENSIONS(mm)

SIZE	FLANGED	ØD	B1	B2	E	H	□	LF	ØT	ØU	ØV	W	W1	ØX	N	ISO 5211	
1/2"	150 LB	PN40	15	40.2	9	128	70.5	9	131.1	47.3	65	95	16	2	14	4	F03 F04
	10K								108	52	70	95	12	1	15		
3/4"	150 LB	PN40	20	43.4	9	128	73.8	9	117	43	69.9	98.4	12.7	1.6	16	4	F03 F04
	10K								150	58	75	105	18	2	14	4	
1"	150 LB	PN40	25	52	14	167	85.4	11	127	50.8	79.4	108	14.3	1.6	16	4	F04 F05
	10K								160	69	85	115	18	2	14	4	
1 1/4"	150 LB	PN40	32	56.5	14	167	90	11	146	64	88.9	117.5	15.9	1.6	16	4	F04 F05
	10K								182	78.8	100	140	18	2	18	4	
1 1/2"	150 LB	PN40	38	65.7	15.5	215	99.6	14	165	73	98.5	127	17.5	1.6	16	4	F05 F07
	10K								200	90	110	150	18	3	18	4	
2"	150 LB	PN40	50	73.95	15.5	215	107.8	14	192	92	120.7	152.4	19.1	1.6	19	4	F05 F07
	10K								230	106	125	165	20	3	18	4	
2 1/2"	150 LB	PN40	65	94	16.5	322	145.7	17	232	104.8	139.7	177.8	22.3	1.6	19	4	F07 F10
	10K								290	122	145	185	22	3	18	8	
3"	150 LB	PN40	80	102	16.5	322	154.7	17	255	127	152.4	190.5	23.9	1.6	19	4	F07 F10
	10K								310	138	160	200	24	3	18	8	
4"	150 LB	PN40	100	132	21.5	320	188	22	290	157.2	190.5	228.6	23.9	1.6	19		F10
	10K								350	162	190	235	24	3	23	8	



1/2" - 2"

2 1/2" - 4"

MODEL 905
3-Piece Ball Valve
Flanged
(5" - 6")

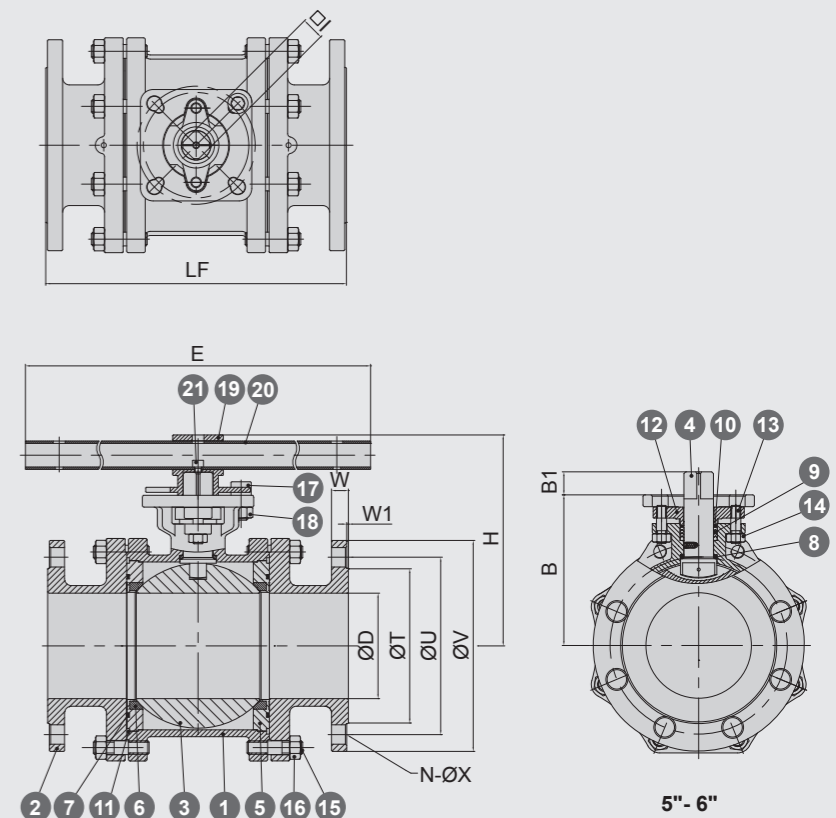
Pressure Rating	PN16 (5"-6")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600, 25%, 50%
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> Available connection: ANSI Class 150, JIS 10K, DIN PN40 ISO5211 direct mounting pad 1/2"-2": Needs extra parts to mount an actuator Able to add anti-static device (ball-stem-body)

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	630(H1150)
5	JOINT GASKET	2	SUS316
6	SEAT	2	TFM1600
7	SEAL	2	PTFE
8	STEM SEAL	1	PTFE
9	V-RING PACKING	1SET	PTFE
10	BUSHING	1	50%S.S.POWDER FILLED PTFE
11	PACKING	2	PTFE
12	GLAND	1	CF8
13	GLAND BOLT	2	SUS304
14	GLAND NUT	2	SUS304
15	BOLT	16	SUS304
16	NUT	16	SUS304
17	STOP PIN	1	SUS304
18	STOP PIN NUT	1	SUS304
19	HANDLE ADAPTOR	1	CF8
20	PIPE HANDLE	1	SUS304
21	HANDLE BOLT	1	SUS304

DIMENSIONS(mm)

SIZE	FLANGED	B	B1	ØD	E	H	□	LF	ØT	ØU	ØV	W	W1	N	ØX	ISO 5211
5"	150 LB	178.5	27	125	600	250	27	356	187.5	215.9	254	23.9	1.6	8	22.4	F12 F14
	10K	178.5	27	125	600	250	27	356	185	210	250	20	2	8	23	F12 F14
6"	150 LB	196	27	150	800	267.5	27	394	214.2	241.3	279.4	25.4	1.6	8	22.4	F12 F14
	10K	196	27	150	800	267.5	27	394	217.3	240	280	22	2	8	23	F12 F14



5" - 6"



MODEL 906 / 907

3-Piece Sanitary Ball Valve
T-Clamp / Butt weld
(1/2" - 4")



Pressure Rating	PN64 (1/2"-2") PN50 (2 1/2"-4")
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	Cavity filled PTFE, Non-cavity filled TFM1600
Bore Type	Standard bore
Additional Features	<ul style="list-style-type: none"> Surface roughness: Ra ≤ 0.4µm ISO5211 direct mounting pad Able to add anti-static device (ball-stem-body)

MODEL 906 / 907

3-Piece Sanitary Ball Valve
T-Clamp / Butt weld
(6")

Pressure Rating	PN16 (6")
Material	ASTM A351-CF3M
Seat	Cavity filled PTFE, Non-cavity filled TFM1600
Bore Type	Standard bore
Additional Features	<ul style="list-style-type: none"> Surface roughness: Ra ≤ 0.4µm ISO5211 direct mounting pad Able to add anti-static device (ball-stem-body)

MATERIALS LIST

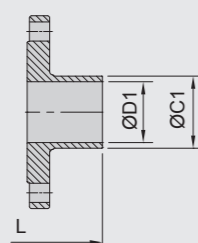
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	BODY SEAT	2	PTFE
6	SEAT/CAVITY FILLER	2	PTFE
7	STEM SEAL	1	R.PTFE
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50%S.S.POWDER FILLED PTFE
10	O-RING	1	VITON
11	STEM NUT	2	SUS304
12	GLAND	1	SUS304
13	BELLEVILLE WASHER	2	SUS304
14	BOLT	4~6	SUS304
15	WASHER	4~12	SUS304
16	BOLT NUT	4~12	SUS304
17	LOCK SADDLE	1	SUS304
18	WASHER	1	SUS304
19	HANDLE LOCK	1	SUS304
20	HANDLE SLEEVE	1	VINYL
21	STOP PIN	1	SUS304
22	STOP PIN NUT	1	SUS304

MATERIALS LIST

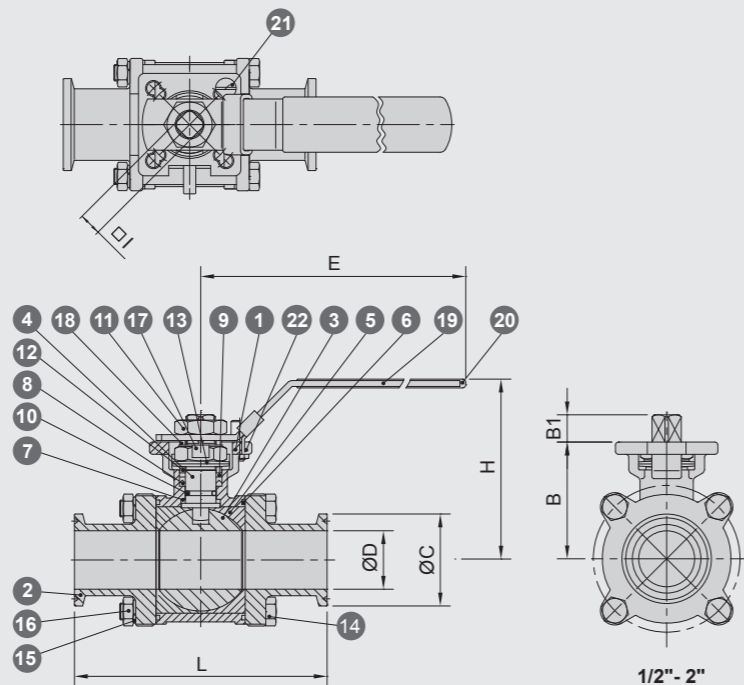
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF3M
2	END CAP	2	CF3M
3	BALL	1	SUS316L
4	STEM	1	630(H1150)
5	JOINT GASKET	2	SUS316
6	SEAT /CAVITY FILLER	2	PTFE
7	STEM SEAL	1	TFM1600
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50%S.S.POWDER FILLED PTFE
10	PACKING	2	PTFE
11	GLAND	1	CF8
12	GLAND BOLT	2	SUS304
13	GLAND NUT	2	SUS304
14	BOLT	16	SUS304
15	NUT	16	SUS304
16	STOP PIN	1	SUS304
17	STOP PIN NUT	1	SUS304
18	HANDLE ADAPTOR	1	CF8
19	PIPE HANDLE	1	SUS304
20	HANDLE BOLT	1	SUS304

DIMENSIONS(mm)

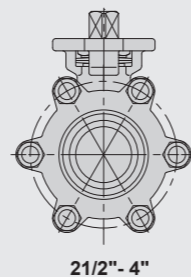
SIZE	B	B1	ØC	ØD	E	H	□	L	ISO 5211
6"	196	27	166.9	146.8	800	267.5	27	320	F12 F14



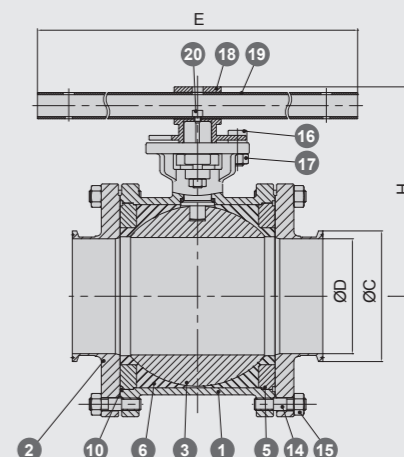
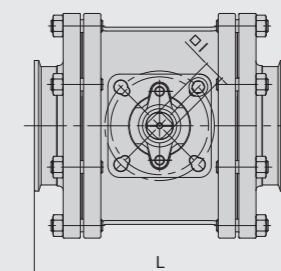
MODEL 907
Butt Weld End



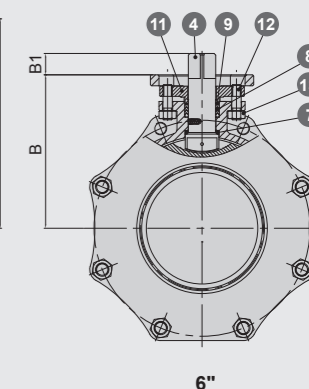
MODEL 906
Clamp End



2 1/2" - 4"



MODEL 906
Clamp End



6"

DIMENSIONS(mm)

SIZE	B	B1	ØC	ØD	ØC1	ØD1	E	H	□	L	ISO 5211
1/2"	40.2	9	25	9.5	12.7	9.4	128	70.5	9	89.1	F03 F04
3/4"	43.4	9	25	15.9	19.05	15.75	128	73.8	9	101	F03 F04
1"	52	14	50.4	22.2	25.4	22.2	167	85.4	11	114	F04 F05
1 1/2"	65.7	15.5	50.4	35	38.1	34.8	215	99.6	14	140	F05 F07
2"	73.95	15.5	64	47.5	50.8	47.5	215	107.8	14	156	F05 F07
2 1/2"	94	16.5	77.5	60.3	63.5	60.2	322	145.7	17	197	F07 F10
3"	102	16.5	90.9	73	76.2	72.9	322	154.7	17	229	F07 F10
4"	132	21.5	118.9	97.4	101.6	97.4	320	188	22	241	F10



MODEL 90KF-NW

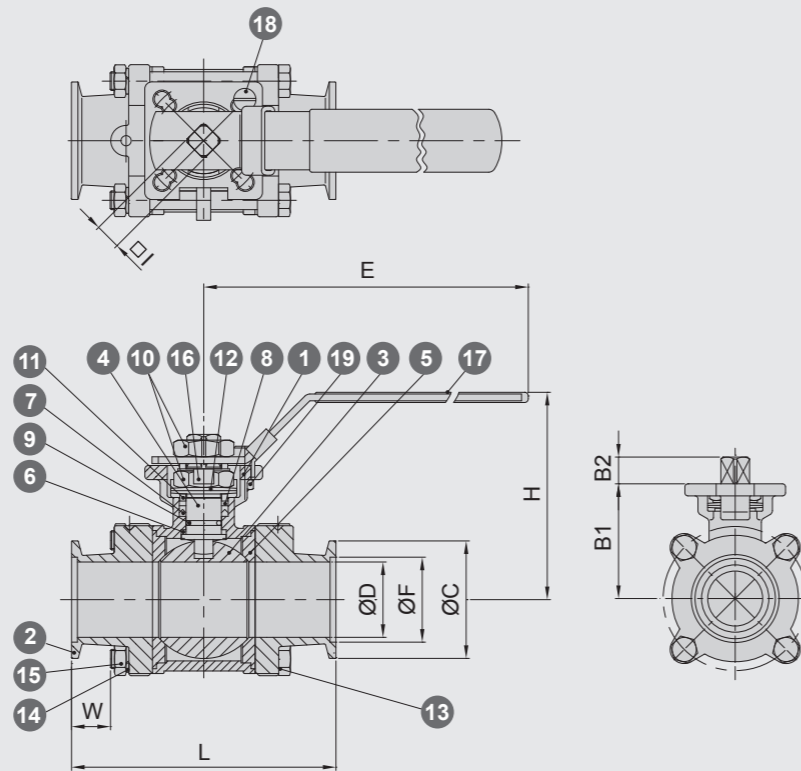
3-Piece Vacuum Ball Valve



Pressure Rating	PN64
Material	EN10213-1.4408, ASTM A351-CF8M
Seat	TFM1600
Bore Type	Full bore
Additional Features	<ul style="list-style-type: none"> • ISO5211 direct mounting pad • Vacuum rated to 1×10^{-4} Torr • Able to add anti-static device (ball-stem-body)

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	1.4408(CF8M)
2	END CAP	2	1.4408(CF8M)
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	STEM SEAL	1	R.PTFE
7	V-RING PACKING	1SET	PTFE
8	BUSHING	1	50%S.S.POWDER FILLED PTFE
9	O-RING	1	VITON
10	STEM NUT	2	SUS304
11	GLAND	1	SUS304
12	BELLEVILLE WASHER	2	SUS304
13	BOLT	4	SUS304
14	WASHER	4	SUS304
15	BOLT NUT	4	SUS304
16	LOCK SADDLE	1	SUS304
17	HANDLE LOCK	1	SUS304
18	STOP PIN	1	SUS304
19	STOP PIN NUT	1	SUS304



DIMENSIONS(mm)

SIZE	B1	B2	ØC	ØF	ØD	E	H	ØI	L	W	ISO 5211
NW10 3/8"	40.2	9	30	12.2	9.5	128	70.5	9	89	14.5	F03 F04
NW16 1/2"	40.2	9	30	17.2	15	128	70.5	9	89	14.5	F03 F04
NW25 1"	52	14	40	26.2	22.2	167	85.4	11	119	22.5	F04 F05
NW40 1 1/2"	65.7	15.5	55	41.2	38	215	99.6	14	147	23	F05 F07
NW50 2"	73.95	15.5	75	52.2	50	215	107.8	14	181	23	F05 F07





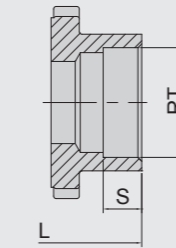
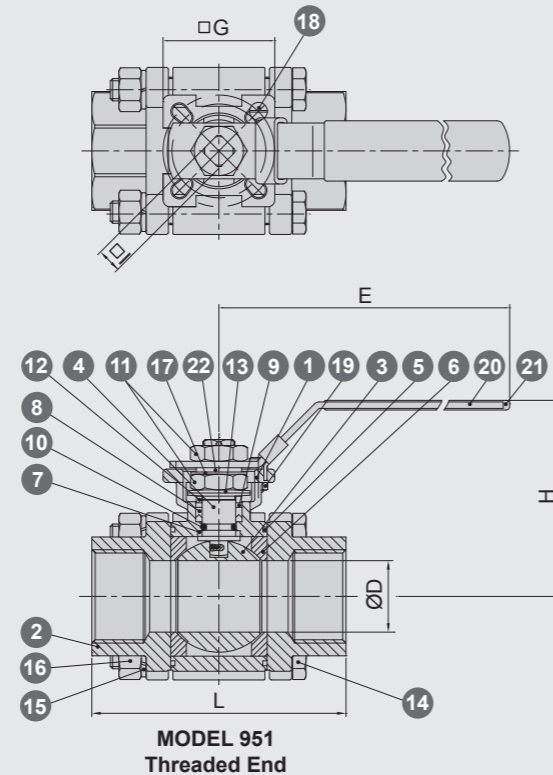
MODEL 951 / 952 / 953
3-Piece High Pressure Ball Valve



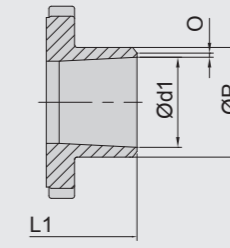
Pressure Rating	2000WOG (1/4"-1") 1500WOG (1 1/4"-2") 1000WOG (2 1/2"-4")
Material	ASTM A351-CF8M, ASTM A890-CE3MN
Seat	TFM1600
Bore Type	Full bore, Reduced bore
Additional Features	• Available connections: Threaded, Socket weld, Butt weld • ISO5211 direct mounting pad

MATERIALS LIST

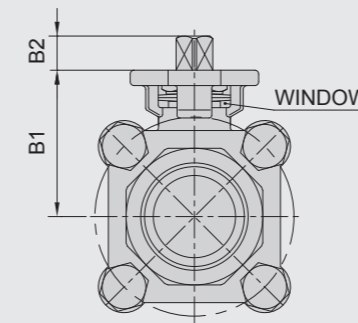
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	END CAP	2	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	PCACKING	2	PTFE
6	SEAT	2	TFM1600
7	STEM SEAL	1	R.PTFE
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50%S.S.POWDER FILLED PTFE
10	O-RING	1	VITON
11	STEM NUT	2	SUS304
12	GLAND	1	SUS304
13	BELLEVILLE WASHER	2	SUS304
14	BOLT	4~16	SUS304
15	WASHER (1/4"-11/2")	4	SUS304
16	BOLT NUT (1/4"-11/2")	4	SUS304
17	LOCK SADDLE	1	SUS304
18	STOP PIN	1	SUS304
19	STOP PIN NUT	1	SUS304
20	HANDLE LOCK	1	SUS304
21	HANDLE SLEEVE	1	VINYL
22	HANDLE WASHER	1	SUS304



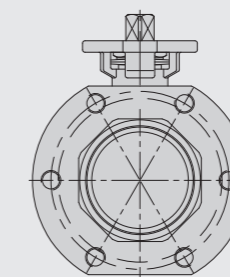
MODEL 952
Socket Weld End



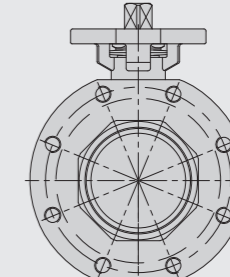
MODEL 953
Butt Weld End



1/4"-1 1/2"



2"



2 1/2"-4"

DIMENSIONS(mm)

SIZE	B1		B2		ØD		Ød1		E	□G		H		□I		L		L1		O		ØP		RT		S		ISO 5211	
	F	R	F	R	F	R	F	R		F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R
DN8 1/4"	40.5	-	9	-	11.6	-	-	-	128	42	-	70.8	-	9	-	64.8	-	75	-	-	-	-	-	14.2	-	11	-	F03 F04	-
DN10 3/8"	40.5	-	9	-	12.5	-	-	-	128	42	-	70.8	-	9	-	64.8	-	75	-	-	-	-	-	17.7	-	11	-	F03 F04	-
DN15 1/2"	40.5	40.5	9	9	15	12.5	16	16	128	42	42	70.8	70.8	9	9	72.5	64.8	75	75	1	1	21.7	21.7	21.9	21.9	12	12	F03 F04	F03 F04
DN20 3/4"	43.7	40.5	9	9	20	15	21.4	21.4	128	42	42	74.1	70.8	9	9	85.4	72.5	85.4	75	1	1	27.2	27.2	27.2	27.2	14	14	F03 F04	F03 F04
DN25 1"	52	43.7	14	9	25	20	27.2	27.2	167	50	42	85.4	74.1	11	9	105.3	85.4	105.3	85.4	1	1	34	34	33.9	33.9	14	14	F04 F05	F03 F04
DN32 1 1/4"	57	52	14	14	32	25	35.5	35.5	167	50	50	90.5	85.4	11	11	111	105.3	111	105.3	1	1	42.7	42.7	42.7	42.7	15	15	F04 F05	F04 F05
DN40 1 1/2"	77	57	15.5	14	38	32	41.2	41.2	215	70	50	110.9	90.5	14	11	127.3	111	127.3	111	1	1	48.6	48.6	48.8	48.8	17	17	F05 F07	F04 F05
DN50 2"	85.2	77	15.5	15.5	50	38	52.5	52.5	215	70	70	119	110.9	14	14	142.8	127.3	142.8	127.3	1.6	1.6	60.5	60.5	61.3	61.3	19	19	F05 F07	F05 F07
DN65 2 1/2"	111.5	85.2	16.5	15.5	65	50	65.9	65.9	322	100	70	163.2	119	17	14	185	142.8	185	142.8	2	2	76.3	76.3	74	74	21	21	F07 F10	F05 F07
DN80 3"	120.5	111.5	16.5	16.5	80	65	80	80	322	100	100	173.2	163.2	17	17	205	185	205	185	2	2	90	90	90	90	25	25	F07 F10	F07 F10
DN100 4"	131.5	120.5	21.5	16.5	100	80	102.5	102.5	320	100	100	187.5	173.2	22	17	240	205	240	205	2	2	115	115	115.6	115.6	30	30	F10	F07 F10



MODEL 95K

3-Piece High Pressure Ball Valve
Tube fitting end

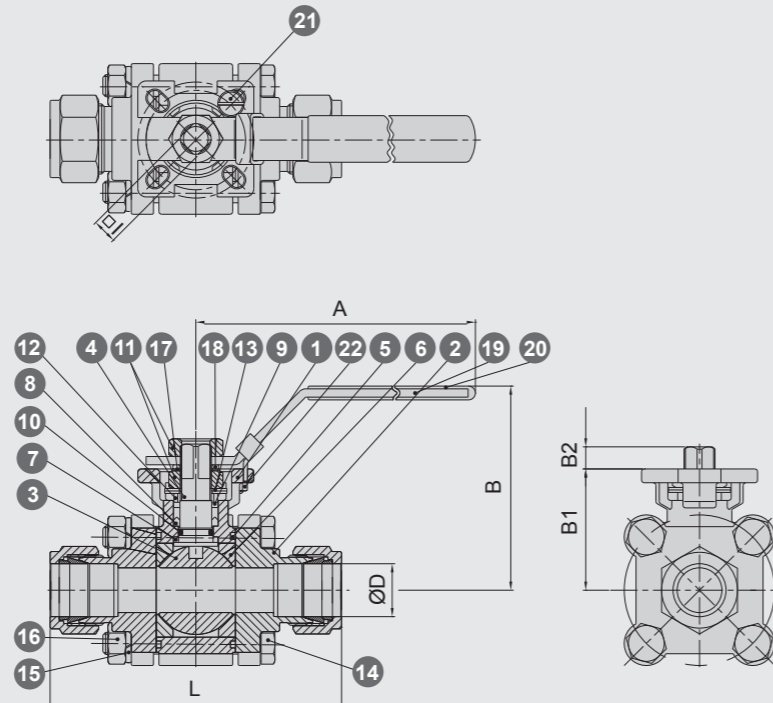


Pressure Rating	2000WOG
Material	ASTM A351-CF8M
Seat	TFM1600
Bore Type	Reduced bore
Additional Features	<ul style="list-style-type: none"> • ISO5211 direct mounting pad • BA Grade (Ra≤0.25μm) • Silver plated nut • Heat treated ferrule

ACTUATED VALVES LINE-UP

MATERIALS LIST

NO.	PART NAME	QTY	MATERIAL
1	BODY	1	CF8M
2	END CAP	2	CF8M
3	BALL	1	SUS316
4	STEM	1	SUS316
5	PCACKING	2	PTFE
6	SEAT	2	TFM1600
7	STEM SEAL	1	R.PTFE
8	V-RING PACKING	1SET	PTFE
9	BUSHING	1	50%S.S.POWDER FILLED PTFE
10	O-RING	1	VITON
11	STEM NUT	2	SUS304
12	GLAND	1	SUS304
13	BELLEVILLE WASHER	2	SUS304
14	BOLT	4	SUS304
15	WASHER	4	SUS304
16	BOLT NUT	4	SUS304
17	LOCK SADDLE	1	SUS304
18	WASHER	1	SUS304
19	HANDLE LOCK	1	SUS304
20	HANDLE SLEEVE	1	VINYL
21	STOP PIN	1	SUS304
22	STOP PIN NUT	1	SUS304



DIMENSIONS(mm)

SIZE	A	B	B1	B2	ØD	□I	L	ISO 5211
1/4"	128	70.8	40.5	9	6.49	9	95.1	F03 F04
3/8"	128	70.8	40.5	9	9.7	9	96.2	F03 F04
1/2"	128	70.8	40.5	9	12.9	9	102.2	F03 F04
3/4"	128	74.1	43.7	9	19.2	9	102.2	F03 F04



MODEL 206
Accessory:
Pneumatic Actuator



MODEL 203AJI-10K
Accessory:
Electric Actuator



MODEL 901
Accessory:
Pneumatic Actuator with Smart
Electropneumatic Valve Positioner



MODEL 90KF-NW
Accessory:
Pneumatic Actuator with
Solenoid Valve and Filter Regulator



MODEL MPY1
Accessory:
Solenoid Valve



MODEL MPY1
Accessory:
Pneumatic Actuator with Smart
Electropneumatic Valve Positioner



Butterfly Valve
Accessory:
Pneumatic Actuator



**Pneumatic Actuator with
Reed Sensor**



MODEL MPY1 / MPY2 MPY3

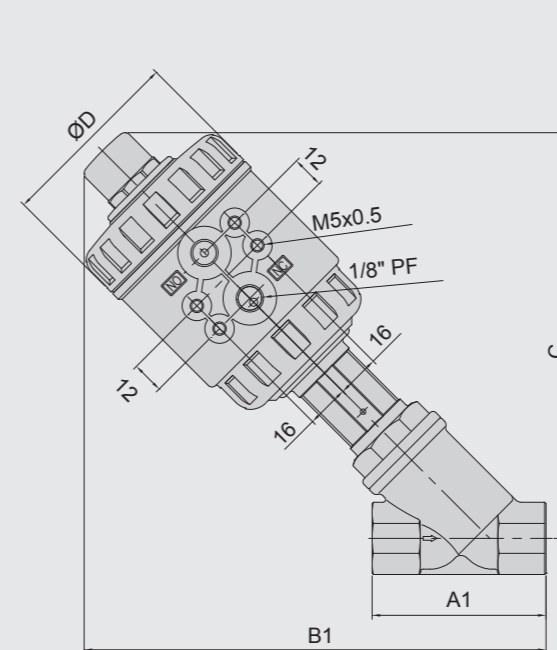
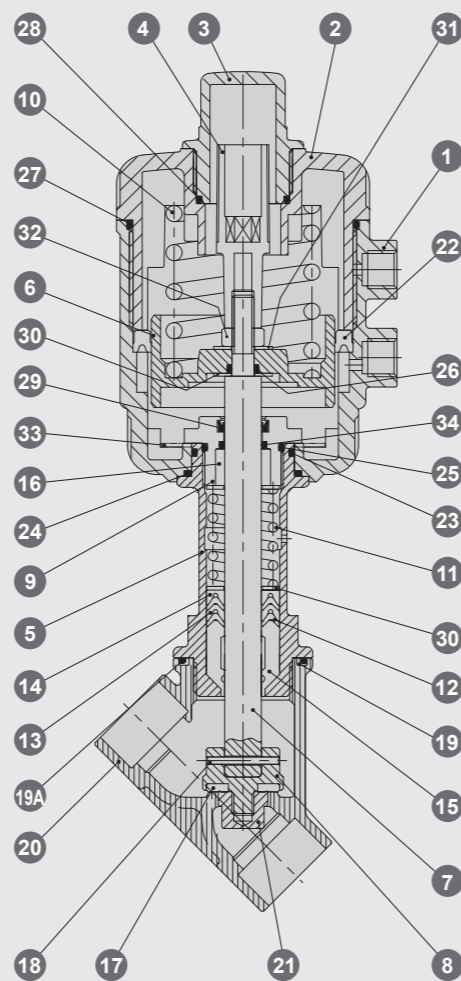
Angle Seat Globe Valve



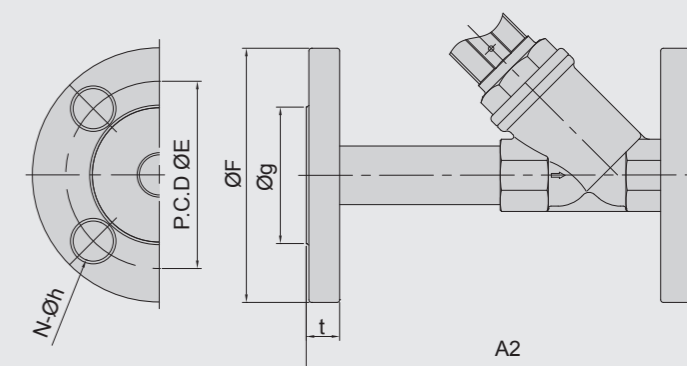
Valve Piloting Type	Pneumatics (Spring return)
Control Function	Normally closed, Normally open
Material	ASTM A351-CF8M
Temperature Range	-10°C ~ +180°C
Control Pressure	4 ~ 10 Bar
Seat	PTFE
Additional Features	<ul style="list-style-type: none"> Available connections: Threaded, Flanged, T-Clamp NAMUR solenoid mounting pad

MATERIALS LIST

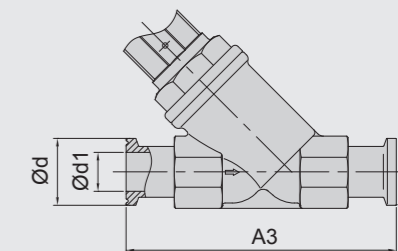
NO.	PART NAME	Q'TY	MATERIAL
1	ACTUATOR BODY	1	PA66-GF30%
2	ACTUATOR COVER	1	PA66-GF30%
3	TRANSPARENT CUP	1	PC
4	MOVABLE DISPLAYER	1	PA66-GF30%
5	TUBE	1	SUS316
6	PISTON	1	BRASS
7	STEM	1	SUS316
8	PLOG	1	SUS316
9	GLAND NUT	1	BRASS
10	SPRING	1	SWC
11	SPRING	1	SUS304
12	V-RING PACKING	2	VITON
13	V-RING PACKING	1	PTFE
14	V-RING PACKING	1	PTFE
15	BEARING	1	PTFE
16	BEARING	1	PTFE
17	SEAT	1	PTFE
18	DOWEL PIN	1	SUS316
19	END SEAL	1	TFM4215
19A	END O-RING	1	EPDM
20	VALVE BODY	1	SUS316
21	SEAT NUT	1	SUS316
22	PISTON SEAL	1	NBR
23	TUBE O-RING	1	VITON
24	TUBE O-RING	1	VITON
25	TUBE O-RING	1	VITON
26	STEM O-RING	1	VITON
27	BODY O-RING	1	NBR
28	COVER O-RING	1	NBR
29	STEM SEAL	1	VITON
30	WASHER	2	BRASS
31	STEM WASHER	2	SUS304
32	STEM NUT	1	SUS304
33	BELLEVILLE WASHER 11/2"-2"	1	SUS304
34	TUBE O-RING	1	VITON



**MODEL MPY1
Threaded End**



**MODEL MPY2
Flanged End**



**MODEL MPY3
Clamp End**

DIMENSIONS(mm)

SIZE	10K 150LB	A1	A2	A3	B1	C	ØD	Ød	Ød1	ØE	ØF	Øg	N-Øh	t	Ø Control head	P control bar		P operating bar
																Min	Max	Max
1/2"	10K	65	145	113	173	152	70	25	9.5	70	95	51	4-15	12.5	50	4	10	11
	150LB									60.3	89	35	4-16	11.2				
3/4"	10K	75	150	130	179	157	70	25	15.9	75	100	56	4-15	14.5	50	4	10	11
	150LB									69.9	98.4	43	4-16	12.7				
1"	10K	90	180	140	209	182	84	50.4	22.2	90	125	67	4-19	14.3	63	4	10	11
	150LB									79.4	108	50.8	4-16	14.3				
1 1/4"	10K	110	190	-	214	192	84	-	-	100	135	76	4-19	16.3	63	4	10	11
	150LB									88.9	117.5	63.5	4-16	15.8				
1 1/2"	10K	120	220	170	250	219	115	50.4	35	105	140	81	4-19	16.5	90	4	8	11
	150LB									98.4	127	73	4-16	17.4				
2"	10K	150	235	212	267	226	115	64.5	47.5	120	155	96	4-19	16.5	90	4	8	11
	150LB									125	165	102	4-18	18				
										120.7	152.4	92	4-19	19				



MODEL MP271 / MP2714

2-Piece Instrumentation Ball Valve



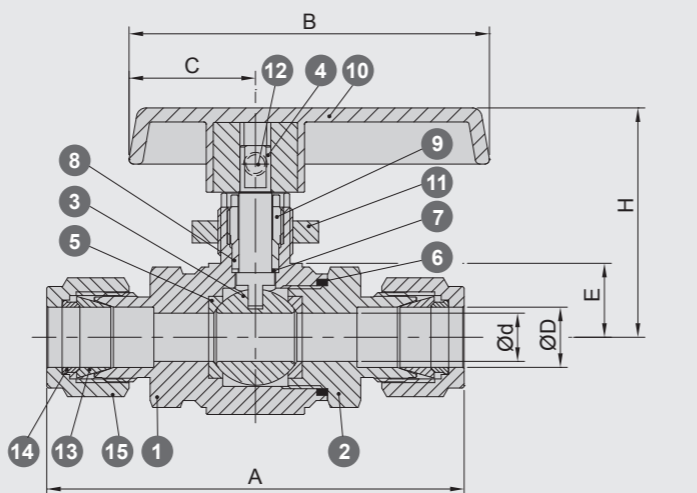
Maximum Pressure	1000PSI (69bar)
Temperature Rating	-20°C ~ +180°C
Material	ASTM A351-CF8M
Seat	TFM1600
Additional Features	<ul style="list-style-type: none"> • Oil-free product • Available connections: Tube fitting end, Tube fitting end x Tube end • Silver plated nut • Heat treated ferrule

MATERIALS LIST

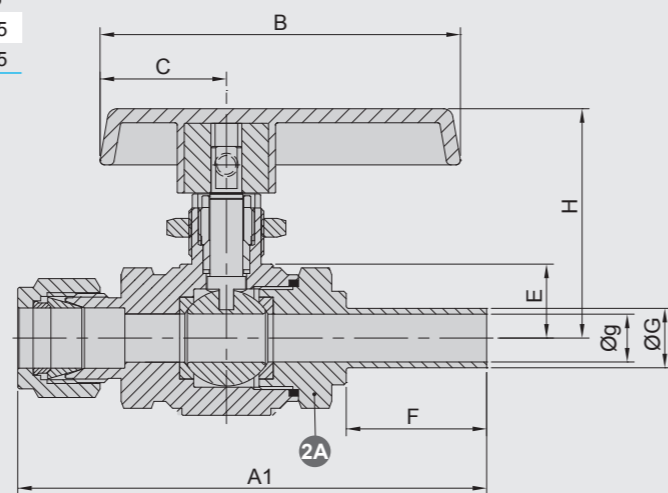
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	ASTM A351-CF8M
2	END CONNECTOR	1	ASTM A351-CF8M
2A	END CAP	1	SUS316L
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	BODY SEAL	1	PTFE
7	STEM WASHER	1	SUS304
8	STEM PACKING	1SET	PTFE
9	PACKING NUT	1	SUS316
10	HANDLE	1	PA66-GF30%
11	PANEL NUT	1	SUS304
12	HANDLE SET SCREW	1	SUS304
13	FRONT FERRULE	1~2	SUS316
14	BACK FERRULE	1~2	SUS316
15	NUT	1~2	SUS316

DIMENSIONS(mm)

SIZE	A	A1	B	C	Ød	ØD	E	F	Øg	ØG	H
1/4"	67	82	63	25	4.6	6.49	11.2	30	4.57	6.35	42.6
3/8"	70	83.5	63	25	6.4	9.7	11.2	30	7.53	9.53	42.6
1/2"	89.2	100.2	77	27	10.3	12.9	15.8	30	10.22	12.7	49.15
3/4"	89.4	106.2	77	27	10.3	19.2	15.8	36	16.57	19.05	49.15



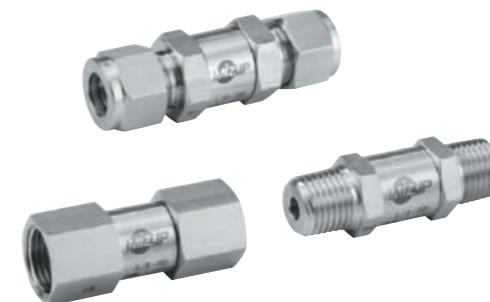
MODEL MP271
Tube Fitting End



MODEL MP2714
Tube Fitting End x Tube End

MODEL MP281 / MP282 MP283

Mini Check Valve



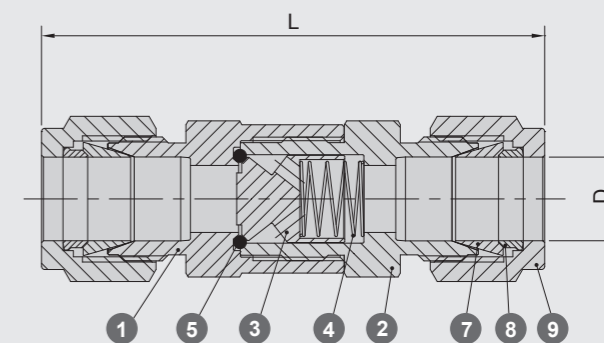
Maximum Pressure	2000PSI (138bar)
Temperature Rating	-20°C ~ +180°C
Cracking Pressure	1/3 PSI
Material	SS316 BAR
Seat	VITON
Additional Features	<ul style="list-style-type: none"> • Oil-free product • Available connections: Tube fitting end, Female/Male threaded • Silver plated nut • Heat treated ferrule

MATERIALS LIST

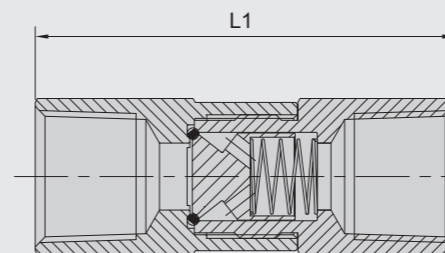
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	SUS316
2	END CONNECTOR	1	SUS316
3	POPPET	1	SUS316
4	SPRING	1	SUS304
5	SEAT	1	VITON
6	BODY SEAL	1	VITON
7	BV FF	2	SUS316
8	BV BF	2	SUS316
9	LOCKER	2	SUS316

DIMENSIONS(mm)

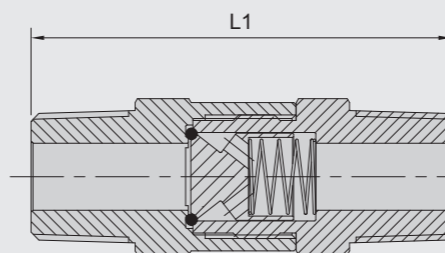
SIZE	D	L	L1
1/4"	6.49	60.7	49
3/8"	9.7	63.7	49
1/2"	12.9	77.1	65
3/4"	19.2	89.6	77.2
1"	25.5	120	105



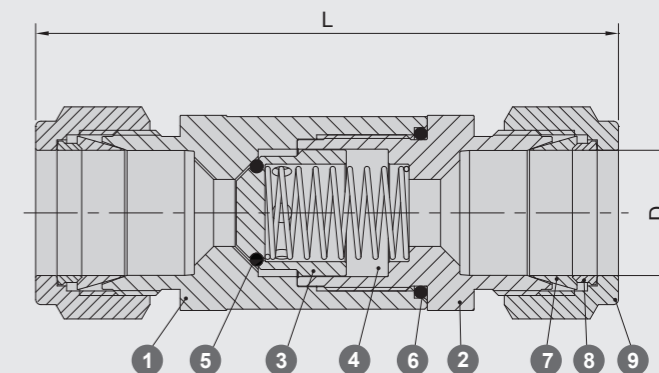
1/4"-1/2"
MODEL MP281
Tube Fitting End



MODEL MP282
Female



MODEL MP283
Male



3/4"-1"
MODEL MP281
Tube Fitting End



MODEL MP371 / MP372 MP373

3-Piece Instrumentation Ball Valve



Maximum Pressure	3000PSI (207bar)
Temperature Rating	-20°C ~ +180°C
Material	ASTM A351-CF8M
Seat	TFM1600
Additional Features	<ul style="list-style-type: none"> Oil-free product Available connections: Tube fitting end, Female/Male threaded Silver plated nut Heat treated ferrule

MODEL MP381 / MP382 MP383

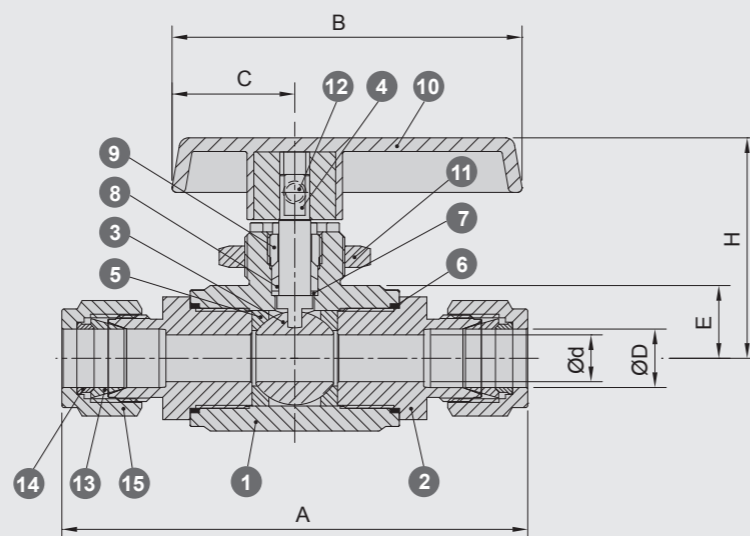
3-Piece 3-Way Instrumentation Ball Valve



Maximum Pressure	3000PSI (207bar)
Temperature Rating	-20°C ~ +180°C
Material	ASTM A351-CF8M
Seat	TFM1600
Additional Features	<ul style="list-style-type: none"> Oil-free product L-port, T-port available Available connections: Tube fitting end, Female/Male threaded Silver plated nut Heat treated ferrule

MATERIALS LIST

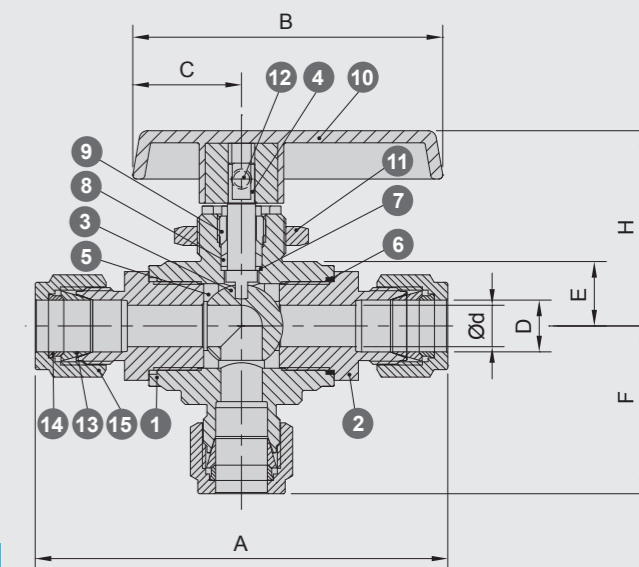
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	ASTM A351-CF8M
2	END CONNECTOR	2	SUS316
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	BODY SEAL	2	PTFE
7	STEM WASHER	1	SUS304
8	STEM PACKING	1SET	PTFE
9	PACKING NUT	1	SUS316
10	HANDLE	1	PA66-GF30%
11	PANEL NUT	1	SUS304
12	HANDLE SET SCREW	1	SUS304
13	FRONT FERRULE	2	SUS316
14	BACK FERRULE	2	SUS316
15	NUT	2	SUS316



MODEL MP371
Tube Fitting End

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	ASTM A351-CF8M
2	END CONNECTOR	2	SUS316
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	2	TFM1600
6	BODY SEAL	2	PTFE
7	STEM WASHER	1	SUS304
8	STEM PACKING	1SET	PTFE
9	PACKING NUT	1	SUS316
10	HANDLE	1	PA66-GF30%
11	PANEL NUT	1	SUS304
12	HANDLE SET SCREW	1	SUS304
13	FRONT FERRULE	3	SUS316
14	BACK FERRULE	3	SUS316
15	NUT	3	SUS316



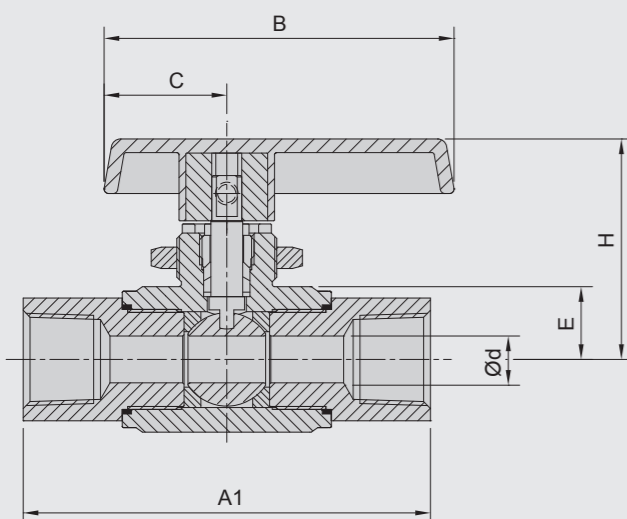
MODEL MP381
Tube Fitting End

DIMENSIONS(mm)

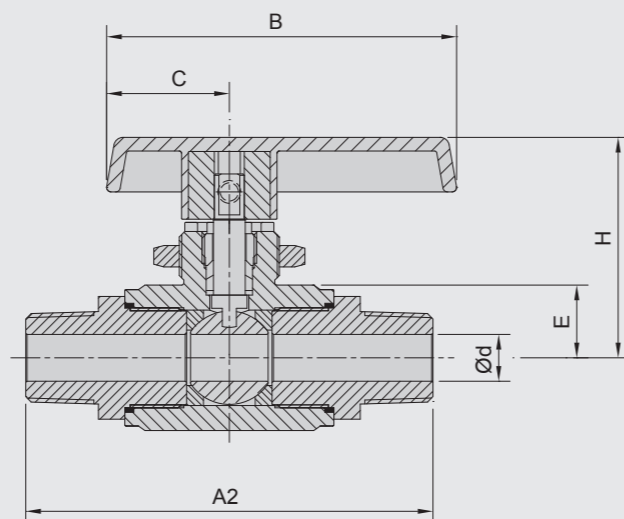
SIZE	A	A1	A2	B	C	Ød	ØD	E	H
1/4"	83.6	65.6	70.2	63	25	5	6.49	11.5	42.2
3/8"	86.6	67.6	71.6	63	25	6.3	9.7	11.5	42.2
1/2"	102.5	89.6	89.6	77	27	10.3	12.9	16	47.9
3/4"	102.7	89.6	89.6	77	27	10.3	19.2	16	47.9

DIMENSIONS(mm)

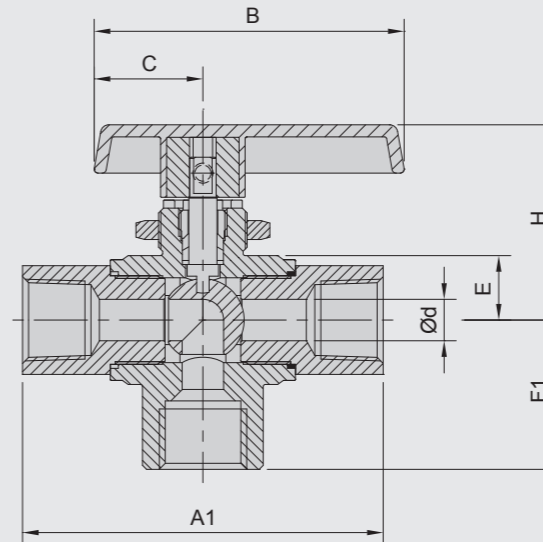
SIZE	A	A1	A2	B	C	Ød	ØD	E	F	F1	H
1/4"	83.6	65.6	70.2	63	25	5	6.49	11.5	32.3	26.7	42.2
3/8"	86.6	67.6	71.6	63	25	6.3	9.7	11.5	33.8	26.7	42.2
1/2"	105.5	89.6	89.6	77	27	10.3	12.9	16	41.6	37	47.9
3/4"	105.7	89.6	89.6	77	27	10.3	19.2	16	41.7	37	47.9



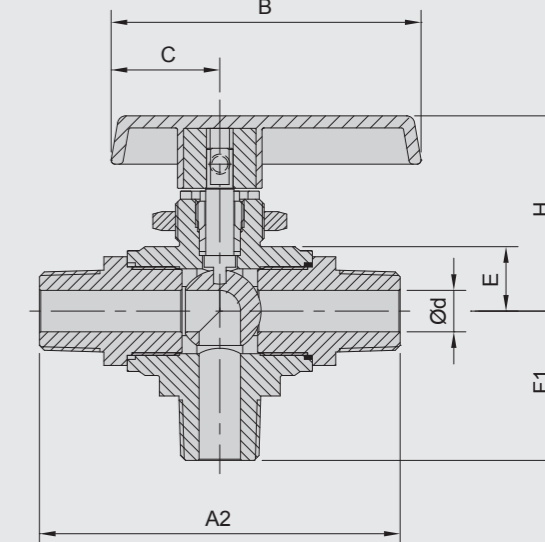
MODEL MP372
Female



MODEL MP373
Male



MODEL MP382
Female



MODEL MP383
Male



MODEL MP392

3-Piece 2/3-Way High Pressure Instrumentation Ball Valve

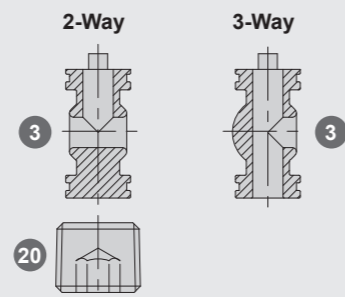
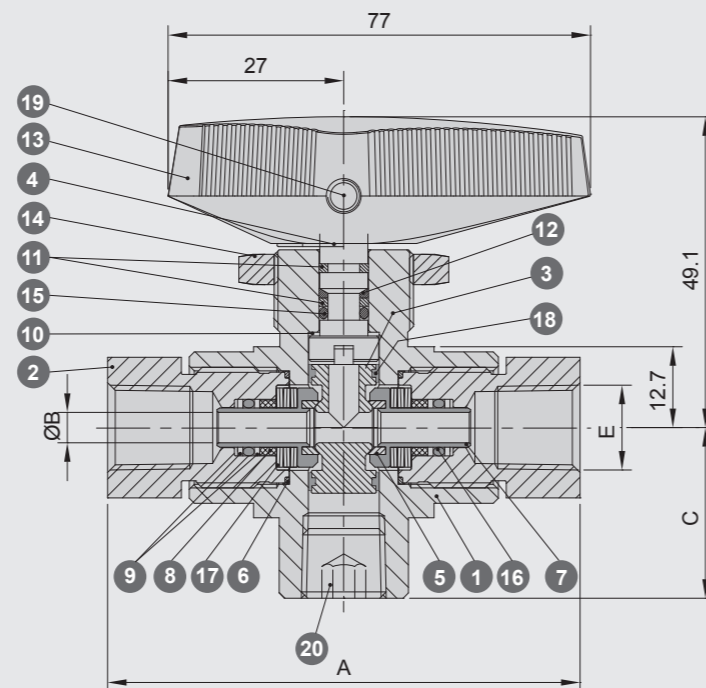
Maximum Pressure	6000PSI (414bar), 10000PSI (689bar)
Temperature Rating	6000PSI: -20°C ~ +120°C, 10000PSI: -20°C ~ +200°C
Material	SS316 BAR
Seat	PCTFE (6000PSI), PEEK (10000PSI)
Additional Features	<ul style="list-style-type: none"> • L-port, T-port available • Available connection: Female threaded

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	VALVE BODY	1	SUS316
2	PORT END CONNECTOR	2	SUS316
3	BALL	1	SUS316
4	STEM	1	SUS316
5	SEAT	3	PCTFE
6	CONNECTOR END SEAL	2	TFM1600
7	SEAT RETAINER	2	SUS316
8	SPRING WASHER	2	SUS316
9	SEAT RETAINER O-RING BACK-UP	4	TFM1600
10	STEM WASHER	1	PEEK
11	STEM O-RING BACK-UP	2	TFM1600
12	PRIMARY STEM BACKUP RING	1	PEEK
13	HANDLE / INSERT	1	PA66-GF30%
14	PANEL NUT	1	SUS304
15	STEM O-RING	1	VITON
16	SEAT RETAINER O-RING	2	VITON
17	BELLEVILLE WASHER	12	SUS304
18	TRUNNION BEARINGS	2	PEEK
19	HANDLE SCREW	1	SUS304
20	PLUG (2-WAY ONLY)	1	SUS304

DIMENSIONS(mm)

SIZE	A	ØB	C	E (Thread)
1/8"	74.6	4.8	26.9	NPT.PT.PF
1/4"	74.6	4.8	26.9	NPT.PT.PF
3/8"	93.8	4.8	26.9	NPT.PT.PF
1/2"	100.2	4.8	28.9	NPT.PT.PF





MODEL CGL02 / CGL03

Cryogenic Globe Valve
Socket weld / Butt weld

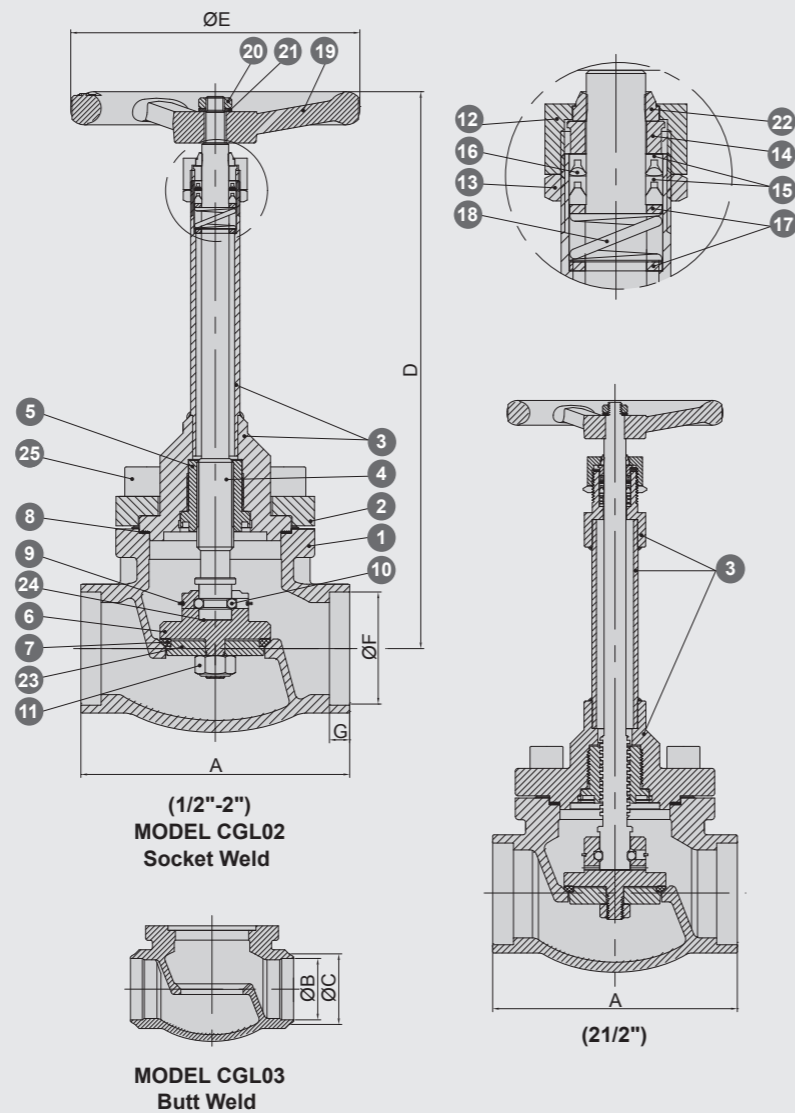


Maximum Pressure	PN50
Temperature Rating	-196°C ~ +65°C
Material	CF8M
Seat	PCTFE
Additional Features	• Acquired BS 6364: 1984 Cryogenic Test Approval

OEM PRODUCTS AND OTHER VALVES

MATERIALS LIST

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	CF8M
2	CAP	1	CF8M
3	PIPE LINER	1	SUS316
4	PLUG STEM	1	SUS316
5	BRASS BUSHING	1	BRASS
6	PLUG	1	BRASS
7	SEAT	1	PCTFE
8	SEAT RING	1	SIGMA511
9	SNALINK	1	SUS420
10	BALL	10	SUS304
11	SEAT NUT	1	SUS304
12	BONNET NUT	1	SUS304
13	NUT	1	SUS304
14	GLAND	1	BRASS
15	V-RING PACKING	3	TFM1600
16	O-RING	1	NBR
17	WASHER	2"	BRASS
18	SPRING	1	SUS304
19	HANDLE WHEEL	1	DUCTILE IREN
20	NUT	1	SUS304
21	WASHER	1	SUS304
22	BOOT	1	SI
23	WASHER	1	BRASS
24	BUNG GASKET	1	PTFE
25	BOLT	4~6	SUS304

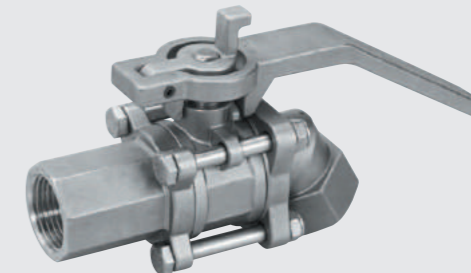


DIMENSIONS(mm)

SIZE	A	ØB	ØC	D	ØE	ØF	G
1/2"	68	16	24	285	80	21	9.5
1"	92	27	35	287.5	100	34	12
1 1/2"	121	41.5	50.5	297	125	49	12.5
2"	146	53	62	298	125	61.5	11
2 1/2"	178	67	77	364.6	160	74	15



Sampling Valve



Angle Cock



Tank Bottom Ball Valve



High Temperature Ball Valve



Y-strainer



Butterfly Valve



Needle Valve




Gate Valve



High Pressure High Temperature Ball Valve

BALL SEATS

	Name	Material	Temperature Rating
	PTFE	Virgin PTFE	-10°C~+120°C
	TFM1600	Chemically Modified PTFE	-29°C~+230°C
	Carbon Filled PTFE	25% Carbon Graphite Filled PTFE	-10°C~+250°C
	50/50	50% Stainless Steel Powder Filled PTFE	-10°C~+270°C
	Cavity Filled Seat	Virgin PTFE	-10°C~+120°C
	RPTFE	15% Glass Fiber Filled PTFE	-10°C~+120°C
	PCTFE	Fluorocarbon Based Polymer	-196°C~+65°C
	Carbon-Layered Metal	Carbon Graphite and Stainless Steel	20°C~500°C

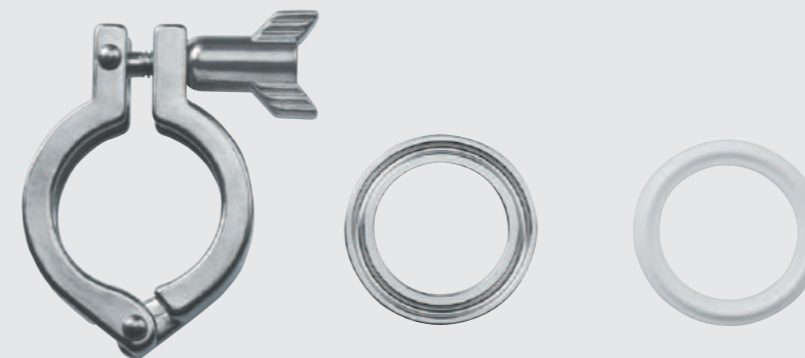
VALVES PARTS



V-port Balls



T-clamp Parts



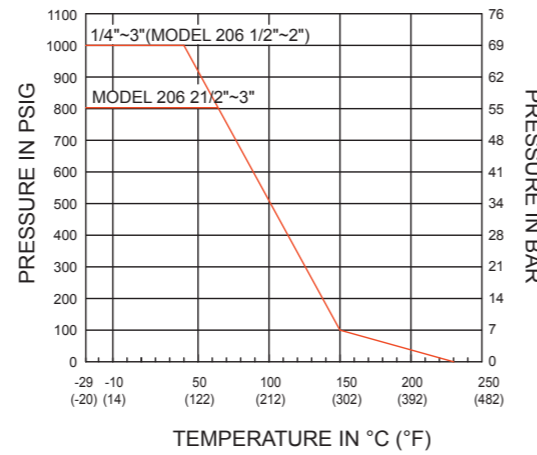
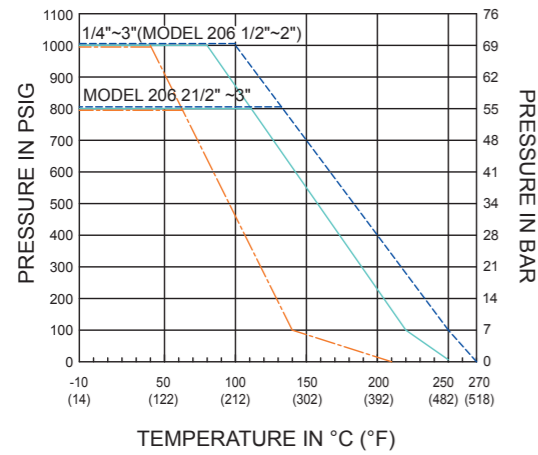
Vacumm Parts



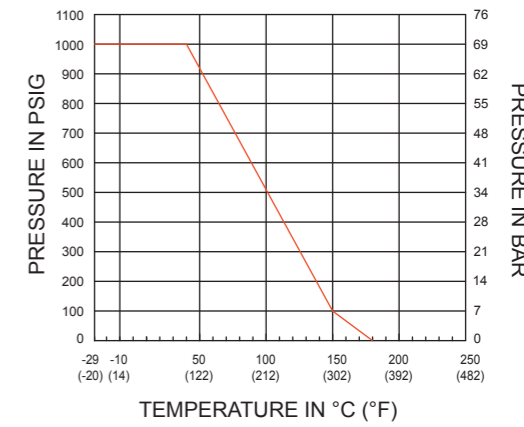
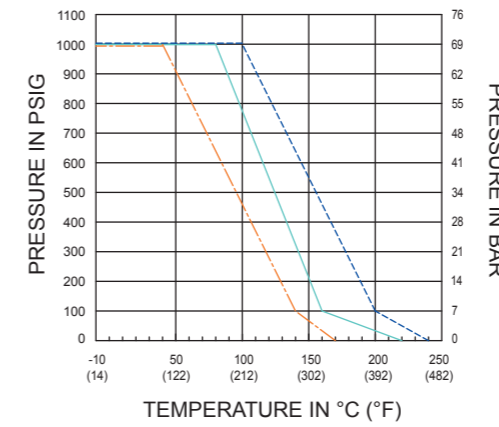
Pressure-Temperature Ratings

- PTFE
- 25% CARBON FILLED
- 50% S.S. POWDER FILLED
- TFM1600

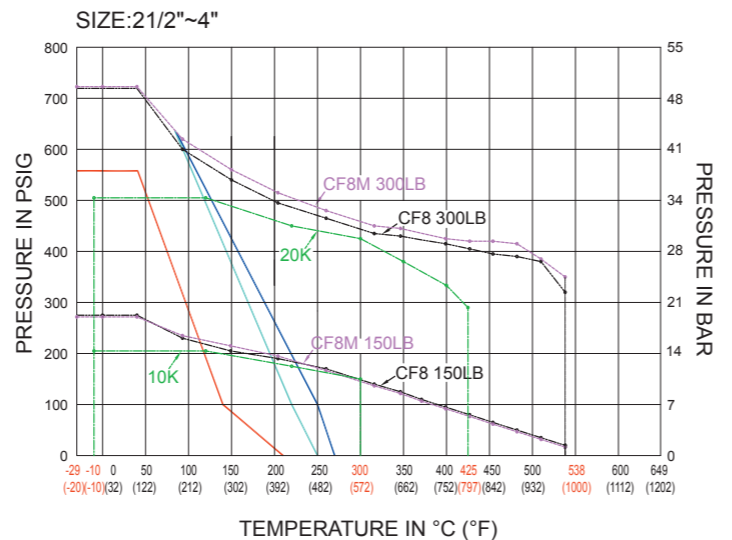
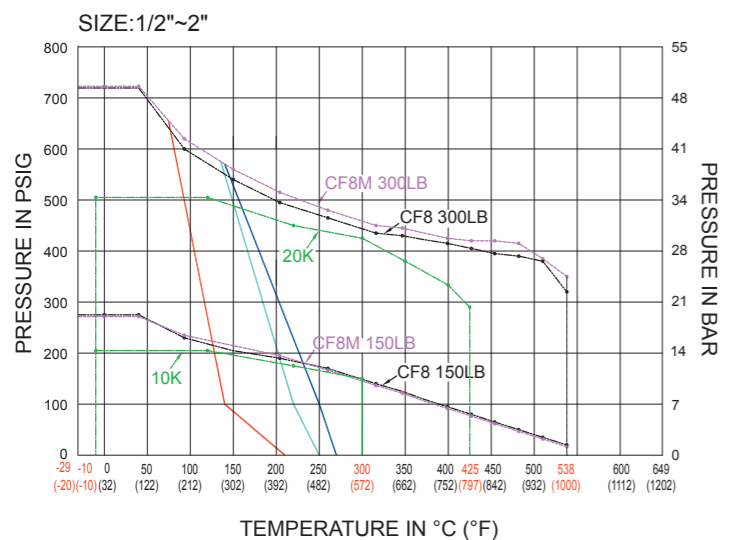
SERIES 20 EXCEPTION : MODEL 205 & 205S



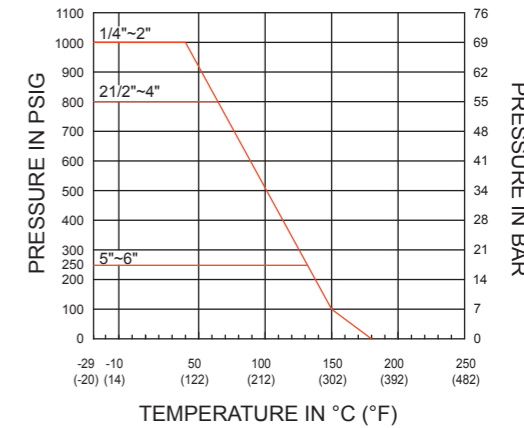
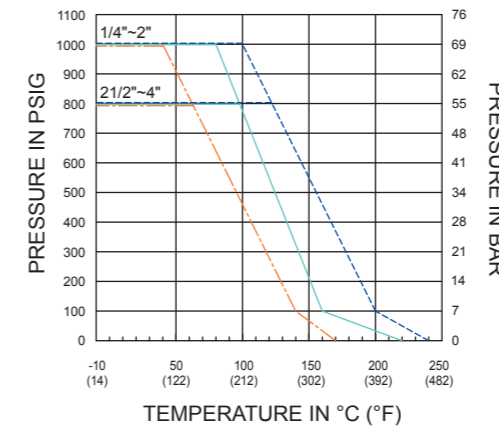
SERIES 30



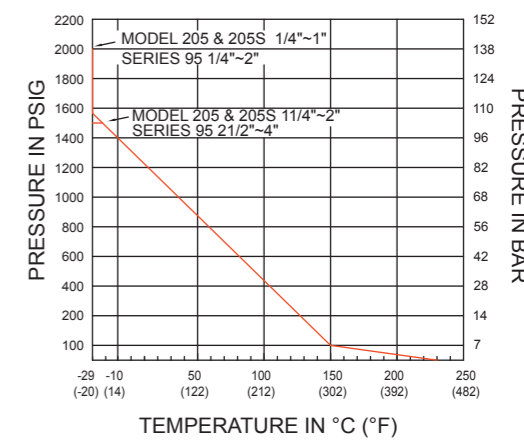
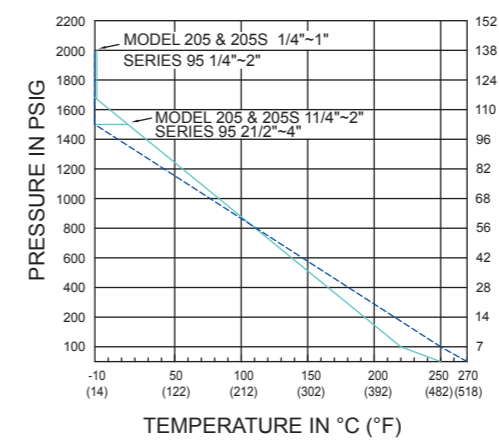
SERIES 203A ASME B16.34-150LB 300LB JIS B2220-10K 20K



SERIES 70 90



SERIES 95 MODEL 205 & 205S





OPERATING TORQUE

Unit: N · M

Model Size	203A	204-2 204-4	204-3	204-5	206	701~705 901~905	704LV 904LV	706 707 906 907	951 952 953	95K
1/4"	N/A	5.2	N/A	N/A	5	5	6.5	N/A	5	6.5
3/8"	N/A	5.2	N/A	N/A	5	5	6.5	N/A	5	6.5
1/2"	3.5	5.2	5.3	9.8	5	5	6.5	4.5	5	6.5
3/4"	5	9.1	5.3	17.6	9	9	10.4	10	9	10.4
1"	7	9.75	14.3	29.6	11	11	14.3	17	11	N/A
1 1/4"	10	20.8	N/A	55.8	15	15	19.5	N/A	15	N/A
1 1/2"	15	28.6	45.5	78.4	22	22	28.6	32	22	N/A
2"	20	52	68.9	161	26	26	33.8	44	26	N/A
2 1/2"	36	N/A	N/A	225	48	48	86.4	68	48	N/A
3"	42	N/A	N/A	245	60	60	108	90	60	N/A
4"	80	N/A	N/A	300	N/A	90	162	135	90	N/A
5"	144	N/A	N/A	520	N/A	144	280	N/A	N/A	N/A
6"	190	N/A	N/A	840	N/A	190	295	260	N/A	N/A

Note:

- 1 Inch Pound = 0.113 Newton Meter
- 1 Newton Meter = 8.85 Inch Pound
- 20% safety factor is already added to the listed torques.
- Torques shown are for each model with its standard equipment for clean flow media.
- All figures can vary depending on temperature, pressure, flow media and seat.
- Contact us for specific conditions.

