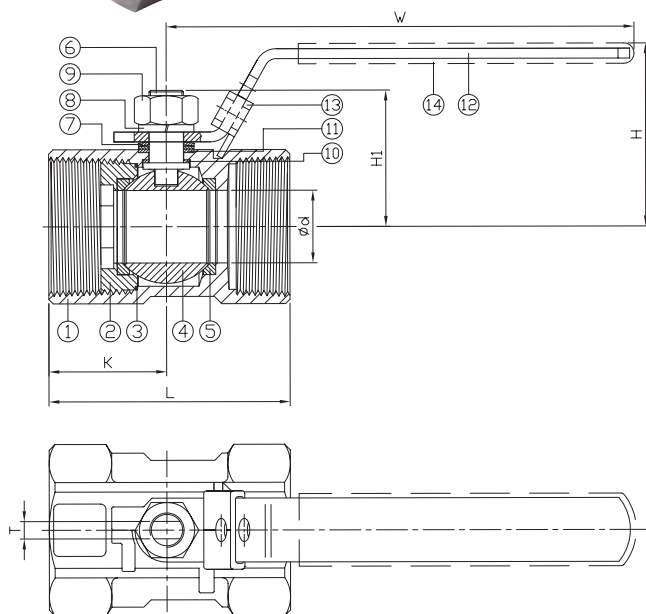




SERIES: B110TC - CARBON STEEL 1-PC. SCREWED END BALL VALVE (1/4" - 2")

DESIGN FEATURES:

- Reduced port, 1/4"~2" (DN8~DN80)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Anti-Static Device
- Silicone Free
- Locking device
- Thread type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226



ITEM	PARTS	MATERIAL
		B110TCPTXXX
1	BODY	ASTM A216-WCB
2	RETAINER	
3	BODY SEAL (1)	PTFE
4	BALL	ASTM A351-CF8M
5	BALL SEAT	PTFE
6	STEM	ASTM A276-316
7	FLAT WASHER	AISI 304
8	SPRING WASHER	
9	STEM NUT	
10	THRUST WASHER	PTFE
11	PACKING	
12	HANDLE	STAINLESS STEEL
13	LATCH LOCK	AISI 304
14	HANDLE SLEEVE	PVC

(1) 1-1/4" - 2" size only

DN	d	L	H	H1	T	W	K	Torque (N-m)	Weight (kg)
8	5.0	39.0	38.0	17.0	3.0	61.7	20.0	0.8	0.1
10	7.0	44.0	41.1	21.4	4.0	73.5	23.0	1.0	0.1
15	9.0	56.5	40.6	26.1	5.0	94.7	29.0	1.2	0.2
20	12.5	59.0	44.1	28.8	5.0	94.7	29.0	1.8	0.3
25	15.0	71.0	56.5	36.5	6.0	111.5	35.0	3.0	0.4
32	20.0	78.0	62.0	40.5	112.5	113.0	38.0	4.9	0.7
40	25.0	83.0	63.2	46.5	160.0	141.0	40.5	7.4	0.9
50	32.0	100.0	68.5	51.0	160.5	141.0	49.0	8.8	1.4

unit: mm

NPS	d	L	H	H1	T	W	K	Torque (in-lb)	Weight (lb)
1/4"	0.20	1.54	1.50	0.67	0.12	2.43	0.79	7.1	0.2
3/8"	0.28	1.73	1.62	0.84	0.16	2.89	0.91	8.9	0.2
1/2"	0.35	2.22	1.60	1.03	0.20	3.73	1.14	10.6	0.4
3/4"	0.49	2.32	1.74	1.13	0.20	3.73	1.14	15.9	0.7
1"	0.59	2.80	2.22	1.44	0.24	4.39	1.38	25.7	0.9
1-1/4"	0.79	3.07	2.44	1.59	4.43	4.45	1.50	43.4	1.5
1-1/2"	0.98	3.27	2.49	1.83	6.30	5.55	1.59	65.1	2.0
2"	1.26	3.94	2.70	2.01	6.32	5.55	1.93	78.1	3.1

unit: in



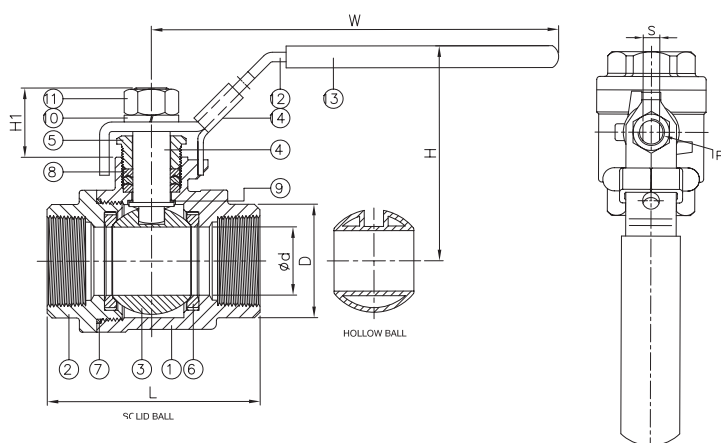
SERIES: B210TM - B210TC (1/4" - 4")

2-PC. SCREWED END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4" - 4" (DN8-DN80)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-Static Device
- Locking device
- Tapped & drilled mounting pad (option)
- Thread type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226



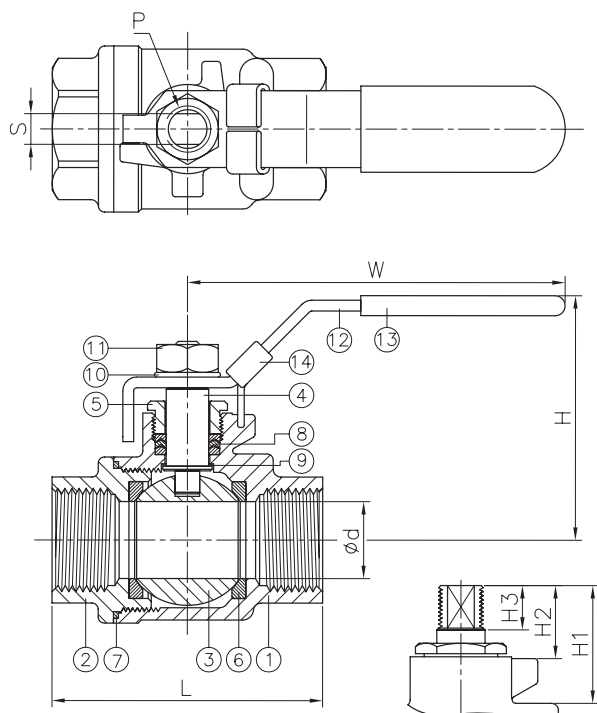
ITEM	PARTS	MATERIAL	
		B210TMRTXXX	B210TCRTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	SOLID BALL	ASTM A351-CF8M	
	HOLLOW BALL	ASTM A240-316	
4	STEM	ASTM A276-316	
5	GLAND	AISI 304	
6	SEAT	RTFE	
7	SEAL	PTFE	
8	PACKING		
9	THRUST WASHER	AISI 304	
10	SPRING WASHER		
11	NUT		
12	HANDLE	STAINLESS STEEL	
13	HANDLE SLEEVE	PVC	
14	LOCK DEVICE	STAINLESS STEEL	

DN	d	D	L	H	H1	W	S	P	Torque (N-M)	Weight (kg)
8	11.6	19.0	50.8	58.5	18.5	99.5	5.0	3/8"-24UNF	3.5	SOLID BALL
10	12.5	22.5	50.8	58.5	18.5	99.5	5.0	3/8"-24UNF	4.0	0.2
15	15.0	26.0	58.0	60.5	18.8	99.5	5.0	3/8"-24UNF	5.5	0.2
20	20.0	32.0	65.6	63.0	23.4	123.0	6.5	7/16"-20UNF	7.5	0.3
25	25.0	38.0	78.7	79.5	26.2	149.0	8.0	7/16"-20UNF	11.0	0.5
32	32.0	48.0	90.0	86.0	23.6	149.0	8.0	7/16"-20UNF	15.0	0.8
40	38.0	54.8	105.0	101.7	28.2	190.0	10.0	1/2"-20UNF	20.0	1.1
50	50.0	67.0	124.0	109.3	23.4	190.0	10.0	1/2"-20UNF	40.0	1.8
65	63.0	85.0	146.0	140.0	39.4	247.0	12.0	3/4"-10UNF	60.0	2.7
80	76.0	100.0	163.2	148.5	39.4	247.0	12.0	3/4"-10UNF	85.0	5.6
100	100.0	126.0	240.0	175.0	43.0	300.0	15.0	3/4"-10UNF	90.0	7.5
										13.9

unit: mm

NPS	d	D	L	H	H1	W	S	P	Torque (in-lb)	Weight (lb)
1/4"	0.46	0.75	2.00	2.30	0.73	3.92	0.20	3/8"-24UNF	31.0	SOLID BALL
3/8"	0.49	0.89	2.00	2.30	0.73	3.92	0.20	3/8"-24UNF	35.4	0.5
1/2"	0.59	1.02	2.28	2.38	0.74	3.92	0.20	3/8"-24UNF	48.7	0.5
3/4"	0.79	1.26	2.58	2.48	0.92	4.84	0.26	7/16"-20UNF	66.4	0.7
1"	0.98	1.50	3.10	3.13	1.03	5.87	0.31	7/16"-20UNF	97.4	1.0
1-1/4"	1.26	1.89	3.54	3.39	0.93	5.87	0.31	7/16"-20UNF	132.8	1.7
1-1/2"	1.50	2.16	4.13	4.00	1.11	7.48	0.39	1/2"-20UNF	177.0	2.5
2"	1.97	2.64	4.88	4.30	0.92	7.48	0.39	1/2"-20UNF	354.0	3.9
2-1/2"	2.48	3.35	5.75	5.51	1.55	9.72	0.47	3/4"-10UNF	531.0	5.9
3"	2.99	3.94	6.43	5.85	1.55	9.72	0.47	3/4"-10UNF	752.3	12.4
4"	3.94	4.96	9.45	6.89	1.69	11.81	0.59	3/4"-10UNF	796.6	16.5
										30.6

unit: in



SERIES: B220TM - B220TC (1/4" - 2")

2-PC. SCREWED END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port
- **W.P. :**
 - » 1/4"~1" - 2000 WOG (PN150)
 - » 1-1/4"~2" - 1500 WOG (PN100)
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Silicone Free
- Blow-out proof stem
- Anti-static device
- Locking device
- Thread type :
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226

ITEM	PARTS	MATERIAL	
		B220TMRTXXX	B220TCRTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	STEM	ASTM A276-316	
5	GLAND NUT	AISI 304	
6	BALL SEAT	RTFE	
7	BODY SEAL	PTFE	
8	PACKING		
9	THRUST WASHER		
10	SPRING WASHER	AISI 304	
11	NUT		
12	HANDLE	STAINLESS STEEL	
13	HANDLE SLEEVE	PVC	
14	LOCK DEVICE	STAINLESS STEEL	

DN	D	L	H	H1	H2	H3	W	S	P	TORQUE (N-M)	WEIGHT (KG)
8	11.6	60.5	54.1	25.0	17.1	11.0	103	5.0	5/16"W	4.1	0.3
10	13.0	60.5	54.1	25.0	17.1	11.0	103	5.0	5/16"W	4.1	0.3
15	15.0	64.0	56.7	26.0	17.7	11.0	103	5.0	5/16"W	4.4	0.3
20	20.0	77.0	63.7	31.7	22.7	13.5	126	6.5	3/8"W	5.9	0.6
25	25.0	90.0	76.7	37.3	26.1	15.7	164	8.0	7/16"W	7.4	0.8
32	32.0	100.0	82.7	37.7	24.9	15.7	164	8.0	7/16"W	8.8	1.3
40	38.0	118.0	95.5	42.1	27.2	17.0	190	9.0	1/2"W	13.2	2.0
50	50.8	138.0	105.3	43.3	28.3	17.0	190	9.0	1/2"W	16.2	3.1

unit: mm

NPS	D	L	H	H1	H2	H3	W	S	P	TORQUE (IN-LB)	WEIGHT (LB)
1/4"	0.46	2.38	2.13	0.98	0.67	0.43	4.06	0.20	5/16"W	36.0	0.6
3/8"	0.51	2.38	2.13	0.98	0.67	0.43	4.06	0.20	5/16"W	36.0	0.6
1/2"	0.59	2.52	2.23	1.02	0.70	0.43	4.06	0.20	5/16"W	39.0	0.7
3/4"	0.79	3.03	2.51	1.25	0.89	0.53	4.96	0.26	3/8"W	52.0	1.2
1"	0.98	3.54	3.02	1.47	1.03	0.62	6.46	0.31	7/16"W	65.1	1.9
1-1/4"	1.26	3.94	3.26	1.48	0.98	0.62	6.46	0.31	7/16"W	78.1	2.8
1-1/2"	1.50	4.65	3.76	1.66	1.07	0.67	7.48	0.35	1/2"W	116.8	4.4
2"	2.00	5.43	4.15	1.70	1.11	0.67	7.48	0.35	1/2"W	143.4	6.9

unit: in



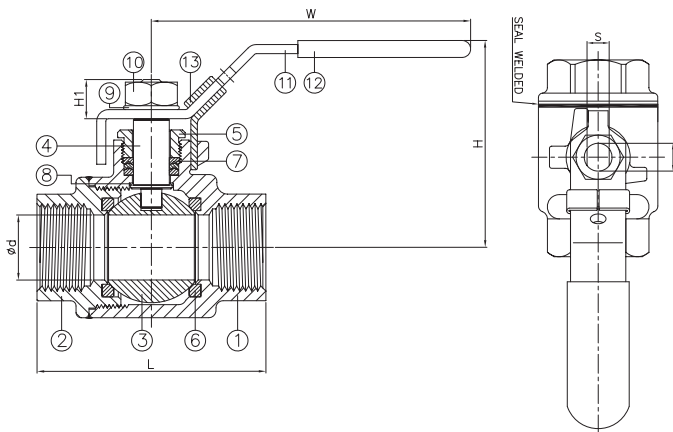
SERIES: B820TM - B820TC (1/4" - 4")

2-PC. SCREWED END BALL VALVE

SEAL WELDED

DESIGN FEATURES:

- Full port
- **W.P. :**
 - » 1/4"~1" - 2000 WOG(PN150)
 - » 1-1/4"~2" - 1500 WOG(PN100)
 - » 2-1/2"~4" - 1000 WOG(PN63)
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Anti-static device
- Silicone Free
- Locking device
- **API 607 Fire safe approved**
- ASME B16.34 Wall thickness
- API 608 Design
- **NACE MR0103**
- Seal welded ends
- Thread type :
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226



ITEM	PARTS	MATERIAL	
		B820TMRGNXX	B820TCRGNXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	316 ASTM CF8M	
4	STEM	ASTM A276-316	
5	GLAND NUT	AISI 304	
6	SEAT	RTFE	
7	PACKING	GRAPHITE	
8	THRUST WASHER	CTFE	
9	SPRING WASHER	AISI 304	
10	NUT		
11	HANDLE	STAINLESS STEEL	
12	HANDLE SLEEVE	PVC	
13	LOCK DEVICE	STAINLESS STEEL	

DN	d	L	H	H1	W	S	P	Torque (N-M)		Weight (kg)
								Action	Breakaway	
8	11.6	60.5	53.6	10.5	102	5.0	5/16"	3.6	5.1	0.4
10	12.8	60.5	53.6	10.5	102	5.0	5/16"	3.8	6.4	0.4
15	15.0	62.5	57.0	10.5	102	5.0	5/16"	3.8	6.4	0.4
20	20.2	77.0	62.1	13.5	124	6.5	3/8"	3.8	6.4	0.7
25	25.6	90.0	80.0	15.7	165	8.0	7/16"	7.7	11.4	1.3
32	32.0	100.0	83.7	15.7	165	8.0	7/16"	19.5	28.6	2.0
40	38.0	118.0	99.0	17.0	188	9.0	1/2"	19.5	32.5	2.5
50	50.8	138.0	107.0	17.0	188	9.0	1/2"	20.8	44.2	4.1
65	65.5	167.0	142.0	27.5	250	12.0	3/4"	33.0	55.0	6.4
80	80.0	193.0	153.0	27.5	250	12.0	3/4"	42.0	70.0	10.9
100	100.0	258.0	180.0	34.0	324	16.0	1"	54.0	90.0	21.0

unit: mm

NPS	d	L	H	H1	W	S	P	Torque (in-lb)		Weight (lb)
								Action	Breakaway	
1/4"	0.46	2.38	2.11	0.41	4.02	0.20	5/16"	31.9	45.1	0.9
3/8"	0.50	2.38	2.11	0.41	4.02	0.20	5/16"	33.6	56.6	0.9
1/2"	0.59	2.46	2.24	0.41	4.02	0.20	5/16"	33.6	56.6	0.9
3/4"	0.80	3.03	2.44	0.53	4.88	0.26	3/8"	33.6	56.6	1.5
1"	1.01	3.54	3.15	0.62	6.50	0.31	7/16"	68.2	100.9	2.9
1-1/4"	1.26	3.94	3.30	0.62	6.50	0.31	7/16"	172.6	253.1	4.4
1-1/2"	1.50	4.65	3.90	0.67	7.40	0.35	1/2"	172.6	287.6	5.5
2"	2.00	5.43	4.21	0.67	7.40	0.35	1/2"	184.1	391.2	9.0
2-1/2"	2.58	6.57	5.59	1.08	9.84	0.47	3/4"	292.1	486.8	14.1
3"	3.15	7.60	6.02	1.08	9.84	0.47	3/4"	371.7	619.5	24.0
4"	3.94	10.16	7.09	1.34	12.76	0.63	1"	477.9	796.6	46.3

unit: in



SERIES: B410TM - B410TC (1/4" - 3")

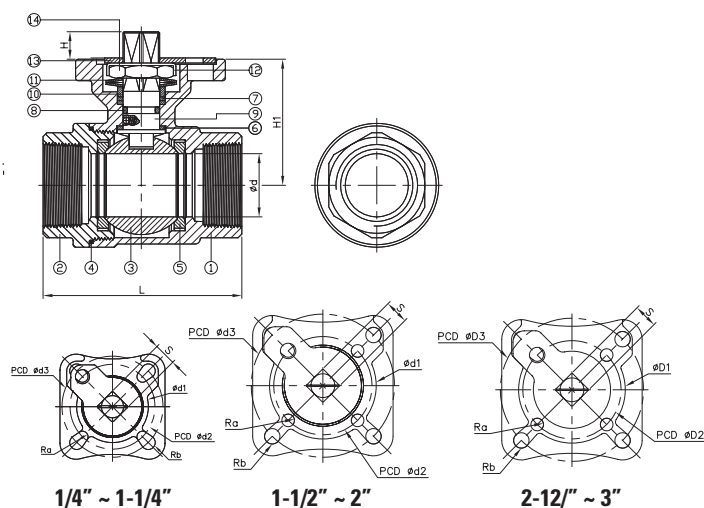
2-PC. SCREWED END BALL VALVE

Stainless / Carbon Steel

DIRECT MOUNT

DESIGN FEATURES:

- Full port, 1/4" ~ 3" (DN8~DN50)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Anti-static device
- Supplied with level handle
- Silicone Free
- Locking device
- **Direct Mounting pad ISO 5211**
- Thread type :
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226



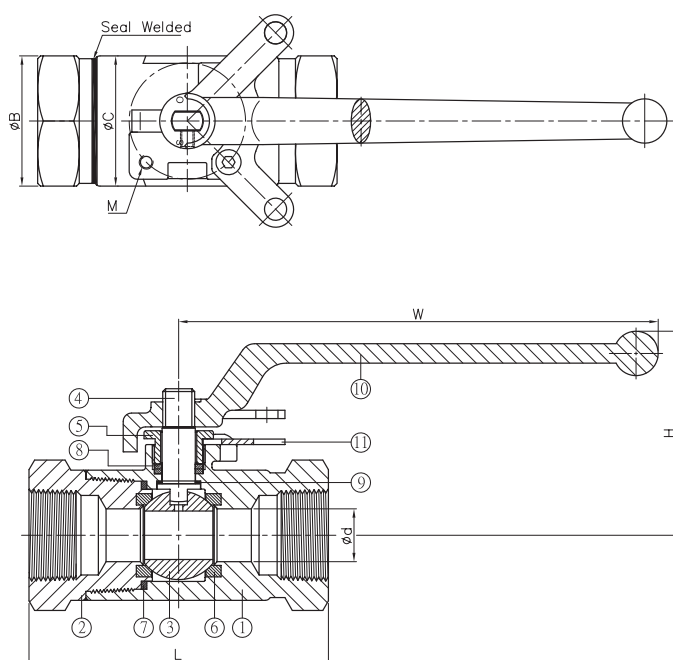
ITEM	PARTS	MATERIAL	
		B410TMMTXXX	B410TCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAL	PTFE	
5	SEAT	TFM 1600	
6	THRUST WASHER	PTFE	
7	PACKING		
8	O-RING	VITON	
9	STEM	ASTM A276-316	
10	GLAND RING	AISI 304	
11	BELLEVILLE WASHER	AISI 301	
12	LOCK WASHER	AISI 304	
13	STOPPER		
14	STEM NUT		

DN	d	L	H	H1	S	d1	d2	d3	Ra	Rb	ISO 5211	Torque (N-m)	Weight (kg)
8	11.6	58.0	8.0	36.4	9	31.0	36	42	2.8	2.8	F03 / F04	5.5	0.5
10	12.7	58.0	8.0	36.4	9	31.0	36	42	2.8	2.8	F03 / F04	5.5	0.5
15	15	58.0	8.0	36.4	9	31.0	36	42	2.8	2.8	F03 / F04	5.5	0.5
20	20	65.6	9.0	39.2	9	31.0	36	42	2.8	2.8	F03 / F04	7.5	0.5
25	25	78.7	11.0	48.7	11	35.5	42	50	2.8	3.5	F04 / F05	11.0	0.8
32	32	90.0	11.0	54.2	11	35.5	42	50	2.8	3.5	F04 / F05	15.0	1.2
40	38	105.0	11.5	65.7	14	56.0	50	70	3.5	4.5	F05 / F07	20.0	2.0
50	50	124.0	11.5	75.5	14	56.0	50	70	3.5	4.5	F05 / F07	40.0	2.9
65	63	146.2	20.5	91.5	17	76.0	70	102	4.5	5.5	F07 / F10	60.0	5.3
80	76	163.7	20.5	100.8	17	76.0	70	102	4.5	5.5	F07 / F10	85.0	7.2

unit: mm

NPS	d	L	H	H1	S	d1	d2	d3	Ra	Rb	ISO 5211	Torque (in-lb)	Weight (lb)
1/4"	0.46	2.28	0.31	1.43	0.35	1.22	1.42	1.65	0.11	0.11	F03 / F04	48.7	1.0
3/8"	0.50	2.28	0.31	1.43	0.35	1.22	1.42	1.65	0.11	0.11	F03 / F04	48.7	1.0
1/2"	0.59	2.28	0.31	1.43	0.35	1.22	1.42	1.65	0.11	0.11	F03 / F04	48.7	1.0
3/4"	0.79	2.58	0.35	1.54	0.35	1.22	1.42	1.65	0.11	0.11	F03 / F04	66.4	1.0
1"	0.98	3.10	0.43	1.92	0.43	1.40	1.65	1.97	0.11	0.14	F04 / F05	97.4	1.8
1-1/4"	1.26	3.54	0.43	2.13	0.43	1.40	1.65	1.97	0.11	0.14	F04 / F05	132.8	2.6
1-1/2"	1.50	4.13	0.45	2.59	0.55	2.20	1.97	2.76	0.14	0.18	F05 / F07	177.0	4.4
2"	1.97	4.88	0.45	2.97	0.55	2.20	1.97	2.76	0.14	0.18	F05 / F07	354.0	6.4
2-1/2"	2.48	5.76	0.81	3.60	0.67	3.0	2.76	4.02	0.18	0.22	F07 / F10	531.0	11.7
3"	2.99	6.44	0.81	3.97	0.67	3.0	2.76	4.02	0.18	0.22	F07 / F10	752.0	15.8

unit: in



SERIES: B836TM - B836TC (1/4" - 2")

HIGH PRESSURE THREADED BALL VALVE

Stainless / Carbon Steel

SEAL WELDED • FIRE SAFE

DESIGN FEATURES:

- 1/4"~2" (DN8~DN50)
- **W.P. : 3600 WOG (PN250)**
- W.T. : -20°C~260°C (-4°F~500°F)
- Investment casting
- Blow-out proof stem
- Anti-static device (option)
- Locking device
- **Mounting pad ISO 5211**
- Silicone Free
- **Seal welded ends**
- ASME B16.34 Wall thickness
- **NACE MR0103**
- **API 607 Fire safe approved**
- Thread type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226

ITEM	PARTS	MATERIAL	
		B836TMKGNXX	B836TCKGNXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	17-4PH	
4	STEM	ASTM A564-630 H900	
5	GLAND NUT	AISI 304	
6	SEAT	PEEK	
7	SEAL	GRAPHITE	
8	PACKING		
9	THRUST WASHER	CTFE	
10	HANDLE	AISI 304	
11	LOCK PAD		

PN 250	DN	d	B	C	L	H	W	M	ISO 5211	Torque (N-M)	Weight (kg)
	8 F	6.4	32	39	76.2	56.6	142.0	M5*P0.80	F03	9.5	0.7
	10 S	6.4	32	39	76.2	56.6	142.0	M5*P0.80	F03	9.5	0.7
	15 F	12.7	32	39	101.6	56.6	142.0	M5*P0.80	F03	9.5	0.8
	20 F	19.0	47	47	108.0	76.1	173.0	M5*P0.80	F04	28.0	1.3
	25 S	19.0	47	47	108.0	76.1	173.0	M5*P0.80	F04	28.0	1.3
	40 F	38.1	77	86	134.0	117.0	247.5	M8*P1.25	F07	53.0	4.9
	50 S	38.1	82	86	158.1	117.0	247.5	M8*P1.25	F07	53.0	5.4

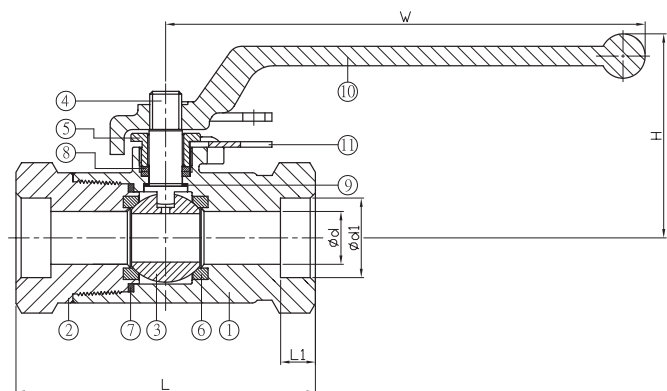
F: Full Port S: Standard Port

unit: mm

3600 WOG	NPS	d	B	C	L	H	W	M	ISO 5211	Torque (in-lb)	Weight (lb)
	1/4" F	0.25	1.26	1.54	3.00	2.23	5.59	M5*P0.80	F03	84.1	1.5
	3/8" S	0.25	1.26	1.54	3.00	2.23	5.59	M5*P0.80	F03	84.1	1.5
	1/2" F	0.50	1.26	1.54	4.00	2.23	5.59	M5*P0.80	F03	84.1	1.7
	3/4" F	0.75	1.85	1.85	4.25	3.00	6.81	M5*P0.80	F04	247.8	2.9
	1" S	0.75	1.85	1.85	4.25	3.00	6.81	M5*P0.80	F04	247.8	2.9
	1-1/2" F	1.50	3.03	3.39	5.28	4.61	9.74	M8*P1.25	F07	469.1	10.8
	2" S	1.50	3.23	3.39	6.22	4.61	9.74	M8*P1.25	F07	469.1	11.8

F: Full Port S: Standard Port

unit: in



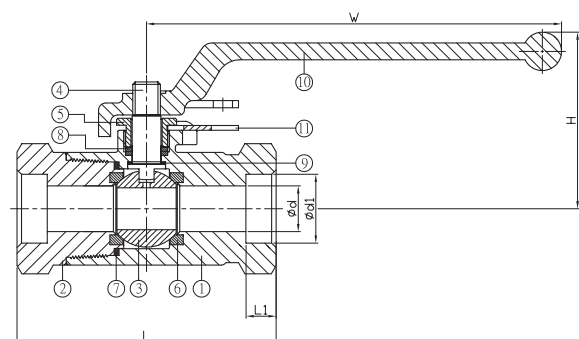
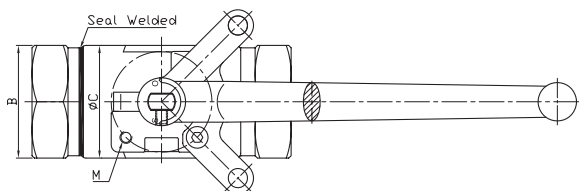
SEAL WELDED • FIRE SAFE

- **Seal welded ends**
- ASME B16.34 Wall thickness
- **NACE MR0103**
- **API 607 Fire safe approved**
- Socket Weld Ends:
 - » ASME B16.34 / 1.20.1
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226

PN 250	DN	d	B	C	L	H	W	M	ISO 5211	Torque (N-M)	Weight (kg)
	8 F	6.4	32	39	76.2	56.6	142.0	M5*P0.80	F03	9.5	0.7
	10 S	6.4	32	39	76.2	56.6	142.0	M5*P0.80	F03	9.5	0.7
	15 F	12.0	32	39	101.6	56.6	142.0	M5*P0.80	F03	9.5	0.8
	20 F	19.0	47	47	108.0	76.1	173.0	M5*P0.80	F04	28.0	1.3
	25 S	19.0	47	47	108.0	76.1	173.0	M5*P0.80	F04	28.0	1.3
	40 F	38.1	77	86	134.0	117.0	247.5	M8*P1.25	F07	53.0	4.9
	50 S	38.1	82	86	158.1	117.0	247.5	M8*P1.25	F07	53.0	5.4

unit: mm

unit: in



SERIES: B860SM - B860SC (1/4" - 2")

HIGH PRESSURE BALL VALVE

Stainless / Carbon Steel

SEAL WELDED • FIRE SAFE

DESIGN FEATURES:

- 1/4"~2" (DN8~DN50)
- **W.P. : 6000 WOG (PN420)**
- W.T. : -20°C~260°C (-4°F~500°F)
- Investment casting
- Blow-out proof stem
- Anti-static device
- Locking device
- **Mounting pad ISO 5211**
- Silicone Free
- **Seal welded ends**
- ASME B16.34 Wall thickness
- **NACE MR0103**
- **API 607 Fire safe approved**
- Socket Weld:
 - » ASME 16.34 / 16.11
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226

ITEM	PARTS	MATERIAL	
		B860SMKGNXX	B860SCKGNXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	17-4PH	
4	STEM	ASTM A564-630 H900	
5	GLAND NUT	AISI 304	
6	SEAT	PEEK	
7	SEAL	GRAPHITE	
8	PACKING		
9	THRUST WASHER	CTFE	
10	HANDLE	AISI 304	
11	LOCK PAD		

PN 420	DN	d	B	C	L	H	W	M	ISO 5211	Torque (N-M)	Weight (kg)
	8 F	6.4	32	39	76.2	56.6	142.0	M5*P0.80	F03	9.5	0.7
	10 S	6.4	32	39	76.2	56.6	142.0	M5*P0.80	F03	9.5	0.7
	15 F	12.7	38	39	101.6	56.6	142.0	M5*P0.80	F03	9.5	0.9
	20 F	19.0	47	52	108.0	76.1	173.0	M5*P0.80	F04	28.0	1.6
	25 S	19.0	55	55	108.0	76.1	173.0	M5*P0.80	F04	28.0	1.8
	25 F	25.4	55	68	122.0	83.1	173.0	M6*P1.00	F05	33.3	2.7
	40 F	38.1	77	97	134.0	117	247.5	M8*P1.25	F07	53.0	6.1
	50 S	38.1	92	97	158.1	117	247.5	M8*P1.25	F07	53.0	7.4

F:Full Port S:Standard Port

unit: mm

6000 WOG	NPS	d	B	C	L	H	W	M	ISO 5211	Torque (in-lb)	Weight (lb)
	1/4" F	0.25	1.26	1.54	3.00	2.23	5.59	M5*P0.8	F03	84.1	1.5
	3/8" S	0.25	1.26	1.54	3.00	2.23	5.59	M5*P0.8	F03	84.1	1.5
	1/2" F	0.50	1.50	1.54	4.00	2.23	5.59	M5*P0.8	F03	84.1	2.0
	3/4" F	0.75	1.85	2.05	4.25	3.00	6.81	M5*P0.8	F04	247.8	3.4
	1" S	0.75	2.17	2.17	4.25	3.00	6.81	M5*P0.8	F04	247.8	5.9
	1-1/2" F	1.50	3.03	3.82	5.28	4.61	9.74	M8*P1.25	F07	469.1	13.4
	2" S	1.50	3.62	3.82	6.22	4.61	9.74	M8*P1.25	F07	469.1	16.3

F:Full Port S:Standard Port

unit: in



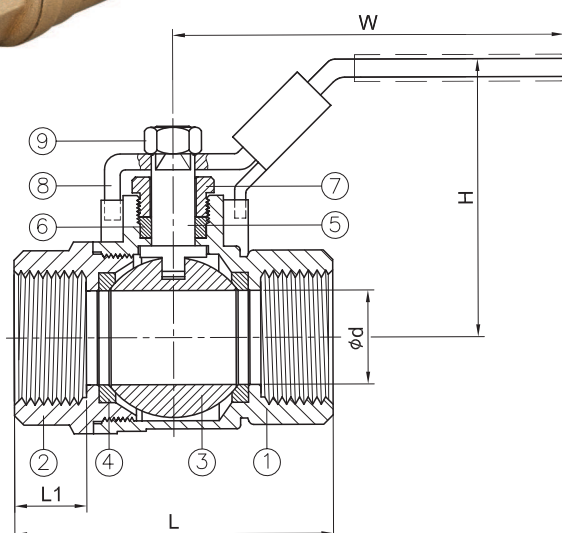
SERIES: B200T (1/4" - 4")

2-PC. SCREWED END BALL VALVE

Brass

DESIGN FEATURES:

- Full port, 1/4"~4" (DN8-DN100)
- **W.P. :**
 - » 1/4" - 2": **600 WOG**
 - » 2-1/2" - 4": **400 WOG**
- U.L. Listed
- Solid Ball
- NSF/ANSI 61-8
- CSA-ANSI Z21.15
- CGA9.1, ASME B16.44, CGA CR91-002
- Thread type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226
- Blow-out proof stem
- Locking device (1/4 - 2" only)



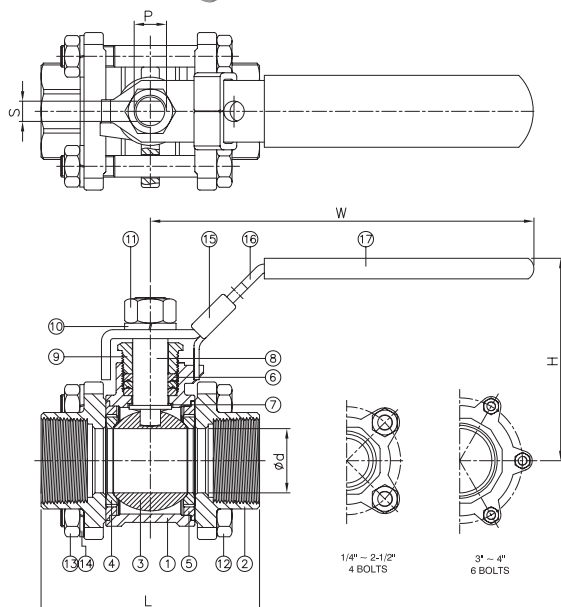
ITEM	PARTS	MATERIAL
		B200T
1	BODY	BRASS
2	CAP	
3	BALL	
4	SEAT	PTFE
5	STEM	BRASS
6	PACKING	PTFE
7	GLAND	BRASS
8	HANDLE	NICKEL PLATING STEEL
9	STEM NUT	BRASS PLATING STEEL

DN	d	L	L1	H	W	NPT THREAD	Weight (kg)
8	10.0	44.6	11.6	47.8	90.0	1/4"	0.4
10	10.0	44.6	11.6	47.8	90.0	3/8"	0.4
15	14.8	52.0	13.2	53.1	90.0	1/2"	0.4
20	19.0	60.0	14.3	56.8	96.0	3/4"	0.7
25	24.0	70.0	16.0	67.8	115.0	1"	1.1
32	32.0	84.0	18.0	77.50	115.0	1-1/4"	1.6
40	40.0	93.0	18.2	88.5	140.0	1-1/2"	2.4
50	50.0	106.2	19.0	97.5	140.0	2"	3.4
65	64.0	136.6	26.0	121.0	220.0	2-1/2"	9.0
80	74.0	153.4	28.0	129.0	220.0	3"	12.0
100	99.0	187.6	31.0	149.0	244.0	4"	18.0

unit: mm

NPS	d	L	L1	H	W	NPT THREAD	Weight (lb)
1/4"	0.39	1.76	0.46	1.88	3.54	1/4"	0.7
3/8"	0.39	1.76	0.46	1.88	3.54	3/8"	0.7
1/2"	0.58	2.05	0.52	2.09	3.54	1/2"	1.0
3/4"	0.75	2.36	0.56	2.24	3.78	3/4"	1.5
1"	0.95	2.76	0.63	2.67	4.53	1"	2.4
1-1/4"	1.26	3.31	0.71	3.05	4.53	1-1/4"	3.5
1-1/2"	1.58	3.66	0.72	3.48	5.51	1-1/2"	5.3
2"	1.97	4.18	0.75	3.84	5.51	2"	7.4
2-1/2"	2.52	5.38	1.02	4.76	8.66	2-1/2"	19.8
3"	2.91	6.04	1.10	5.08	8.66	3"	26.0
4"	3.90	7.39	1.22	5.87	9.61	4"	40.0

unit: in



SERIES: B310TM - B310TC (1/4" - 4")

3-PC. SCREWED END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4"~4" (DN8~DN100)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-Static
- Locking device
- Thread type :
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226

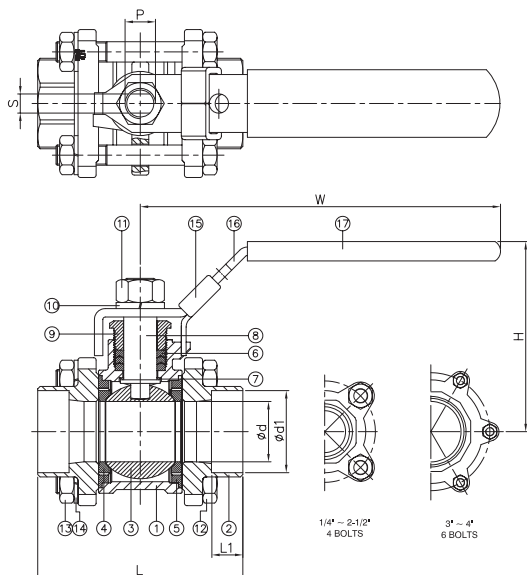
ITEM	PARTS	MATERIAL	
		B310TMRTXXX	B310TCRTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	RTFE	
5	SEAL	PTFE	
6	PACKING		
7	THRUST WASHER		
8	STEM	ASTM A276-316	
9	GLAND	AISI 304	
10	SPRING WASHER		
11	STEM NUT		
12	BOLT		
13	NUT		
14	SPRING WASHER	STAINLESS STEEL	
15	LOCKING DEVICE		
16	HANDLE	PVC	
17	HANDLE SLEEVE		

DN	d	L	H	W	S	P	Torque (N-m)	Weight (kg)
8	11.6	65	60.2	98	5.0	3/8"-24UNF	3.5	0.4
10	12.5	65	60.2	98	5.0	3/8"-24UNF	4.0	0.4
15	15.0	65	62.2	98	5.0	3/8"-24UNF	5.5	0.5
20	20.0	75	64.6	121	6.5	7/16"-20UNF	7.5	0.7
25	25.0	85	80.1	147	8.0	7/16"-20UNF	11.0	1.1
32	32.0	101	85.1	147	8.0	7/16"-20UNF	15.0	1.6
40	38.0	112	103.3	188	10.0	1/2"-20UNF	20.0	2.4
50	50.0	130	110.8	188	10.0	1/2"-20UNF	40.0	3.1
65	63.0	162	141.7	245	12.0	3/4"-10UNC	60.0	6.5
80	76.0	188	150.4	245	12.0	3/4"-10UNC	85.0	9.5
100	96.0	224	181.7	316	16.0	1"-8UNC	150.0	19.0

unit: mm

NPS	d	L	H	W	S	P	Torque (in-lb)	Weight (lb)
1/4"	0.46	2.56	2.37	3.86	0.20	3/8"-24UNF	31.0	0.8
3/8"	0.49	2.56	2.37	3.86	0.20	3/8"-24UNF	35.4	0.8
1/2"	0.59	2.56	2.45	3.86	0.20	3/8"-24UNF	48.7	1.1
3/4"	0.79	2.95	2.54	4.76	0.26	7/16"-20UNF	66.4	1.5
1"	0.98	3.35	3.15	5.79	0.31	7/16"-20UNF	97.4	2.3
1-1/4"	1.26	3.98	3.35	5.79	0.31	7/16"-20UNF	132.8	3.5
1-1/2"	1.50	4.41	4.07	7.40	0.39	1/2"-20UNF	177.0	5.3
2"	1.97	5.12	4.36	7.40	0.39	1/2"-20UNF	354.0	6.8
2-1/2"	2.48	6.38	5.58	9.65	0.47	3/4"-10UNC	531.0	14.3
3"	2.99	7.40	5.92	9.65	0.47	3/4"-10UNC	752.3	20.9
4"	3.78	8.82	7.15	12.44	0.63	1"-8UNC	1327.6	41.9

unit: in



SERIES: B310SM - B310SC (1/4" - 4")

3-PC. SOCKET WELD END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4"~4" (DN8~DN100)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-Static Device
- Locking device
- Socket weld ends:
 - » ASME B16.11
 - » DIN3239
 - » ISO7/1 & EN10226

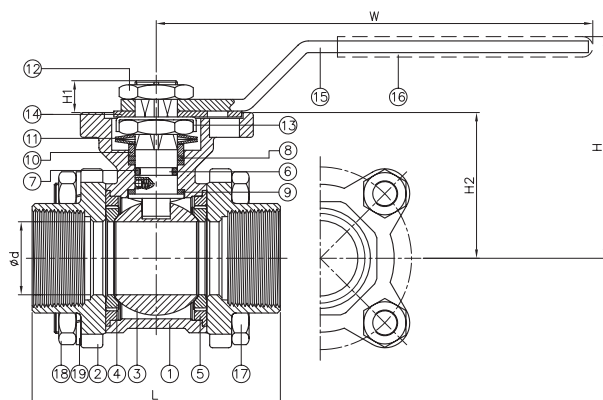
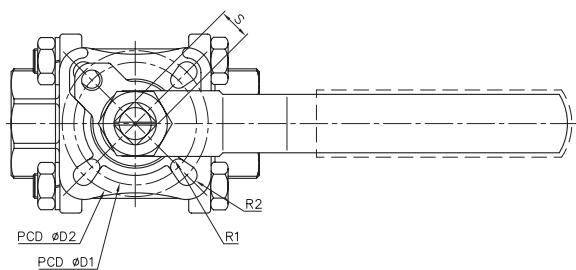
ITEM	PARTS	MATERIAL	
		B310SMRTXXX	B310SCRTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	RTFE	
5	SEAL	PTFE	
6	PACKING		
7	THRUST WASHER		
8	STEM	ASTM A276-316	
9	GLAND	AISI 304	
10	SPRING WASHER		
11	STEM NUT		
12	BOLT		
13	NUT		
14	SPRING WASHER	STAINLESS STEEL	
15	LOCKING DEVICE		
16	HANDLE		
17	HANDLE SLEEVE	PVC	

DN	d	d1	L	L1	H	W	S	P	Torque (N-m)	Weight (kg)
8	11.6	14.5	65	10	60.2	98	5.0	3/8"-24UNF	3.5	0.4
10	12.5	18.0	65	10	60.2	98	5.0	3/8"-24UNF	4.0	0.4
15	15.0	22.0	65	10	62.2	98	5.0	3/8"-24UNF	5.5	0.5
20	20.0	27.5	75	13	64.6	121	6.5	7/16"-20UNF	7.5	0.7
25	25.0	34.0	85	13	80.1	147	8.0	7/16"-20UNF	11.0	1.1
32	32.0	43.0	101	13	85.1	147	8.0	7/16"-20UNF	15.0	1.6
40	38.0	49.0	112	13	103.0	188	10.0	1/2"-20UNF	20.0	2.4
50	50.0	61.0	130	16	111.0	188	10.0	1/2"-20UNF	40.0	3.1
65	63.0	74.0	162	16	142.0	245	12.0	3/4"-10UNC	60.0	6.5
80	76.0	90.0	188	16	150.0	245	12.0	3/4"-10UNC	85.0	9.5
100	96.0	115.5	224	20	182.0	316	16.0	1"-8UNC	150.0	19.0

unit: mm

NPS	d	d1	L	L1	H	W	S	P	Torque (in-lb)	Weight (lb)
1/4"	0.46	0.57	2.56	0.39	2.37	3.86	0.20	3/8"-24UNF	31.0	0.8
3/8"	0.49	0.71	2.56	0.39	2.37	3.86	0.20	3/8"-24UNF	35.4	0.8
1/2"	0.59	0.87	2.56	0.39	2.45	3.86	0.20	3/8"-24UNF	48.7	1.1
3/4"	0.79	1.08	2.95	0.51	2.54	4.76	0.26	7/16"-20UNF	66.4	1.5
1"	0.98	1.34	3.35	0.51	3.15	5.79	0.31	7/16"-20UNF	97.4	2.3
1-1/4"	1.26	1.69	3.98	0.51	3.35	5.79	0.31	7/16"-20UNF	132.8	3.5
1-1/2"	1.50	1.93	4.41	0.51	4.06	7.40	0.39	1/2"-20UNF	177.0	5.3
2"	1.97	2.40	5.12	0.63	4.37	7.40	0.39	1/2"-20UNF	354.0	6.8
2-1/2"	2.48	2.91	6.38	0.63	5.59	9.65	0.47	3/4"-10UNC	531.0	14.3
3"	2.99	3.54	7.40	0.63	5.91	9.65	0.47	3/4"-10UNC	752.3	20.9
4"	3.78	4.55	8.82	0.79	7.17	12.44	0.63	1"-8UNC	1327.6	41.9

unit: in



SERIES: B710TM - B710TC (1/4" - 2")

3-PC THREADED BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4" ~ 2" (DN8~DN50)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Locking device
- Silicone Free
- Supplied with lever handle
- Anti-static device
- **Direct mounting pad ISO 5211**
- Automation accessories (option)
- Thread type :
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226

ITEM	PARTS	MATERIAL	
		B710TMMTXXX	B710TCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	STEM	ASTM A276-316	
7	O-RING	VITON	
8	PACKING	PTFE	
9	THRUST WASHER		
10	GLAND RING	AISI 304	
11	BELLEVILLE WASHER	AISI 301	
12	STEM NUT	AISI 304	
13	LOCK WASHER		
14	LOCKING DEVICE		
15	HANDLE	STAINLESS STEEL	
16	HANDLE SLEEVE	PVC	
17	BOLT	AISI 304	
18	NUT		
19	SPRING WASHER		

DN	d	d1	L	L1	H	H1	H2	W	S	D1	D2	R1	R2	ISO 5211	Torque (N-M)		Weight (kg)
															Breakaway	Action	
8	11.6	14.5	65	10	61.0	7.5	35.3	114.5	9	36	42	2.8	2.8	F03/F04	7	4	0.6
10	12.5	18.0	65	10	61.0	7.5	35.3	114.5	9	36	42	2.8	2.8	F03/F04	7	4	0.6
15	15.0	22.0	65	10	62.7	7.1	36.4	114.5	9	36	42	2.8	2.8	F03/F04	7	4	0.6
20	20.0	27.5	75	13	65.1	7.3	39.5	114.5	9	36	42	2.8	2.8	F03/F04	9	5	0.7
25	25.0	34.0	85	13	76.5	11.0	49.0	140.0	11	42	50	2.8	3.5	F04/F05	15	9	1.1
32	32.0	43.0	101	13	82.0	9.5	54.2	140.0	11	42	50	2.8	3.5	F04/F05	18	11	1.7
40	38.0	49.0	112	13	102.0	12.4	64.6	172.0	14	50	70	3.5	4.5	F05/F07	25	15	2.6
50	50.0	61.0	130	16	110.1	13.6	72.5	172.0	14	50	70	3.5	4.5	F05/F07	35	21	3.7

unit: mm

NPS	d	d1	L	L1	H	H1	H2	W	S	D1	D2	R1	R2	ISO 5211	Torque (in-lb)		Weight (lb)
															Breakaway	Action	
1/4"	0.46	0.57	2.56	0.39	2.40	0.30	1.39	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	62.0	35.4	1.2
3/8"	0.49	0.71	2.56	0.39	2.40	0.30	1.39	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	62.0	35.4	1.2
1/2"	0.59	0.87	2.56	0.39	2.47	0.28	1.43	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	62.0	35.4	1.2
3/4"	0.79	1.08	2.95	0.51	2.56	0.29	1.56	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	79.7	44.3	1.6
1"	0.98	1.34	3.35	0.51	3.01	0.43	1.93	5.51	0.43	1.65	1.97	0.11	0.14	F04/F05	132.8	79.7	2.4
1-1/4"	1.26	1.69	3.98	0.51	3.23	0.37	2.13	5.51	0.43	1.65	1.97	0.11	0.14	F04/F05	159.3	97.4	3.7
1-1/2"	1.50	1.93	4.41	0.51	4.02	0.49	2.54	6.77	0.55	1.97	2.76	0.14	0.18	F05/F07	221.3	132.8	5.8
2"	1.97	2.40	5.12	0.63	4.33	0.54	2.85	6.77	0.55	1.97	2.76	0.14	0.18	F05/F07	309.8	185.9	8.1

unit: in

FOR ADDITIONAL SIZES SEE NEXT PAGE



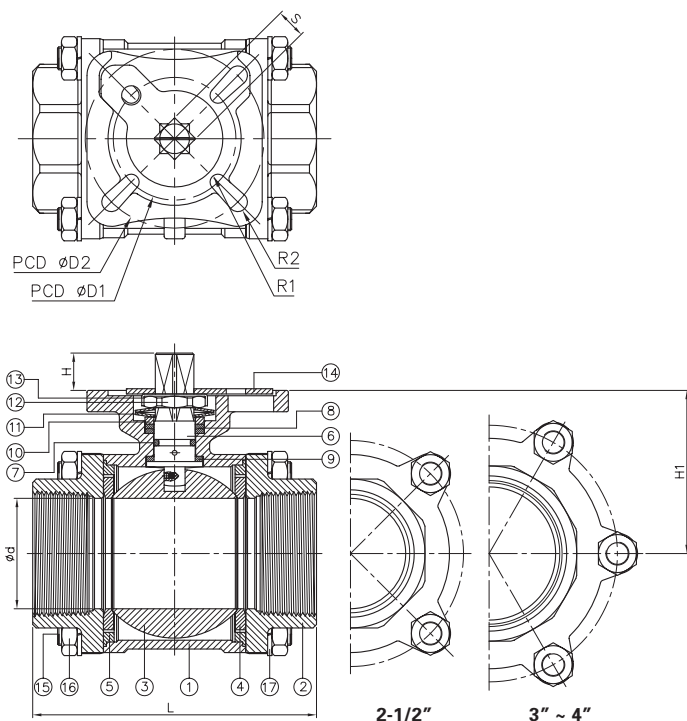
SERIES: B710TM - B710TC (2-1/2" - 4")

3-PC THREADED BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 2-1/2" ~ 4" (DN65 ~ DN100)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Locking device
- Silicone Free
- Supplied with lever handle
- Anti-static device
- **Direct mounting pad ISO 5211**
- Automation accessories (option)
- Thread type :
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226



ITEM	PARTS	MATERIAL	
		B710TMMTXXX	B710TCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL		
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	STEM	ASTM A276-316	
7	O-RING	VITON	
8	PACKING	PTFE	
9	THRUST WASHER		
10	GLAND RING	AISI 304	
11	BELLEVILLE WASHER	AISI 301	
12	STEM NUT	AISI 304	
13	LOCK WASHER		
14	LOCKING DEVICE		
15	HANDLE		
16	BOLT		
17	NUT		
18	SPRING WASHER		
19	BOLT		
20	NUT		

DN	d	d1	L	L1	H	H1	H2	W	S	D1	D2	R1	R2	ISO 5211	Torque (N-M)		Weight (kg)
															Breakaway	Action	
65	63	74.0	162	16	127.3	16.3	92	325	17	70	102	4.5	5.5	F07/F10	55	33	7.4
80	76	90.0	188	16	136.3	16.3	100	325	17	70	102	4.5	5.5	F07/F10	70	42	10.3
100	96	115.5	224	20	142.5	20.5	130	325	22	102	125	5.5	6.5	F10/F12	90	54	19.9

unit: mm

NPS	d	d1	L	L1	H	H1	H2	W	S	D1	D2	R1	R2	ISO 5211	Torque (in-lb)		Weight (lb)
															Breakaway	Action	
2-1/2"	2.48	2.91	6.38	0.63	5.01	0.64	3.62	12.8	0.67	2.76	4.02	0.18	0.22	F07/F10	486.8	292.1	16.3
3"	2.99	3.54	7.40	0.63	5.37	0.64	3.94	12.8	0.67	2.76	4.02	0.18	0.22	F07/F10	619.5	371.7	22.7
4"	3.78	4.55	8.82	0.79	5.61	0.81	5.12	12.8	0.87	4.02	4.92	0.22	0.26	F10/F12	796.6	477.9	43.9

unit: in



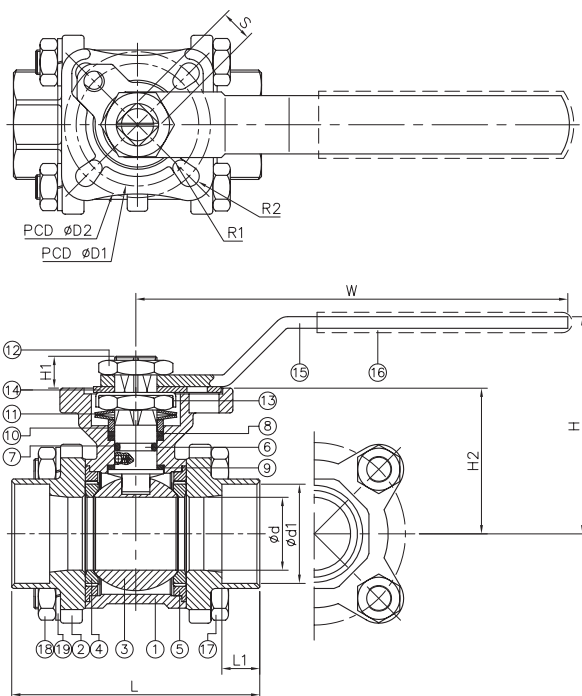
SERIES: B710SM - B710SC (1/4" - 2")

3-PC SOCKET WELD BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4"~2" (DN8~DN50)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Locking device
- Silicone Free
- Anti-static device
- **Direct mounting pad ISO 5211**
- Automation accessories (option)
 - » ASME B16.11
 - » DIN3239
 - » ISO7/1 & EN10226



ITEM	PARTS	MATERIAL	
		B710SMMTXXX	B710SCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	STEM	ASTM A276-316	
7	O-RING	VITON	
8	PACKING	PTFE	
9	THRUST WASHER		
10	GLAND RING	AISI 304	
11	BELLEVILLE WASHER	AISI 301	
12	STEM NUT		
13	LOCK WASHER	AISI 304	
14	LOCKING DEVICE		
15	HANDLE	STAINLESS STEEL	
16	HANDLE SLEEVE	PVC	
17	BOLT		
18	NUT	AISI 304	
19	SPRING WASHER		

DN	d	L	H	H1	H2	W	S	D1	D2	R1	R2	ISO 5211	Torque (N-M)		Weight (kg)
													Breakaway	Action	
8	11.6	65	61.0	7.5	35.3	114.5	9	36	42	2.8	2.8	F03/F04	7	4	0.6
10	12.5	65	61.0	7.5	35.3	114.5	9	36	42	2.8	2.8	F03/F04	7	4	0.6
15	15.0	65	62.7	7.1	36.4	114.5	9	36	42	2.8	2.8	F03/F04	7	4	0.6
20	20.0	75	65.1	7.3	39.5	114.5	9	36	42	2.8	2.8	F03/F04	9	5	0.7
25	25.0	85	76.5	11.0	49.0	140.0	11	42	50	2.8	3.5	F04/F05	15	9	1.1
32	32.0	101	82.0	11.5	54.2	140.0	11	42	50	2.8	3.5	F04/F05	18	11	1.7
40	38.0	112	102.0	12.4	64.6	172.0	14	50	70	3.5	4.5	F05/F07	25	15	2.6
50	50.0	130	110.1	13.6	72.5	172.0	14	50	70	3.5	4.5	F05/F07	35	21	3.7

unit: mm

NPS	d	L	H	H1	H2	W	S	D1	D2	R1	R2	ISO 5211	Torque (in-lb)		Weight (lb)
													Breakaway	Action	
1/4"	0.46	2.56	2.40	0.30	1.39	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	62.0	35.4	1.2
3/8"	0.49	2.56	2.40	0.30	1.39	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	62.0	35.4	1.2
1/2"	0.59	2.56	2.47	0.28	1.43	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	62.0	35.4	1.2
3/4"	0.79	2.95	2.56	0.29	1.56	4.51	0.35	1.42	1.65	0.11	0.11	F03/F04	79.7	44.3	1.6
1"	0.98	3.35	3.01	0.43	1.93	5.51	0.43	1.65	1.97	0.11	0.14	F04/F05	132.8	79.7	2.4
1-1/4"	1.26	3.98	3.23	0.45	2.13	5.51	0.43	1.65	1.97	0.11	0.14	F04/F05	159.3	97.4	3.7
1-1/2"	1.50	4.41	4.02	0.49	2.54	6.77	0.55	1.97	2.76	0.14	0.18	F05/F07	221.3	132.8	5.7
2"	1.97	5.12	4.33	0.54	2.85	6.77	0.55	1.97	2.76	0.14	0.18	F05/F07	309.8	185.9	8.2

unit: in

FOR ADDITIONAL SIZES SEE NEXT PAGE



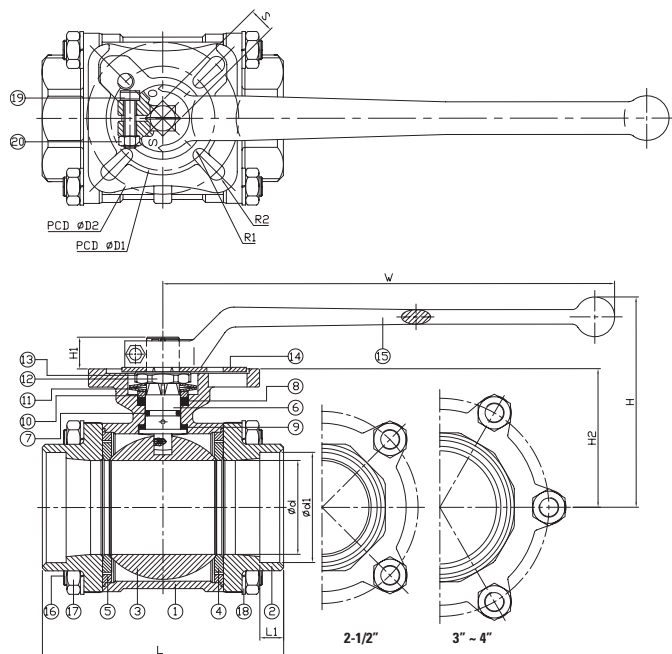
SERIES: B710SM - B710SC (2-1/2" - 4")

3-PC SOCKET WELD BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 2 1/2"~ 4" (DN65~DN100)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Locking device
- Silicone Free
- Anti-static device
- **Direct mounting pad ISO 5211**
- Automation accessories (option)
- Socket Weld Ends:
 - » ASME B16.11
 - » DIN3239
 - » ISO7/1 & EN10226



ITEM	PARTS	MATERIAL	
		B710SMMTXXX	B710SCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL		
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	STEM	ASTM A276-316	
7	O-RING	VITON	
8	PACKING	PTFE	
9	THRUST WASHER		
10	GLAND RING	AISI 304	
11	BELLEVILLE WASHER	AISI 301	
12	STEM NUT	AISI 304	
13	LOCK WASHER		
14	LOCKING DEVICE		
15	BOLT		
16	NUT		
17	SPRING WASHER		

DN	d	L	H	H1	S	D1	D2	R1	R2	ISO 5211	Torque (N-M)		Weight (kg)
											Breakaway	Action	
65	63	162	16.3	92	17	70	102	4.5	5.5	F07/F10	55	33	7.4
80	76	188	16.3	100	17	70	102	4.5	5.5	F07/F10	70	42	10.3
100	96	224	20.5	130	22	102	125	5.5	6.5	F10/F12	90	54	19.9

unit: mm

NPS	d	L	H	H1	S	D1	D2	R1	R2	ISO 5211	Torque (in-lb)		Weight (lb)
											Breakaway	Action	
2-1/2"	2.48	6.38	0.64	3.62	0.67	2.76	4.02	0.18	0.22	F07/F10	486.8	292.1	16.3
3"	2.99	7.40	0.64	3.94	0.67	2.76	4.02	0.18	0.22	F07/F10	619.5	371.7	22.7
4"	3.78	8.82	0.81	5.12	0.87	4.02	4.92	0.22	0.26	F10/F12	796.6	477.9	43.9

unit: in



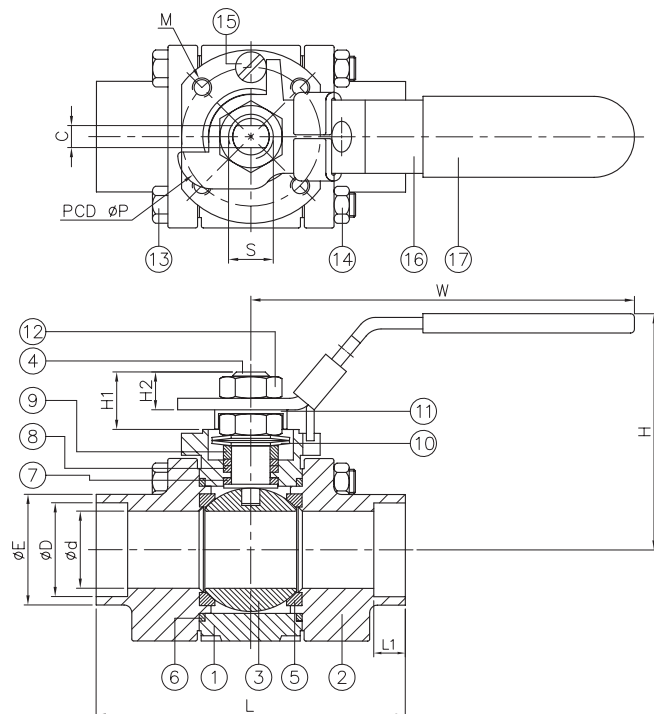
SERIES: B920SM - B920SC (1/4" - 3/4")

3-PC SOCKET WELD END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4" ~ 3/4" (DN8~DN20)
- **W.P. :**
 - » **1/4" ~ 1" - 2000 WOG**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device
- Locking device
- Thread Type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226
- NACE MR0103
- **API 607 Fire Safe Approved**
- API 608 Design



ITEM	PARTS	MATERIAL	
		B920SMRGXXX	B920SCRGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP	ASTM A351-CF3M	
3	BALL	ASTM A351-CF8M	
4	STEM	ASTM A276-316	
5	BALL SEAT	RTFE	
6	GASKET	GRAPHITE	
7	THRUST WASHER	CTFE	
8	PACKING	GRAPHITE	
9	GLAND RING	AISI 304	
10	DISC SPRING	AISI 301	
11	LOCK PAD	ASTM A167-304	
12	STEM NUT	ASTM A194-8A	
13	BOLT	ASTM A193-B8A	
14	NUT	ASTM A194-8A	
15	STOP PIN	AISI 304	
16	HANDLE	STAINLESS STEEL	
17	HANDLE SLEEVE	PVC	

DN	d	D	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (N-M)	Weight (kg)
8	8	14.0	25.0	65.7	10	57.0	12.1	9.8	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	3.8	0.7
10	10	18.0	25.0	65.7	10	57.0	12.1	9.8	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	3.8	0.7
15	15	22.0	30.3	74.8	10	57.0	12.1	9.8	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	3.8	0.8
20	20	27.5	36.0	80.2	13	59.7	14.5	10.6	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	5.1	0.9

unit: mm

NPS	d	D	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (in-lb)	Weight (lb)
1/4"	0.31	0.55	0.98	2.59	0.39	2.24	0.48	0.39	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	33.8	1.6
3/8"	0.39	0.71	0.98	2.59	0.39	2.24	0.48	0.39	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	33.8	1.6
1/2"	0.59	0.87	1.19	2.94	0.39	2.24	0.48	0.39	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	33.8	1.7
3/4"	0.79	1.08	1.42	3.16	0.51	2.35	0.57	0.42	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	45.1	1.9

unit: in



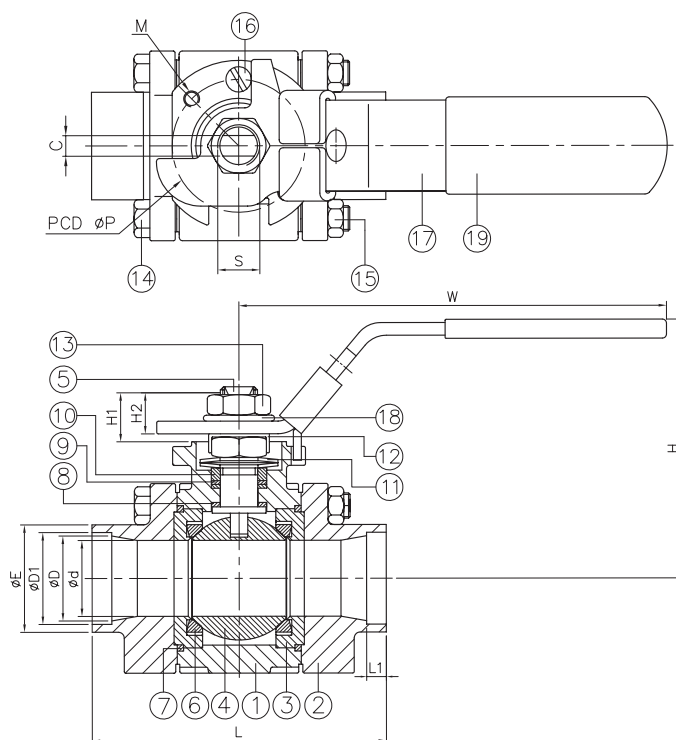
SERIES: B920SM - B920SC (1" - 2")

3-PC SOCKET WELD END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1" ~ 2" (DN25~DN50)
- **W.P. :**
 - » 1/4" ~ 1" - 2000 WOG
 - » 1-1/4" ~ 2" - 1500 WOG
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device
- Locking device
- Thread Type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226
- NACE MR0103
- **API 607 Fire Safe Approved**
- API 608 Design



ITEM	PARTS	MATERIAL	
		B920SMRGXXX	B920SCRGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP	ASTM A351-CF3M	
3	RETAINER	ASTM A351-CF8M	
4	BALL		
5	STEM	ASTM A276-316	
6	BALL SEAT	RTFE	
7	GASKET	GRAPHITE	
8	THRUST WASHER	CTFE	
9	PACKING	GRAPHITE	
10	GLAND RING	AISI 304	
11	DISC SPRING	AISI 301	
12	LOCK PAD	ASTM A167-304	
13	STEM NUT	ASTM A194-8A	
14	BOLT	ASTM A193-B8A	
15	NUT	ASTM A194-8A	
16	STOP PIN	AISI 304	
17	HANDLE	STAINLESS STEEL	
18	SPRING WASHER	AISI 304	
19	HANDLE SLEEVE	PVC	

DN	d	D	D1	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (N-M)	Weight (kg)
25	24	26.6	34.5	44.8	93.0	13	81.5	15.5	14.0	146	7.5	42	F04	M5*0.8	7/16"-20UNF	10.2	1.7
32	30	35.0	43.0	54.0	110.6	13	85.9	15.5	15.0	146	7.5	42	F04	M5*0.8	7/16"-20UNF	15.9	2.7
40	38	41.0	49.0	62.0	122.6	13	96.7	27.3	18.7	180	8.6	50	F05	M6*1.0	9/16"-18UNF	21.0	3.9
50	50	52.5	61.2	76.0	140.0	16	104.9	28.1	19.0	180	8.6	50	F05	M6*1.0	9/16"-18UNF	32.1	6.2

unit: mm

NPS	d	D	D1	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (in-lb)	Weight (lb)
1"	0.94	1.05	1.36	1.76	3.66	0.51	3.21	0.61	0.55	5.75	0.30	1.65	F04	M5*0.8	7/16"-20UNF	90.2	3.8
1-1/4"	1.18	1.38	1.69	2.13	4.35	0.51	3.38	0.61	0.59	5.75	0.30	1.65	F04	M5*0.8	7/16"-20UNF	141.0	6.0
1-1/2"	1.5	1.61	1.93	2.44	4.83	0.51	3.81	1.07	0.74	7.09	0.34	1.97	F05	M6*1.0	9/16"-18UNF	186.0	8.5
2"	1.97	2.07	2.41	2.99	5.51	0.63	4.13	1.11	0.75	7.09	0.34	1.97	F05	M6*1.0	9/16"-18UNF	284.1	13.6

unit: in



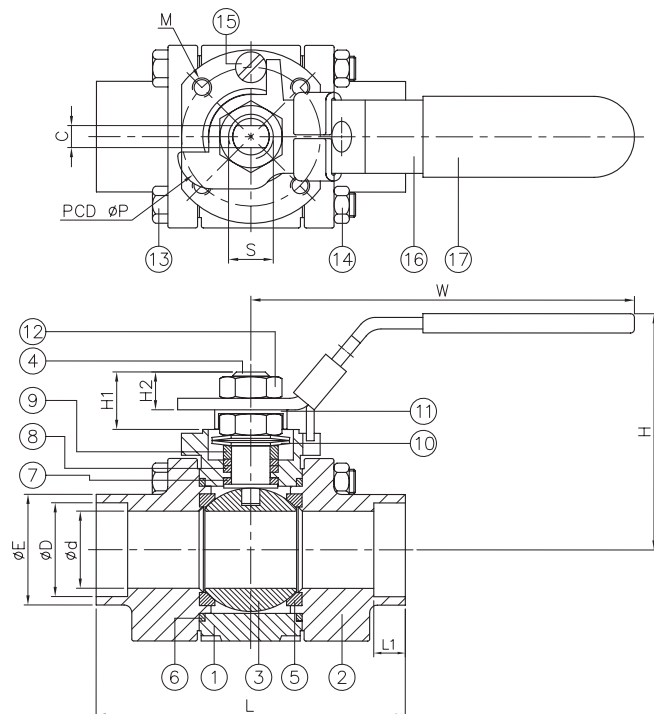
SERIES: B920SM - B920SC (1/4" - 3/4")

3-PC SOCKET WELD END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1/4" ~ 3/4" (DN8~DN20)
- **W.P. :**
 - » **1/4" ~ 1" - 2000 WOG**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device
- Locking device
- Thread Type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226
- NACE MR0103
- **API 607 Fire Safe Approved**
- API 608 Design



ITEM	PARTS	MATERIAL	
		B920SMRGXXX	B920SCRGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP	ASTM A351-CF3M	
3	BALL	ASTM A351-CF8M	
4	STEM	ASTM A276-316	
5	BALL SEAT	RTFE	
6	GASKET	GRAPHITE	
7	THRUST WASHER	CTFE	
8	PACKING	GRAPHITE	
9	GLAND RING	AISI 304	
10	DISC SPRING	AISI 301	
11	LOCK PAD	ASTM A167-304	
12	STEM NUT	ASTM A194-8A	
13	BOLT	ASTM A193-B8A	
14	NUT	ASTM A194-8A	
15	STOP PIN	AISI 304	
16	HANDLE	STAINLESS STEEL	
17	HANDLE SLEEVE	PVC	

DN	d	D	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (N-M)	Weight (kg)
8	8	14.0	25.0	65.7	10	57.0	12.1	9.8	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	3.8	0.7
10	10	18.0	25.0	65.7	10	57.0	12.1	9.8	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	3.8	0.7
15	15	22.0	30.3	74.8	10	57.0	12.1	9.8	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	3.8	0.8
20	20	27.5	36.0	80.2	13	59.7	14.5	10.6	113.5	5.7	36	F03	M5*0.8	3/8"-24UNF	5.1	0.9

unit: mm

NPS	d	D	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (in-lb)	Weight (lb)
1/4"	0.31	0.55	0.98	2.59	0.39	2.24	0.48	0.39	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	33.8	1.6
3/8"	0.39	0.71	0.98	2.59	0.39	2.24	0.48	0.39	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	33.8	1.6
1/2"	0.59	0.87	1.19	2.94	0.39	2.24	0.48	0.39	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	33.8	1.7
3/4"	0.79	1.08	1.42	3.16	0.51	2.35	0.57	0.42	4.47	0.22	1.42	F03	M5*0.8	3/8"-24UNF	45.1	1.9

unit: in



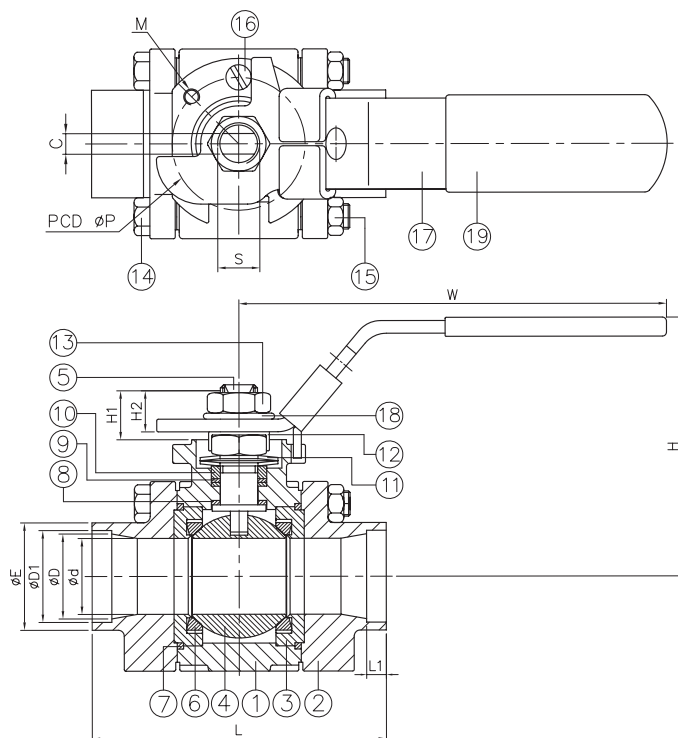
SERIES: B920SM - B920SC (1" - 2")

3-PC SOCKET WELD END BALL VALVE

Stainless / Carbon Steel

DESIGN FEATURES:

- Full port, 1" ~ 2" (DN25~DN50)
- **W.P. :**
 - » 1/4" ~ 1" - 2000 WOG
 - » 1-1/4" ~ 2" - 1500 WOG
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device
- Locking device
- Thread Type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226
- NACE MR0103
- **API 607 Fire Safe Approved**
- API 608 Design



ITEM	PARTS	MATERIAL	
		B920SMRGXXX	B920SCRGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP	ASTM A351-CF3M	
3	RETAINER	ASTM A351-CF8M	
4	BALL		
5	STEM	ASTM A276-316	
6	BALL SEAT	RTFE	
7	GASKET	GRAPHITE	
8	THRUST WASHER	CTFE	
9	PACKING	GRAPHITE	
10	GLAND RING	AISI 304	
11	DISC SPRING	AISI 301	
12	LOCK PAD	ASTM A167-304	
13	STEM NUT	ASTM A194-8A	
14	BOLT	ASTM A193-B8A	
15	NUT	ASTM A194-8A	
16	STOP PIN	AISI 304	
17	HANDLE	STAINLESS STEEL	
18	SPRING WASHER	AISI 304	
19	HANDLE SLEEVE	PVC	

DN	d	D	D1	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (N-M)	Weight (kg)
25	24	26.6	34.5	44.8	93.0	13	81.5	15.5	14.0	146	7.5	42	F04	M5*0.8	7/16"-20UNF	10.2	1.7
32	30	35.0	43.0	54.0	110.6	13	85.9	15.5	15.0	146	7.5	42	F04	M5*0.8	7/16"-20UNF	15.9	2.7
40	38	41.0	49.0	62.0	122.6	13	96.7	27.3	18.7	180	8.6	50	F05	M6*1.0	9/16"-18UNF	21.0	3.9
50	50	52.5	61.2	76.0	140.0	16	104.9	28.1	19.0	180	8.6	50	F05	M6*1.0	9/16"-18UNF	32.1	6.2

unit: mm

NPS	d	D	D1	E	L	L1	H	H1	H2	W	C	P	ISO 5211	M	S	Torque (in-lb)	Weight (lb)
1"	0.94	1.05	1.36	1.76	3.66	0.51	3.21	0.61	0.55	5.75	0.30	1.65	F04	M5*0.8	7/16"-20UNF	90.2	3.8
1-1/4"	1.18	1.38	1.69	2.13	4.35	0.51	3.38	0.61	0.59	5.75	0.30	1.65	F04	M5*0.8	7/16"-20UNF	141.0	6.0
1-1/2"	1.5	1.61	1.93	2.44	4.83	0.51	3.81	1.07	0.74	7.09	0.34	1.97	F05	M6*1.0	9/16"-18UNF	186.0	8.5
2"	1.97	2.07	2.41	2.99	5.51	0.63	4.13	1.11	0.75	7.09	0.34	1.97	F05	M6*1.0	9/16"-18UNF	284.1	13.6

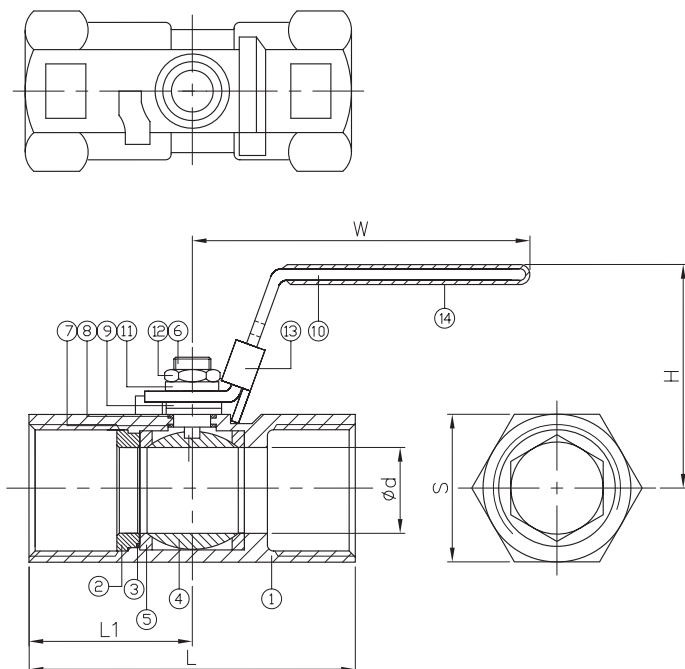
unit: in



SERIES: B110TM - STAINLESS STEEL 1-PC. SCREWED END BALL VALVE (1/4" - 2")

DESIGN FEATURES:

- Reduced port, 1/4"~2"
(DN8~DN80)
- **W.P. : 1000 WOG (PN63)**
- W.T. : -20°C~200°C
(-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Locking device
- Thread type:
 - » ASME B1.20.1 (NPT)
 - » DIN2999 & BS21
 - » ISO7/1 & EN10226



ITEM	PARTS	MATERIAL
		B110TMRXXX
1	BODY	ASTM A351-CF8M
2	RETAINER	AISI 316
3	BODY SEAL (1)	PTFE
4	BALL	AISI 316
5	SEAT	PTFE
6	STEM	AISI 316
7	THRUST WASHER	PTFE
8	PACKING	
9	GLAND WASHER	AISI 304
10	HANDLE	
11	SPRING WASHER	
12	NUT	
13	LOCKING DEVICE	PVC
14	HANDLE SLEEVE	

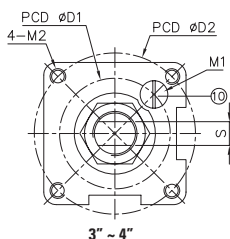
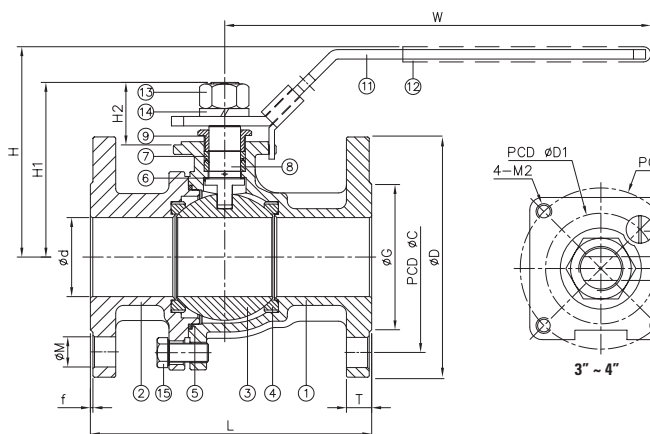
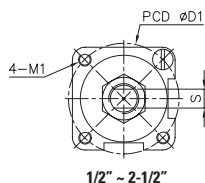
(1) 1-1/4" - 2" size only

DN	d	L	L1	H	W	S	Torque (N-M)	Weight (kg)
8	5.0	39.0	20.0	38.0	67.0	17.0	0.8	0.1
10	7.0	44.0	23.5	39.4	75.5	21.0	1.3	0.1
15	9.2	55.5	28.5	51.0	90.0	24.5	1.9	0.2
20	12.5	59.0	29.0	51.5	90.0	32.0	2.6	0.3
25	16.0	71.0	36.0	53.5	101.5	38.0	4.5	0.4
32	20.0	78.0	40.0	61.5	101.5	49.0	7.0	0.7
40	25.0	83.0	42.5	65.4	132.0	53.0	8.9	0.9
50	32.0	100.0	51.0	71.0	132.0	65.0	9.6	1.4

unit: mm

NPS	d	L	L1	H	W	S	Torque (in-lb)	Weight (lb)
1/4"	0.20	1.54	0.79	1.50	2.64	0.67	6.7	0.2
3/8"	0.28	1.73	0.93	1.55	2.97	0.83	11.2	0.2
1/2"	0.36	2.19	1.12	2.01	3.54	0.96	16.9	0.4
3/4"	0.49	2.32	1.14	2.03	3.54	1.26	22.6	0.6
1"	0.63	2.80	1.42	2.11	4.00	1.50	39.5	0.9
1-1/4"	0.79	3.07	1.57	2.42	4.00	1.93	62.0	1.6
1-1/2"	0.98	3.27	1.67	2.57	5.20	2.09	78.9	1.9
2"	1.26	3.94	2.01	2.80	5.20	2.56	84.6	3.0

unit: in



SERIES: B203FM - B203FC - 300#

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (1/2" - 4")

DESIGN FEATURES:

- Full port, 1/2"~4" (DN15~DN100)
- **W.P. : CLASS 300**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device (option)
- Locking device
- **Mounting pad ISO 5211**
- Flange dimension: ASME B16.5
- Face to face: ASME B16.10

ITEM	PARTS	MATERIAL	
		B203FMMTXXX	B203FCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	THRUST WASHER		
7	PACKING		
8	STEM	ASTM A276-316	
9	GLAND NUT	AISI 304	
10	STOP PIN		
11	HANDLE	STAINLESS STEEL	
12	HANDLE SLEEVE	PVC	
13	STEM NUT	AISI 304	
14	SPRING WASHER		
15	BOLT		

DN	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	M	M1	M2	Torque (N-m)		Weight (kg)
																		Breakaway	Action	
15	15	35	66.5	95	140	85.7	57.2	23.7	169	14.3	1.6	8	42	-	16	M5	-	7.5	5.0	2.0
20	20	43	82.5	117	152	88.5	60.0	23.5	169	15.8	1.6	8	42	-	19	M5	-	7.6	5.0	3.2
25	25	51	89.0	124	165	103.3	73.8	29.0	205	17.5	1.6	10	50	-	19	M6	-	17.5	15.1	3.8
32	32	64	98.5	133	178	108.0	78.5	29.0	205	19.1	1.6	10	50	-	19	M6	-	20.0	17.2	5.6
40	38	73	114.5	156	190	128.4	102.9	39.4	266	20.6	1.6	12	70	-	22	M8	-	22.9	20.5	8.1
50	50	92	127.0	165	216	135.9	110.4	39.4	266	22.4	1.6	12	70	-	19	M8	-	32.2	27.2	10.3
65	63	105	149.0	190	241	147.6	122.1	38.6	298	25.4	1.6	12	70	-	22	M8	-	42.3	34.2	16.1
80	76	127	168.0	210	282	167.5	142.0	43.0	390	28.5	1.6	15	70	102	22	M8	M10	87.2	74.6	22.7
100	100	157	200.0	254	305	182.5	157.0	43.0	390	31.8	1.6	15	70	102	22	M8	M10	98.2	75.2	36.7

unit: mm

NPS	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	M	M1	M2	Torque (in-lb)		Weight (lb)
																		Breakaway	Action	
1/2"	0.59	1.38	2.62	3.74	5.51	3.37	2.25	0.93	6.65	0.56	0.06	0.31	1.65	-	0.63	M5	-	66.4	44.3	4.4
3/4"	0.79	1.69	3.25	4.61	5.98	3.48	2.36	0.93	6.65	0.62	0.06	0.31	1.65	-	0.75	M5	-	67.3	44.3	7.1
1"	0.98	2.01	3.50	4.88	6.50	4.07	2.91	1.14	8.07	0.69	0.06	0.39	1.97	-	0.75	M6	-	154.9	133.7	8.4
1-1/4"	1.26	2.52	3.88	5.24	7.01	4.25	3.09	1.14	8.07	0.75	0.06	0.39	1.97	-	0.75	M6	-	177.0	152.2	12.3
1-1/2"	1.50	2.87	4.51	6.14	7.48	5.06	4.05	1.55	10.47	0.81	0.06	0.47	2.76	-	0.75	M8	-	202.7	181.4	17.9
2"	1.97	3.62	5.00	6.50	8.50	5.35	4.35	1.55	10.47	0.88	0.06	0.47	2.76	-	0.87	M8	-	285.0	240.7	22.7
2-1/2"	2.48	4.13	5.87	7.48	9.49	5.81	4.81	1.52	11.73	1.00	0.06	0.47	2.76	-	0.87	M8	-	374.4	302.7	35.5
3"	2.99	5.00	6.61	8.27	11.1	6.59	5.59	1.69	15.35	1.12	0.06	0.59	2.76	4.02	0.87	M8	M10	771.8	660.3	50.0
4"	3.94	6.18	7.87	10.0	12.01	7.19	6.18	1.69	15.35	1.25	0.06	0.59	2.76	4.02	0.87	M8	M10	869.2	665.6	80.9

unit:in

FOR ADDITIONAL SIZES SEE NEXT PAGE



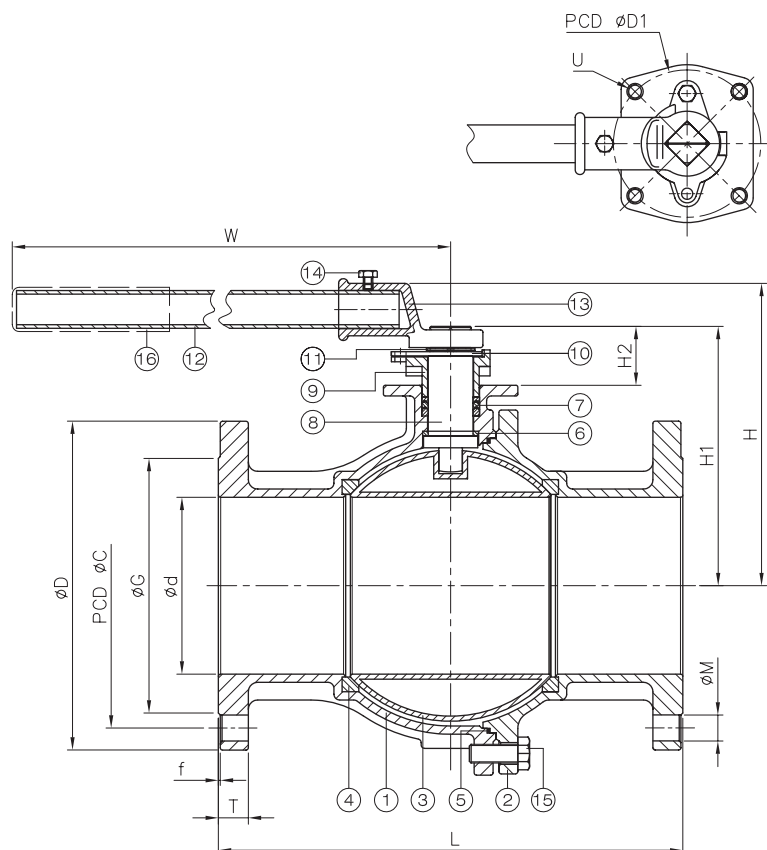
SERIES: B203FM - B203FC - 300#

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (6")

DESIGN FEATURES:

- Full port, 6" (DN150)
- **W.P. : CLASS 300**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Anti-static device (option)
- Locking device
- **Mounting pad ISO 5211**
- Flange dimension: ASME B16.5
- Face to face: ASME B16.10



ITEM	PARTS	MATERIAL	
		B203FMMTXXX	B203FCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A240-316	
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	THRUST WASHER		
7	PACKING		
8	STEM	ASTM A276-316	
9	GLAND	AISI 304	
10	STOPPER		
11	CIRCLIPS FOR SHAFT		
12	STEEL TUBE		
13	WRENCH BLOCK		
14	BOLT		
15	BOLT		
16	HANDLE SLEEVE	PVC	

DN	d	G	C	D	L	H	H1	H2	W	D1	T	f	U	M	Torque (N-M)		Weight (kg)
															Breakaway	Action	
150	150	216	270	317.5	403	256.5	220	50	743	125	36.6	1.6	M12X1.75	22.5	185	165	79

unit: mm

NPS	d	G	C	D	L	H	H1	H2	W	D1	T	f	U	M	Torque (in-lb)		Weight (lb)
															Breakaway	Action	
6"	5.91	8.5	10.63	12.5	15.87	10.1	8.66	1.97	29.25	4.92	1.44	0.06	M12X1.75	0.89	1637.4	1460.4	174.2

unit: in



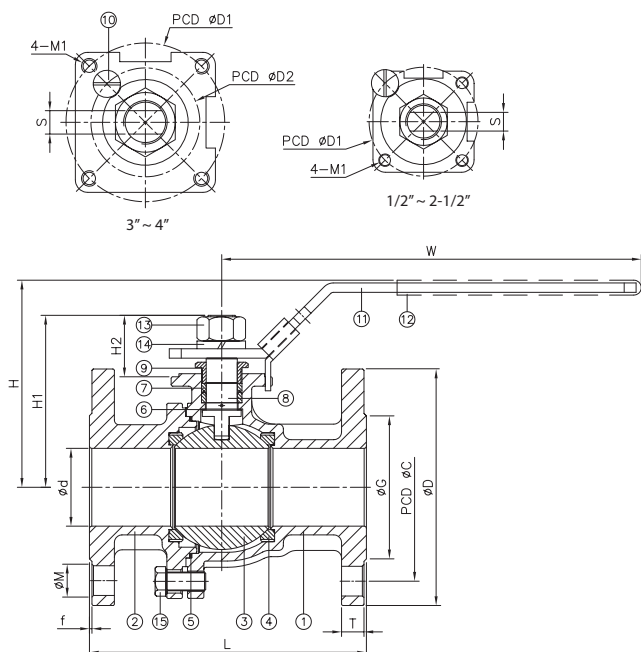
SERIES: B201FM - B201FC - 150#

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (1/2" - 4")

DESIGN FEATURES:

- Full port, 1/2"~4" (DN15~DN100)
- **W.P. : CLASS 150**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device
- Locking device
- **Mounting pad ISO 5211**
- Flange dimension: ASME B16.5
- Face to face: ASME B16.10



ITEM	PARTS	MATERIAL	
		B201FMMTXXX	B201FCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	THRUST WASHER		
7	PACKING		
8	STEM	ASTM A276-316	
9	GLAND NUT	AISI 304	
10	STOP PIN		
11	HANDLE	STAINLESS STEEL	
12	HANDLE SLEEVE	PVC	
13	STEM NUT	AISI 304	
14	SPRING WASHER		
15	BOLT		

DN	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	M	M1	Torque (N-M)		Weight (kg)
																	Breakaway	Action	
15	15	35.0	60.5	89	108.0	85.7	57.2	23.7	169	9.6	1.6	8	42	-	16	M5	3.8	3.0	1.7
20	20	43.0	70.0	99	117.0	88.5	60.0	23.5	169	9.6	1.6	8	42	-	16	M5	5.5	4.0	2.1
25	25	51.0	79.0	108	127.0	103.3	73.8	29.0	205	9.7	1.6	10	50	-	16	M6	6.5	4.5	2.9
32	32	63.5	88.9	117	140.0	108.0	78.5	29.0	205	11.1	1.6	10	50	-	16	M6	9.0	7.5	4.0
40	38	73.2	98.6	127	165.0	128.4	102.9	39.4	266	12.7	1.6	12	70	-	16	M8	25.0	20.0	5.7
50	50	92.0	120.7	152	178.0	135.9	110.4	39.4	266	14.4	1.6	12	70	-	19.1	M8	38.0	30.0	8.4
65	65	104.6	139.0	178	190.0	147.6	122.1	38.6	298	16.0	1.6	12	70	-	19.1	M8	45.0	35.0	13.3
80	80	127.0	152.0	190	203.0	167.5	142.0	43.0	390	17.5	1.6	15	102	70	19.1	M10	61.0	50.0	16.4
100	100	157.2	190.5	228	228.5	182.5	157.0	43.0	390	22.4	1.6	15	102	70	19.1	M10	80.0	73.0	27.7

unit: mm

NPS	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	M	M1	Torque (lb-in)		Weight (lb)
																	Breakaway	Action	
1/2"	0.59	1.38	2.38	3.50	4.25	3.37	2.25	0.93	6.65	0.38	0.06	0.31	1.65	-	0.63	M5	33.6	26.6	3.8
3/4"	0.79	1.69	2.76	3.90	4.61	3.48	2.36	0.93	6.65	0.38	0.06	0.31	1.65	-	0.63	M5	48.7	35.4	4.5
1"	0.98	2.01	3.11	4.25	5.00	4.07	2.91	1.14	8.07	0.38	0.06	0.39	1.97	-	0.63	M6	57.5	39.8	6.4
1-1/4"	1.26	2.50	3.50	4.61	5.51	4.25	3.09	1.14	8.07	0.44	0.06	0.39	1.97	-	0.63	M6	79.7	66.4	8.8
1-1/2"	1.50	2.88	3.88	5.00	6.50	5.06	4.05	1.55	10.47	0.50	0.06	0.47	2.76	-	0.63	M8	221.3	177.0	12.5
2"	1.97	3.62	4.75	5.98	7.01	5.35	4.35	1.55	10.47	0.57	0.06	0.47	2.76	-	0.75	M8	336.3	265.5	18.5
2-1/2"	2.56	4.12	5.47	7.01	7.48	5.81	4.81	1.52	11.73	0.63	0.06	0.47	2.76	-	0.75	M8	398.3	309.8	29.3
3"	3.15	5.00	5.98	7.48	7.99	6.59	5.59	1.69	15.35	0.69	0.06	0.59	4.02	2.76	0.75	M10	539.9	442.5	36.1
4"	3.94	6.19	7.50	8.98	9.00	7.19	6.18	1.69	15.35	0.88	0.06	0.59	4.02	2.76	0.75	M10	708.1	646.1	61.0

unit: in



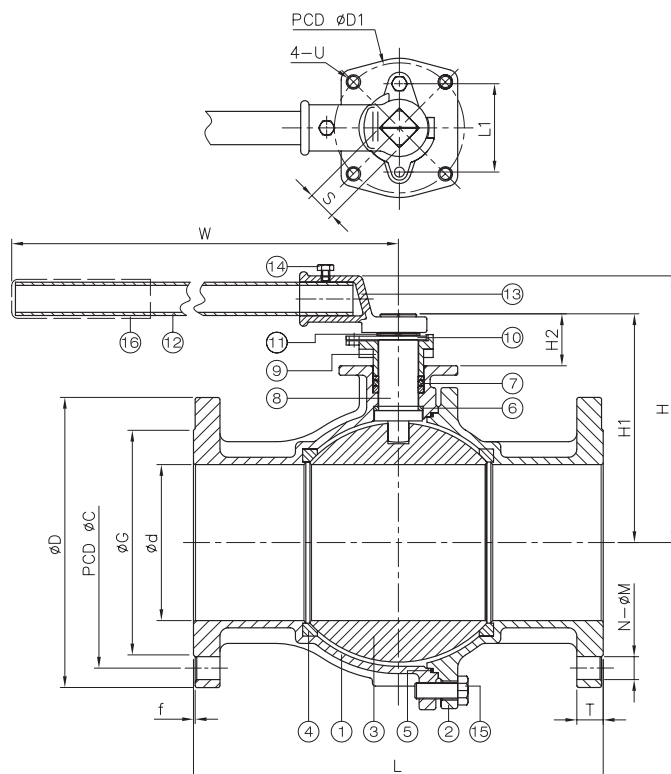
SERIES: B201FM - B201FC - 150#

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (5" - 10")

DESIGN FEATURES:

- Full port, 5" ~ 10" (DN125~DN250)
- **W.P. : CLASS 150**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Anti-static device
- Locking device
- **Mounting pad ISO 5211**
- Flange dimension: ASME B16.5
- Face to face: ASME B16.10



ITEM	PARTS	MATERIAL	
		B201FMMTXXX	B201FCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	PTFE	
6	THRUST WASHER		
7	PACKING		
8	STEM	ASTM A276-316	
9	GLAND	AISI 304	
10	STOPPER		
11	CIRCLIPS FOR SHAFT		
12	STEEL TUBE		
13	WRENCH BLOCK		
14	BOLT		
15	BOLT		
16	HANDLE SLEEVE	PVC	

DN	d	G	C	D	L	H	H1	H2	W	T	f	N	M	S	L1	D1	U	Torque (N-M)		Weight (kg)
																		Breakaway	Action	
125	125	186	216.0	254	356	239.6	199.0	52.0	743	23.9	1.6	8	22.0	27	85	125	M12*1.75	160	96	46.0
150	150	216	241.5	279	394	256.5	220.0	50.0	743	25.4	1.6	8	22.0	27	85	125	M12*1.75	190	168	64.5
200	200	270	298.5	343	457	334.0	300.5	85.5	840	28.6	1.6	8	22.5	36	120	140	M16*2.00	470	350	121.0
250	250	324	362.0	406	533	378.0	334.5	74.5	1040	30.2	1.6	12	25.4	36	120	140	M16*2.00	750	450	186.0

unit: mm

NPS	d	G	C	D	L	H	H1	H2	W	T	f	N	M	S	L1	D1	U	Torque (in-lb)		Weight (lb)
																		Breakaway	Action	
5"	4.92	7.32	8.50	10.00	14.02	9.43	7.83	2.05	29.25	0.94	0.06	8	0.87	1.06	3.35	4.92	M12*1.75	1416.1	849.7	101.4
6"	5.91	8.50	9.51	10.98	15.51	10.10	8.66	1.97	29.25	1.00	0.06	8	0.87	1.06	3.35	4.92	M12*1.75	1681.6	1486.9	142.2
8"	7.87	10.63	11.75	13.50	17.99	13.15	11.83	3.37	33.07	1.13	0.06	8	0.89	1.42	4.72	5.51	M16*2.00	4159.8	3097.7	266.8
10"	9.84	12.76	14.25	15.98	20.98	14.88	13.17	2.93	40.94	1.19	0.06	12	1.00	1.42	4.72	5.51	M16*2.00	6638.0	3982.8	410.1

unit: in



SERIES: B101FM - B101FC - 150# (6")

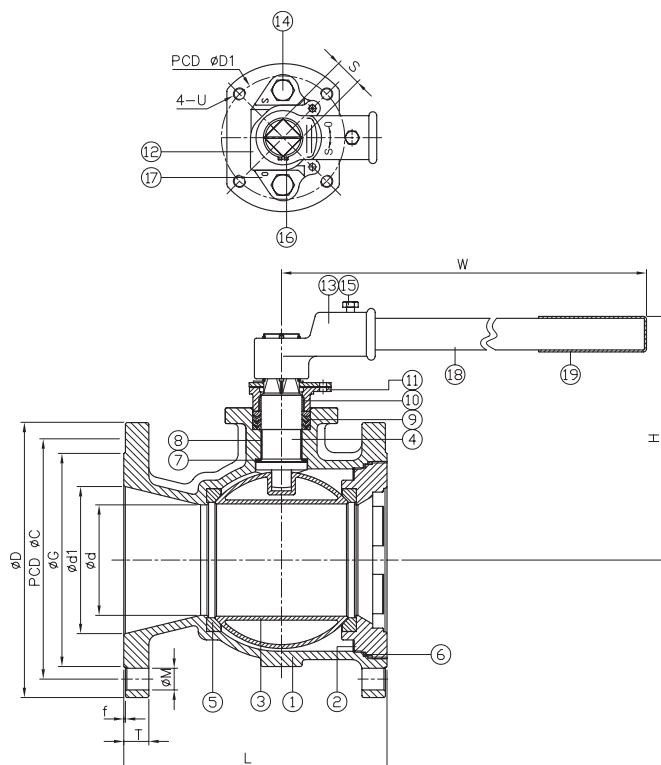
1-PC FLANGED END BALL VALVE

Stainless / Carbon Steel

DIRECT MOUNT

DESIGN FEATURES:

- Standard port, 6" (DN150)
- **W.P. : CLASS 150**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Silicone Free
- Anti-static device
- **Mounting pad ISO 5211**
- API 598 Design
- Wall thickness: ASME B16.34
- Flange dimension: ASME B16.5
- Face to face: ASME B16.10
- Supplied with lever handle



ITEM	PARTS	MATERIAL	
		B101FMMTXXX	B101FCMTXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A240-316	
4	STEM	ASTM A276316	
5	BALL SEAT	TFM 1600	
6	BODY SEAL	PTFE	
7	THRUST WASHER A		
8	THRUST WASHER B		
9	PACKING		
10	BUSHING	AISI 304	
11	GLAND		
12	STOPPER		
13	HANDLE HEAD		
14	BOLT		
15	BOLT		
16	CIRCLIPS FOR SHAFTS		
17	STOPPER		
18	STEEL TUBE		
19	HANDLE SLEEVE		

DN	d	d1	G	C	D	L	H	W	T	f	N	M	S	D1	U	ISO 5211	Torque (N-m)	Weight (kg)
150	112	150	216	241.5	279	267	246	745	25.4	1.6	8	22	27	125	1/2" -13UNC	F10 /F12	205	41

unit: mm

NPS	d	d1	G	C	D	L	H	W	T	f	N	M	S	D1	U	ISO 5211	Torque (in-lb)	Weight (lb)
6"	4.41	5.91	8.50	9.51	10.98	10.51	9.69	29.33	1.00	0.06	8.00	0.87	1.06	4.92	1/2" -13UNC	F10 /F12	1814.4	90.4

unit: in



SERIES: B501FM - B501FC - 150# (1" - 4")

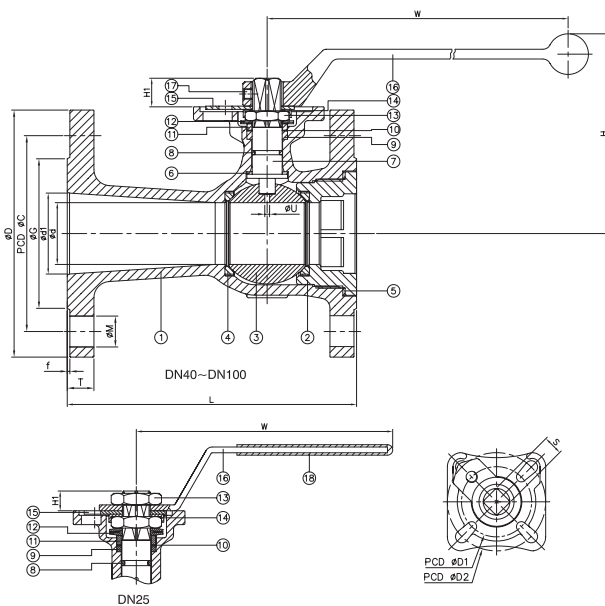
1-PC FLANGED END BALL VALVE

Stainless / Carbon Steel

DIRECT MOUNT • FIRE SAFE

DESIGN FEATURES:

- Standard port, 1"~4" (DN25~DN100)
- **W.P. : CLASS 150**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Live-loading design
- Silicone Free
- Anti-static device
- **Direct mounting pad ISO 5211**
- **API 607 Fire safe approved**
- Wall thickness: ASME B16.34
- Flange dimension: ASME B16.5
- Face to face: ASME B16.10
- Supplied with lever handle



ITEM	PARTS	MATERIAL	
		B501FMMGXXX	B501FCMGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	RETAINER		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	GRAPHITE	
6	THRUST WASHER	CTFE	
7	STEM	ASTM A276-316	
8	O-RING	VITON	
9	PACKING A	GRAPHITE	
10	PACKING B	CTFE	
11	GLAND RING	AISI 304	
12	BELLEVILLE WASHER	AISI 301	
13	STEM NUT	AISI 304	
14	LOCKING WASHER		
15	STOPPER		
16	HANDLE	STAINLESS STEEL	
17	SOCKET SET SCREWS	AISI 304	
18	HANDLE SLEEVE	PVC	

DN	d	d1	G	C	D	L	H	H1	W	T	f	S	D1	D2	M	U	ISO 5211	Torque (N-m)		Weight (kg)
																		Break-away	Action	
25	20	25	51	79.5	108.0	127.0	96	8.0	140.0	11.1	1.6	9	36	42	16	3	F03 / F04	9.8	5.9	2.0
40	30	40	73	98.5	127.0	165.0	101	10.5	197.5	14.3	1.6	11	42	50	16	3	F03 / F04	20.8	11.7	4.0
50	38	50	92	120.5	152.0	178.0	123	14.0	247.5	15.8	1.6	14	50	70	19	3	F05 / F07	29.9	20.8	6.8
65	50	64	105	139.5	178.0	190.5	136	15.5	247.5	17.6	1.6	14	50	70	19	3	F05 / F07	37.7	26.0	9.7
80	64	76	127	152.5	190.5	203.0	155	18.5	340.0	19.1	1.6	17	70	102	19	3	F07 / F10	48.1	36.4	15.2
100	76	100	157	190.5	229.0	229.0	170	20.0	340.0	24.0	1.6	17	70	102	19	3	F07 / F10	55.9	45.5	23.0

unit: mm

NPS	d	d1	G	C	D	L	H	H1	W	T	f	S	D1	D2	M	U	ISO 5211	Torque (in-lb)		Weight (lb)
																		Break-away	Action	
1"	0.79	0.98	2.01	3.13	4.25	5.00	3.79	0.31	5.51	0.44	0.06	0.35	1.42	1.65	0.63	0.12	F03 / F04	86.7	52.2	4.4
1-1/2"	1.18	1.57	2.87	3.88	5.00	6.50	3.97	0.41	7.78	0.56	0.06	0.43	1.65	1.97	0.63	0.12	F03 / F04	184.1	103.6	8.8
2"	1.50	1.97	3.62	4.74	5.98	7.01	4.84	0.55	9.74	0.62	0.06	0.55	1.97	2.76	0.75	0.12	F05 / F07	264.6	184.1	15.0
2-1/2"	1.97	2.52	4.13	5.49	7.01	7.50	5.35	0.61	9.74	0.69	0.06	0.55	1.97	2.76	0.75	0.12	F05 / F07	333.7	230.1	21.4
3"	2.52	2.99	5.00	6.00	7.50	7.99	6.11	0.73	13.39	0.75	0.06	0.67	2.76	4.02	0.75	0.12	F07 / F10	425.7	322.2	33.5
4"	2.99	3.94	6.18	7.50	9.02	9.02	6.70	0.79	13.39	0.94	0.06	0.67	2.76	4.02	0.75	0.12	F07 / F10	494.8	402.7	50.7

unit: in

FOR ADDITIONAL SIZES SEE NEXT PAGE



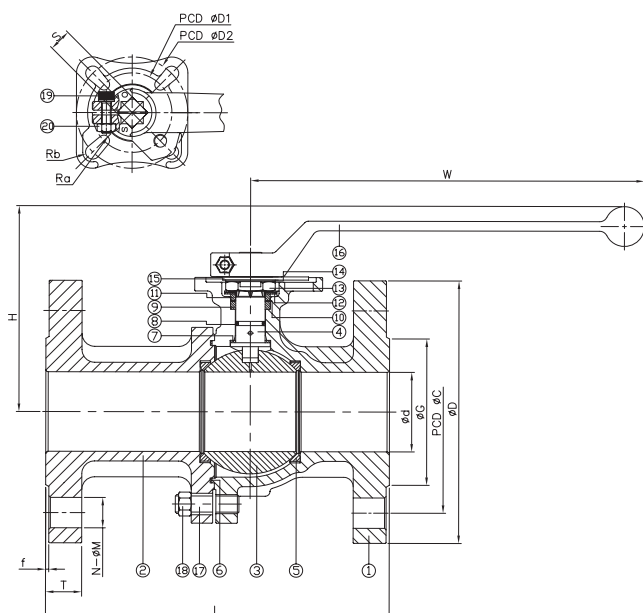
SERIES: B603FM - B603FC - Class 300

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (1/2" - 4")

DESIGN FEATURES:

- Full port, 1/2"~4" (DN15~DN100)
- **W.P. : CLASS 300**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Supplied with lever handle
- Live-loading design
- Anti-static device
- Locking device
- **Direct mounting pad ISO 5211**
- **API 607 Fire safe approved**



ITEM	PARTS	MATERIAL	
		B603FMMGXXX	B603FCMGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	STEM	ASTM A276-316	
5	SEAT	TFM 1600	
6	SEAL	GRAPHITE	
7	THRUST WASHER	CTFE	
8	O-RING	VITON	
9	PACKING A	GRAPHITE	
10	PACKING B	CTFE	
11	GLAND RING	AISI 304	
12	BELLEVILLE WASHER	AISI 301	
13	STEM NUT	AISI 304	
14	LOCK WASHER		
15	STOPPER		
16	HANDLE		
17	STUD		
18	NUT		
19	BOLT		
20	HANDLE NUT		

DN	d	G	C	D	L	H	W	T	f	S	D1	D2	Ra	Rb	N	M	ISO 5211	Torque(N-M)		Weight (kg)
																		Breakaway	Action	
15	15	35.0	66.7	95	140	84.5	197.5	14.7	2	9	36	42	2.75	2.75	4	16.0	F03 / F04	5.2	3.0	2.4
20	20	43.0	82.6	115	152	94.5	197.5	16.3	2	9	36	42	2.75	2.75	4	19.1	F03 / F04	8.0	4.7	3.4
25	24	51.0	89.0	125	165	99.5	197.5	17.9	2	11	42	50	2.75	3.5	4	19.1	F04 / F05	12.5	9.0	4.6
32	30	63.5	98.4	135	178	105.0	197.5	19.5	2	11	42	50	2.75	3.5	4	19.1	F04 / F05	14.0	11.0	5.9
40	38	73.0	114.3	155	190	124.5	247.5	21.1	2	14	50	70	3.50	4.5	4	22.3	F05 / F07	24.5	18.0	8.8
50	50	92.0	127.0	165	216	129.0	247.5	22.7	2	14	50	70	3.50	4.5	8	19.1	F05 / F07	32.0	23.0	11.0
65	64	104.8	149.2	190	241	154.5	340.0	25.9	2	17	70	102	4.50	5.5	8	22.3	F07 / F10	38.0	27.0	18.5
80	75	127.0	168.3	210	282	165.5	340.0	29.0	2	17	70	102	4.50	5.5	8	22.3	F07 / F10	45.0	30.0	25.3
100	98	157.2	200.0	255	305	188.0	340.0	32.2	2	22	102	125	5.50	6.5	8	22.3	F10 / F12	55.0	37.0	39.5

unit: mm

NPS	d	G	C	D	L	H	W	T	f	S	D1	D2	Ra	Rb	N	M	ISO 5211	Torque(in-lb)		Weight (lb)
																		Breakaway	Action	
1/2'	0.59	1.38	2.63	3.74	5.51	3.33	7.78	0.58	0.08	0.35	1.42	1.65	0.11	0.11	4	0.63	F03 / F04	46.0	26.6	5.3
3/4"	0.79	1.69	3.25	4.53	5.98	3.72	7.78	0.64	0.08	0.35	1.42	1.65	0.11	0.11	4	0.75	F03 / F04	70.8	41.6	7.5
1"	0.94	2.01	3.50	4.92	6.50	3.92	7.78	0.70	0.08	0.43	1.65	1.97	0.11	0.14	4	0.75	F04 / F05	110.6	79.7	10.1
1-1/4"	1.18	2.50	3.87	5.31	7.01	4.13	7.78	0.77	0.08	0.43	1.65	1.97	0.11	0.14	4	0.75	F04 / F05	123.9	97.4	13.0
1-1/2"	1.50	2.87	4.50	6.10	7.48	4.90	9.74	0.83	0.08	0.55	1.97	2.76	0.14	0.18	4	0.88	F05 / F07	216.8	159.3	19.4
2"	1.97	3.62	5.00	6.50	8.50	5.08	9.74	0.89	0.08	0.55	1.97	2.76	0.14	0.18	8	0.75	F05 / F07	283.2	203.6	24.3
2-1/2"	2.52	4.13	5.87	7.48	9.49	6.08	13.39	1.02	0.08	0.67	2.76	4.02	0.18	0.22	8	0.88	F07 / F10	336.3	239.0	40.8
3"	2.95	5.00	6.63	8.27	11.1	6.52	13.39	1.14	0.08	0.67	2.76	4.02	0.18	0.22	8	0.88	F07 / F10	398.3	265.5	55.8
4"	3.86	6.19	7.87	10.04	12.01	7.40	13.39	1.27	0.08	0.87	4.02	4.92	0.22	0.26	8	0.88	F10 / F12	486.8	327.5	87.1

unit: in

FOR ADDITIONAL SIZES SEE NEXT PAGE



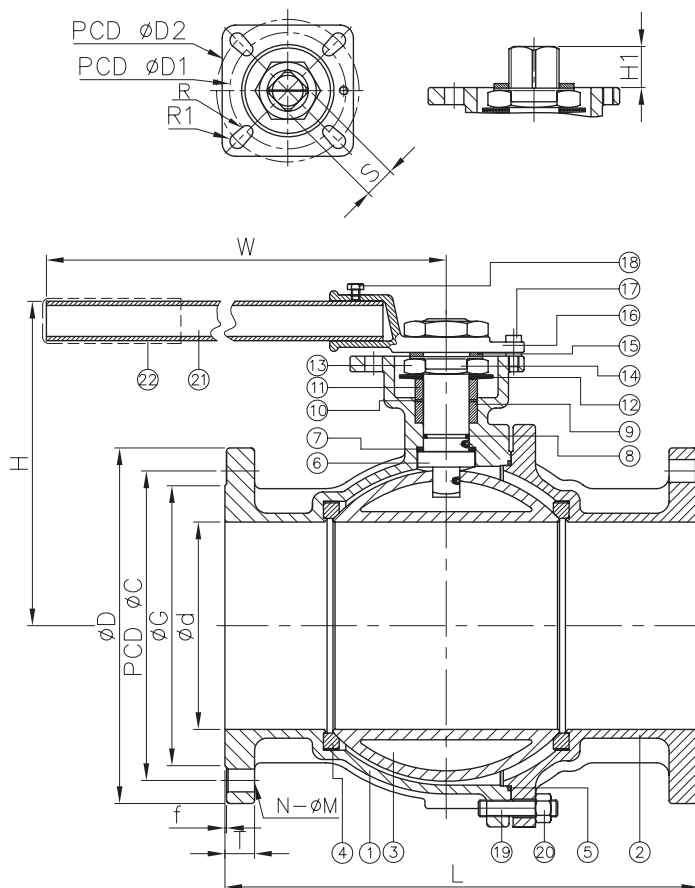
SERIES: B603FC - B603FM - Class 300

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (6")

DESIGN FEATURES:

- Full port, 6" (DN150)
- **W.P. : CLASS 300**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Supplied with lever handle
- Live-loading design
- Anti-static device
- Locking device
- **Direct mounting pad ISO 5211**
- **API 607 Fire safe approved**



ITEM	PARTS	MATERIAL	
		B603FMMGXXX	B603FCMGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A240-316	
4	SEAT	TFM 1600	
5	SEAL	316+GRAPHITE	
6	STEM	ASTM A276-316	
7	THRUST WASHER	CTFE	
8	O-RING	VITON	
9	PACKING A	GRAPHITE	
10	PACKING B	CTFE	
11	GLAND RING	AISI 304	
12	BELLEVILLE WASHER	AISI 301	
13	STEM NUT	AISI 304	
14	LOCK WASHER		
15	FLAT WASHER		
16	HANDLE HEAD		
17	STOP PIN		
18	BOLT		
19	STUD		
20	NUT		
21	STEEL TUBE		
22	HANDLE SLEEVE	PVC	

DN	d	G	C	D	L	H	H1	W	T	f	S	D1	D2	R	R1	N	M	ISO 5211	Torque (N-M)		Weight (kg)
																			Breakaway	Action	
150	150	216	269.9	320	403	27.5	253	743	37	2	27	102	125	5.5	6.5	12	22.3	F10 / F12	250	170	79

unit: mm

NPS	d	G	C	D	L	H	H1	W	T	f	S	D1	D2	R	R1	N	M	ISO 5211	Torque (in-lb)		Weight (lb)
																			Breakaway	Action	
6"	5.91	8.5	10.63	12.6	15.87	1.08	9.96	29.25	1.46	0.08	1.06	4.02	4.92	0.22	0.26	12	0.88	F10 / F12	2212.7	1504.6	174.2

unit: in



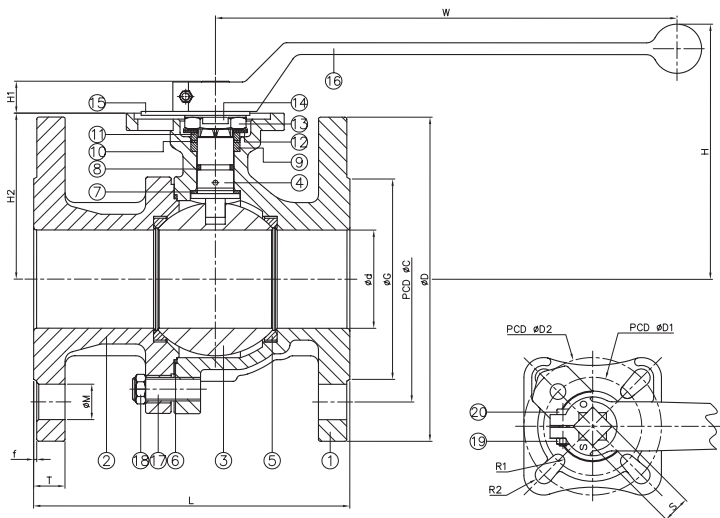
SERIES: B601FM - B601FC - Class 150

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (1/2" - 4")

DESIGN FEATURES:

- Full port, 1/2"~4" (DN15~DN100)
- **W.P. : CLASS 150**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Live-loading design
- Anti-static device
- Locking device
- **Direct mounting pad ISO 5211**
- **API 607 Fire safe approved**
- Supplied with lever handle



ITEM	PARTS	MATERIAL	
		B601FMMGXXX	B601FCMGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL		
4	STEM	ASTM A276-316	
5	SEAT	TFM 1600	
6	SEAL	GRAPHITE	
7	THRUST WASHER	CTFE	
8	O-RING	VITON	
9	PACKING A	GRAPHITE	
10	PACKING B	CTFE	
11	GLAND RING	AISI 304	
12	BELLEVILLE WASHER	AISI 301	
13	NUT	AISI 304	
14	LOCK WASHER		
15	STOPPER		
16	HANDLE		
17	STUD		
18	NUT		
19	NUT		
20	BOLT		

DN	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	R1	R2	M	ISO 5211	Torque (N-M)		Weight (kg)
																			Breakaway	Action	
15	15	35.0	60.5	89.0	108.0	85.0	8.5	50.5	190	11.1	1.6	9	36	42	2.75	2.75	16	F03 / F04	5.2	3.0	1.7
20	20	43.0	70.0	98.0	117.0	89.5	8.5	55.0	190	11.6	1.6	9	36	42	2.75	2.75	16	F03 / F04	8.0	4.7	2.1
25	24	51.0	79.5	108.0	127.5	94.2	10.5	59.0	190	11.6	1.6	11	42	50	2.75	3.50	16	F04 / F05	12.5	9.0	3.2
32	30	64.0	89.0	117.0	140.5	97.9	10.5	62.0	190	12.7	1.6	11	42	50	2.75	3.50	16	F04 / F05	14.0	11.0	3.7
40	38	73.0	98.5	127.0	165.0	120.9	14.0	76.0	235	14.3	1.6	14	50	70	3.50	4.50	16	F05 / F07	24.5	18.0	6.0
50	50	92.0	120.5	152.0	178.0	129.9	14.0	84.5	235	16.0	1.6	14	50	70	3.50	4.50	19	F05 / F07	32.0	23.0	8.0
65	64	105.0	139.5	178.0	190.5	156.3	17.0	104.5	325	17.5	1.6	17	70	102	4.50	5.50	19	F07 / F10	38.0	27.0	14.5
80	76	127.0	152.5	190.5	203.0	163.3	17.0	111.5	325	19.1	1.6	17	70	102	4.50	5.50	19	F07/ F10	45.0	30.0	18.2
100	100	157.2	190.5	229.0	229.0	195.9	23.0	142.0	325	24.3	1.6	22	102	125	5.50	6.50	19	F10 / F12	130.0	78.0	29.3

unit: mm

NPS	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	R1	R2	M	ISO 5211	Torque (in-lb)		Weight (lb)
																			Breakaway	Action	
1/2"	0.59	1.38	2.38	3.50	4.25	3.35	0.33	1.99	7.48	0.44	0.06	0.35	1.42	1.65	0.11	0.11	0.63	F03 / F04	46.0	26.6	3.7
3/4"	0.79	1.69	2.76	3.86	4.61	3.52	0.33	2.17	7.48	0.46	0.06	0.35	1.42	1.65	0.11	0.11	0.63	F03 / F04	70.8	41.6	4.6
1"	0.94	2.01	3.13	4.25	5.02	3.71	0.41	2.32	7.48	0.46	0.06	0.43	1.65	1.97	0.11	0.14	0.63	F04 / F05	110.6	79.7	7.1
1-1/4"	1.18	2.52	3.50	4.61	5.53	3.85	0.41	2.44	7.48	0.50	0.06	0.43	1.65	1.97	0.11	0.14	0.63	F04 / F05	123.9	97.4	8.2
1-1/2"	1.50	2.87	3.88	5.00	6.50	4.76	0.55	2.99	9.25	0.56	0.06	0.55	1.97	2.76	0.14	0.18	0.63	F05 / F07	216.8	159.3	13.2
2"	1.97	3.62	4.74	5.98	7.01	5.11	0.55	3.33	9.25	0.63	0.06	0.55	1.97	2.76	0.14	0.18	0.75	F05 / F07	283.2	203.6	17.6
2-1/2"	2.52	4.13	5.49	7.01	7.50	6.15	0.67	4.11	12.8	0.69	0.06	0.67	2.76	4.02	0.18	0.22	0.75	F07 / F10	336.3	239.0	32.0
3"	2.99	5.00	6.00	7.50	7.99	6.43	0.67	4.39	12.8	0.75	0.06	0.67	2.76	4.02	0.18	0.22	0.75	F07 / F10	398.3	265.5	40.2
4"	3.94	6.19	7.50	9.02	9.02	7.71	0.91	5.59	12.8	0.96	0.06	0.87	4.02	4.92	0.22	0.26	0.75	F10 / F12	1150.6	690.4	64.6

unit: in

FOR ADDITIONAL SIZES SEE NEXT PAGE



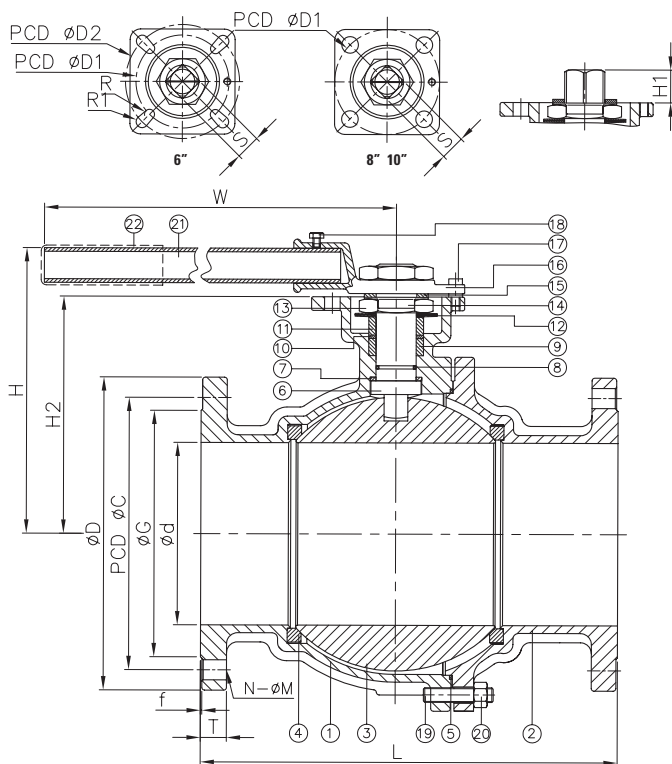
SERIES: B601FM - B601FC - Class 150

2-PC FLANGED END BALL VALVE

Stainless / Carbon Steel (6" - 10")

DESIGN FEATURES:

- Full port, 6"~10" (DN150 ~ DN250)
- **W.P. : CLASS 150**
- W.T. : -20°C~200°C (-4°F~392°F)
- Investment casting
- Blow-out proof stem
- Silicone Free
- Supplied with lever handle
- Live-loading design
- Anti-static device
- Locking device
- **Direct mounting pad ISO 5211**
- **API 607 Fire safe approved**



ITEM	PARTS	MATERIAL	
		B601FMMGXXX	B601FCMGXXX
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	BALL	ASTM A351-CF8M	
4	SEAT	TFM 1600	
5	SEAL	316+GRAPHITE	
6	STEM	ASTM A276-316	
7	THRUST WASHER	CTFE	
8	O-RING	VITON	
9	PACKING A	GRAPHITE	
10	PACKING B	CTFE	
11	GLAND RING	AISI 304	
12	BELLEVILLE WASHER	AISI 301	
13	STEM NUT	AISI 304	
14	LOCK WASHER		
15	FLAT WASHER		
16	HANDLE HEAD		
17	STOP PIN		
18	BOLT		
19	STUD		
20	NUT		
21	STEEL TUBE		
22	HANDLE SLEEVE		

DN	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	R	R1	N	M	ISO 5211	Torque (N-M)		Weight (kg)
																				Breakaway	Action	
150	150	216	241.5	279	394	230	27.5	201	743	25.4	1.6	27	102	125	5.5	6.5	8	22.4	F10 / F12	250	170	67
200	200	270	298.5	343	457	312	36	259	840	28.6	1.6	36	140	-	8.5	-	8	22.4	F14	470	280	116
250	250	324	362.0	406	533	350	36	295	1040	30.2	1.6	36	140	-	8.5	-	12	25.4	F14	750	532	186

unit: mm

NPS	d	G	C	D	L	H	H1	H2	W	T	f	S	D1	D2	R	R1	N	M	ISO 5211	Torque (in-lb)		Weight (lb)
																				Breakaway	Action	
6"	5.91	8.50	9.51	10.98	15.51	9.06	1.08	7.91	29.25	1.00	0.06	1.06	4.02	4.92	0.22	0.26	8	0.88	F10 / F12	2212.7	1504.6	147.7
8"	7.87	10.63	11.75	13.5	17.99	12.28	1.42	10.20	33.07	1.13	0.06	1.42	5.51	-	0.33	-	8	0.88	F14	4159.8	2478.2	255.7
10"	9.84	12.76	14.25	15.98	20.98	13.78	1.42	11.61	40.94	1.19	0.06	1.42	5.51	-	0.33	-	12	1.00	F14	6638.0	4708.6	410.1

unit: in