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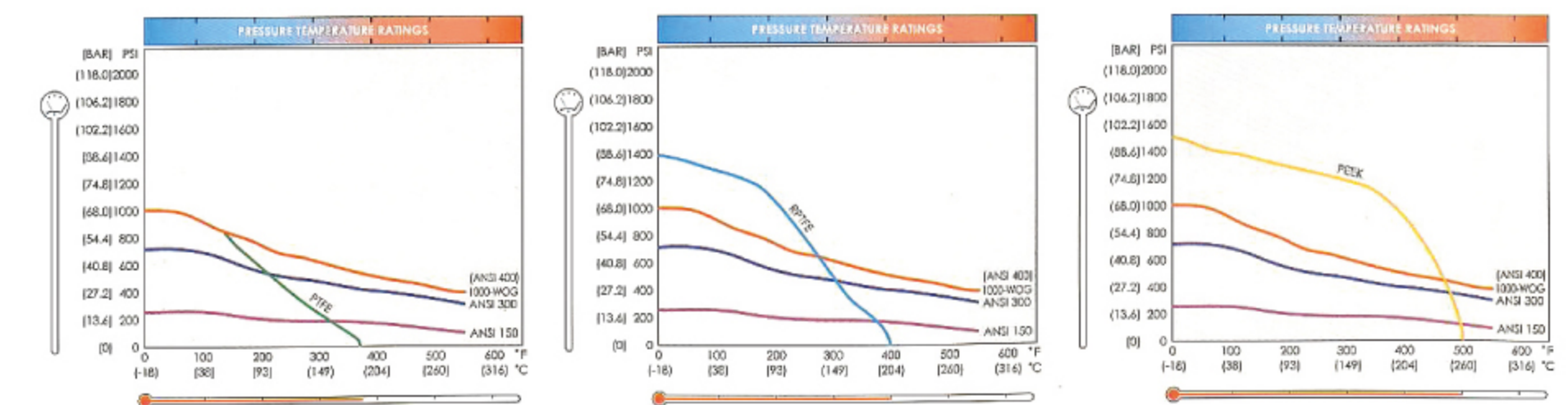


BALL VALVE



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PTFE

General application seat material, exhibiting lowest operating torque and excellent resistance to chemical attack.

RPTFE

Most commonly specified seat material, and used as the basis for published torque values. Maintains the excellent chemical resistance of unfilled teflon(TFE)with increased resistance to wear and abrasion resulting in longer life.

(PEEK)

PEEK(PolyEtherEtherKetone)offers a high strength alternative to RPTFE, resistant to creep and cold flow. This seat offers good abrasion resistance. Higher in cost, this material offers similar chemical resistance to PTFE but should be checked on application. Operating torque tend to be 40% higher than RTFE. Ball stop recommended.

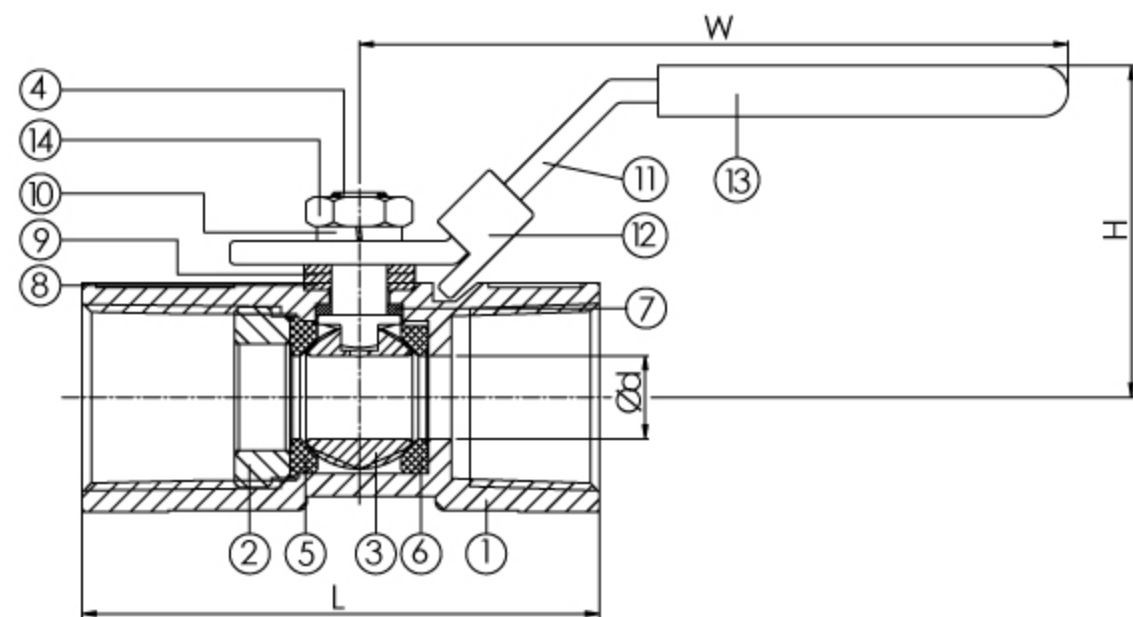
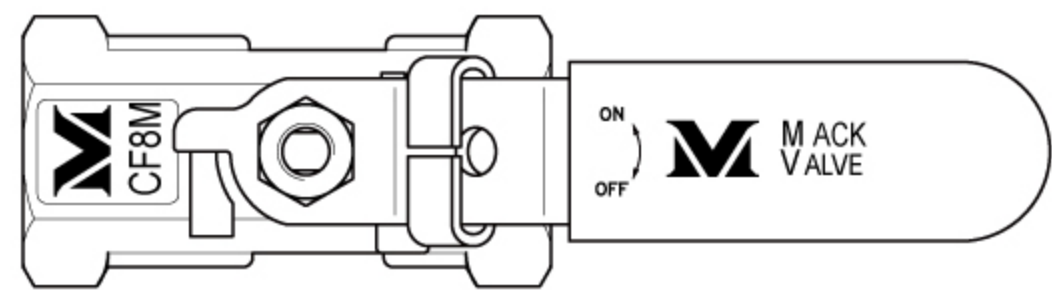
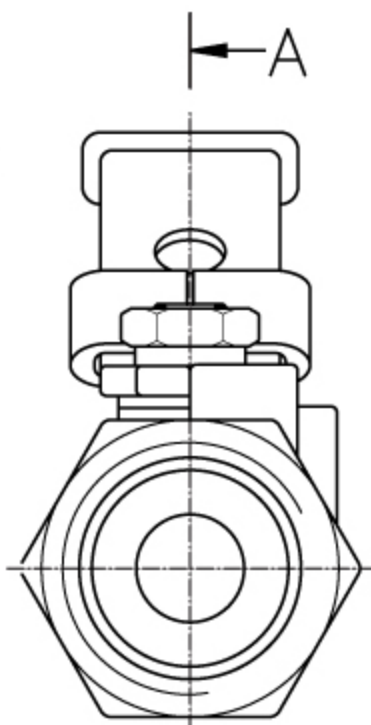
1PCS REDUCE BORE 800 WOG SCREWED BALL VALVE

1PCS REDUCE BORE 2000 WOG SCREWED BALL VALVE



101
BALL VALVE

Features:
The Thread ends conform to
ASME B1.20.1 (NPT)
ISO 228/1 & ISO &/1
DIN 2999 & BS 21
Investment Casting
Blow-out proof Stem
15% Glassfiber fill PTFE
reinforce Seat (RTFE)
PTFE Seal & Packing
Latch Lock Handle
Oval handle is available



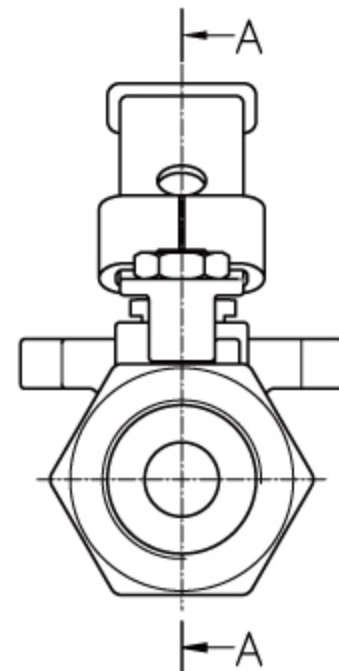
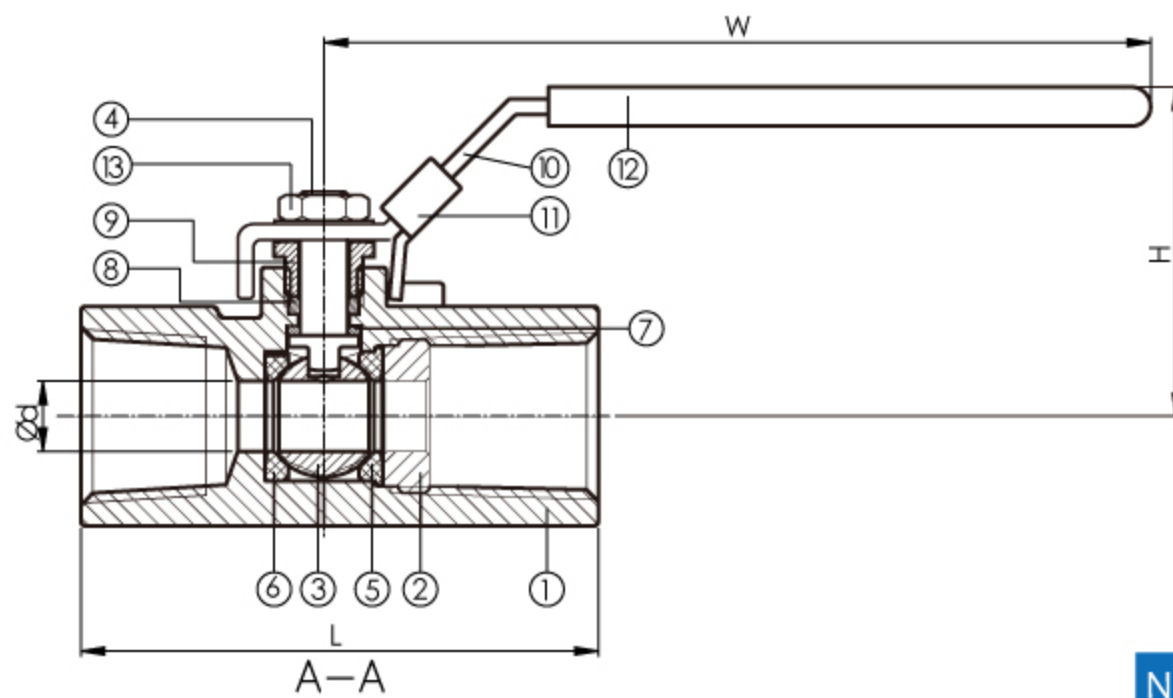
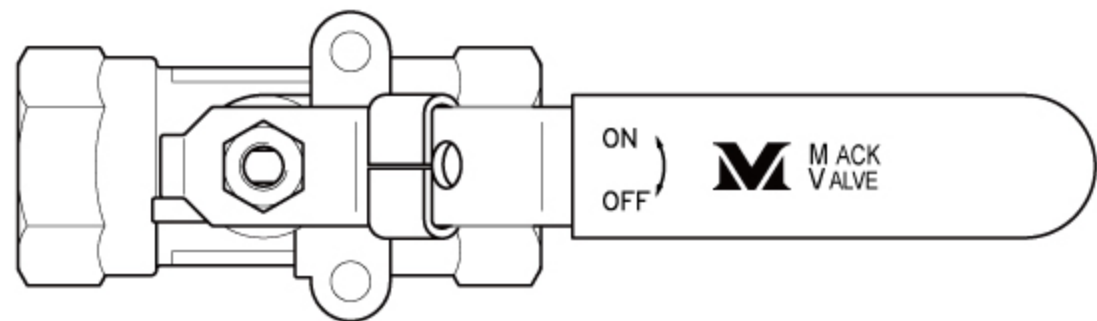
NPS	DN	d	L	W	H	UNIT
1/4"	8.0	0.19	1.53	2.55	1.02	INCH
		5.0	39.0	65.0	26.0	MM
3/8"	10.0	0.27	1.73	3.07	1.10	INCH
		7.0	44.0	78.0	28.0	MM
1/2"	15.0	0.35	2.20	3.34	1.41	INCH
		9.0	56.0	85.0	36.0	MM
3/4"	20.0	0.49	2.44	3.34	1.55	INCH
		12.5	62.0	85.0	39.5	MM
1"	25.0	0.61	2.75	4.44	1.77	INCH
		15.5	70.0	113.0	45.0	MM
1-1/4"	32.0	0.78	3.03	4.44	1.94	INCH
		20.0	77.0	113.0	49.5	MM
1-1/2"	38.0	0.98	3.34	5.21	2.24	INCH
		25.0	85.0	132.5	57.0	MM
2"	50.0	1.25	3.93	5.21	2.50	INCH
		32.0	100.0	132.5	63.5	MM

Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Retainer	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat (A)	RTFE	RTTE
6	Ball Seat (B)	RTFE	RTTE
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Gland Ring	AISI 304	AISI 304
10	Spring Waher	AISI 304	AISI 304
11	Handle	AISI 304	AISI 304
12	Locking device	AISI 304	AISI 304
13	Handle Sleeve	VINYL	VINYL
14	Stem Nut	AISI 304	AISI 304



121
BALL VALVE

Features:
The Thread ends conform to
ASME B1.20.1(NPT)
ISO 228/1 & ISO &/1
DIN 2999 & BS 21
Investment Casting
Blow-out proof Stem
15% Glassfiber fill PTFE
reinforce Seat (RTFE)
PTFE Seal & Packing
Latch Lock Handle
Oval handle is available



Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Retainer	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat (A)	RTFE	RTFE
6	Ball Seat (B)	RTFE	RTFE
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Gland Ring	AISI 304	AISI 304
10	Handle	AISI 304	AISI 304
11	Locking device	AISI 304	AISI 304
12	Handle Sleeve	VINYL	VINYL
13	Stem Nut	AISI 304	AISI 304

NPS	DN	d	L	W	H	UNIT
1/4"	8.0	0.35	2.28	4.17	1.73	INCH
		9.0	58.0	106.0	44.0	MM
3/8"	10.0	0.35	2.28	4.17	1.73	INCH
		9.0	58.0	106.0	44.0	MM
1/2"	15.0	0.35	2.6	4.17	1.73	INCH
		9.0	66.0	106	44.0	MM
3/4"	20.0	0.49	2.84	4.17	1.97	INCH
		12.5	72.0	106.0	50.0	MM
1"	25.0	0.59	3.23	5.71	2.64	INCH
		15.0	82.0	145.0	67.0	MM
1-1/4"	32.0	0.78	3.54	5.71	2.76	INCH
		20.0	90.0	145.0	70.0	MM
1-1/2"	40.0	0.98	3.86	7.24	3.23	INCH
		25.0	98.0	184.0	82.0	MM
2"	50.0	1.25	4.33	7.24	3.47	INCH
		32.0	110.0	184.0	88.0	MM



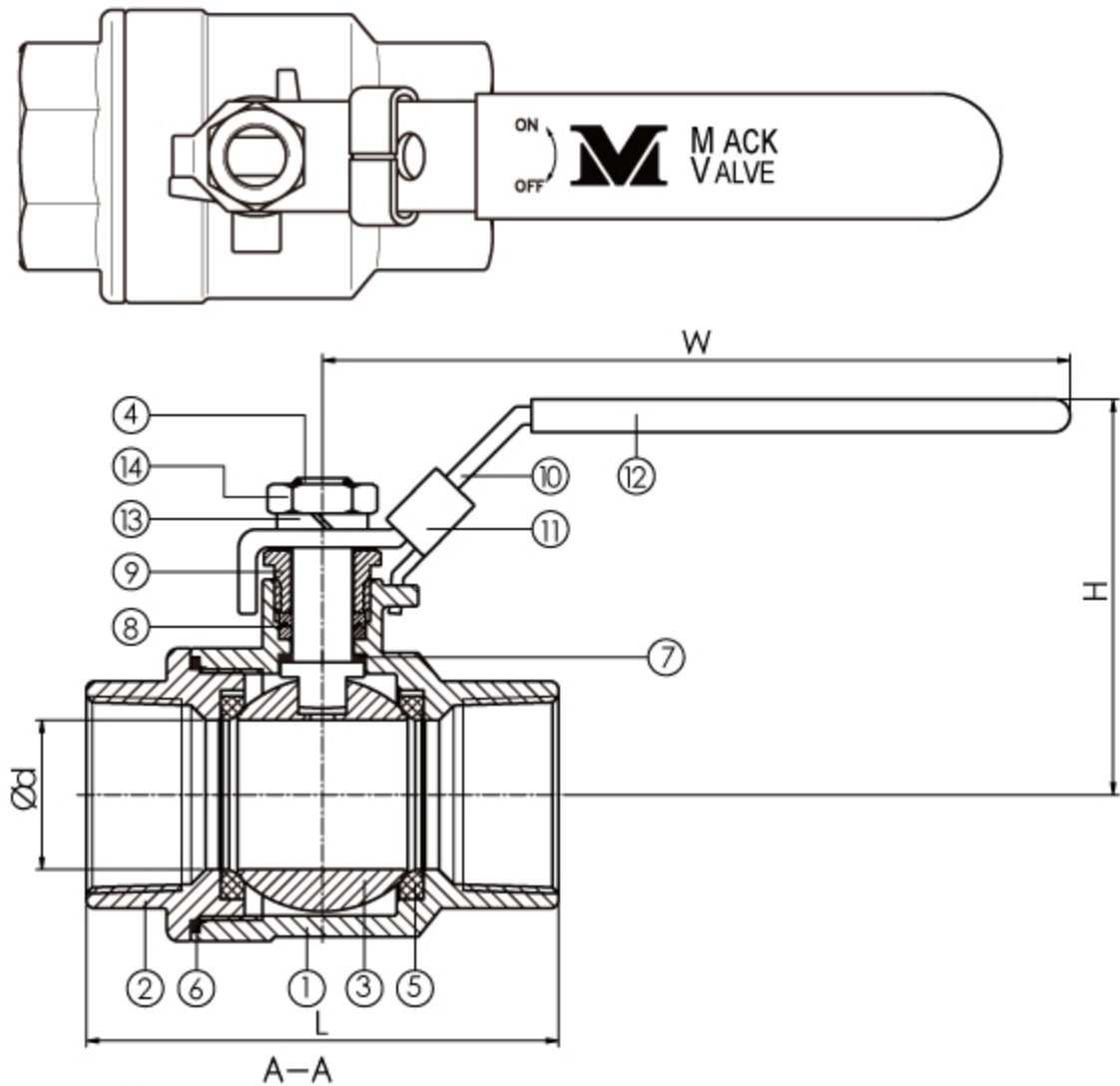
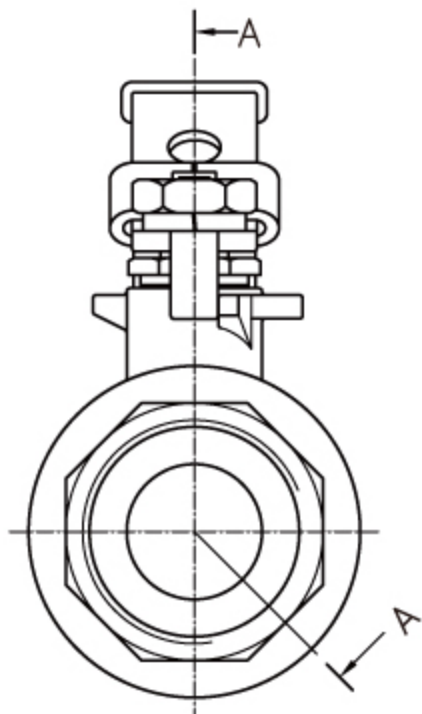
2PCS FULL BORE 1000 WOG SCREWED BALL VALVE

2PCS STANDARD BORE 2000 WOG SCREWED BALL VALVE



201
BALL VALVE

- Features:
- The Thread ends conform to ASME B1.20.1 (NPT)
 - ISO228/1 & ISO 7/1
 - DIN 2999 & BS 21
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill PTFE reinforce Seat (RTFE)
 - PTFE Seal & Packing
 - Latch Lock Handle



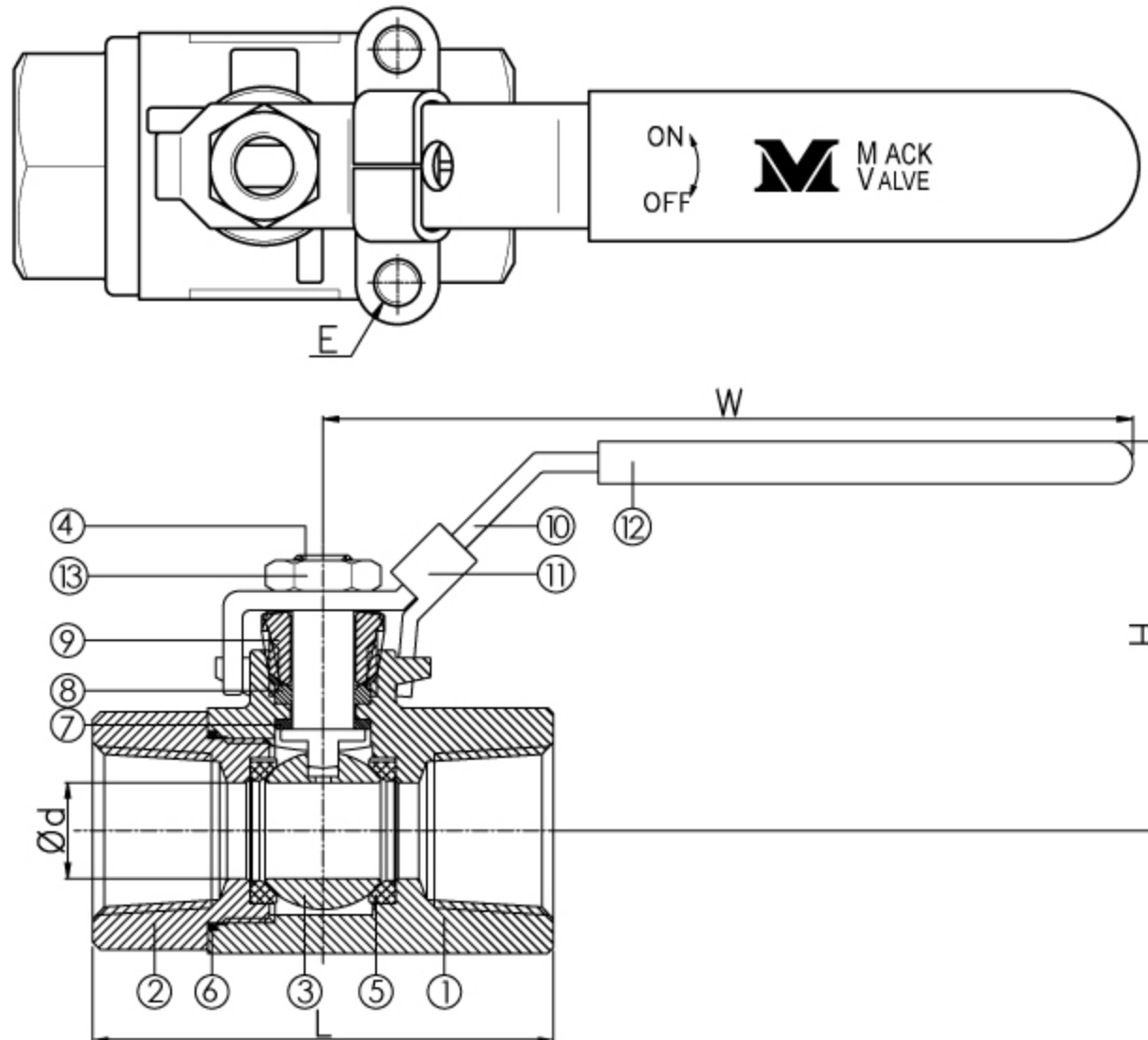
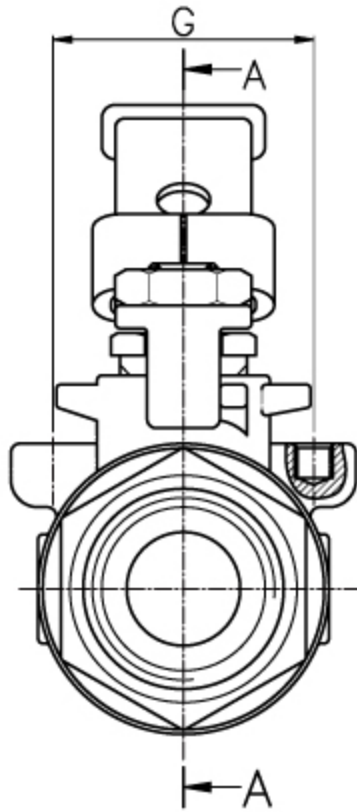
NPS	DN	d	L	W	H	UNIT
1/4"	8	0.39	1.92	3.14	1.73	INCH
		10.0	49.0	80.0	44.0	MM
3/8"	10	0.49	1.92	3.14	1.73	INCH
		12.5	49.0	80.0	44.0	MM
1/2"	15	0.59	2.3	3.14	1.92	INCH
		15.0	58.5	80.0	49.0	MM
3/4"	20	0.78	2.71	4.05	2.28	INCH
		20.0	69.0	103.0	58.0	MM
1"	25	0.98	3.11	4.92	2.61	INCH
		25.0	79.0	125.0	66.5	MM
1-1/4"	32	1.25	3.74	4.92	2.83	INCH
		32.0	95.0	125.0	72.0	MM
1-1/2"	40	1.49	4.15	6.41	3.3	INCH
		38.0	105.5	163.0	84.0	MM
2"	50	1.96	4.86	6.41	3.66	INCH
		50.0	123.5	163.0	93.0	MM

Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	PTFE	PTFE
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Gland Nut	AISI 304	AISI 304
10	Handle	AISI 304	AISI 304
11	Locking Device	AISI 304	AISI 304
12	Handle Sleeve	VINYL	VINYL
13	Spring Washer	AISI 304	AISI 304
14	Stem Nut	AISI 304	AISI 304



221
BALL VALVE

- Features:
- The Thread ends conform to ASME B1.20.1(NPT)
 - ISO228/1 & ISO 7/1
 - DIN 2999 & BS 21
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill PTFE reinforce Seat (RTFE)
 - PTFE seal & Packing
 - Latch Lock Handle
 - Seal weld is available option



NPS	DN	d	L	H	W	E	G	UNIT
1/2"	15	0.49	2.36	2.01	4.13	10-24NC	1.1	INCH
		12.5	60.0	51.0	105.0	10-24NC	28.0	MM
3/4"	20	0.59	2.8	2.64	5.71	10-24NC	1.37	INCH
		15.0	71.0	67.0	145.0	10-24NC	35.0	MM
1"	25	0.78	3.23	3.19	7.2	10-24NC	1.37	INCH
		20.0	82.0	81.0	183.0	10-24NC	35.0	MM
1-1/4"	32	0.98	3.62	3.43	7.28	1/2-20NC	1.49	INCH
		25.0	92.0	87.0	185.0	1/2-20NC	38.0	MM
1-1/2"	40	1.25	4.06	3.54	7.28	1/2-20NC	1.49	INCH
		32.0	103.0	90.0	185.0	1/2-20NC	38.0	MM
2"	50	1.49	3.65	3.82	7.28	1/2-20NC	1.49	INCH
		38.0	118.0	97.0	185.0	1/2-20NC	38.0	MM

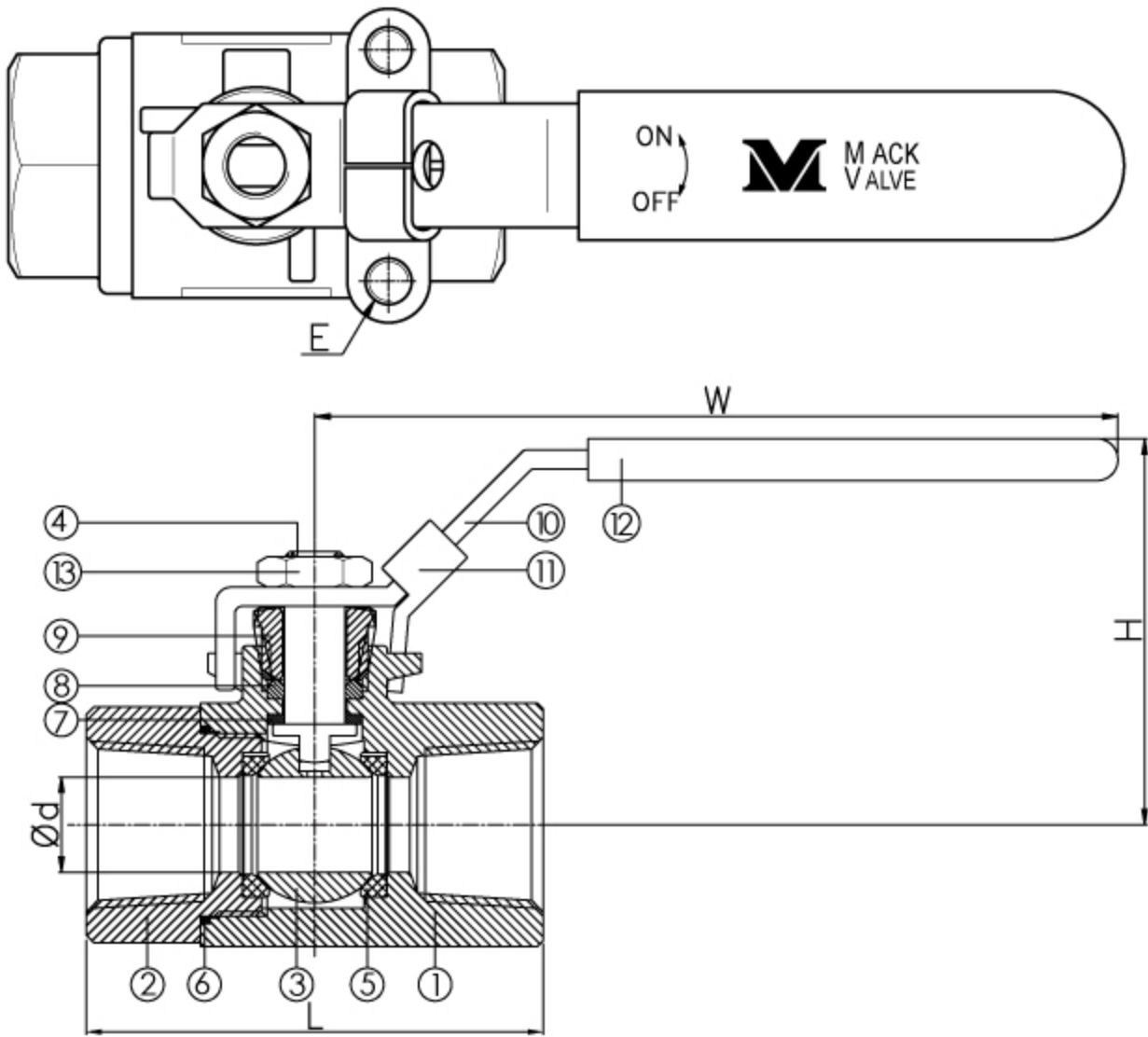
Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	PTFE	PTFE
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Gland Nut	AISI 304	AISI 304
10	Handle	AISI 304	AISI 304
11	Locking Device	AISI 304	AISI 304
12	Handle Sleeve	VINYL	VINYL
13	Stem Nut	AISI 304	AISI 304



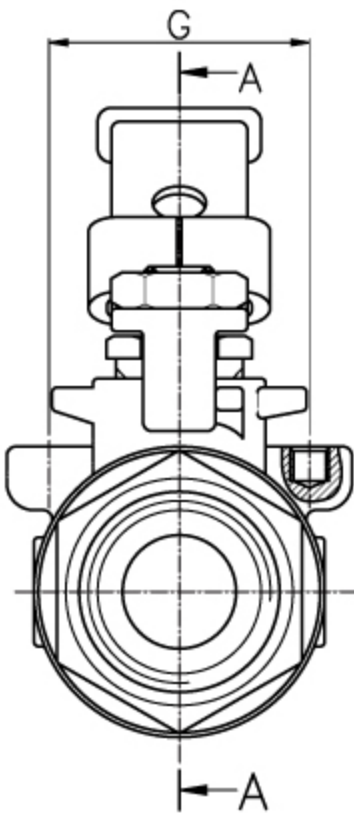
2PCS FULL BORE 2000WOG SCREWED BALL VALVE



222
BALL VALVE



- Features:
- The Thread ends conform to ASME B1.20.1(NPT)
 - ISO228/1 & ISO 7/1
 - DIN 2999 & BS 21
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill PTFE reinforce Seat (RTFE)
 - PTFE seal & Packing
 - Latch Lock Handle
 - Seal weld is Available option



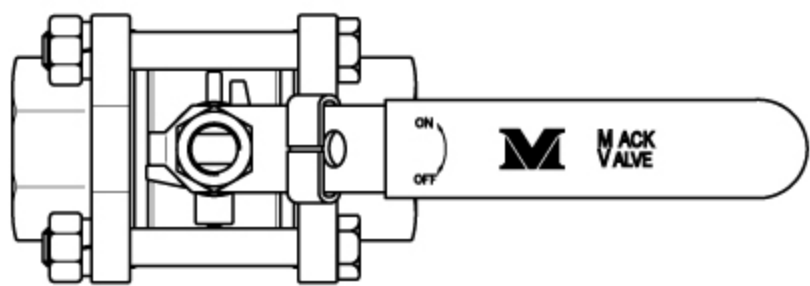
NPS	DN	d	L	H	W	E	G	UNIT
1/2"	15	0.59	2.8	2.64	5.71	10-24NC	1.37	INCH
		15.0	71.0	67.0	145.0		35.0	MM
3/4"	20	0.78	3.23	3.19	7.2	10-24NC	1.37	INCH
		20.0	82.0	81.0	183.0		35.0	MM
1"	25	0.98	3.62	3.43	7.28	1/2-20NC	1.49	INCH
		25.0	92.0	87.0	185.0		38.0	MM
1-1/4"	32	1.25	4.06	3.54	7.28	1/2-20NC	1.49	INCH
		32.0	103.0	90.0	185.0		38.0	MM
1-1/2"	40	1.49	3.65	3.82	7.28	1/2-20NC	1.49	INCH
		38.0	118.0	97.0	185.0		38.0	MM
2"	50	1.97	5.70	4.72	8.15	1/2-20NC	1.97	INCH
		50.0	145.0	120.0	207.0		50.0	MM

Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	PTFE	PTFE
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Gland Nut	AISI 304	AISI 304
10	Handle	AISI 304	AISI 304
11	Locking Device	AISI 304	AISI 304
12	Handle Sleeve	VINYL	VINYL
13	Stem Nut	AISI 304	AISI 304

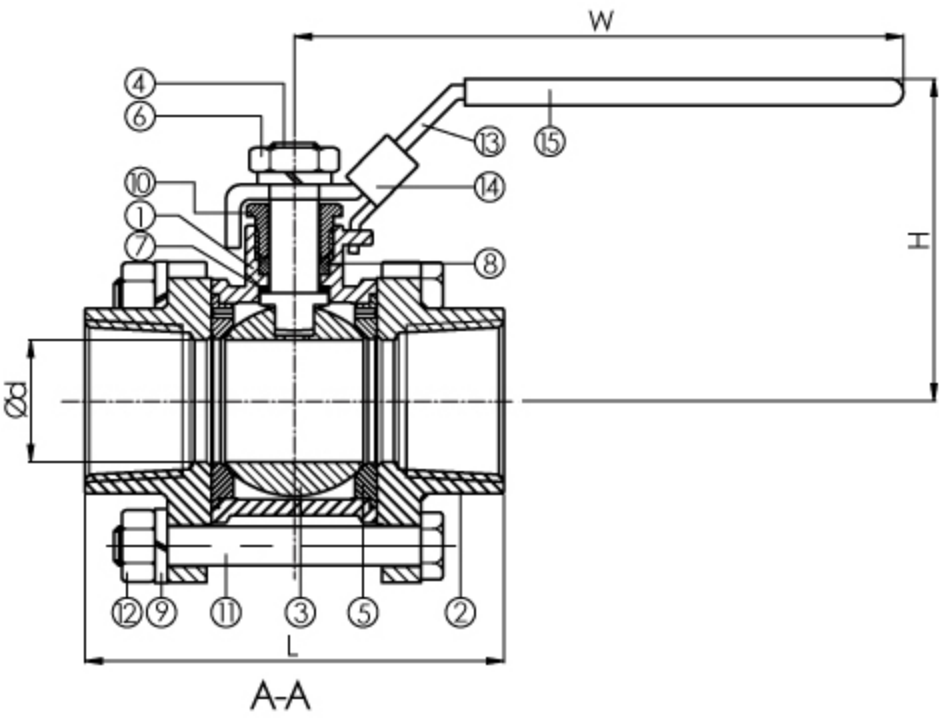
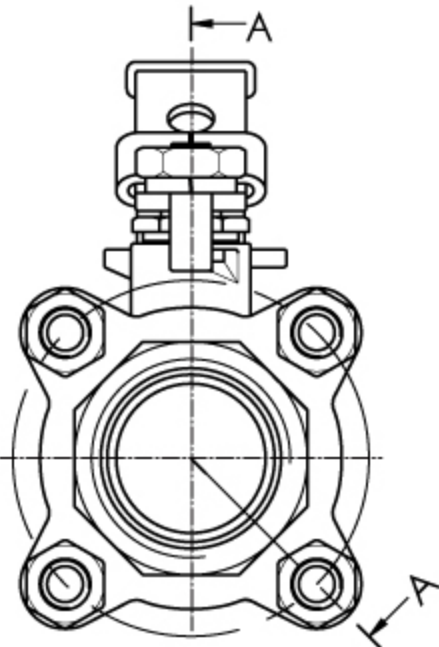
3PCS FULL BORE 1000 WOG SCREWED BALL VALVE



301
BALL VALVE



- Features:
- The Thread ends conform to ASME B1.20.1(NPT)
 - ISO228/1 & ISO 7/1
 - DIN 2999 & BS 21
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill PTFE reinforce Seat (RTFE)
 - PTFE seal & Packing
 - Latch Lock Handle



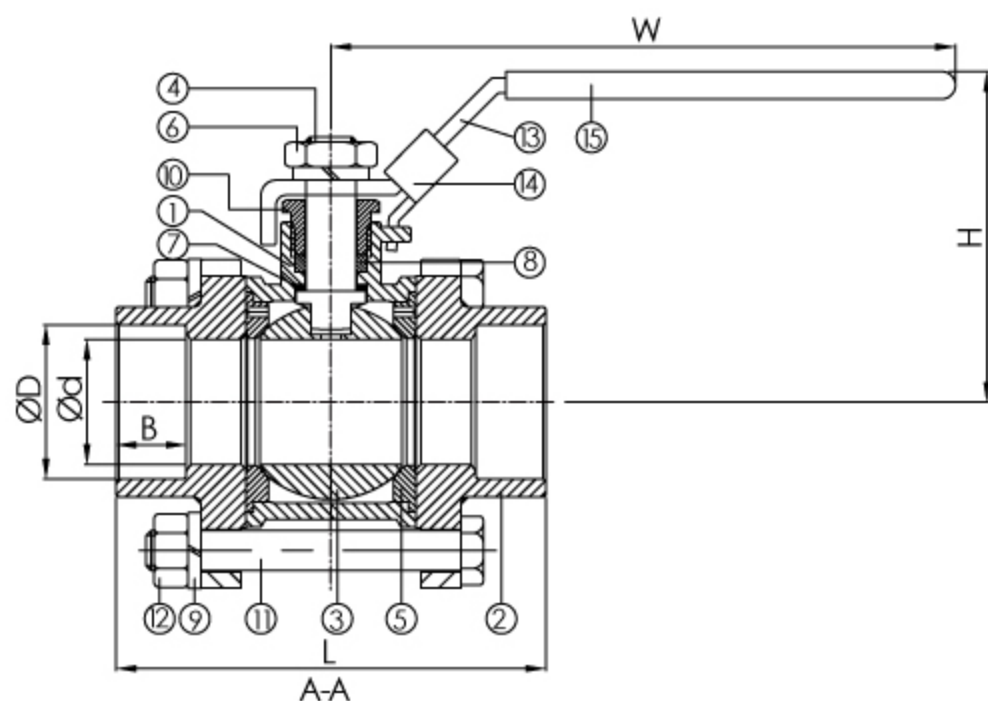
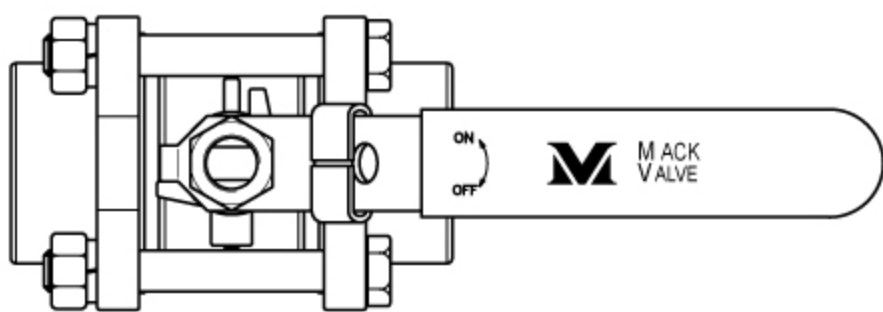
NPS	DN	d	L	H	W	UNIT
1/4"	8	0.39	2.2	1.73	3.14	INCH
		10.0	56.0	44.0	80.0	MM
3/8"	10	0.49	2.2	1.73	3.14	INCH
		13.0	56.0	44.0	80.0	MM
1/2"	15	0.59	2.61	1.94	3.14	INCH
		15.0	66.5	49.5	80.0	MM
3/4"	20	0.78	2.95	2.28	4.05	INCH
		20.0	75.0	58.0	103.0	MM
1"	25	0.98	3.38	2.61	4.92	INCH
		25.0	86.0	66.5	125.0	MM
1-1/4"	32	1.25	3.95	2.83	4.92	INCH
		32.0	100.5	72.0	125.0	MM
1-1/2"	40	1.49	4.38	3.3	6.41	INCH
		38.0	111.5	84.0	163.0	MM
2"	50	1.96	5.11	3.66	6.41	INCH
		50.0	130.0	93.0	163.0	MM

Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Stem Nut	304	304
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Spring Washer	AISI 304	AISI 304
10	Gland Nut	AISI 304	AISI 304
11	Bolt	AISI 304	AISI 304
12	Bolt Nut	AISI 304	AISI 304
13	Handle	AISI 304	AISI 304
14	Locking Device	AISI 304	AISI 304
15	Handle Sleeve	VINYL	VINYL

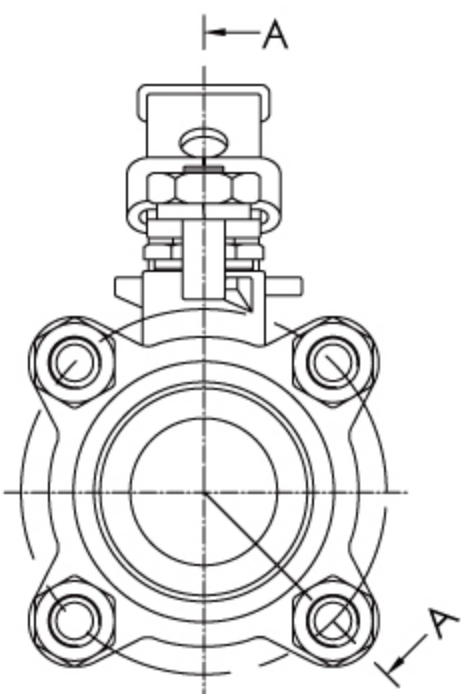




302
BALL VALVE



Features:
The Socket Weld ends conform to ANSI B16.11& DIN 3239 Part 2
Investment Casting
Blow-out proof Stem
15% Glassfiber fill PTFE reinforce Seat (RTFE)
PTFE Seal & Packing
Latch Lock Handle

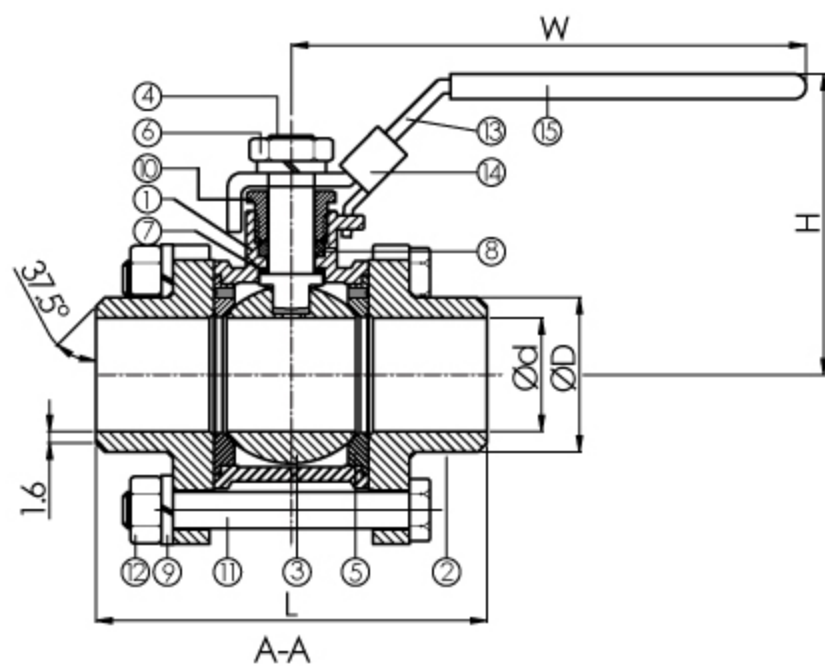
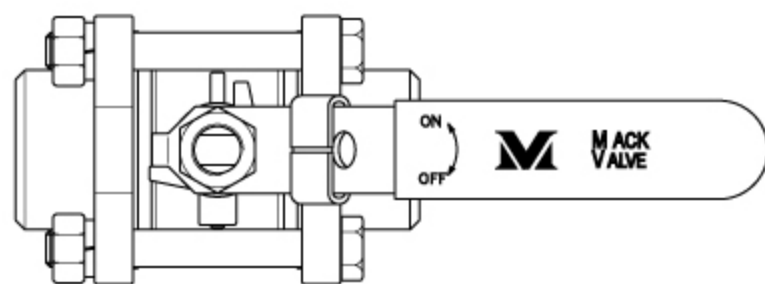


Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Stem Seat	AISI 304	AISI 304
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Spring Washer	AISI 304	AISI 304
10	Gland Nut	AISI 304	AISI 304
11	Bolt	AISI 304	AISI 304
12	Bolt Nut	AISI 304	AISI 304
13	Handle	AISI 304	AISI 304
14	Locking Device	AISI 304	AISI 304
15	Handle Sleeve	VINYL	VINYL

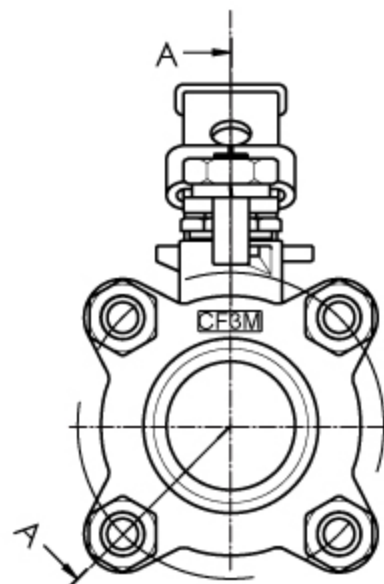
NPS	DN	d	L	H	W	D	B	UNIT
1/4"	8	0.39	2.2	1.73	3.14	0.55	0.37	INCH
		10.0	56.0	44.0	80.0	14.0	9.5	MM
3/8"	10	0.49	2.2	1.73	3.14	0.66	0.37	INCH
		12.5	56.0	44.0	80.0	17.0	9.5	MM
1/2"	15	0.59	2.61	1.94	3.14	0.85	0.43	INCH
		15.0	66.5	49.5	80.0	21.7	11.0	MM
3/4"	20	0.78	2.95	2.28	4.05	1.06	0.51	INCH
		20.0	75.0	58.0	103.0	27.0	13.0	MM
1"	25	0.98	3.38	2.61	4.92	1.33	0.55	INCH
		25.0	86.0	66.5	125.0	33.8	14.0	MM
1-1/4"	32	1.25	3.95	2.83	4.92	1.67	0.62	INCH
		32.0	100.5	72.0	125.0	42.6	16.0	MM
1-1/2"	40	1.49	4.38	3.3	6.41	1.91	0.64	INCH
		38.0	111.5	84.0	163.0	48.7	16.5	MM
2"	50	1.96	5.11	3.66	6.41	2.4	0.721	INCH
		50.0	130	93.0	163.0	61.0	18.5	MM



303
BALL VALVE



Features:
The Butt Weld ends conform to ANSI B16.25 & DIN3239 Part 1
Investment Casting
Blow-out proof Stem
15% Glassfiber fill Reinforce Seat (RTFE)
PTFE Seal & Packing
Latch Lock Handle



NPS	DN	d	D	L	H	W	UNIT
1/2"	15	0.59	0.87	2.76	1.95	3.15	INCH
		15.0	22.0	70.0	49.5	80.0	MM
3/4"	20	0.79	1.1	3.15	2.28	4.06	INCH
		20.0	28.0	80.0	58.0	103.0	MM
1"	25	0.98	1.34	3.54	2.62	4.92	INCH
		25.0	34.0	90.0	66.5	125.0	MM
1-1/4"	32	1.26	1.73	4.33	2.84	4.92	INCH
		32.0	44.0	110.0	72.0	125.0	MM
1-1/2"	40	1.5	1.97	4.72	3.31	6.42	INCH
		38.0	50.0	120.0	84.0	163.0	MM
2"	50	1.97	2.44	5.51	3.66	6.42	INCH
		50.0	62.0	140.0	93.0	163.0	MM

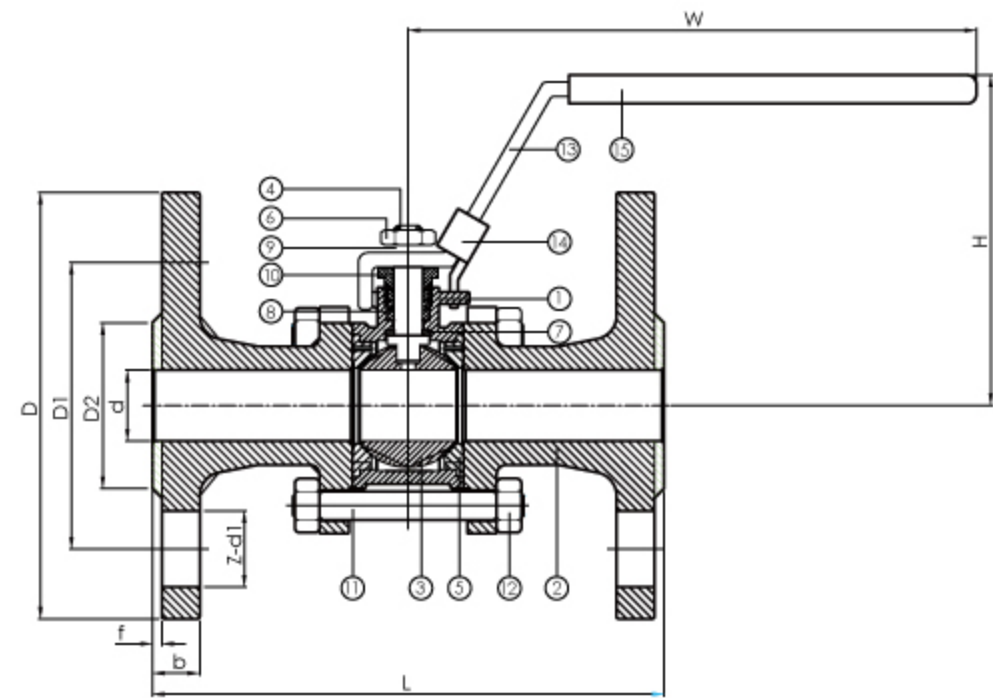
Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF3M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Stem Nut	AISI 304	AISI 304
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Spring Washer	AISI 304	AISI 304
10	Gland Nut	AISI 304	AISI 304
11	Bolt	AISI 304	AISI 304
12	Bolt Nut	AISI 304	AISI 304
13	Handle	AISI 304	AISI 304
14	Locking Device	AISI 304	AISI 304
15	Handle Sleeve	VINYL	VINYL

3PCS FULL BORE ANSI 150 FLANGE RF BALL VALVE



305
BALL VALVE

- Features:
- The RF Flange conform to ANSI B16.5
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill reinforce Seat (RTFE)
 - PTFE seal & Packing
 - Latch Lock Handle(option)



Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Stem Nut	AISI 304	AISI 304
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Spring Washer	AISI 304	AISI 304
10	Gland Nut	AISI 304	AISI 304
11	Bolt	AISI 304	AISI 304
12	Bolt Nut	AISI 304	AISI 304
13	Handle	AISI 304	AISI 304
14	Locking Device	AISI 304	AISI 304
15	Handle Sleeve	VINYL	VINYL

ANSI #150 RF

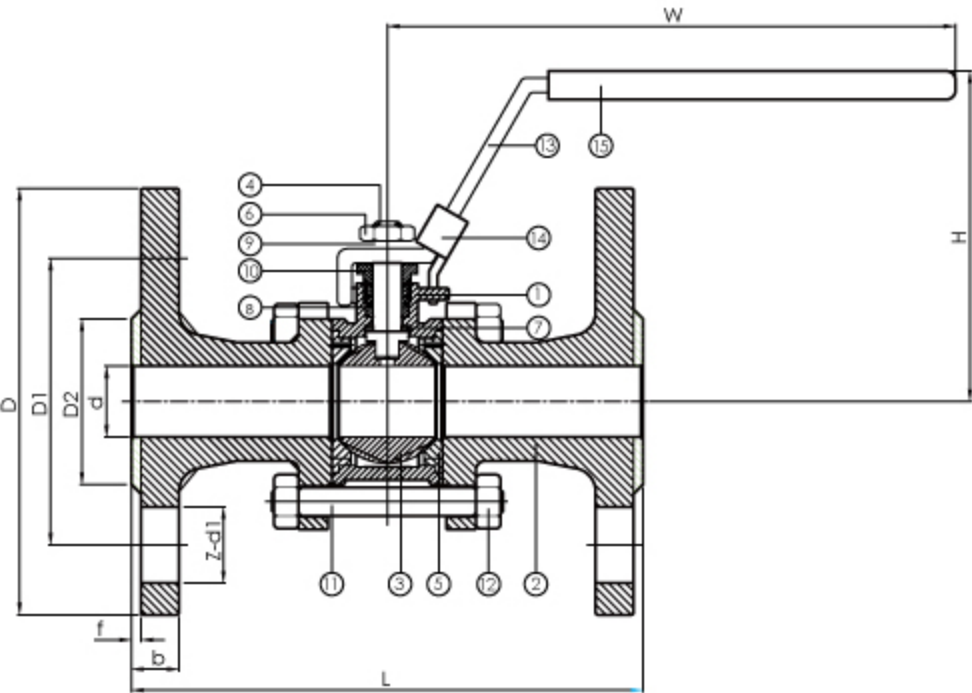
NPS	DN	b	d	D	D1	D2	L	W	H	f	Z-d1	UNIT
1/2"	15	0.39	0.59	3.54	2.38	1.37	4.25	4.72	2.79	0.08	4-Φ5/8	INCH
		9.9	15.0	89.9	60.5	35.0	108.0	119.9	70.9	2.0	4-Φ5/8	MM
3/4"	20	0.43	0.78	3.93	2.75	1.69	4.6	5.31	3.5	0.08	4-Φ5/8	INCH
		10.9	19.8	99.8	69.9	42.9	116.8	134.9	88.9	2.0	4-Φ5/8	MM
1"	25	0.47	0.98	4.33	3.12	2	5	5.7	3.62	0.08	4-Φ5/8	INCH
		11.9	24.9	110.0	79.2	50.8	127.0	144.8	91.9	2.0	4-Φ5/8	MM
1-1/4"	32	0.51	1.25	4.52	3.5	2.5	5.51	6.29	3.7	0.08	4-Φ5/8	INCH
		13.0	31.8	114.8	88.9	63.5	140.0	159.8	94.0	2.0	4-Φ5/8	MM
1-1/2"	40	0.59	1.49	4.92	3.87	2.87	6.49	7.08	4.21	0.08	4-Φ5/8	INCH
		15.0	37.8	125.0	98.3	72.9	164.8	179.8	106.9	2.0	4-Φ5/8	MM
2"	50	0.64	1.96	5.9	4.74	3.62	7	7.87	4.52	0.08	4-Φ3/4	INCH
		16.3	49.8	149.9	120.4	91.9	177.8	199.9	114.8	2.0	4-Φ3/4	MM

3PCS FULL BORE ANSI 300 FLANGE RF BALL VALVE



335
BALL VALVE

- Features:
- The RF Flange conform to ANSI B16.5
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill reinforce Seat (RTFE)
 - PTFE seal & Packing
 - Latch Lock Handle(option)



Item	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Stem Nut	AISI 304	AISI 304
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	Spring Washer	AISI 304	AISI 304
10	Gland Nut	AISI 304	AISI 304
11	Bolt	AISI 304	AISI 304
12	Bolt Nut	AISI 304	AISI 304
13	Handle	AISI 304	AISI 304
14	Locking Device	AISI 304	AISI 304
15	Handle Sleeve	VINYL	VINYL

ANSI #300 RF

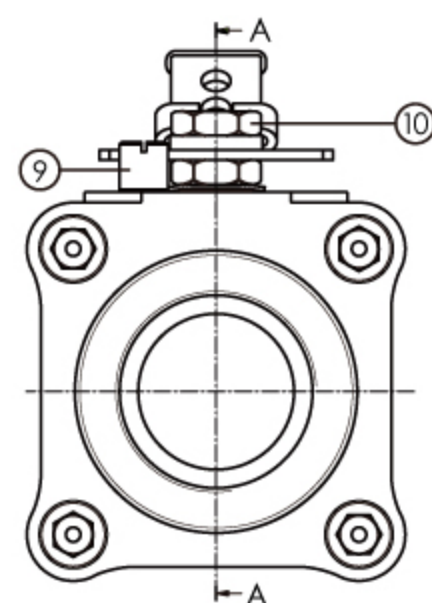
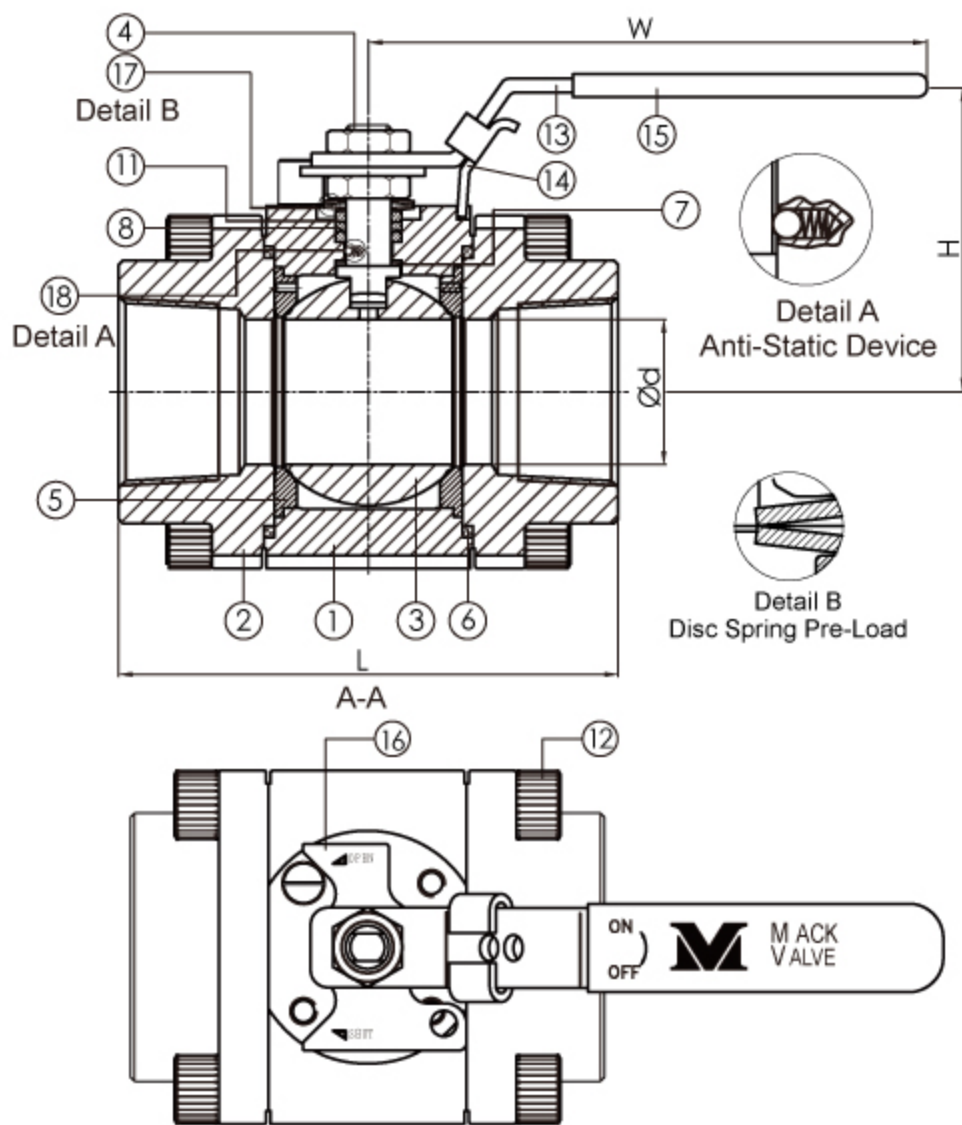
NPS	DN	d	D	D1	D2	L	W	H	f	b	Z-d1	UNIT
1/2"	15	0.59	3.74	2.61	1.37	5.51	4.72	2.79	0.08	0.59	4-Φ5/8	INCH
		15.0	95.0	66.3	34.8	140.0	119.9	70.9	2.0	15.0	4-Φ5/8	MM
3/4"	20	0.78	4.52	3.24	1.69	5.98	5.31	3.50	0.08	0.64	4-Φ3/4	INCH
		19.8	114.8	82.3	42.9	151.9	134.9	88.9	2.0	16.3	4-Φ3/4	MM
1"	25	0.98	4.92	3.50	2.00	6.49	5.70	3.62	0.08	0.78	4-Φ3/4	INCH
		24.9	125.0	88.9	50.8	164.8	144.8	91.9	2.0	19.8	4-Φ3/4	MM
1-1/4"	32	1.25	5.31	3.87	2.50	7.00	6.29	3.70	0.08	0.76	4-Φ3/4	INCH
		31.8	134.9	98.3	63.5	177.8	159.8	94.0	2.0	19.3	4-Φ3/4	MM
1-1/2"	40	1.49	6.10	4.50	2.87	7.48	7.08	4.21	0.08	0.83	4-Φ7/8	INCH
		37.8	154.9	114.3	72.9	190.0	179.8	106.9	2.0	21.1	4-Φ7/8	MM
2"	50	1.96	6.49	5.00	3.62	8.50	7.80	4.52	0.08	0.90	8-Φ3/4	INCH
		49.8	164.8	127.0	91.9	215.9	198.1	114.8	2.0	22.9	8-Φ3/4	MM
2-1/2"	63	2.55	7.48	5.86	4.13	9.48	9.84	5.70	0.08	1.02	8-Φ7/8	NCH
		64.8	190.0	148.8	104.9	240.8	249.9	144.8	2.0	25.9	8-Φ7/8	MM



3PCS FULL BORE ANSI 800 FORGED SCREWED BALL VALVE



M31
BALL VALVE



- Features:
- The Thread ends conform to ANSI B1.20.1(NPT)
 - ISO228/1 & ISO 7/1
 - DIN 2999 & BS 21
 - Forging body
 - Blow-out proof Stem
 - 15% Glassfiber fill
 - Reinforce Seat (RTFE)
 - Graphite Seal & Packing
 - Fire safe Design
 - Latch Lock Handle
 - Anti-State Device

Item	Parts Name	S.S. Material	C.S. Material
1	Body	F316	A105N
2	Cap	F316	A105N
3	Ball	SS316	SS316
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	Graphite	Graphite
7	Thrust Washer	PTFE	PTFE
8	Packing	Graphite	Graphite
9	Stop Pin	AISI 304	AISI 304
10	Stem Nut	AISI 304	AISI 304
11	Gland RING	AISI 304	AISI 304
12	Bolt	B8	B7
13	Handle	304SS	304SS
14	Locking device	304SS	304SS
15	hanadle Sleeve	VINYL	VINYL
16	Stopper	AISI 304	AISI 304
17	Disc Spring	301	65Mn
18	ANTI-Static Devic	AISI316	AISI316

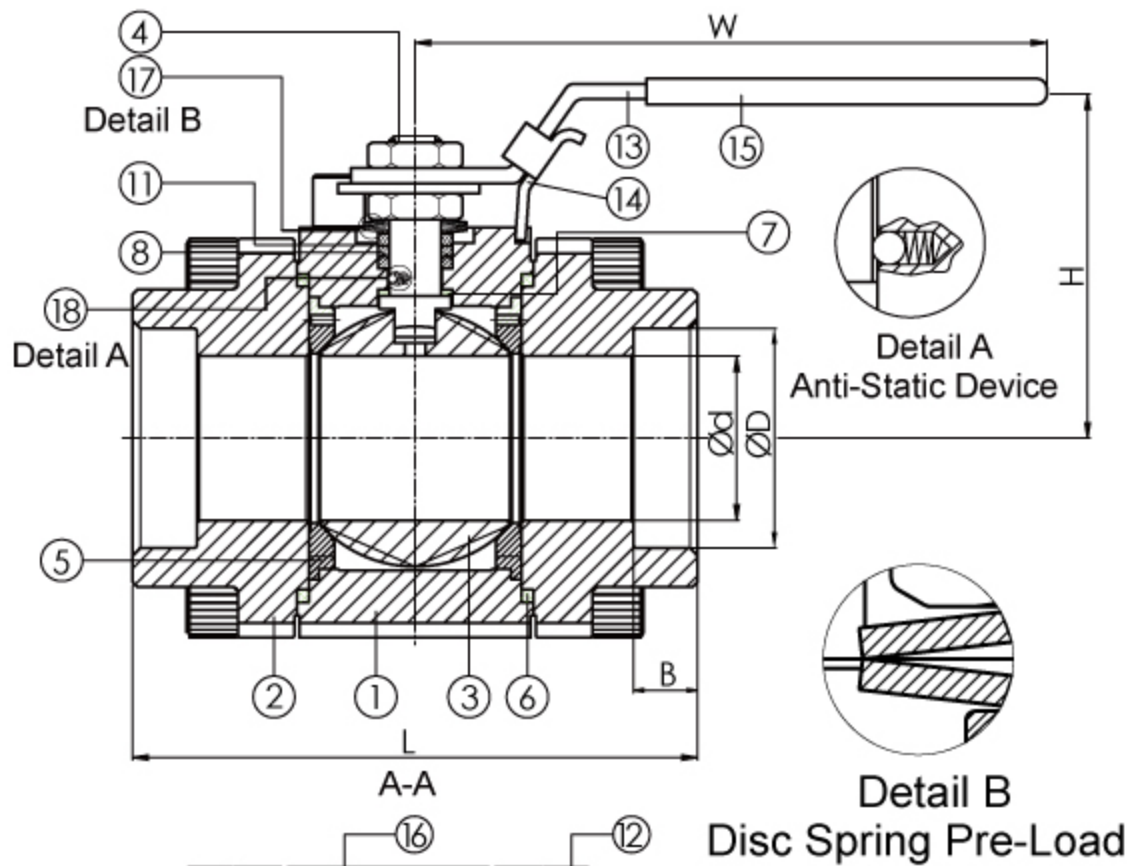
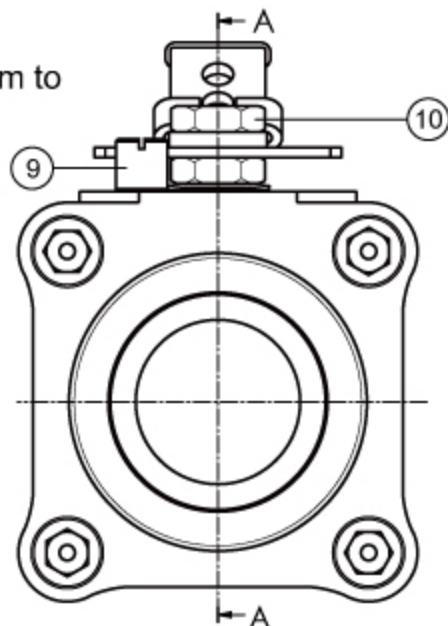
NPS	DN	d	L	H	W	UNIT
1/2"	15	0.59	2.95	2.16	4.01	INCH
		15.0	75.0	55.0	102.0	MM
3/4"	20	0.78	3.14	2.28	4.01	INCH
		20.0	80.0	56.0	102.0	MM
1"	25	0.98	3.54	2.55	4.84	INCH
		25.0	90.0	65.0	123.0	MM
1-1/4"	32	1.25	4.33	2.75	4.84	INCH
		32.0	110.0	70.0	123.0	MM
1-1/2"	40	1.49	4.72	3.3	6.29	INCH
		38.0	120.0	84.0	160.0	MM
2"	50	1.96	5.51	3.7	6.29	INCH
		50.0	140.0	94.0	160.0	MM

3PCS FULL BORE ANSI 800 FORGED SOCKET WELD BALL VALVE



M32
BALL VALVE

- Features:
- The socket weld ends conform to ANSI B16.11 & DIN 3239 Part 2
 - Forgeing body
 - Blow-out proof Stem
 - 15% Glassfiber fill
 - Reinforce Seat (RTFE)
 - Graphite Seal & Packing
 - Fire safe Design
 - Latch Lock Handle
 - Anti-State Device



Item	Parts Name	S.S. Material	C.S. Material
1	Body	F316	A105N
2	Cap	F316	A105N
3	Ball	SS316	SS316
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	Graphite	Graphite
7	Thrust Washer	PTFE	PTFE
8	Packing	Graphite	Graphite
9	Stop Pin	AISI304	AISI304
10	Stem Nut	AISI304	AISI304
11	Gland RING	304SS	304SS
12	Bolt	B8	B7
13	Handle	304SS	304SS
14	Locking device	304SS	304SS
15	hanadle Sleeve	VINYL	VINYL
16	Stopper	AISI 304	AISI 304
17	Disc Spring	301	65Mn
18	ANTI-Static Devic	AISI316	AISI316

NPS	DN	d	L	H	W	D	B	UNIT
1/2"	15	0.59	2.95	2.16	4.01	0.85	0.37	INCH
		15.0	75.0	55.0	102	21.8	9.5	MM
3/4"	20	0.78	3.14	2.28	4.01	1.07	0.49	INCH
		20.0	80.0	56.0	102	27.2	12.5	MM
1"	25	0.98	3.54	2.55	4.84	1.33	0.49	INCH
		25.0	90.0	65.0	123	33.9	12.5	MM
1-1/4"	32	1.25	4.33	2.75	4.84	1.68	0.49	INCH
		32.0	110.0	70.0	123	42.7	12.5	MM
1-1/2"	40	1.49	4.72	3.3	6.29	1.92	0.49	INCH
		38.0	120.0	84.0	160	48.8	12.5	MM
2"	50	1.96	5.51	3.7	6.29	2.4	0.62	INCH
		50.0	140.0	94.0	160	61.2	16.0	MM

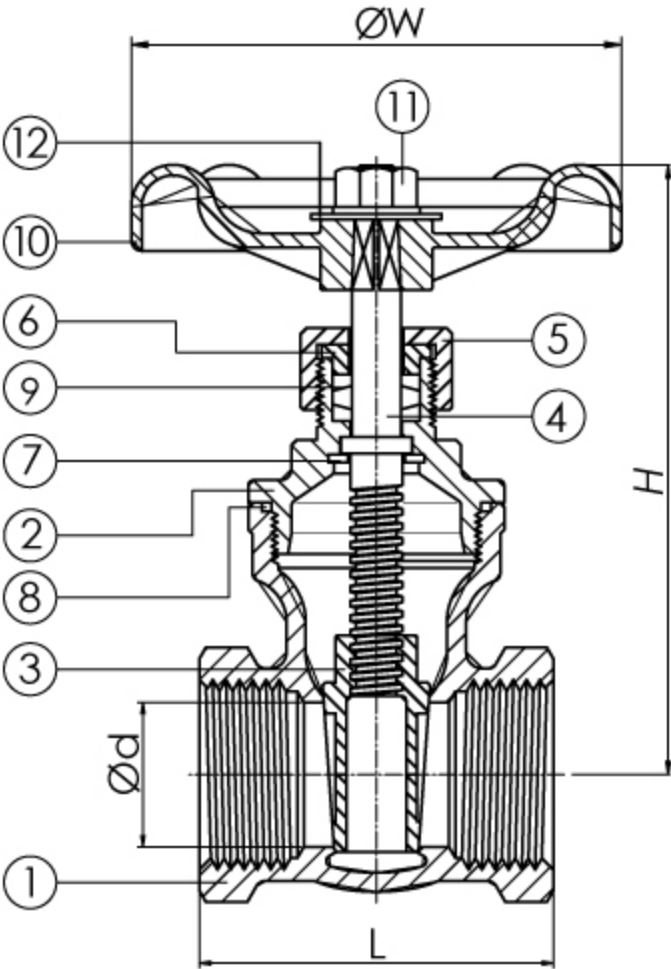




270
GATE VALVE

ITEN	Parts Name	MATERIAL
1	Body	ASTM A351-CF8M
2	Bonnet	ASTM A351-CF8M
3	Disc	ASTM A351-CF8M
4	Stem	AISI 316
5	Packing Nut	A351 CF8M
6	Gland	AISI 304
7	Snap Ring	AISI 316
8	Gasket	PTFE
9	Packing	PTFE
10	Handle Wheel	Aluminum Alloy
11	Nut	AISI 304
12	Name Plate	Aluminum

NPS	DN	d	L	W	H(open)	UNIT
1/2"	15	0.59	2.17	2.76	3.66	INCH
		15.0	55.1	70.1	93.0	MM
3/4"	20	0.79	2.36	2.76	3.94	INCH
		20.0	59.9	70.1	100.1	MM
1"	25	0.98	2.68	3.15	4.39	INCH
		25.0	68.1	80	111.5	MM
1-1/4"	32	1.26	2.99	3.15	5.12	INCH
		32.0	75.9	80	130	MM
1-1/2"	40	1.57	3.15	3.94	6.22	INCH
		40.0	80.0	100.1	158	MM
2"	50	1.97	3.66	3.94	6.85	INCH
		50.0	93.0	100.1	174	MM
2-1/2"	65	2.44	4.57	4.76	10.24	INCH
		65.0	116.1	120.9	260.1	MM
3"	80	2.99	5.16	4.76	11.61	INCH
		80.0	131.1	120.9	294.9	MM



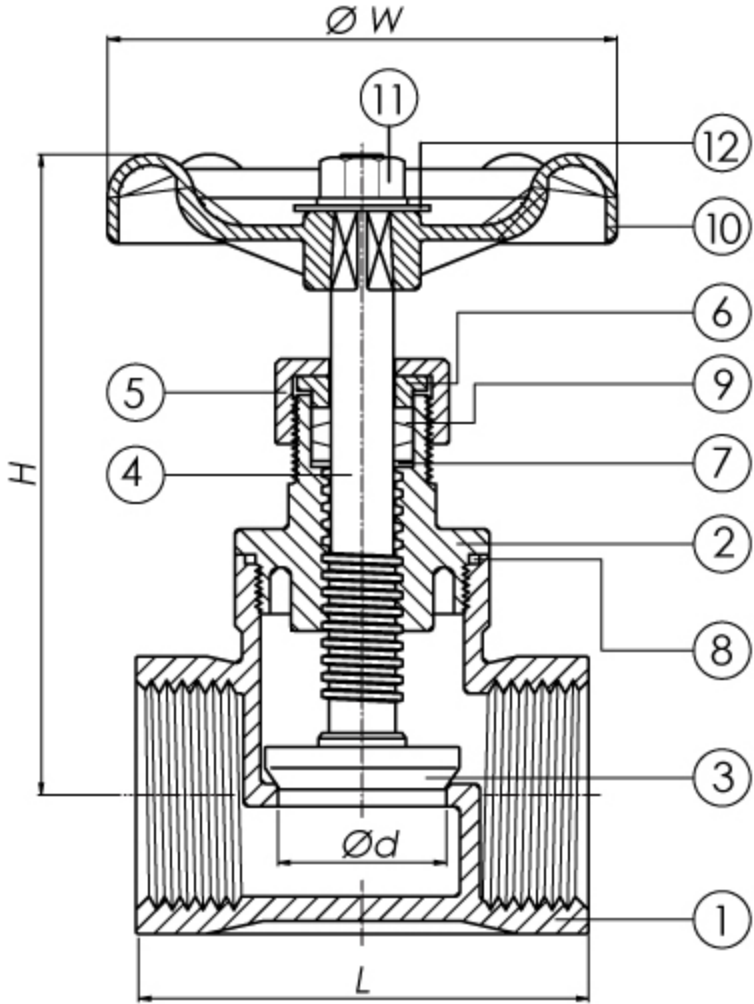
Features:
The thread ends conform to ANSI
B1.20.1(NPT)
DIN 2999 & BS 21
ISO228/1 & ISO 7/1
Investment Casting
Non-Raising Stem
Max.working temperature 445° F



260
GLOBE VALVE

ITEN	Parts Name	MATERIAL
1	Body	ASTM A351-CF8M
2	Bonnet	ASTM A351-CF8M
3	Disc	ASTM A351-CF8M
4	Stem	AISI 316
5	Packing Nut	AISI 316
6	Gland	AISI 304
7	Snap Ring	AISI 316
8	Gasket	PTFE
9	Packing	PTFE
10	Handle Wheel	Aluminum Alloy
11	Nut	AISI 304
12	Name Plate	Aluminum

NPS	DN	W	d	L	H(open)	UNIT
1/2"	15	2.76	0.59	2.56	3.43	INCH
		70.1	15.0	65.0	87.1	MM
3/4"	20	2.76	0.79	2.95	3.62	INCH
		70.1	20.0	74.9	91.9	MM
1"	25	3.15	0.98	3.54	4.21	INCH
		80.0	25.0	89.9	106.9	MM
1-1/4"	32	3.15	1.26	4.13	4.41	INCH
		80.0	32.0	104.9	112.0	MM
1-1/2"	40	3.94	1.57	4.72	5.39	INCH
		100.1	40.0	119.9	136.9	MM
2"	50	3.94	1.97	5.51	5.75	INCH
		100.1	50.0	140.0	146.1	MM



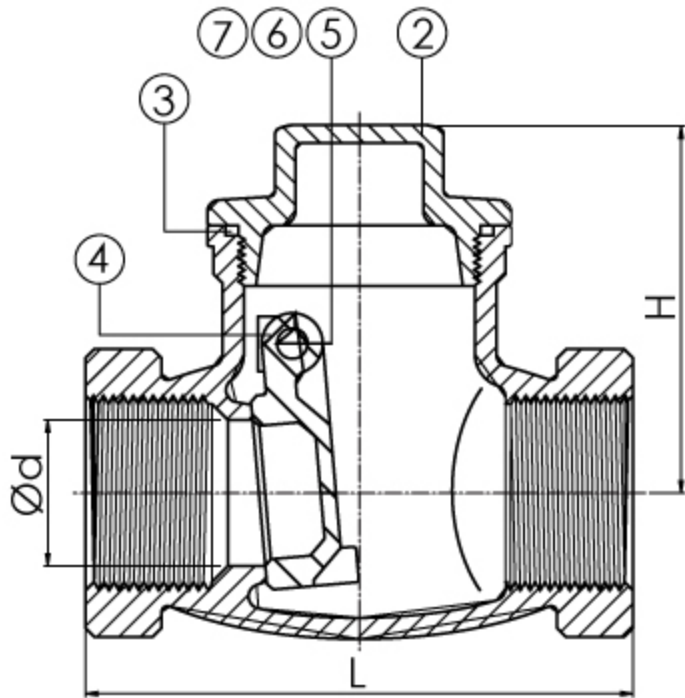
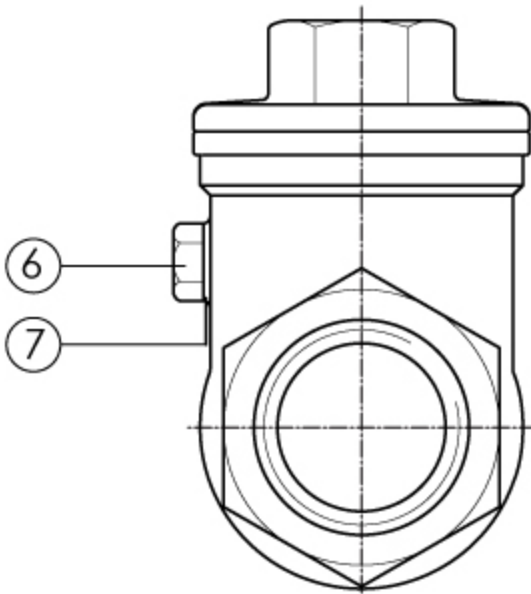
Features:
The thread ends conform to ANSI
B1.20.1(NP (RTFE)(RTFE)T)
DIN 2999 & BS 21
ISO228/1 & ISO 7/1
Investment Casting
Raising Stem
Max.working temperature 445° F

200 WOG SCREWED SWING CHECK VALVE



Features:

The thread ends conform to ANSI B1.20.1(NPT)
DIN 2999 & BS 21
ISO228/1 & ISO 7/1
investment Casting
Max.working temperature 445° F



250
CHECK VALVE

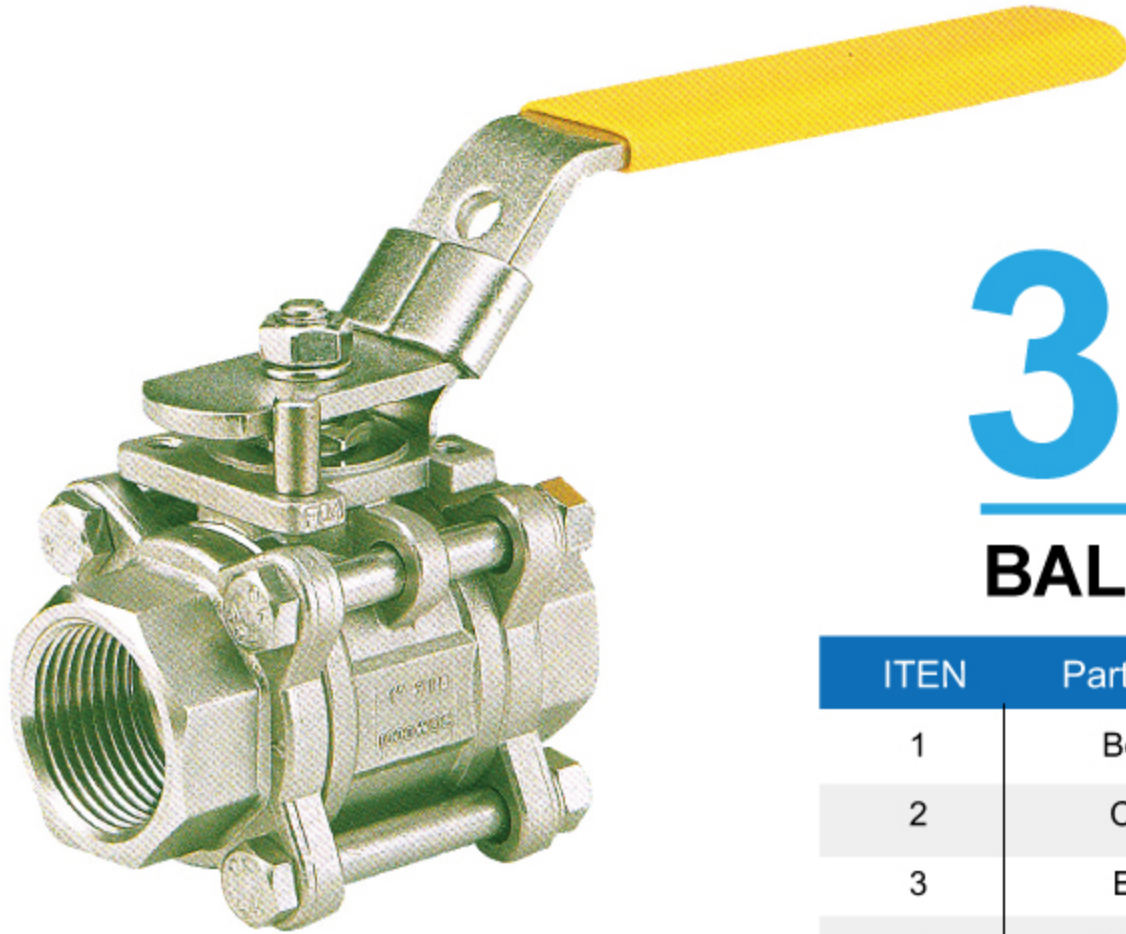
NPS	DN	d	L	H	UNIT
1/4"	8	0.39	2.55	1.88	INCH
		10.0	65.0	48.0	MM
3/8"	10	0.49	2.55	1.88	INCH
		12.5	65.0	48.0	MM
1/2"	15	0.59	2.55	1.88	INCH
		15.0	65.0	48.0	MM
3/4"	20	0.78	2.95	2.1	INCH
		20.0	75.0	53.5	MM
1"	25	0.98	3.54	2.22	INCH
		25.0	90.0	56.5	MM
1-1/4"	32	1.25	4.13	2.81	INCH
		32.0	105.0	71.5	MM
1-1/2"	40	1.57	4.72	2.91	INCH
		40.0	120.0	74.0	MM
2"	50	1.96	5.51	3.56	INCH
		50.0	140.0	90.5	MM
2-1/2"	65	2.55	6.14	3.56	INCH
		65.0	156.0	90.5	MM
3"	80	3.14	7.48	4.03	INCH
		80.0	188.0	102.5	MM

ITEN	Parts Name	MATERIAL
1	Body	ASTM A351-CF8M
2	Cover	ASTM A351-CF8M
3	Gasket	PTFE
4	Disc	ASTM A351-CF8M
5	Pin	AISI 316
6	Plug	AISI 316
7	Washer	PTFE

3PCS FULL BORE 1000 WOG SCREWED BALL VALVE WITH MOUNTING PAD

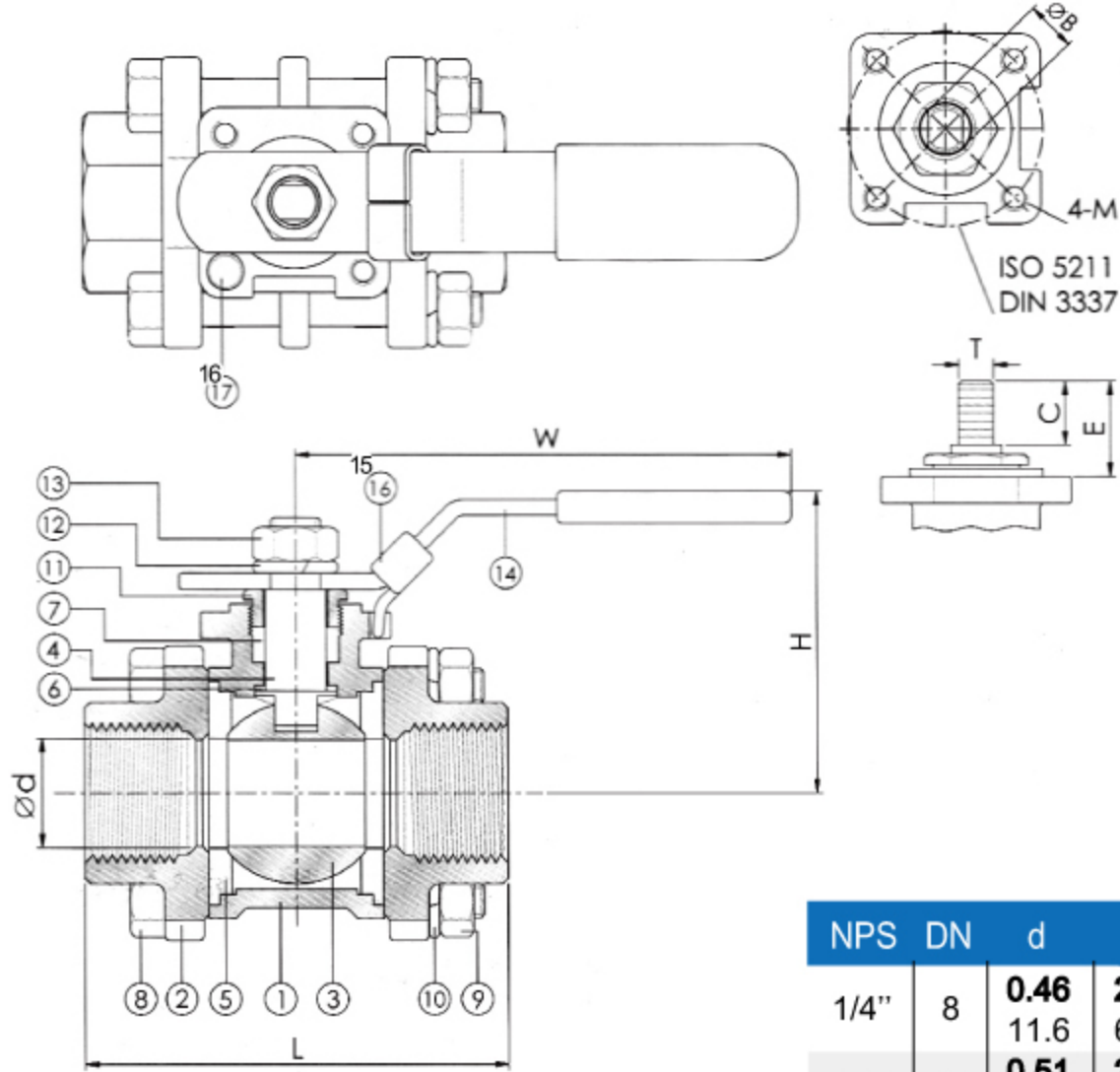
Features:

The thread ends conform to
ASME B1.20.1(NPT)
DIN 2999 & BS 21
ISO 228/1 & ISO 7/1
Investment casting
Blow-out proof Stem
Full bore
1000 W.O.G
15% glassfiber fill PTFE
reinforce seat (RTFE)
Latch Lock handle
ISO Mounting pad

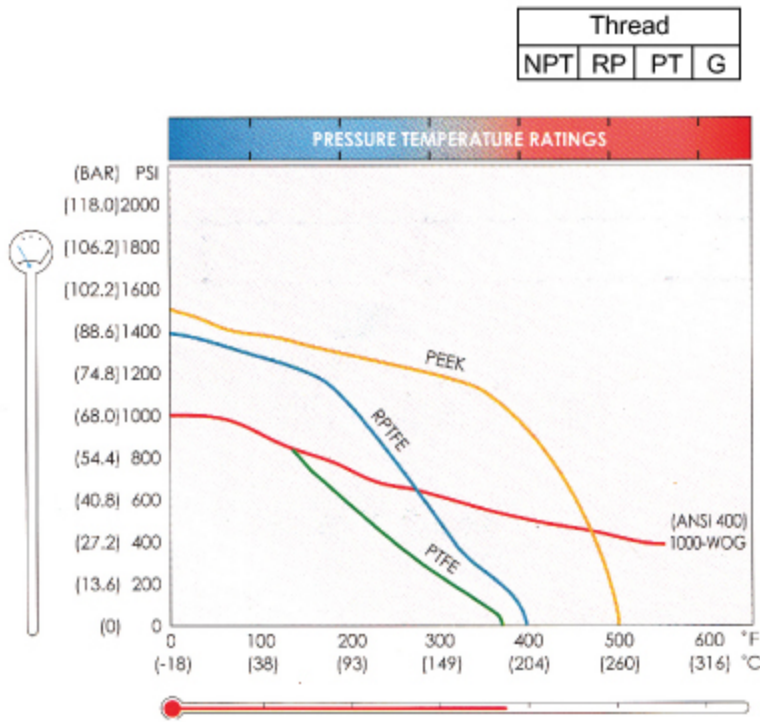


311
BALL VALVE

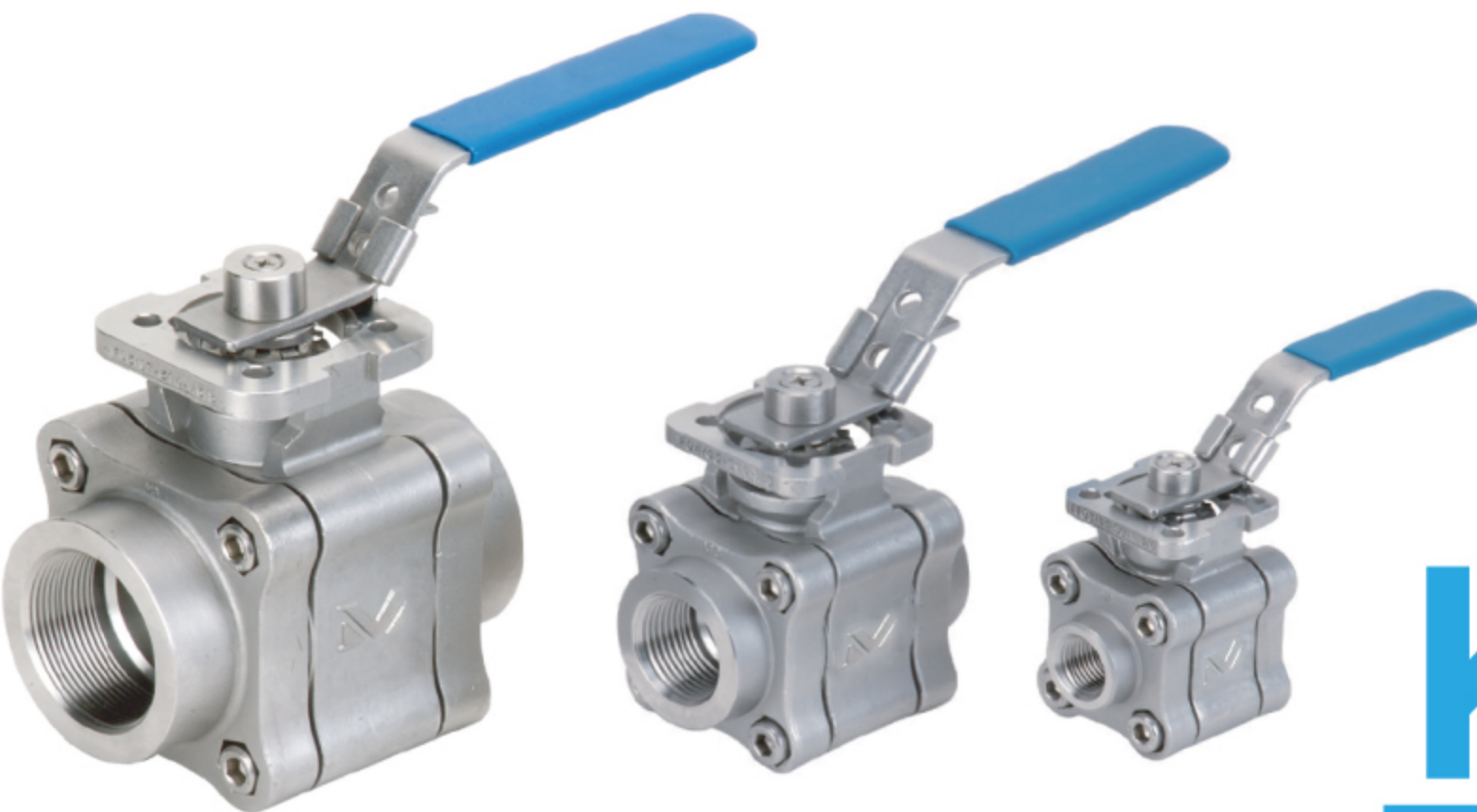
ITEN	Parts Name	MATERIAL
1	Body	CF8M
2	Cap	CF8M
3	Ball	CF8M
4	Stem	316
5	Seat	RTFE
6	Thrust Washer	PTFE
7	Packing	PTFE
8	Bolt	AISI 304
9	Hex Nut	AISI 304
10	Bolt Washer	AISI 304
11	Gland Nut	AISI 304
12	Washer	AISI 304
13	Nut	AISI 304
14	Handle	AISI 304
15	Lock Device	AISI 304
16	Stop Pin	AISI 304



NPS	DN	d	L	H	W	T	C	E	ISO 5211 DIN 3337	M	UNIT
1/4"	8	0.46	2.60	1.89	5.12	0.26	0.49	0.26	F03	M5	INCH
		11.6	66.0	48.0	130.0	6.5	12.5	6.5			MM
3/8"	10	0.51	2.60	1.89	5.12	0.26	0.49	0.26	F03	M5	INCH
		13.0	66.0	48.0	130.0	6.5	12.5	6.5			MM
1/2"	15	0.59	2.60	1.89	5.12	0.26	0.49	0.26	F03	M5	INCH
		15.0	66.0	48.0	130.0	6.5	12.5	6.5			MM
3/4"	20	0.79	2.99	2.13	5.12	0.26	0.49	0.26	F03	M5	INCH
		20.0	76.0	54.0	130.0	6.5	12.5	6.5			MM
1"	25	0.98	3.39	2.24	6.50	0.31	0.67	0.31	F04	M5	INCH
		25.0	86.0	57.0	165.0	8.0	17.0	8.0			MM
1-1/4"	32	1.26	4.06	2.68	6.50	0.31	0.67	0.31	F04	M5	INCH
		32.0	103.0	68.0	165.0	8.0	17.0	8.0			MM
1-1/2"	40	1.50	4.69	2.91	7.68	0.37	0.71	0.37	F05	M6	INCH
		38.0	119.0	74.0	195.0	9.5	18.0	9.5			MM
2"	50	1.97	5.20	3.23	7.68	0.37	0.71	0.37	F05	M6	INCH
		50.0	132.0	82.0	195.0	9.5	18.0	9.5			MM
2-1/2"	65	2.56	6.50	5.28	9.92	0.47	1.18	0.47	F07	M8	INCH
		65.0	165.0	134.0	252.0	12.0	30.0	12.0			MM
3"	80	3.15	7.17	5.55	9.92	0.47	1.18	0.47	F07	M8	INCH
		80.0	182.0	141.0	252.0	12.0	30.0	12.0			MM
4"	100	3.94	9.02	6.93	13.07	0.63	1.38	0.63	F10	M10	INCH
		100.0	229.0	176.0	332.0	16.0	35.0	16.0			MM

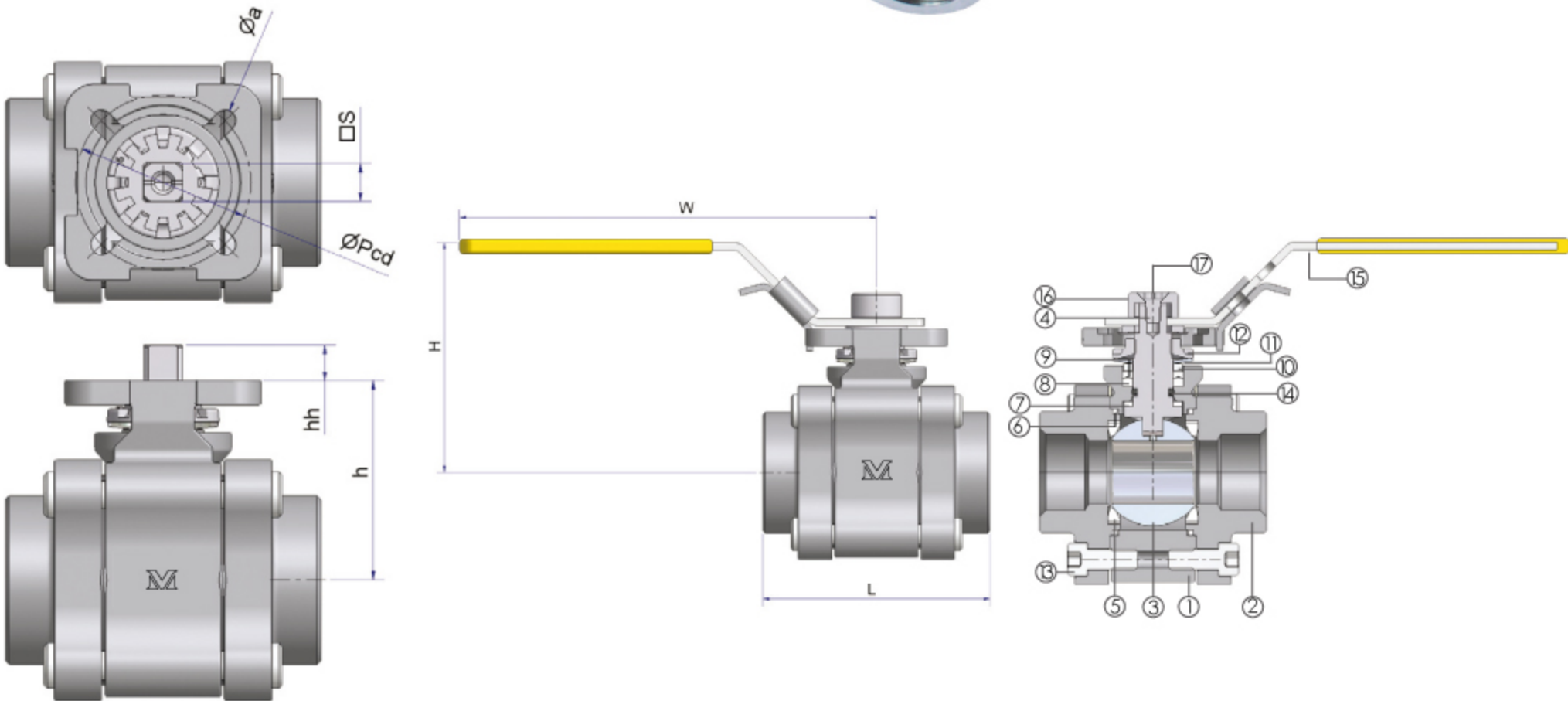
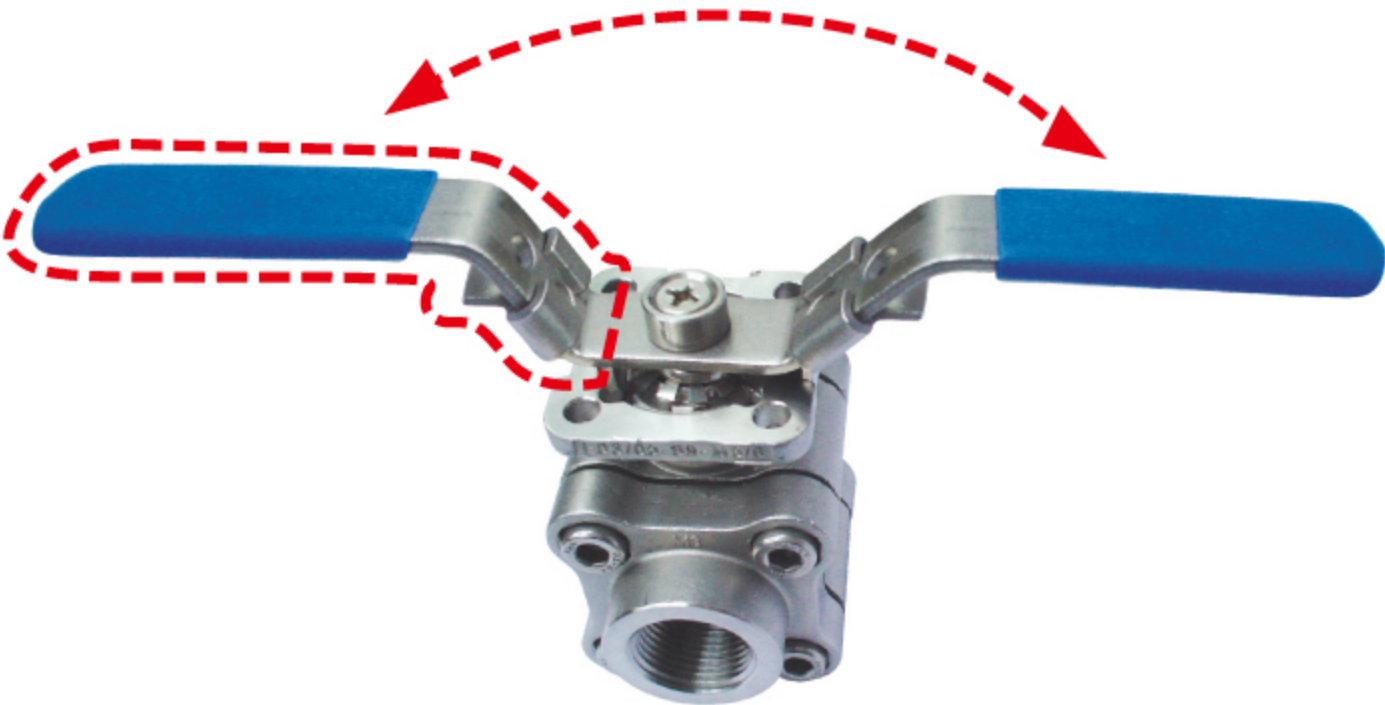


3PCS FULL BORE 2000 WOG SCREWED BALL VALVE

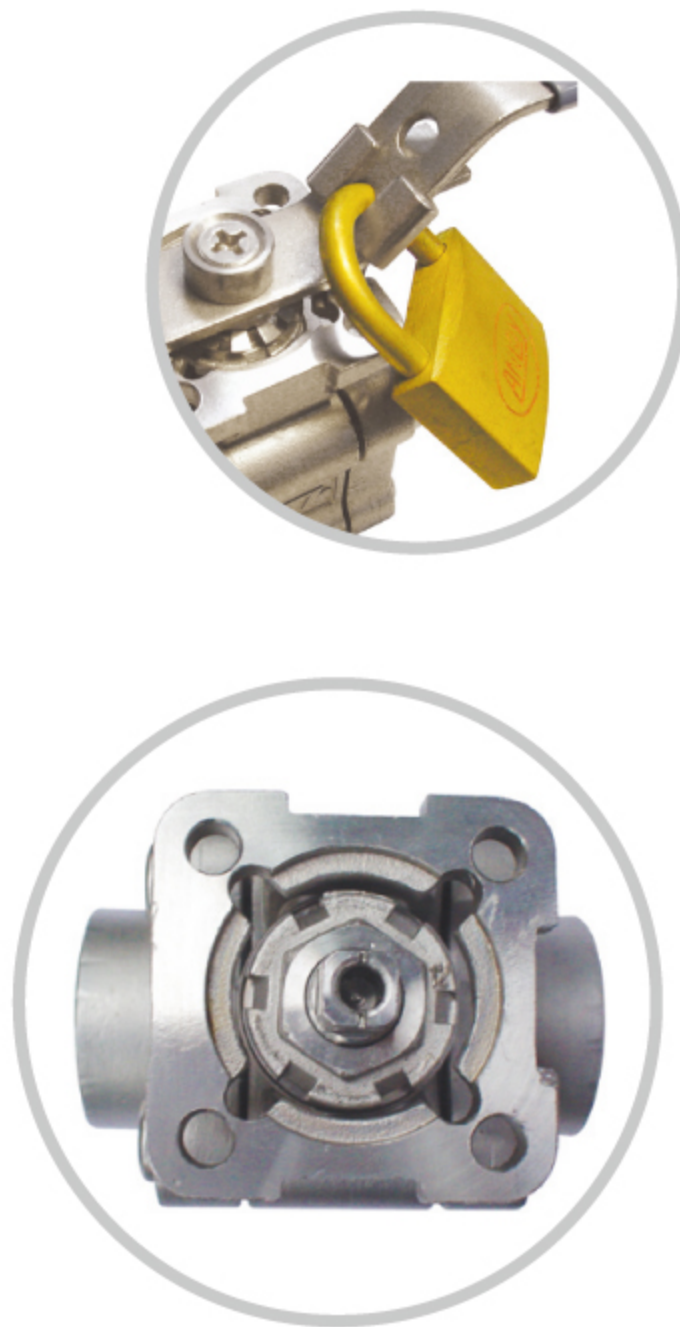


K20
BALL VALVE

- Features:
- The Thread ends conform to ANSI 1.20.1(NPT)
 - ISO228/1 & ISO 7/1
 - DIN 2999 & BS 21
 - Investment Casting
 - Blow-out proof Stem
 - 15% Glassfiber fill
 - Reinforce Seat (RTFE)
 - PTFE Seal & Packing
 - Latch Lock Handle
 - Anti Static Device
 - Fire safe Design Available
 - ISO Direct mounting Pad



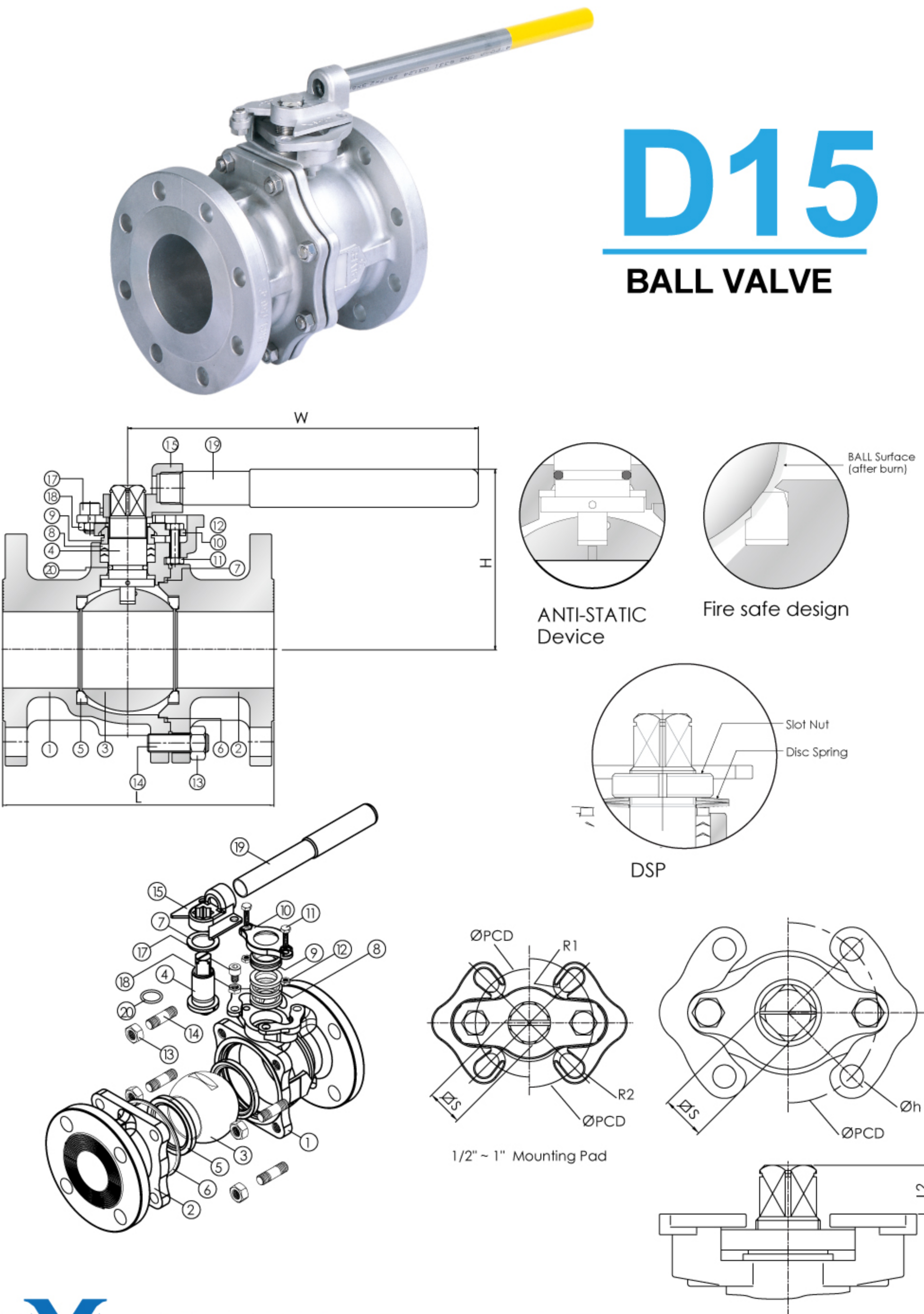
3PCS FULL BORE 2000 WOG SCREWED BALL VALVE



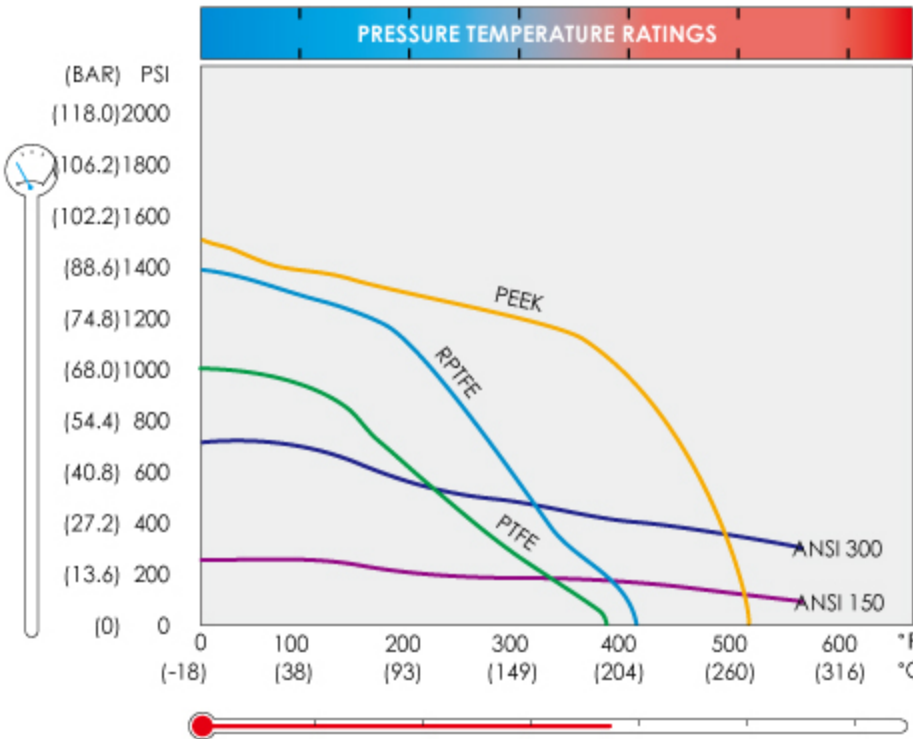
ITEM	Parts Name	S.S. Material	C.S. Material
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	WCB
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	PTFE	PTFE
7	Thrust Washer	PTFE	PTFE
8	Packing-D	PTFE	PTFE
9	Packing-U	PTFE	PTFE
10	GLAND RING	AISI 304	AISI 304
11	Disc Spring	SUS 301	SUS 301
12	Stem Nut	AISI 304	AISI 304
13	Bolt	AISI 304	AISI 304
14	O Ring	Viton	Viton
15	Handle	AISI 304	AISI 304
16	Stem Cap	AISI 304	AISI 304
17	Screw	AISI 304	AISI 304

DPS	DN	L	W	H	h	hh	s	Pcd	a	ISO	UNIT
1/2"	15	2.95	5.04	3.15	1.89	0.28	0.35	1.97	0.26	F03/05	INCH
		75.0	126.0	80.0	46.0	7.0	9.0	50.0	6.5	F03/05	MM
3/4"	20	3.15	5.04	3.15	1.89	0.31	0.35	1.97	0.26	F03/05	INCH
		80.0	126.0	80.0	46.0	8.0	9.0	50.0	6.5	F03/05	MM
1"	25	3.54	6.50	3.62	2.24	0.39	0.43	1.97	0.26	F04/05	INCH
		90.0	165.0	92.0	57.0	10.0	11.0	50.0	6.5	F04/05	MM
1-1/4"	32	4.33	6.50	3.78	2.36	0.39	0.43	0.43	0.26	F04/05	INCH
		110.0	165.0	196.0	60.0	10.0	11.0	50.0	6.5	F04/05	MM
1-1/2"	40	4.72	7.68	3.65	3.11	0.59	0.55	2.76	0.33	F05/07	INCH
		120.0	195.0	118.0	79.0	15.0	14.0	70.0	8.5	F05/07	MM
2"	50	5.51	7.68	4.96	3.43	0.59	0.55	2.76	0.33	F05/07	INCH
		140.0	195.0	126.0	87.0	15.0	14.0	70.0	8.5	F05/07	MM





- FEATURES**
- The flange ends refers to B16.5
 - Face to Face: ANSI B16.10
 - ANSI B1634 Class 150
 - Anti-Static Device
 - Investment casting up to 6"
 - Blow-out proof stem
 - Full bore
 - 15% glassfiber fill PTFE reinforce seat (RTFE)
 - PTFE seal & packing
 - ISO 5211 & DIN 3337
 - Direct mounting pad
 - Fire safe design(API 607 4th)(optional)
 - D.S.P-Disc Spring Pre-Load System(optional)



DPS	DN	L		H		W	
1/2"	15	108	4.25	75	2.95	130	5.12
3/4"	20	117	4.60	75	2.95	130	5.12
1"	25	127	5.00	94	3.70	160	6.3
1-1/4"	32	140	5.51	106	4.17	160	6.3
1-1/2"	40	165	6.49	110	4.33	230	9.06
2"	50	178	7.08	122	4.80	230	9.06
2-1/2"	65	191	7.51	134	5.27	400	15.75
3"	80	203	7.99	167	6.45	400	15.75
4"	100	229	9.01	181	7.12	460	18.11

mm/inch

ITEN	Parts Name	MATERIAL	
1	Body	CF8M	WCB
2	Cap	CF8M	WCB
3	Ball	CF8M	CF8M
4	Stem	316	316
5	Ball Seat	RTFE	RTFE
6	Gasket	PTFE	PTFE
7	Thrust Washer	PTFE	PTFE
8	Packing	PTFE	PTFE
9	GLAND RING	304	304
10	GLAND	CF8	CF8
11	NUT	AISI 304	AISI 304
12	Bolt	AISI 304	AISI 304
13	NUT	8	8
14	STUD	B8	B8
15	HANDLE HEAD	CF8	CF8
16	STOP PIN	AISI 304	AISI 304
17	NUT	AISI 304	AISI 304
18	HANDLE	AISI 304	plating steel
19	O-RING	VITON/NBR	VITON/NBR

MACK VALVE FIGURE NUMBER CHART

Sample: 3" 1 GF WCB 8 RF G NC X
1 2 3 4 5 6 7 8 9

1)SIZE

2)PRESSURE CLASS

ASME B16.34	WOG
CODE 1 = 150	800WOG
3 = 300	1000WOG
6 = 600	2000WOG
8 = 800	
9 = 900	
15 = 1500	
25 = 2500	

3)VALVE TYPE

code	
GF = Gate flex wedge	B = 1 PC FLOATING BV
GS = Gate solid wedge	BA= 2 PC FLOATING BV
G2 = Gate 2 pc wedge/disc	BB= 3 PC FLOATING BV
GL = GLOBE – PLUG TYPE DISC	BT= 2 PC TRUNNION BV
GB = GLOBE- BALL TYPE DISC	BT3= 3 PC TRUNNION BV
GLS = Globe stop check	BTT= TOP ENTRY TRUNNION
SC= SWING CHECK	(SUFFIX W = WELDED BODY)
TC= tilting disc check	State bore dim. -Full port
	-Standard = single reduction
	- Reduced = double reduction

4)SHELL MATERIAL (ASTM)

Cast	Forged					
WCB	A105	WC6	F11	316	F316	A-20
WCC		WC9	F22	316L	F316L	
LCB		C5	F5a	304	F304	
LCC		C12	F9	304L	F304L	
LC3	LF3	C12A		317		
WC6		CA-15		347	F347	

5)TRIM – API 600 TABLE 8

API TRIM #	SOFT SEAT MATERIAL
1 – F6	T = TEFLON TFE
2 – 304	G = GLASS-REINFORCED, TFE
3 – F310	N = REINFORCED NYLON
4 – HARD F6	P = PEEK
5 – HARDFACED	U = UHMWPE
5A – HARDFACED	X = SPECIAL)SPECIFY)
6 – F6 AND CU-NI	
7 – F6 AND HARD F6	
8 – F6 AND HARDFACED	
8A – F6 AND HARDFACED	
9 – MONEL	
10 – 316	
11 – MONEL HARDFACED	
12 – 316 AND HARDFACED	
13 – ALLOY 20	
14 – ALLOY 20 HARDFACED	
15 – HARDFACED	
16 – HARDFACED	
17 – HARDFACED	
18 - HARDFACED	

API 600 SPECIFIES THE FOLLOWING VALVE COMPONENT PARTS AS VALVE TRIM:

- * DISC/WEDGE SEATING SURFACE
- * BODY SEAT SURFACE
- * BONNET BUSHING (BACKSEAT)
- * STEM
- * INTERNAL SMALL PARTS OF GATE VALVES, DISC NUT ON GLOBE VALVES AND HINGE PIN ON CHECK VALVES.

6)END CONNECTION

RF = RAISED FACE FLANGE
RTJ = RING JOINT FLANGE
FF = FLAT FACE
BW () = BUTT WELD (SCHEDULE)
Thd = threaded
SW = socket weld

7)OPERATOR

BLANK = HANDWHEEL OR LEVER
G = GEAR
S = SPUR GEAR
M = ELECTRIC MOTOR ACTUATOR
P = PNEUMATIC ACTUATOR
H = HYDRAULIC ACTUATOR
HB = HAMMER BLOW HANDWHEEL
C = CHAINWHEEL (SPECIFY LENGTH OF CHAIN FROM ENTER LINE OF STEM)

8)OTHER

EB = EXTENDED BONNET
ES = STEM EXTENSION
I = POSITION INDICATOR
NC = NACE (SPECIFY MRO 103 OR MRO 175)
PS = PRESSURE SEAL BONNET
F = FIRE SAFE

9) X = SPECIAL FEATURES OR REQUIREMENTS (SPECIFY)

