



TESTED AND CERTIFIED FIRE SAFE TO API 607 API 608 DESIGN

Size range :

1/4"~1" : 2000 WOG
1-1/4"~2" : 1500 WOG
2-1/2"~4" : 1000 WOG

End Connection :

2011KM - Socket Weld End
2012KM - Butt Weld End
2013KM - Screwed End

Valve Materials :

316 Stainless Steel
Carbon Steel

Ball & Stem Material :

316 Stainless Steel

Service Applications :

Hydraulic	Chemical
Steam	Oil / Gas
Oxygen	Food Processing
Vacuum	Dry / Liquid Chlorine
Thermal Fluids	

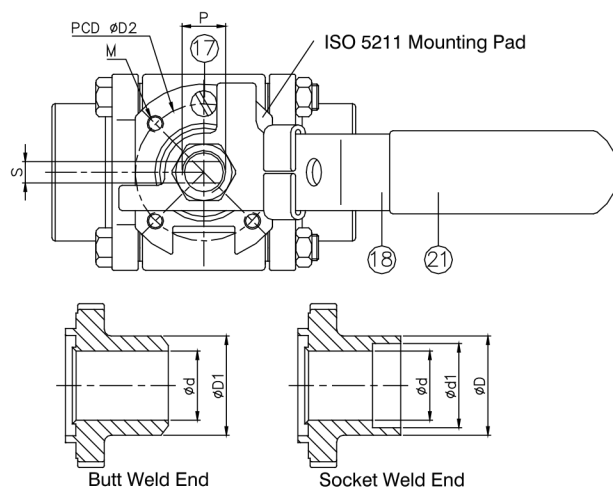
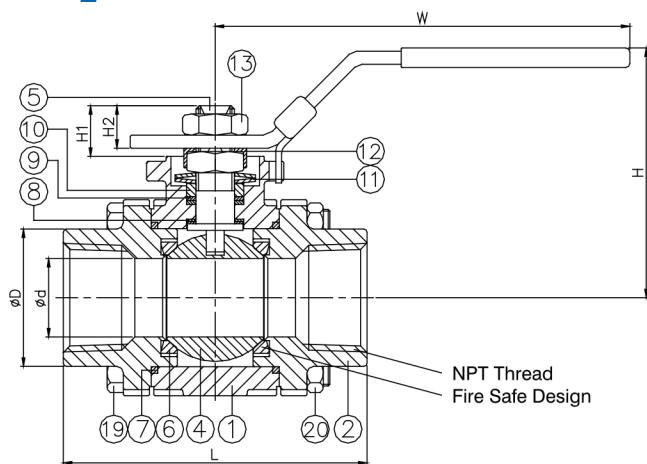
Seat Materials :

Teflon (PTFE)
Reinforced Teflon (RTFE)
TFE+25% Carbon
DELTRIN
PEEK
TFM1600

NACE MR0175

- Spring return handle (option)

M 3-PC. BALL VALVE 201 1KM 2013KM

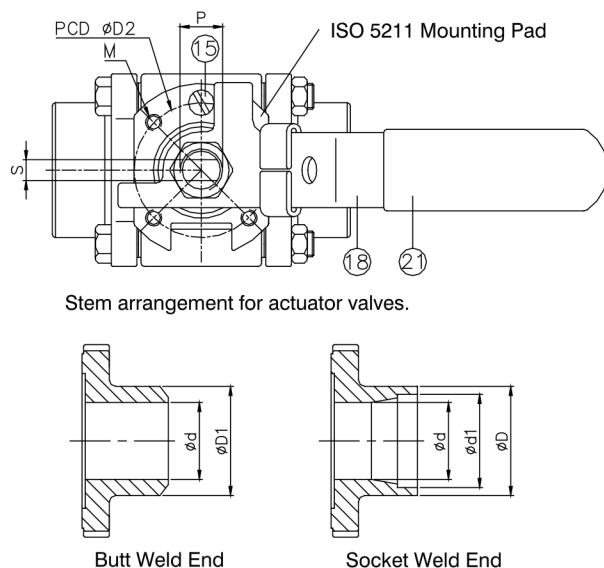
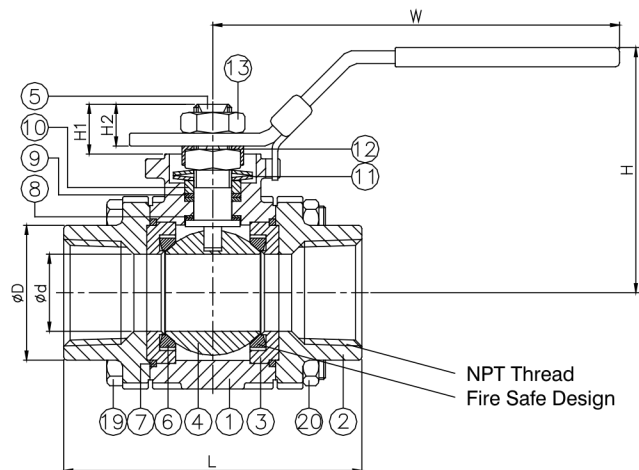


DN	d	d1	D	D1	L	H	H1	H2	W	S	D2	M	P	ISO 5211	Torque (N-M)
8	8	14	25	13.5	65.7	57	12.1	9.8	113.5	5.7	36	M5*0.8	3/8"-24UNF	F03	3.8
10	10	18	25	17.5	65.7	57	12.1	9.8	113.5	5.7	36	M5*0.8	3/8"-24UNF	F03	3.8
15	15	22	30.3	23.3	74.8	57	12.1	9.8	113.5	5.7	36	M5*0.8	3/8"-24UNF	F03	3.8
20	20	27.5	36	28.7	80.2	59.7	14.5	10.6	113.5	5.7	36	M5*0.8	3/8"-24UNF	F03	5.1

unit:mm

NPS	d	d1	D	D1	L	H	H1	H2	W	S	D2	M	P	ISO 5211	Torque (in-lb)
1/4"	0.31	0.55	0.98	0.53	2.59	2.24	0.48	0.39	4.5	0.22	1.42	M5*0.8	3/8"-24UNF	F03	33.8
3/8"	0.39	0.71	0.98	0.69	2.59	2.24	0.48	0.39	4.5	0.22	1.42	M5*0.8	3/8"-24UNF	F03	33.8
1/2"	0.59	0.87	1.2	0.92	2.94	2.24	0.48	0.39	4.5	0.22	1.42	M5*0.8	3/8"-24UNF	F03	33.8
3/4"	0.79	1.08	1.42	1.13	3.16	2.35	0.57	0.42	4.5	0.22	1.42	M5*0.8	3/8"-24UNF	F03	45.1

unit:in



Stem arrangement for actuator valves.

DN	d	d1	D	D1	L	H	H1	H2	W	S	D2	M	P	ISO 5211	Torque (N-M)
25	24	34.5	44.8	34.8	93	81.5	15.5	14	146	7.5	42	M5*0.8	7/16"-24UNF	F04	10.2
32	30	43	54	42.6	110.6	85.9	15.5	15	146	7.5	42	M5*0.8	7/16"-20UNF	F04	15.9
40	38	49	62	50	120	96.7	27.3	18.7	180	8.6	50	M6*1.0	9/16"-18UNF	F05	21
50	50	61.2	76	63.7	140	104.9	28.1	19	180	8.6	50	M6*1.0	9/16"-18UNF	F05	32.1

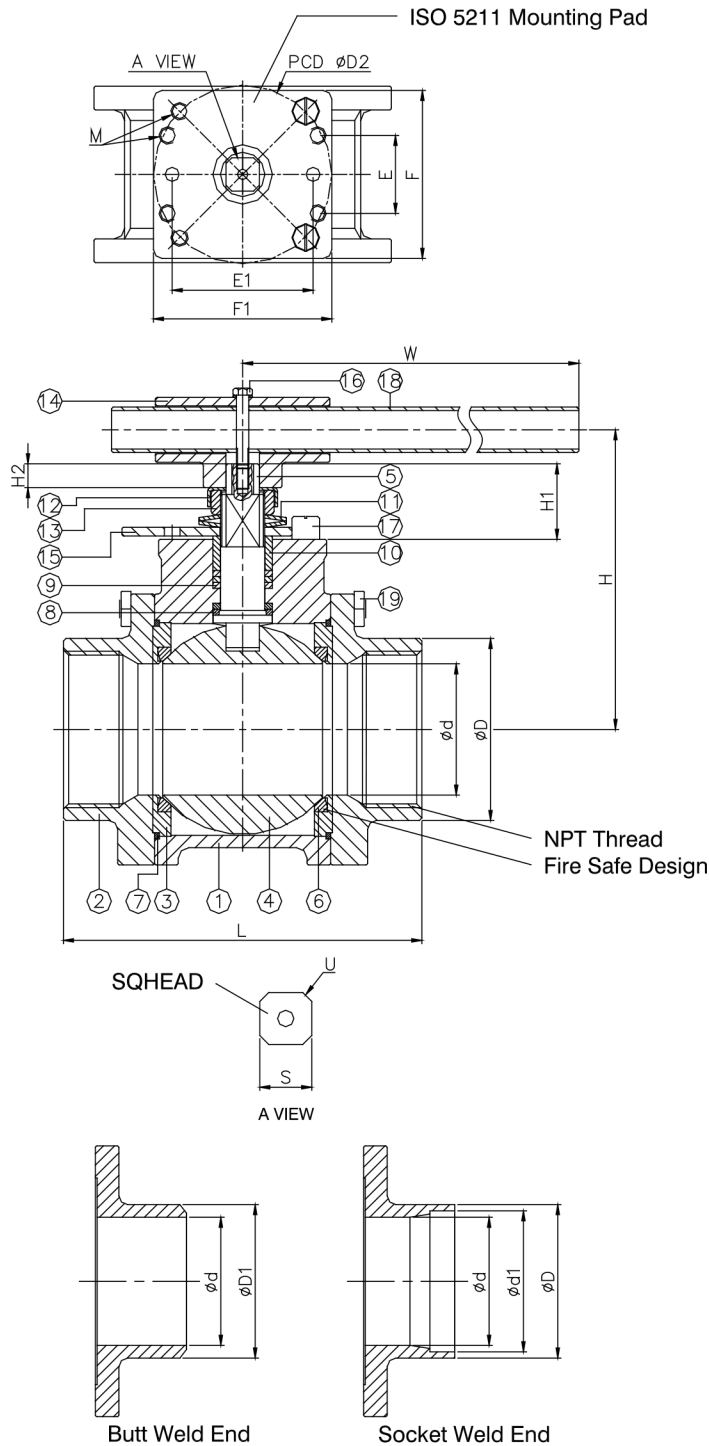
unit:mm

NPS	d	d1	D	D1	L	H	H1	H2	W	S	D2	M	P	ISO 5211	Torque (in-lb)
1"	0.94	1.36	1.76	1.37	3.66	3.21	0.61	0.55	5.75	0.3	1.65	M5*0.8	7/16"-24UNF	F04	90.2
1-1/4"	1.18	1.69	2.13	1.68	4.35	3.38	0.61	0.59	5.75	0.3	1.65	M5*0.8	7/16"-20UNF	F04	141
1-1/2"	1.5	1.93	2.44	1.97	4.72	3.81	1.07	0.74	7.09	0.34	1.97	M6*1.0	9/16"-18UNF	F05	186
2"	1.97	2.41	2.99	2.51	5.51	4.13	1.11	0.75	7.09	0.34	1.97	M6*1.0	9/16"-18UNF	F05	284.1

unit:in

M 3-PC. BALL VALVE

2013KM 2011KM



PERFORMANCE DATA

VALVE SIZE	APPROXIMATE FLOW COEFF. CV
1/4"	10
3/8"	16
1/2"	37
3/4"	68
1"	101
1-1/4"	162
1-1/2"	268
2"	486
2-1/2"	817
3"	1120
4"	1892

unit: US gal/min

ITEM	PARTS	MATERIAL	
1	BODY	ASTM A351-CF8M	ASTM A216-WCB
2	CAP		
3	RETAINER	ASTM A351-CF8M	
4	BALL		
5	STEM	ASTM A276-316	
6	SEAT	PTFE / RTFE / CTFE / TFM 1600	
7	SEAL	GRAPHITE	
8	THRUST WASHER	CTFE	
9	PACKING	GRAPHITE	
10	GLAND RING	AISI 304	
11	BELLEVILLE WASHER	AISI 301	
12	LOCKING WASHER	ASTM A167-304	
13	STEM NUT	ASTM A194-8A	
14	WRENCH BLOCK	AISI 304	
15	LOCKING PAD		
16	HEX HEAD BOLT		
17	STOP PIN		
18	HANDLE	STAINLESS STEEL	
19	BOLT	ASTM A193-B8A	
20	NUT	ASTM A194-8A	
21	HANDLE SLEEVE	PVC	

DN	d	d1	D	D1	L	H	H1	H2	W	S	D2	E	E1	F	F1	M	U	ISO 5211	Torque (N-M)
65	64	74	92	74	184.6	133.9	42.5	15	222.5	14	70	32	64	70	85	M8*1.25	M20*2.5	F07	53.5
80	75	90	104	90	204	172.1	46.4	17.5	344	19	102	44.5	80.6	96	102	M10*1.5	1"-14UNF	F10	111.5
100	96	115.5	136	118	240	185.5	47	17.5	344	19	102	44.5	80.6	96	102	M10*1.5	1"-14UNF	F10	114

unit: mm

NPS	d	d1	D	D1	L	H	H1	H2	W	S	D2	E	E1	F	F1	M	U	ISO 5211	Torque (in-lb)
2-1/2"	2.52	2.91	3.62	2.91	7.27	5.27	1.67	0.59	8.76	0.55	2.76	1.26	2.52	2.76	3.35	M8*1.25	M20*2.5	F07	473.6
3"	2.95	3.54	4.09	3.54	8.03	6.78	1.83	0.69	13.54	0.75	4.02	1.75	3.17	3.78	4.02	M10*1.5	1"-14UNF	F10	986.9
4"	3.78	4.55	5.35	4.65	9.45	7.3	1.85	0.69	13.54	0.75	4.02	1.75	3.17	3.78	4.02	M10*1.5	1"-14UNF	F10	1009

unit: in