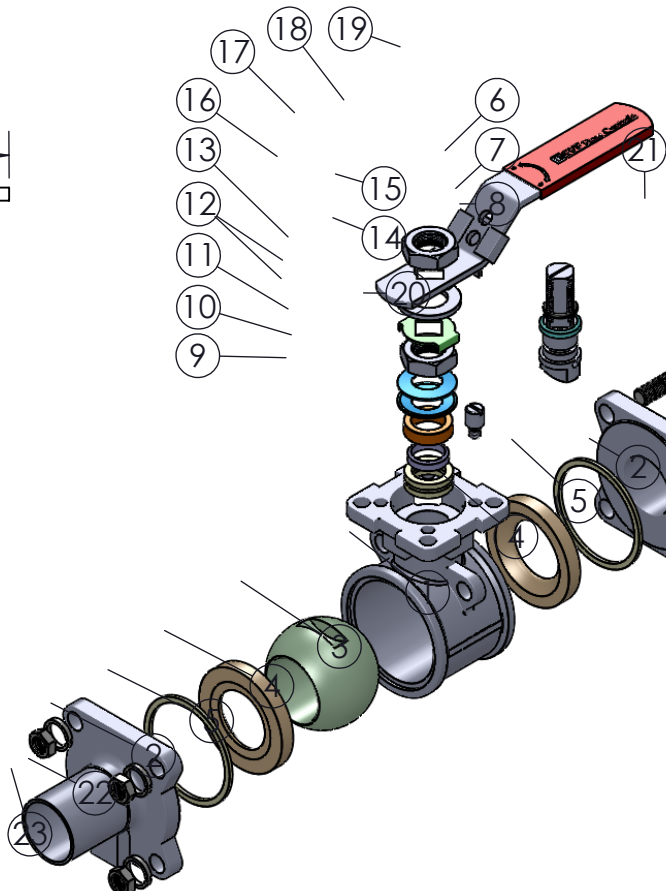
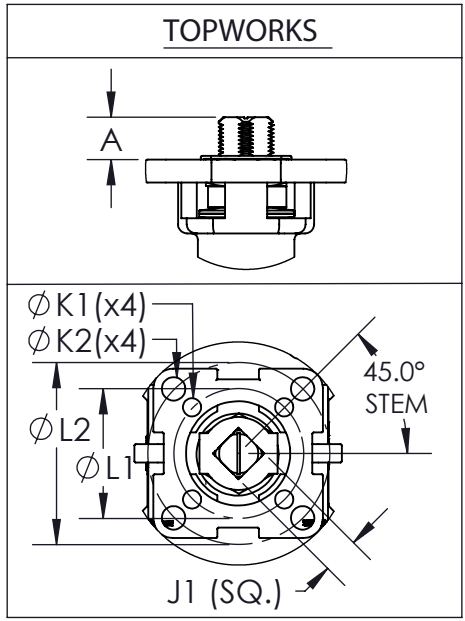
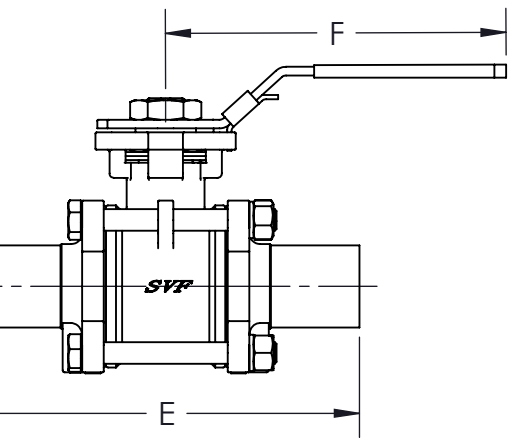
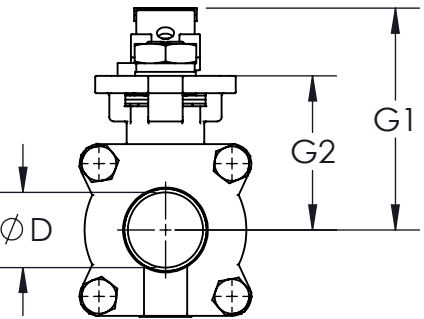


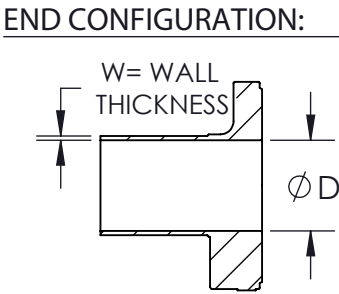
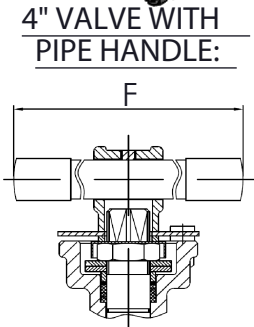
* AT FULL DIFFERENTIAL PRESSURE FOR CLEAN FLUIDS WITH TFM1600 SEATS

SIZE	A	øD	E	F	G1	G2	J1	øK1	øK2	øL1	øL2	W	ISO 5211	WEIGHT (lbs)	Cv	TORQUE* (in-lbf)	BODY BOLT SIZE	BODY NUT SIZE
1/2"	0.35 (9)	0.37 (10)	5.31 (135)	5.71 (145)	2.72 (69)	1.65(42)	0.35 (9)	0.24 (6)	0.24 (6)	1.42 (36)	1.65 (42)	0.065	F03-F04	1	13	44	M6 - 1.0 X 50	M6-1.0
3/4"	0.35 (9)	0.62 (16)	5.59 (142)	5.71 (145)	2.99 (76)	1.93 (49)	0.35 (9)	0.24 (6)	0.28 (7)	1.42 (36)	1.97 (50)	0.065	F03-F05	2	18	53	M8 - 1.25 X 55	M8-1.25
1"	0.43 (11)	0.87 (22)	6.02 (153)	6.89 (175)	3.54 (90)	2.28 (58)	0.43 (11)	0.24 (6)	0.28 (7)	1.65 (42)	1.97 (50)	0.065	F04-F05	3	48	93	M8 - 1.25 X 65	M8-1.25
1-1/2"	0.55 (14)	1.37 (35)	7.05 (179)	7.68 (195)	4.06 (103)	2.80 (71)	0.55 (14)	0.28 (7)	0.35 (9)	1.97 (50)	2.76 (70)	0.065	F05-F07	5	165	195	M10 - 1.5 X 90	M10-1.5
2"	0.55 (14)	1.87 (48)	7.76 (197)	7.68 (195)	4.29 (109)	3.07 (78)	0.55 (14)	0.28 (7)	0.35 (9)	1.97 (50)	2.76 (70)	0.065	F05-F07	7	207	283	M10 - 1.5 X 105	M10-1.5
2-1/2"	0.67 (17)	2.37 (60)	8.90 (226)	10.43 (265)	5.79 (147)	3.94 (100)	0.67 (17)	0.35 (9)	0.43 (11)	2.76 (70)	4.02 (102)	0.065	F07-F10	18	450	434	M14 - 2.0 X 145	M14-2.0
3"	0.67 (17)	2.87 (73)	9.49 (241)	10.43 (265)	6.06 (154)	4.29 (109)	0.67 (17)	0.35 (9)	0.43 (11)	2.76 (70)	4.02 (102)	0.065	F07-F10	20	780	717	M14 - 2.0 X 160	M14-2.0
4"	0.87 (22)	3.84 (98)	10.94 (278)	15.75 (400)	8.07 (205)	5.51 (140)	0.87 (22)	N/A	0.43 (11)	N/A	4.02 (102)	0.083	F10	30	1360	1080	M16 - 2.0 X 200	M16-2.0



PRODUCT INFORMATION:
 1. BLOW-OUT PROOF STEM
 2. LOCKING DEVICE
 3. ANTI-STATIC DEVICE
 4. LIVE LOADING STEM SEAL
 5. INTERNAL SURFACE FINISH OF 20 Ra
 6. COMPLETE VALVE AUTOMATION

APPLICABLE STANDARDS:
 1. ASME B16.34: DESIGN
 2. ISO 5211: MOUNTING
 3. API 598: INSPECTION AND TESTING
 4. CGA G-4.1: CLEANING FOR OXYGEN SERVICE
 5. USP CLASS VI: CONFIRMATION OF COMPLIANCE (TFM1600 MATERIAL)



ITEM NO.	DESCRIPTION	MATERIALS	QTY.
1	BODY	A351-CF8M	1
2	END	A351-CF3M	2
3	BALL	A351-CF8M	1
4	SEAT	TFM1600 CAVITY-FILLED TFM1600	2
5	BODY SEAL	TFM1600	2
6	STEM	A351-CF8M	1
7	STEM O-RING	VITON	1
8	STEM THRUST WASHER	TFM1600	1
9	STEM SEAL	TFM1600	3
10	BUSHING	50%SS + 50%PTFE	1
11	GLAND FOLLOWER	304 STAINLESS STEEL	1
12	BELLEVILLE WASHER	301 STAINLESS STEEL	2
13	JAM NUT	304 STAINLESS STEEL	1
14	LOCK TAB	304 STAINLESS STEEL	1
15	SPACER	304 STAINLESS STEEL	1
16	LEVER HANDLE	304 STAINLESS STEEL	1
17	HANDLE NUT	304 STAINLESS STEEL	1
18	LOCKING DEVICE	304 STAINLESS STEEL	1
19	HANDLE SLEEVE	VINYL	1
20	STOP PIN	304 STAINLESS STEEL	1
21	BODY BOLT	304 STAINLESS STEEL	4
22	SPRING WASHER	304 STAINLESS STEEL	4
23	BODY NUT	304 STAINLESS STEEL	4

DRAWN BY E.P. DATE 06/30/2017
 CHECKED BY E.G. DATE 03/22/2018
 APPROVED BY J.S. DATE 03/22/2018
(FOR REF. ONLY IF NOT APPROVED)

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PROJECTION THIRD ANGLE

OSVF FLOW CONTROLS

DESCRIPTION: 1/2" - 4" SB9 3-PIECE SANITARY BALL VALVE, EXTENDED TUBE OD ENDS

UNITS: INCH (MILLIMETERS) DATE: 03/22/2018 REV: D