

# Flo-Tite, Inc.

## Valves & Controls

### 1PC Standard Bore Flanged End Ball Valves

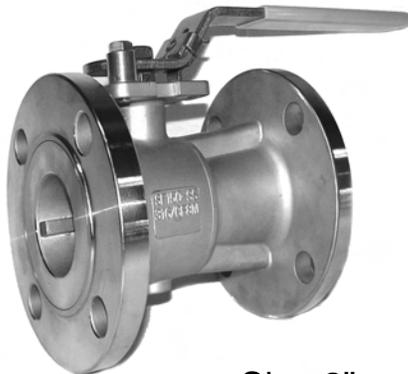
## UNI-FLO SERIES

*Models:*

SF150-SS

SF150-CS

*Flo-Tite's End Entry Flanged Ball Valves Provide An Excellent Cost Effective Choice For Your Flanged Ball Valve Requirements*



Size 2"



I-SO- Mount

Sizes: 2" - 12"  
ANSI Class 150

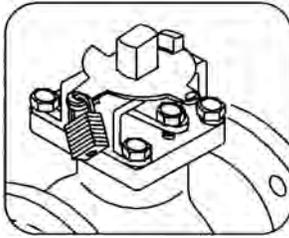
### DESIGN FEATURES:

- One Piece Body
- Bi-Directional Flow Path
- Fire Safe Designed to API 607 Fourth Edition
- Solid Stainless Steel Ball
- TFM Super-TEK Seats/Packing
- Safety Locking Device For Open Or Closed Position
- I-SO-Mount Type , Actuator Mounting Pad Standard On All Sizes
- Anti-Static Grounding Device
- Blow Out Proof Stem
- Adjustable Stem Packing
- Secondary Containment Available
- Larger Sizes Feature Trunnion Type Ball Support

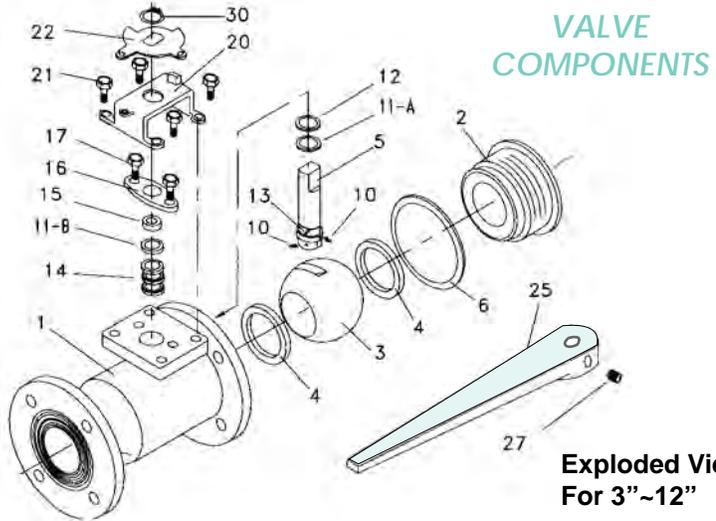
*One Piece Design Eliminates Any Possible Leakage At Unnecessary Body Joints*

**DESIGN & TECHNICAL DATA**

**SF150- 1 PC Standard Bore Flanged End Ball Valve**



Top view of Mounting Pad Showing Standard Tamper-proof Locking Device Locks in Open or Closed Position



**Exploded View For 3"~12"**

**BILL OF MATERIALS:**

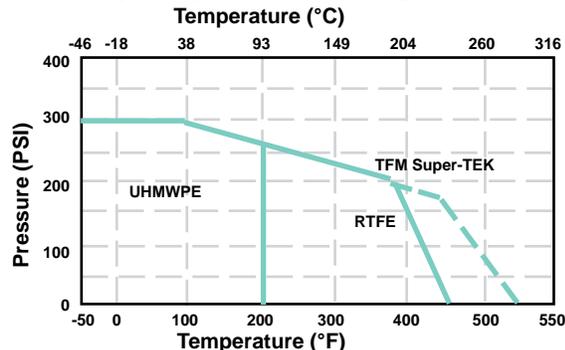
NO.	PART NAME	MODEL # SF 150 SS STAINLESS STEEL	MODEL # SF 150 CS CARBON STEEL
1	BODY	ASTM A351 GR.CF8M - 316	ASTM A216 GR.WBC
2	BODY INSERT	ASTM A351 GR.CF8M - 316	ASTM A216 GR.WCB
3	BALL	ASTM A351 GR.CF8M - 316	ASTM A351 GR.CF8M - 316
4	SEAT #	Super-TEK TFM or RTFE	Super-TEK TFM or RTFE
5	STEM	ASTM A276 TYPE 316	ASTM A276 TYPE 316
6	BODY GASKET #	RPTFE/GRAPHOIL / 50-50	RPTFE/GRAPHOIL / 50-50
10	ANTI-STATIC	SS304	SS304
11	THRUST BEARING #	50% PTFE + 50% 316	50% PTFE + 50% 316
12	THRUST WASHER #	TFM Super-TEK	TFM Super-TEK
13	STEM BREAKING #	TFM Super-TEK	TFM Super-TEK
14	STEM PACKING #	TFM Super-TEK	TFM Super-TEK
15	GLAND RING	STM A167 TYPE 304	CARBON STEEL*
16	GLAND PLATE	ASTM A351 GR.CF8	ASTM A216 GR.WBC
17	GLAND BOLT	ASTM A193 B8	ASTM A193 B7
18	BELLEVILLE WASHER	SS301	SS301
19	LOCK WASHER	SS304	SS304
20	STOP HOUSING	ASTM A351 GR.CF8	ASTM A216 WBC
21	HOUSING BOLT	ASTM A193 B8	ASTM A193 B7
22	TRAVEL STOP	SS304	AINC PLATED CARBON STEEL
23	VALVE STOP SET SLEEVE	ASTM A167 TYPE 304	ASTM A167 TYPE 304
24	VALVE STOP BOLT	ASTM A193 B8	ASTM A193 B8
25	LEVER HANDLE	DUCTILE IRON @	DUCTILE IRON @
26	LEVER NUT	ASTM A167 TYPE 304	ASTM A167 TYPE 304
27	LEVER HANDLE BOLT	CARBON STEEL	CARBON STEEL
28	LEVER SLEEVE	VINYLPLASTISOL	VINYLPLASTISOL
29	LOCKING DEVICE	SS304	SS304
30	SNAPRING	NICKLE PLATED CARBON STEEL	NICKLE PLATED CARBON STEEL

# Part included in the repair kits

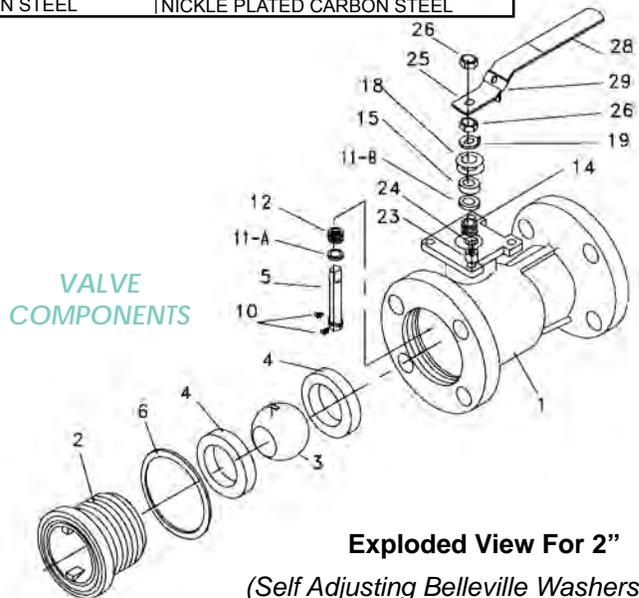
\* For 2" SF150, this material is ASTM A 167 TYPE 304

@ For 2" SF150, this material is SS304

**PRESSURE & TEMPERATURE DATA**



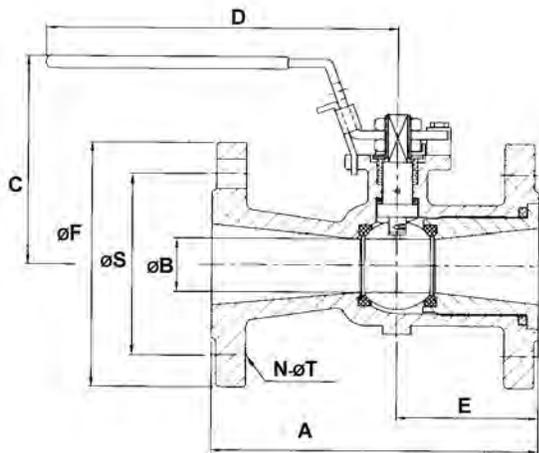
All Valves 100% Hydrostatically Pressure Tested in OPEN and CLOSED Positions.  
Class 150-Shell 425 PSI    Seat (Air) 80 PSI



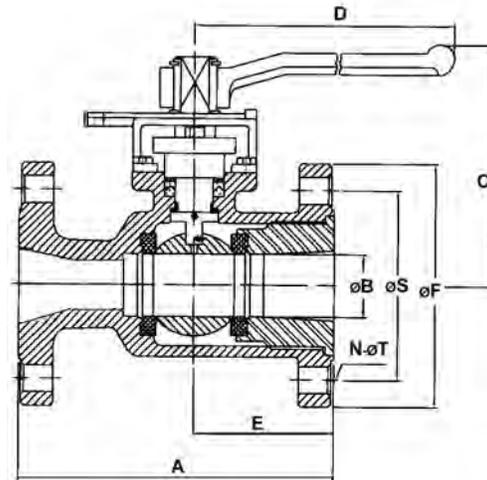
**Exploded View For 2"**

(Self Adjusting Belleville Washers)

**Models SF150**



**2" Style**



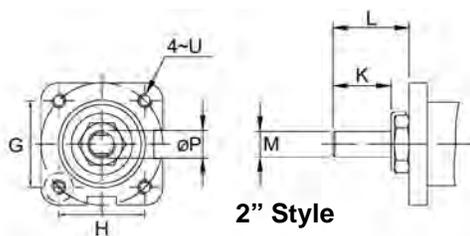
**3"~12" Style**

**DIMENSIONS, TORQUES, AND WEIGHTS:**

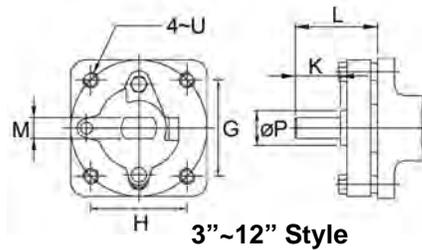
SIZE	A	øB	C	D	E	øF	N	øS	øT	CV	TORQUE (in-lbs)	WEIGHT (lbs)
2"	7.00	1.50	4.134	10.43	2.56	5.98	4	4.74	0.75	160	280	17
3"	8.00	2.56	5.906	15.35	3.27	7.48	4	6.00	0.75	360	640	38
4"	9.01	2.99	6.378	15.35	3.86	9.02	8	7.50	0.75	800	900	55
6"	10.51	3.94	7.520	15.35	4.61	11.0	8	9.51	0.87	1,090	1,850	80
8"	11.50	5.98	10.08	25.59	5.85	13.5	8	11.75	0.87	2,300	4,700	191
10"	12.99	7.87	11.61	38.98	6.85	16.0	12	14.25	0.98	4,000	9,500	315
12"	14.02	9.53	12.76	38.98	7.00	19.0	12	17.01	0.98	7,700	17,800	518

**I-SO-MOUNT:**

All valves have integrally cast mounting pads for ease of mounting automation equipment. This design features four drilled and tapped holes as standard.



**2" Style**



**3"~12" Style**

**MOUNTING DIMENSIONS:**

SIZE	G	H	K	L	M	øP	U
2"	1.949	1.949	0.551	0.906	0.374	0.618	5/16"-18UNC
3"	3.543	1.874	1.752	2.972	0.669	1.102	1/2" -13UNC
4"	3.543	1.874	1.752	3.071	0.669	1.102	1/2" -13UNC
6"	3.543	1.874	1.752	3.071	0.669	1.102	1/2" -13UNC
8"	3.480	3.480	1.654	3.583	1.024	1.713	1/2"-13UNC
10"	3.480	3.480	1.654	3.583	1.024	1.713	1/2"-13UNC
12"	3.897	3.897	2.126	3.858	1.378	1.969	5/8"-11UNC

**Note: Gear Operators Are Required On Size 10" and 12".**

**Ball Design Added Safety Feature:**

As an added safety feature, there is a hole in the stem slot of each ball to equalize pressure between the body cavity and the flow stream when valve is in the open position.

**Optional Seat Materials:**

- Reinforced Teflon
- Virgin Teflon
- Carbon Filled Teflon
- Stainless Filled Teflon
- UMWPE
- Hard Face Metal

**DESIGN & TECHNICAL DATA**

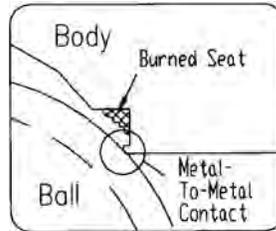
**SPECIFICATION STANDARDS:**

Flanged End           ANSI Class 150  
Flanges                ANSI B16.5  
Face to Face         ANSI B16.10  
Shell/Wall            ANSI B16.34  
Pressure testing     API 598, BS6755 Pt.1  
Federal Spec.         MSS-SP-72, WWV-35

Fire Safe Designed Valves Must Have  
SS/Graphite Stem Packing to  
Certified to API 607 Fourth Edition

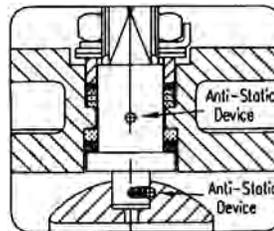
CE Certified valves, Consult Factory  
NACE MR0175  
All Stainless Steel Valves are  
Solution Annealed.

**FIRE SAFE SEAT**

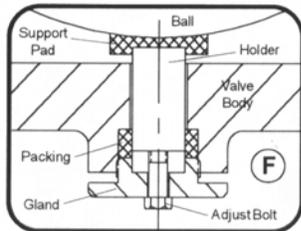


Incorporates Fire Safe Lip as a standard design feature. If the Seat burns out, the lip forms a metal to metal seal with the ball.

**ANTI-STATIC GROUND**



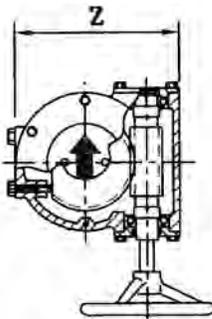
Standard on all flange-end valves



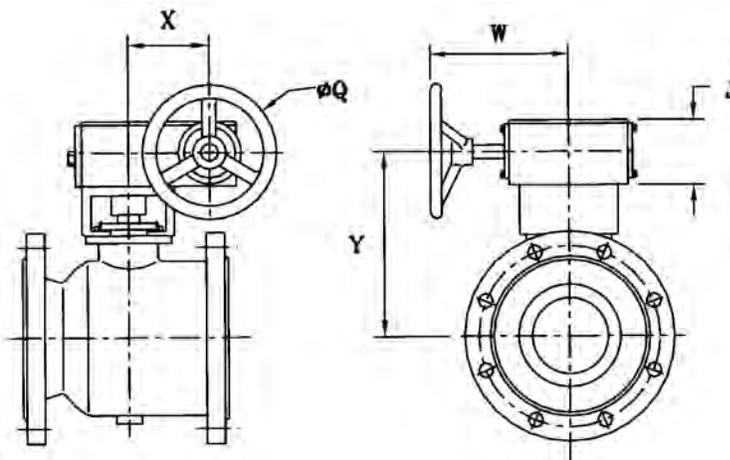
Trunion Supported Ball, maintains a constant ball seat profile size 10 & 12" standard.

**Flo-Tite's Heavy Duty Gear Operators**

**GEAR OPERATOR SELECTION FOR SF150 BALL VALVE:**



SIZE	GO MODEL	J	ØQ	W	X	Y	Z
2"	GO-1	2.95	7.87	5.75	1.67	6.09	4.70
3"	GO-2	3.269	11.81	10.0	2.48	8.73	6.91
4"	GO-2	3.269	11.81	10.0	2.48	9.30	6.91
6"	GO-2	3.269	11.81	10.0	2.48	9.97	6.91
8"	GO-3	3.543	11.81	10.0	3.15	12.62	8.01
10"	GO-3	3.543	11.81	10.0	3.15	15.39	8.01
12"	GO-4	4.29	15.75	13.5	4.72	17.06	11.41



**GEAR OPERATOR DATA:**

MODEL	TORQUE (in-lbs)	WEIGHT (lbs)
GO-1	3,000	10.8
GO-2	8,850	27.5
GO-3	12,390	32.5
GO-4	22,130	82.5

**Note:**

- Weather Proof Design On All Gear Operators
- Hand Wheel And Indicator Are Provided As Standard.