

# Flo-Tite, Inc.

## Valves & Controls

### 2 PC Full Bore Flanged End Ball Valves

## FULL-FLO SERIES

*Models:*

F150 Class 150 / F300 Class 300



ANSI 150



ANSI 300

I-SO - Mount

### DESIGN FEATURES:

- Floating Ball Design
- Protected Seat Design
- O-Ring Backed Seat = 3" & up
- Fire Safe Designed to API 607- 4
- Spiral Wound Body Gasket With Secondary Metal To Metal Seal
- Open And Close Locking Device For Position Safety Lockout Standard On Sizes 1/2"- 8"

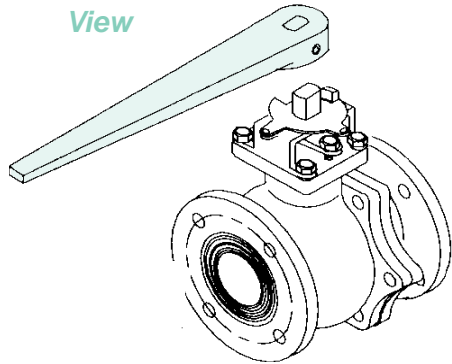
Sizes: 1/2" - 12"

- I-SO-Mount Type , Actuator Mounting Pad Standard
- Super-Tek Seating
- Live Loaded Stem Design
- Anti-Static Grounding Device
- Secondary Containment
- V-Ball-Control
- Flatted Shaft For Positive Visual Indication of Flow
- Optional Metal Seats

*Ideal Design for Process and Petrochemical Applications*

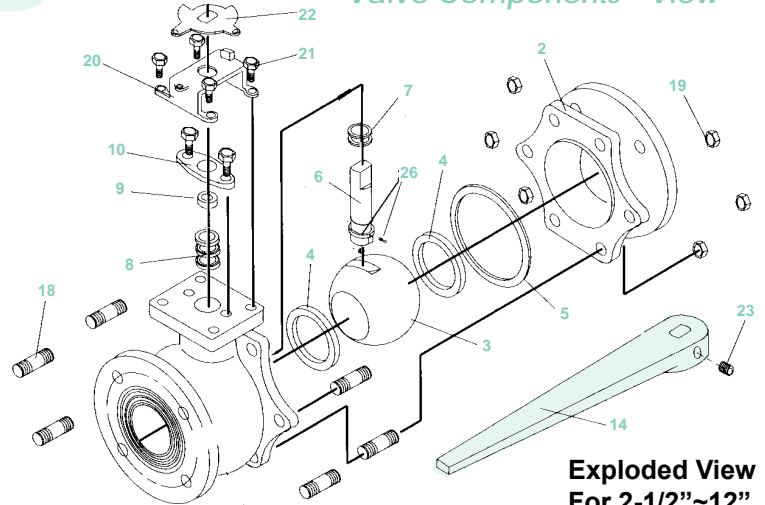
**DESIGN & TECHNICAL DATA**

*Assembled View*



A hole in stem slot of each ball equalizes pressure between the body cavity and the line media flow

*Valve Components - View*



**Exploded View For 2-1/2"~12"**

**BILL OF MATERIALS:**

NO.	PART NAME	F150/F300 SS STAINLESS STEEL	F150/F300 CS CARBON STEEL
1	BODY	ASTM A351 GR. CF8M	ASTM A216 GR. WCB
2	END CAP	ASTM A351 GR. CF8M	ASTM A216 GR. WCB
3	BALL	STAINLESS STEEL 316	STAINLESS STEEL 316
4	SEAT *	Super-TEK TFM or RTFE	Super-TEK TFM or RTFE
5	BODY GASKET *	S. S.304+GRAPHOIL	S. S.304+GRAPHOIL
6	STEM **	STAINLESS STEEL 316	STAINLESS STEEL 316
7	THRUST WASHER *	Super-TEK TFM or 50/50	Super-TEK TFM or 50/50
8	STEM PACKING *	Super-TEK TFM or RTFE	TFM or RTFE
9	GLAND RING	STAINLESS STEEL 304	CARBON STEEL
10	GLAND	STAINLESS STEEL 304	CARBON STEEL
11	BELLEVILLE WASHER	STAINLESS 17-7 PH	CARBON STEEL
12	LEVER NUT	ASTM A194 GR. 8	ASTM A194 2H
13	LOCK WASHER	STAINLESS STEEL 304	CARBON STEEL
14	LEVER	DUCTILE IRON /S.S	DUCTILE IRON /S.S
15	LOCKING DEVICE	STAINLESS STEEL 304	CARBON STEEL
16	LEVER SLEEVE	VINYL PLASTISOL	VINYL PLASTISOL
17	BODY BOLT	ASTM A193 B8	ASTM A193 B7
18	BODY STUD	ASTM A193 B8	ASTM A193 B7
19	NUT	ASTM A194 GR. 8	ASTM A194 2H
20	STOP HOUSING	ASTM A351 GR. CF8	ASTM A216 WCB
21	HOUSING BOLT	ASTM A193 B8	ASTM A193 B7
22	TRAVEL STOP	STAINLESS STEEL 304	CARBON STEEL
23	LEVER BOLT	CARBON STEEL	CARBON STEEL
24	SPRING WASHER	STAINLESS STEEL	CARBON STEEL
25	VALVE STOP	STAINLESS STEEL 304	CARBON STEEL
26	ANTI-STATIC	STAINLESS STEEL 304	STAINLESS STEEL 304

**SPECIFICATION STANDARDS:**

Flanged End      ANSI Class 150/300  
Flanges            ANSI B16.5  
Face to Face      ANSI B16.10  
Shell/Wall        ANSI B16.34

Federal Spec. MSS-SP-72

Fire Safe Certified Valves Must Have Graphite Stem Packing to Comply With API 607 Fourth Edition

250 PSI Steam Seat-Super Tek II

Meets NACE MR0175  
All Stainless Steel Valves are Solution Annealed.

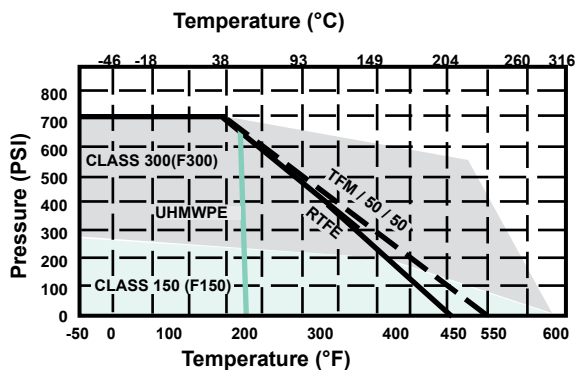
All Valves 100% Hydrostatically Pressure Tested in OPEN and CLOSED Positions

Class 150-Shell 425 PSI      Seat (Air) 80 PSI  
Class 300-Shell 1100 PSI    Seat (Air) 80 PSI

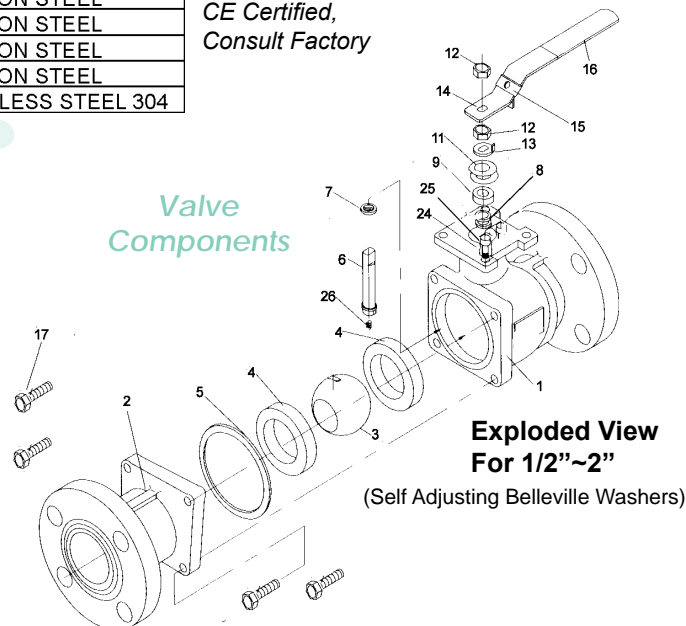
CE Certified,  
Consult Factory

\* Recommended Spare Parts    \*\* Sizes 6" & Larger 17-4Ph Stem

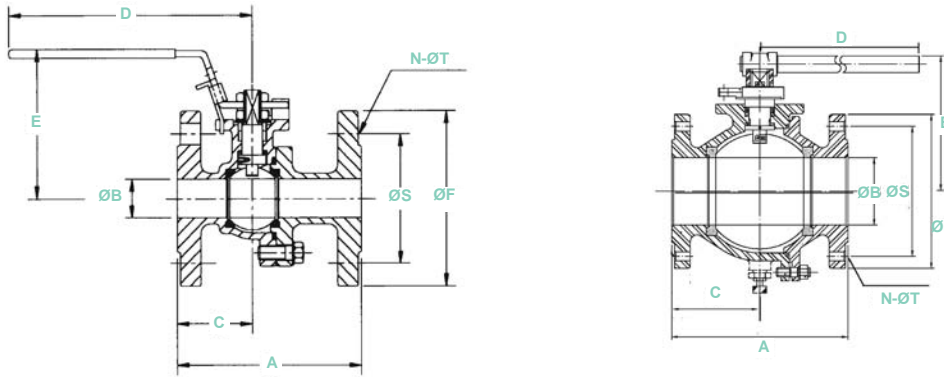
**PRESSURE & TEMPERATURE DATA**



*Valve Components*



**Exploded View For 1/2"~2"**  
(Self Adjusting Belleville Washers)



**MODEL F150 - CLASS 150 DIMENSIONS AND WEIGHTS:**

SIZE	A	øB	C	D	E	øF	N	øS	øT	CV	TORQUE (in-lbs)	WEIGHT (lbs)
1/2"	4.25	0.59	1.79	6.50	2.60	3.50	4	2.38	0.63	17	62	4.10
3/4"	4.61	0.79	2.01	6.50	2.91	3.85	4	2.76	0.63	43	90	4.94
1"	5.00	0.98	2.05	7.87	3.43	4.25	4	3.13	0.63	74	100	7.36
1-1/4"	5.51	1.26	C/F	7.87	3.62	4.63	4	3.50	0.63	192	240	9.44
1-1/2"	6.50	1.50	2.52	9.84	4.13	5.00	4	3.88	0.63	290	270	13.8
2"	7.01	1.97	30.7	10.4	4.53	5.98	4	4.74	0.75	410	360	20.1
2-1/2"	7.84	2.56	3.67	15.4	6.22	7.01	4	5.49	0.75	780	620	33.7
3"	7.99	2.99	3.74	15.4	6.54	7.48	4	6.00	0.75	1,120	800	36.6
4"	9.01	4.00	4.47	15.4	7.21	9.02	8	7.50	0.75	1,825	1,700	61.5
6"	15.51	5.98	7.76	25.6	11.22	10.98	8	9.51	0.87	4,700	4,600	169
8"	17.99	7.87	8.35	37.4	11.58	13.50	8	11.75	0.87	10,100	9,900	292
10"	20.98	9.84	10.47	38.0	14.38	15.98	12	14.75	0.98	17,500	17,000	540
12"	24.02	11.81	12.01	38.0	16.13	19.02	12	17.01	0.98	22,400	23,000	657

**MODEL F300 - CLASS 300 DIMENSIONS AND WEIGHTS:**

SIZE	A	øB	C	D	E	øF	N	øS	øT	CV	TORQUE (in-lbs)	WEIGHT (lbs)
1/2"	5.51	0.59	2.64	6.50	2.60	3.74	4	2.62	0.63	15	80	5.34
3/4"	5.98	0.79	2.51	6.50	2.91	4.61	4	3.25	0.75	40	95	7.14
1"	6.50	0.99	2.56	7.87	3.43	4.88	4	3.50	0.75	70	110	9.88
1-1/4"	7.01	1.26	C/F	7.87	3.62	5.24	4	3.88	0.75	189	280	12.6
1-1/2"	7.48	1.50	2.76	9.84	4.13	6.14	4	4.51	0.87	300	290	19.1
2"	8.50	1.97	3.20	10.43	4.53	6.50	8	5.00	0.75	430	395	24.4
2-1/2"	9.49	2.56	4.60	15.35	6.22	7.49	8	5.87	0.87	768	660	41.0
3"	11.14	3.15	5.57	15.35	6.54	8.27	8	6.61	0.87	1,090	900	67.0
4"	12.01	3.94	5.97	15.35	7.21	10.00	8	7.87	0.87	1,900	1,700	98.8
6"	15.87	5.91	7.60	25.59	11.22	12.52	12	10.63	0.87	4,800	4,700	241
8"	19.76	7.87	9.33	37.40	11.58	15.00	12	12.99	0.98	10,000	10,000	380
10"	22.36	9.84	11.20	N/A	N/A	17.48	16	15.26	1.14	17,350	17,800	703
12"	25.51	11.81	12.80	N/A	N/A	20.51	16	17.76	1.26	21,700	24,000	860

**NOTE:**

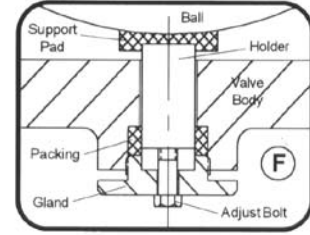
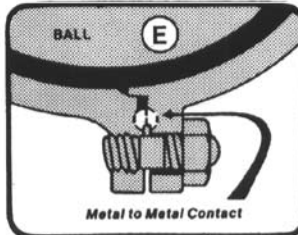
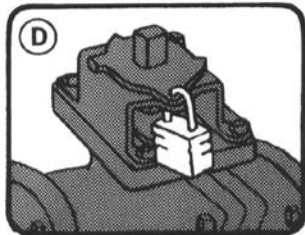
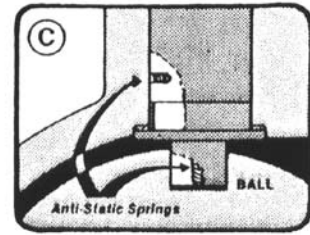
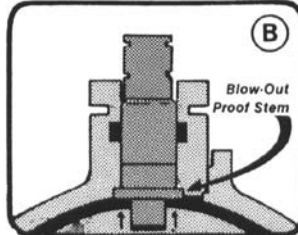
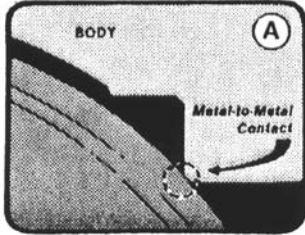
- A variety of Special Alloys as well as Special Seating materials are available.
- Ball Support is a valuable design feature found in 10" and 12" F150; 6", 8", 10" and 12" F300.
- Sizes 14" thru 24" available C/F
- Weatherproof gear operators are recommended for size 6" and larger valves.
- Consult factory for gear operator dimensions and information.

Customer/Project _____ Size _____ Inq./P.O. No. _____ FTI Order No. _____ Certified Correct By _____ Date _____	Ordering Code	_____		F150
		FLANGED TYPE BALL VALVE		F300
<b>Flo-Tite, Inc. VALVE AND CONTROLS, INC.</b>				
	Series	Size	Part No.	Material Trim Code
				Drawing No. <b>F150-05</b>

**DESIGN & TECHNICAL DATA**

**IMPRESSIVE DESIGN FEATURES**

- A. Secondary Metal Seating for Fire Safe Design
- B. Blow-Out Proof Stem
- C. Anti-Static Grounding Springs
- D. Anti-tamper Lock for Open or Closed Position
- E. Secondary Metal Body Seal
- F. Ball Support

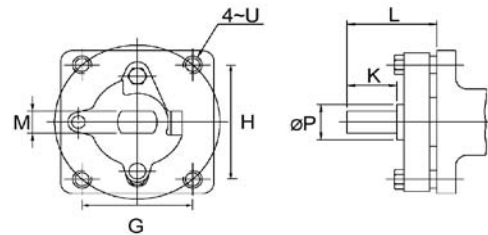
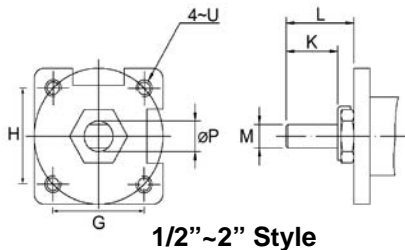


**BALL SUPPORT**

**Flo-Tite's** ball support is a valuable design feature found on our larger sized valves. It maintains a constant ball seat profile which dramatically improves valve performance resulting in smooth, more efficient valve operation with lower operating torques, less seat damage, reduced seat wear, and longer service. Featured in Model F150 - 10" and 12", F300 - 6", 8", 10" and 12" and our standard Port Models SF150 sizes 10" - 12".

**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.



**2-1/2"~12" Style**

NOTE: Verify the mounting dimensions before manufacturing mounting hardware.



**MOUNTING DIMENSIONS:**

SIZE	G	H	K	L	M	øP	U
1/2"~3/4"	1.169	1.169	0.32	0.55	0.250	0.366	#10-24UNC
1"~1-1/4"	1.392	1.392	0.43	0.75	0.315	0.429	1/4"-20UNC
1-1/2"~2"	1.949	1.949	0.55	0.91	0.374	0.618	5/16"-18UNC
2-1/2"~4"	3.543	1.874	1.75	3.07	0.669	1.102	1/2"-13 UNC
6"~8"	3.480	3.480	1.65	3.58	1.024	1.713	1/2"-13UNC
10"~12"	3.897	3.897	2.13	3.86	1.378	1.969	5/8"-11UNC