

## 3 PC DIRECT-MOUNT AUTOMATION SERIES

### 3 PC DM300 Econoflo Series



#### Models:

**#DM310 - Threaded Ends**

**#DM320 - Socket-Weld Ends**

Optional: SS Body with Carbon Steel End Connections

### Valve Features

- 3-Piece Body, Full Port Design
- 1/4" to 4" Sizes
- Threaded or Socket-Weld Ends
- Body: CF8M, 316SS
- PTFE, RTFE or TFM Seats
- Pressure Rating:  
1000 PSI
- Temperature Range:  
-20° F - 450° F

### Design Advantages

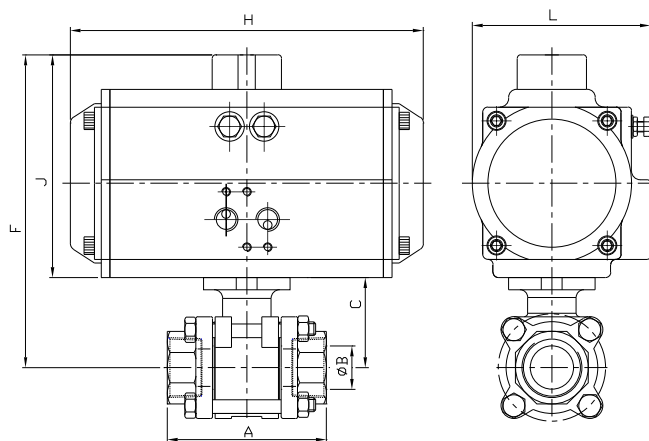
- ISO 5211 Direct Mounting Pad - Provides for precise shaft alignment & eliminates the need for brackets and couplings
- 3-Piece Swing Out Design for easy maintenance
- Improved Seat Material - Extends cycle life and reduces torque
- Blowout Proof Stem
- Anti-Static Device - Standard in all sizes
- Locking Device standard for valves with handles
- Adjustable "Live Loaded" Stem Seal

### Actuator Sizing Chart

Flo-Tite Actuator Selections are based on units with standard seats with clean fluid only at ambient temperature.

Maximum Temperature Limitations for Direct-Mount Actuators: Electric 150 °F; Pneumatic 180 °F  
Special Brackets are available for higher temperatures, consult factory.

All valves are sized for line pressure up to maximum 600 WOG. For higher line pressure applications, consult factory to assure proper actuator sizing.



SIZE	A	B	C	SPRING RETURN 80 PSI					SPRING RETURN 60 PSI					DOUBLE ACTING 80 PSI					DOUBLE ACTING 60 PSI				
				Actuator	F	H	J	L	Actuator	F	H	J	L	Actuator	F	H	J	L	Actuator	F	H	J	L
1/2"	2.76	0.59	1.65	SR52	5.27	5.79	3.62	2.81	SR52	5.27	5.79	3.62	2.81	DA40	4.80	4.81	3.15	2.57	DA40	4.80	4.81	3.15	2.57
3/4"	3.15	0.79	1.77	SR52	5.39	5.79	3.62	2.81	SR52	5.39	5.79	3.62	2.81	DA52	5.39	5.79	3.62	2.81	DA52	5.39	5.79	3.62	2.81
1"	3.54	1.00	2.05	SR63	6.28	6.61	4.23	3.27	SR75	6.75	7.24	4.70	3.74	DA52	5.67	5.79	3.62	2.81	DA52	5.67	5.79	3.62	2.81
1 1/2"	4.72	1.50	2.69	SR75	7.39	7.24	4.70	3.74	SR83	7.76	8.03	5.07	4.05	DA63	6.92	6.61	4.23	3.27	DA75	7.39	7.24	4.70	3.74
2"	5.51	1.97	3.13	SR83	8.20	8.03	5.07	4.05	SR92	8.52	10.31	5.39	4.27	DA75	7.83	7.24	4.70	3.74	DA83	8.20	8.03	5.07	4.05

**Flo-Tite's "DM" design eliminates mounting brackets and all their possible related problems. Ideally designed for low profile, cost effective industrial applications.**

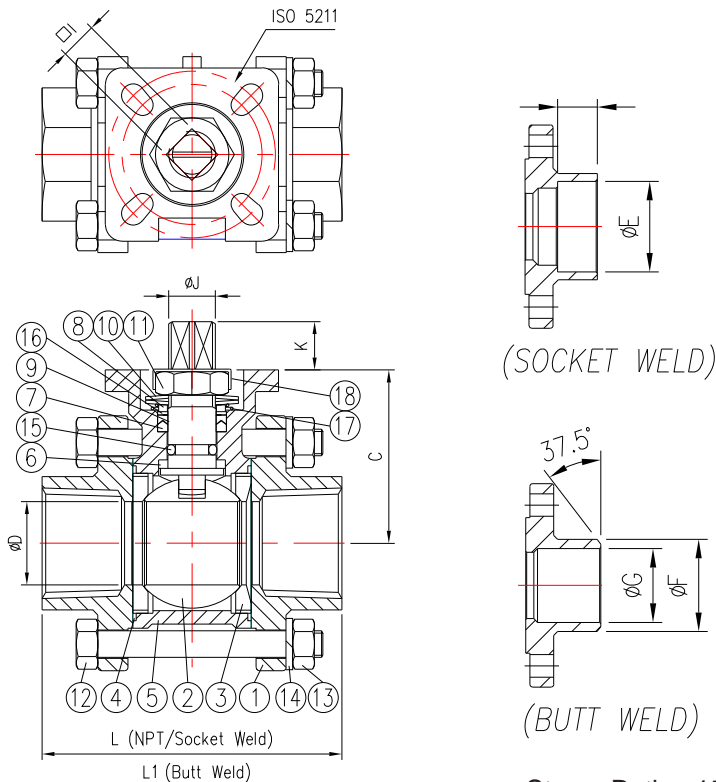
# Design and Technical Data

**Standards**  
**ANSI/ASME - B16.11**  
**ISO - 5211**  
**MSS - SP25, SP72**

**Models**  
**Threaded - DM310**  
**Socket - Weld - DM320**

## Materials of Construction

ITEM	DESCRIPTION	DM300
1	End Cap	ASTM A351-CF8M
2	Ball	ASTM A351-CF8M/316
3	Seat	PTFE/RPTFE/TFM-1600
4	Gasket	PTFE
5	Body	ASTM A351-CF8M
6	Thrust Washer	PTFE
7	Stem Packing	PTFE
8	Packing Follower	AISI 304
9	Stem	ASTM A276-316
10	Belleville Washer	AISI 301
11	Packing Nut	AISI 304
12	Bolt	AISI 304
13	Bolt Nut	AISI 304
14	Bolt Washer	AISI 304
15	O-Ring	VITON
16	Packing Protector	CARBON 25% PTFE
17	Anti-Static	AISI 301
18	Lock Washer	AISI 304



**Steam Rating 150 PSI WSP**  
**175 PSI available with Super-Tek II seats.**

**Vacuum Service to 20 microns**

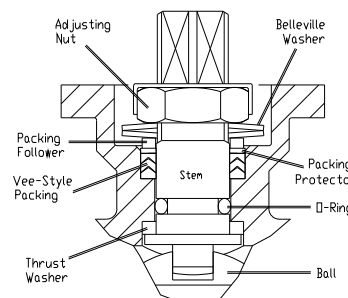
## Dimensions and Weights

SIZE	C	ØD	E	F	G	I	J	K	L	L1	X	Cv	Torque In-Lb	Weight Lb	ISO 5211 Pattern
1/4"	1.65	0.41	0.56	0.57	0.39	0.35	0.47	0.35	2.76	2.76	0.39	7	42	0.85	F03-F04
3/8"	1.65	0.49	0.69	0.72	0.53	0.35	0.47	0.35	2.76	2.76	0.39	10	42	0.84	F03-F04
1/2"	1.65	0.59	0.86	0.88	0.66	0.35	0.47	0.35	2.76	2.80	0.51	15	48	1.43	F03-F04
3/4"	1.77	0.79	1.07	1.09	0.87	0.35	0.47	0.35	3.15	3.23	0.59	35	64	1.85	F03-F04
1"	2.05	0.98	1.33	1.37	1.09	0.43	0.55	0.55	3.54	3.62	0.59	68	90	2.91	F04-F05
1 1/4"	2.30	1.26	1.68	1.70	1.42	0.43	0.55	0.55	4.13	4.33	0.59	110	170	3.92	F04-F05
1 1/2"	2.69	1.50	1.92	1.94	1.65	0.55	0.75	0.71	4.72	5.00	0.63	155	220	5.42	F05-F07
2"	3.13	1.97	2.41	2.42	2.11	0.55	0.75	0.71	5.51	6.14	0.67	300	335	8.16	F05-F07
2 1/2"	4.13	2.56	2.91	2.95	2.54	0.67	0.94	0.87	6.61	7.32	0.67	500	460	18.8	F07-F10
3"	4.57	3.15	3.54	3.54	3.10	0.67	0.94	0.87	7.60	8.58	0.67	750	800	28.6	F07-F10
4"	5.33	3.94	4.54	4.55	4.06	0.87	1.10	1.18	9.09	10.43	0.79	1015	1410	47.8	F10-F12

All torque figures are full pressure rated

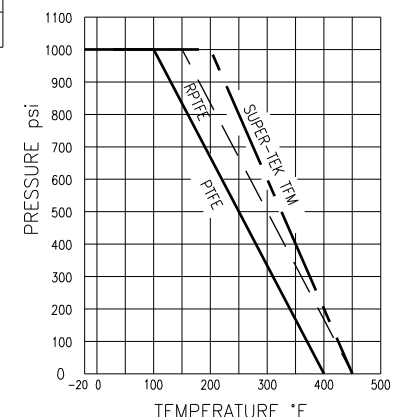
## Stem Seal Design

Flo-Tite's triple stem seal detail provides for an extended valve cycle life. The primary seal is a seal ring that fits firmly on a flat portion of the stem shoulder. The secondary (back-up) seal is provided by an O-ring and a set of Vee packing rings, energized by belleville washers. This design adjusts packing compression to compensate for wear, pressure or temperature fluctuations.



**Leak Detection Window**  
**Prevents actuator damage**  
**in the unlikely event of**  
**stem leakage**

## Pressure/Temperature Chart



Flo-Tite, Inc.  
305 East 21st Street  
Lumberton, NC 28358

P. O. Box 1293  
Lumberton, NC 28359  
Website: [www.flotite.com](http://www.flotite.com)

Tel: (910) 738-8904  
Fax: (910) 738-9112  
E-mail: [flotite@nc.rr.com](mailto:flotite@nc.rr.com)

Due to continuous development & improvement of our product range, we reserve the right to alter the dimensions and techcal data included in this brochure