



## THREE PIECE DIRECT-MOUNT AUTOMATION SERIES

### 3 PC DM300 Econoflo Series



## Valve Features

- 3-Piece Body, Full Port Design
- Threaded or Socket-Weld Ends
- Body: CF8M, 316SS
- PTFE, RTFE or TFM Seats
- Size Range:  
1/4" to 4" Sizes
- Pressure Rating:  
1000 PSI MAWP/WOG
- 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.
- Three Piece Swing Out Design for easy maintenance
- Improved Seat Material - Extends cycle life and reduces torque.
- Blow out Proof Stem
- Anti-Static Device - Standard in all sizes
- Locking Device standard for valves with handles
- Adjustable "Live-Loaded" Stem Seal

### Models:

#DM310 - Threaded Ends

#DM320 - Socket-Weld Ends

Optional: SS Body with Carbon Steel End Connections

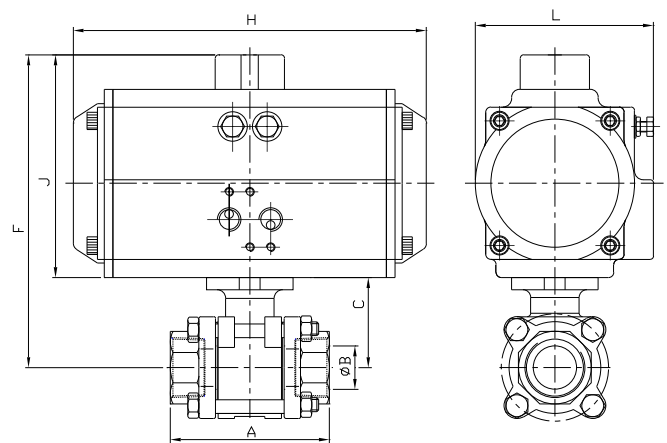
## Actuator Sizing Chart

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 800 WOG. For higher line pressure applications, consult factory to assure proper actuator sizing.



Size	A	øB (port)	C	SPRING RETURN 80 PSI					SPRING RETURN 60 PSI					DOUBLE ACTING 80 PSI					Ø				
				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	SR52.12	5.27	5.79	3.62	2.81	SR52.9	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	SR52.12	5.39	5.79	3.62	2.81	SR52.8	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	SR63.12	6.28	6.61	4.23	3.27	SR63.9	6.28	6.61	4.23	3.27	DA52	5.67	5.79	3.62	2.81	DA63	6.28	6.61	4.23	3.27
1 1/2"	4.72	1.50	2.69	SR83.12	7.76	8.03	5.07	4.05	SR83.8	7.76	8.03	5.07	4.05	DA75	7.39	7.24	4.70	3.74	DA83	7.76	8.03	5.07	4.05
2"	5.51	1.97	3.13	SR92.12	8.52	10.31	5.39	4.27	SR92.9	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.**

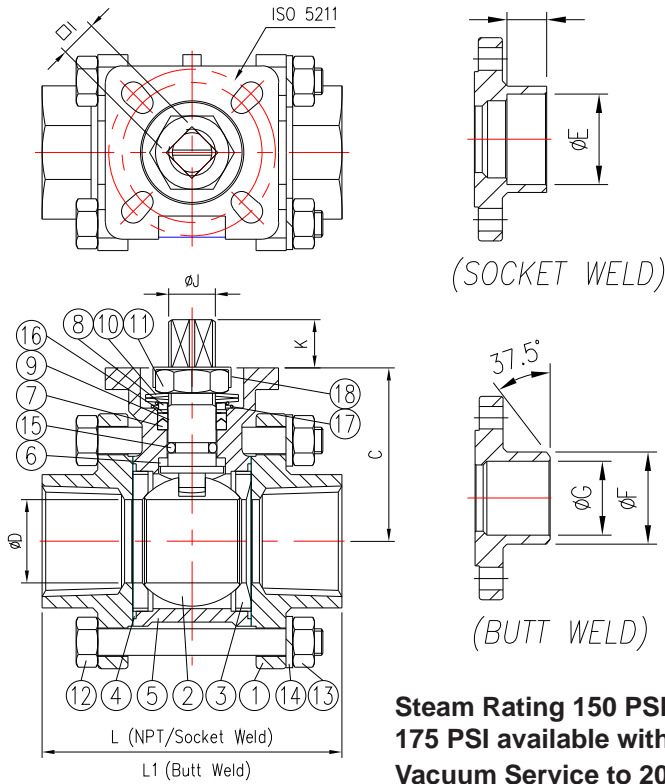
# Design and Technical Data

**Standards**  
ANSI/ASME - B16.11    **Models**  
ISO - 5211                Threaded - DM310  
MSS - SP25, SP72        Socket - Weld - DM320

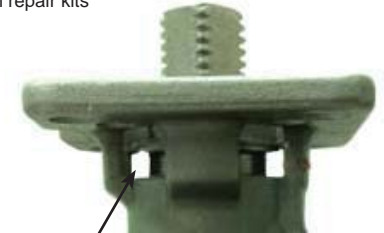
## Bill of Materials

NO	PART NAME	MATERIAL	Qty
1	End Caps	ASTM A351 CF8M	2
2	Ball	ASTM A351 CF8M/316	1
3	Seats	# PTFE/RPTFE/TFM-1600	2
4	Gasket	# PTFE	2
5	Body	ASTM A351 CF8M	1
6	Thrust Washer	# PTFE	1
7	Stem Packing	# PTFE	1
8	Packing Follower	AISI 304	1
9	Stem	ASTM A276 316	1
10	Belleville Washers	AISI 301	2
11	Packing Nut	AISI 304	1
12	Bolts	SS304	set
13	Bolt Nuts	AISI 304	set
14	Bolt Washers	AISI 304	set
15	O-Ring	# VITON	1
16	Packing Protector	# 25% Carbon PTFE	1
17	Anti-Static	AISI 301	1
18	Lock Washer	AISI 304	1

# Parts included in repair kits



**Steam Rating 150 PSI (WSP)**  
**175 PSI available with SuperTek II seats.**  
**Vacuum Service to 20 microns**



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

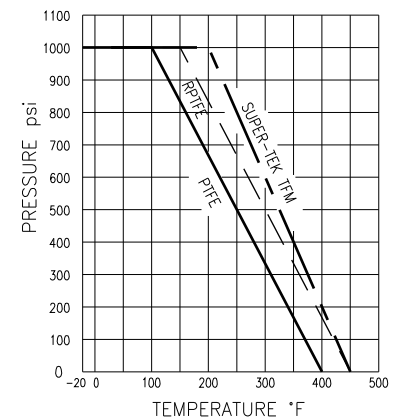
**ATTENTION**  
**MAWP/WOG is a do not exceed pressure at normal ambient NPT & Weld End Models**

## Dimensions and Weights

SIZE	C	D	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	50	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	50	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	55	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	70	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	100	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	190	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	390	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	480	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	735	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

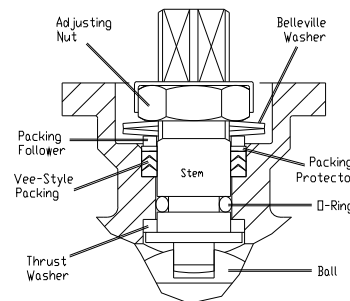
Note: All torque figures are full pressure rated

## Pressure/Temperature Chart



## 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, and is energized by Belleville washers. This design adjusts the packing compression to compensate for wear, pressure, or temperature fluctuations.



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