



## Two Piece Direct-Mount Automation Series

### Two Piece DM85 Econoflo Series

Models:  
#DM85-SS  
#DM85-CS



### Valve Features

- Two-Piece Body, Full Port Design
- Threaded NPT Ends
- Body: WCB or CF8M, 316SS
- Seats: PTFE, RTFE or TFM
- Size Range: 1/2" to 2"
- Pressure Rating:  
1000 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
- Improved Seat Material - Extends cycle life and reduces torque
- Blow-out Proof Stem
- Locking Device standard for valves with handles
- Adjustable "Live-Loaded" Stem Seal

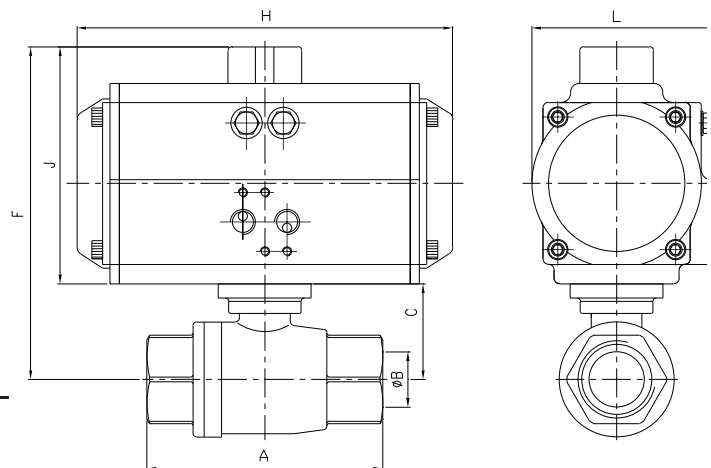
### Actuator Sizing Chart

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.



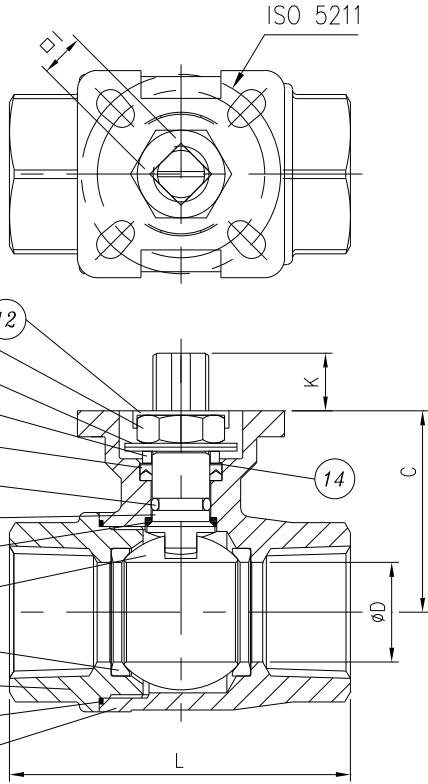
Size	SPRING RETURN 80 PSI								SPRING RETURN 60 PSI					DOUBLE ACTING 80 PSI					DOUBLE ACTING 60 PSI				
	A	B	C	Actuator	F	H	J	L	Actuator	F	H	J	L	Actuator	F	H	J	L	Actuator	F	H	J	L
1/2"	2.52	0.59	1.46	SR52.12	5.08	5.79	3.62	2.81	SR52.9	5.08	5.79	3.62	2.81	DA40	4.61	4.81	3.15	2.57	DA40	4.61	4.81	3.15	2.57
3/4"	2.72	0.79	1.59	SR52.12	5.21	5.79	3.62	2.81	SR52.8	5.21	5.79	3.62	2.81	DA52	5.21	5.79	3.62	2.81	DA52	5.21	5.79	3.62	2.81
1"	3.15	1.00	1.91	SR63.12	6.14	6.61	4.23	3.27	SR63.9	6.14	6.61	4.23	3.27	DA52	5.53	5.79	3.62	2.81	DA63	6.14	6.61	4.23	3.27
1 1/2"	4.13	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"	4.84	1.97	3.05	SR92.12	8.44	10.31	5.39	4.27	SR92.9	8.44	10.31	5.39	4.27	DA75	7.75	7.24	4.70	3.74	DA83	8.12	8.03	5.07	4.05

**Flo-Tite's "DM" design eliminates mounting brackets and all their potential 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**  
DM85-SS Stainless Steel  
DM85-CS Carbon Steel



## Bill of Materials

NO	Part Name	Material	Qty
1	Body	ASTM A351 CF8M	1
2	Gasket #	PTFE	1
3	End Cap	ASTM A351 CF8M	1
4	Seats #	PTFE	2
5	Ball	ASTM A351 CF8M	1
6	Stem	ASTM A276-316	1
7	Thrust Washer #	PTFE	1
8	Stem Packing #	PTFE	1
9	Gland	SS304	1
10	Belleville Washers	SS301	2
11	Packing Nut	SS304	1
12	Nut Lock	SS304	1
13	O-Ring #	Viton	1
14	Packing Protector #	Carbon 25% PTFE	1

# Parts included in repair kits

**Steam Rating:**  
150 PSI WSP  
250 PSI available with SuperTek II seats. Consult Factory

**Vacuum Service to 25 torr**



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

## Dimensions and Weights

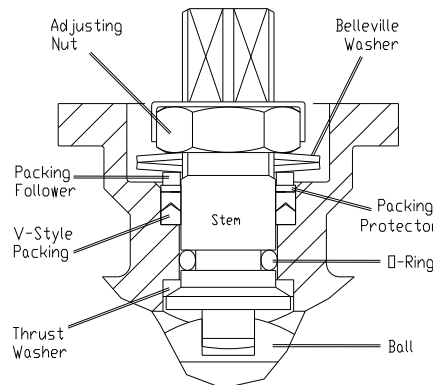
SIZE	C	D	L	I	K	Cv	Torque In-Lb	ISO 5211 Pattern	Weight Lb
1/2"	1.46	0.59	2.52	0.35	0.33	15	60	F03-F04	0.71
3/4"	1.59	0.79	2.72	0.35	0.35	35	70	F03-F04	0.93
1"	1.91	1.00	3.15	0.43	0.55	68	95	F04-F05	1.60
1 1/4"	2.05	1.26	2.62	0.43	0.55	110	150	F04-F05	C/I
1 1/2"	2.69	1.50	4.13	0.55	0.71	155	200	F05-F07	3.86
2"	3.05	1.97	4.84	0.55	0.71	300	320	F05-F07	5.97

## ATTENTION

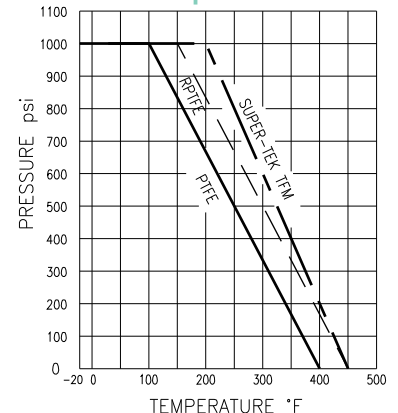
**MAWP/WOG is a do not exceed pressure at normal ambient NPT & Weld End Models**

## 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 taper 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.



## Pressure/Temperature Chart



Flo-Tite, Inc.  
4815 West 5th St.  
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@flotite.com](mailto:flotite@flotite.com)