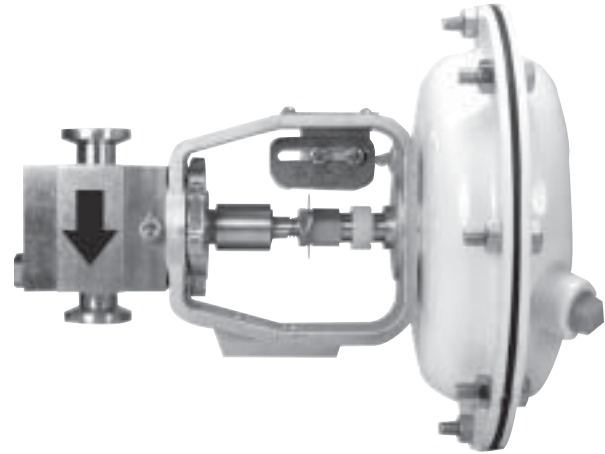


87000 Series Flexsleev™ Sanitary Control Valve

This patented control valve is excellent for throttling high purity liquid or gaseous media commonly found in the food, pharmaceutical, film, and biotechnology industries. Tri-Clamp body connections, polished flow contours, and FDA approved flexible tubing are in compliance with the 3-A Sanitary Standard Council requirements.

The valve is suitable for repeated steam sterilization cycles with 35 psi maximum steam pressures.

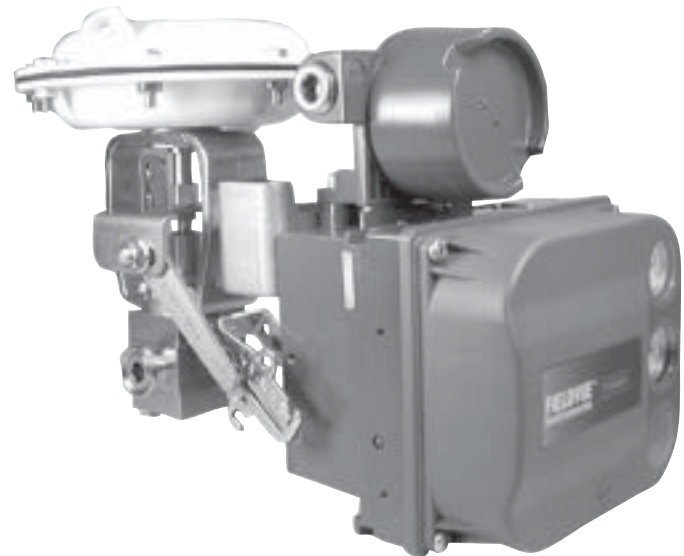
Foolproof assembly of valve body sections using only two bolts allows for ease of cleaning and inspection. A lower telltale port is provided. The valve will drain either horizontally or vertically with actuator in the horizontal position. In contrast to diaphragm valves, the operation is not affected by vacuum.



Shown in recommended mounting position for self draining

FEATURES:

- Unique flow pattern allows for self draining in both vertical and horizontal pipelines.
- Streamlined low shear flow contours make it ideal for sensitive biomedica.
- Flow area between tubing O.D. and body seating is suitable for particulant media.
- Fool proof bolting method assists with ease of body disassembly and reassembly.
- 3-A Standards Council approved.



Shown with FIELDVUE® Digital Valve Controller

BAUMANN


EMERSON.
Process Management

87000 Series Flexsleeve™ Valve

TECHNICAL SPECIFICATIONS

VALVE SIZE	1/2 inch / DN15
RANGEABILITY	100:1
BONNET	Bolted
CHARACTERISTIC	Modified Linear
RATED Cv (Kv)	0.25, 1.25 (0.22, 1.08)
INTERNAL BODY FINISH (WETTED INTERIOR)	≤ 35 Ra Microinch / 0.89 Ra Micron (standard) ≤ 20 Ra Microinch / 0.51 Ra Micron (optional)
END CONNECTIONS	Tri-Clover / Tri-Clamp (Optional Welding Ends)
APPLICABLE STANDARD	3-A Certificate

SLEEVE MATERIAL TEMPERATURE CHART

SLEEVE MATERIAL (A)	TEMPERATURE RANGE	SEAT LEAKAGE	FLOW DIRECTION	MAXIMUM SHUTOFF PRESSURE	
				PSI	BAR
Silicone	-80°F to 450°F (-62°C to 232°C)	VI	To Open	150	10.35
Viton (Non-Water Service)	-0°F to 400°F (-20°C to 240°C)				
Viton (Water Service)	-0°F to 100°F (-20°C to 38°C)				
EPDM	-40°F to 300°F (-40°C to 150°C)				
Kalrez (B)	-0°F to 480°F (-20°C to 250°C)				

NOTES: A. Medical grade in compliance with FDA 21CFR 177.
B. Please consult factory before ordering Kalrez.

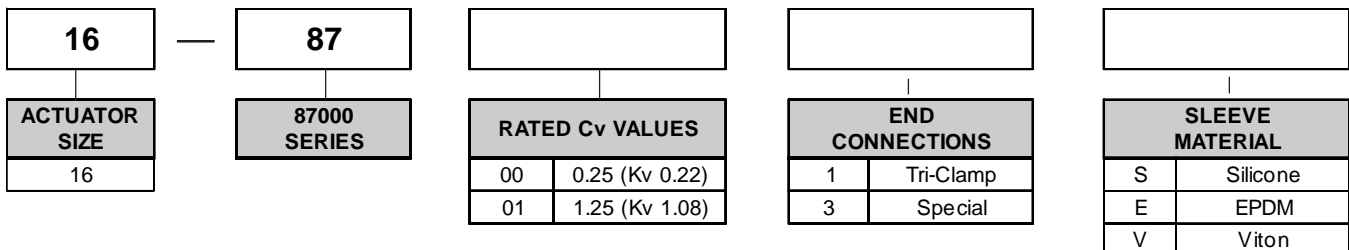
FLOW COEFFICIENTS (ANSI/ISA/IEC) Note: Kv= 0.86 (Cv)

PLUG TRAVEL	Cv at VALVE OPENING - PERCENT OF PLUG TRAVEL											F _L	F _d
	5	10	20	30	40	50	60	70	80	90	100		
5/16"	.0025	.005	.0125	.033	.065	0.125	0.18	0.19	0.215	0.22	0.25	.87	.56
	.0030	.020	.12	.24	.40	.532	.69	.85	1.0	1.15	1.25	.87	.40

F_L = Pressure recovery factor.

F_d = Valve style modifier.

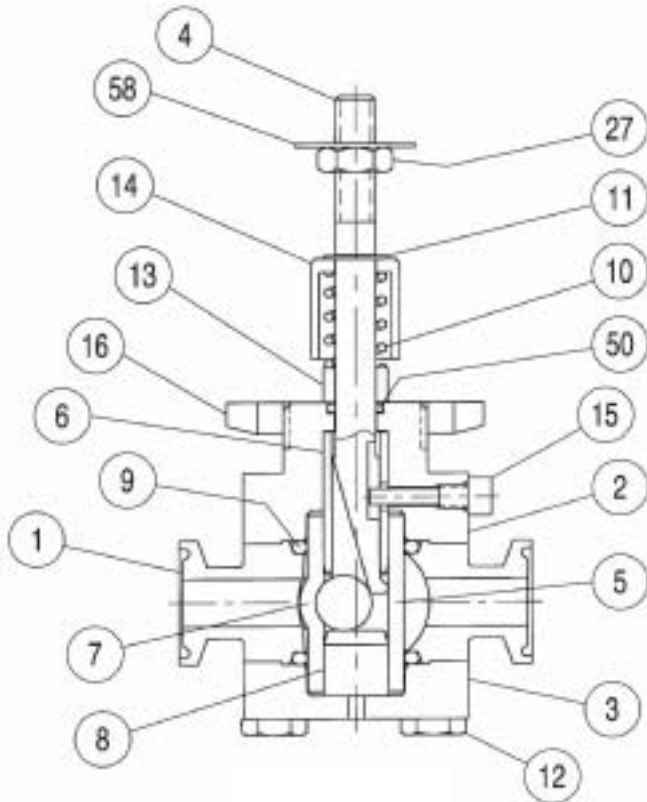
MODEL NUMBERING SYSTEM



WEIGHTS

VALVE				ACTUATOR		FIELDVUE ^(R)			
SIZE		TRAVEL		WEIGHT		TYPE 16		TYPE DVC6010	
in	DN	in	mm	lbs	kgs	lbs	kgs	lbs	kgs
1/2	15	5/16	19.0	8	4	10	4.5	7.7	3.5

87000 Series Flexsleev™ Valve

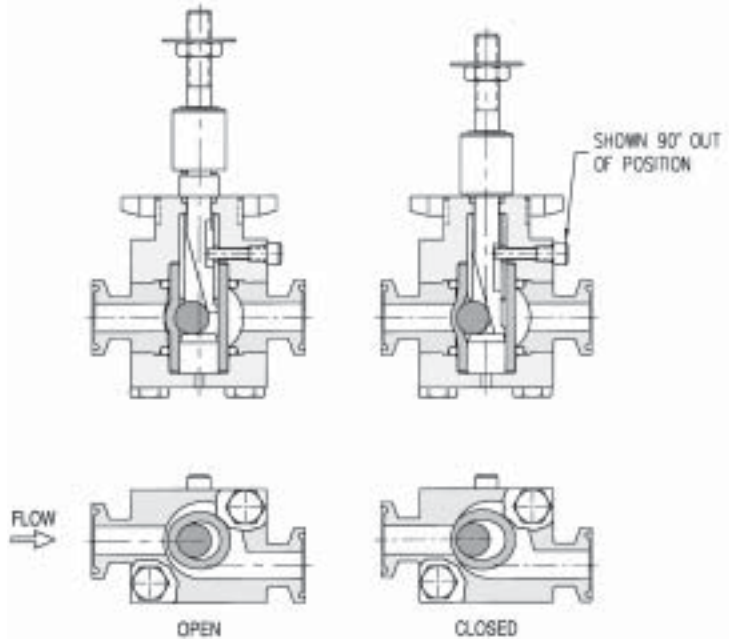


DWG M87004 R01

87000 Series Flexsleev™

MODE OF OPERATION

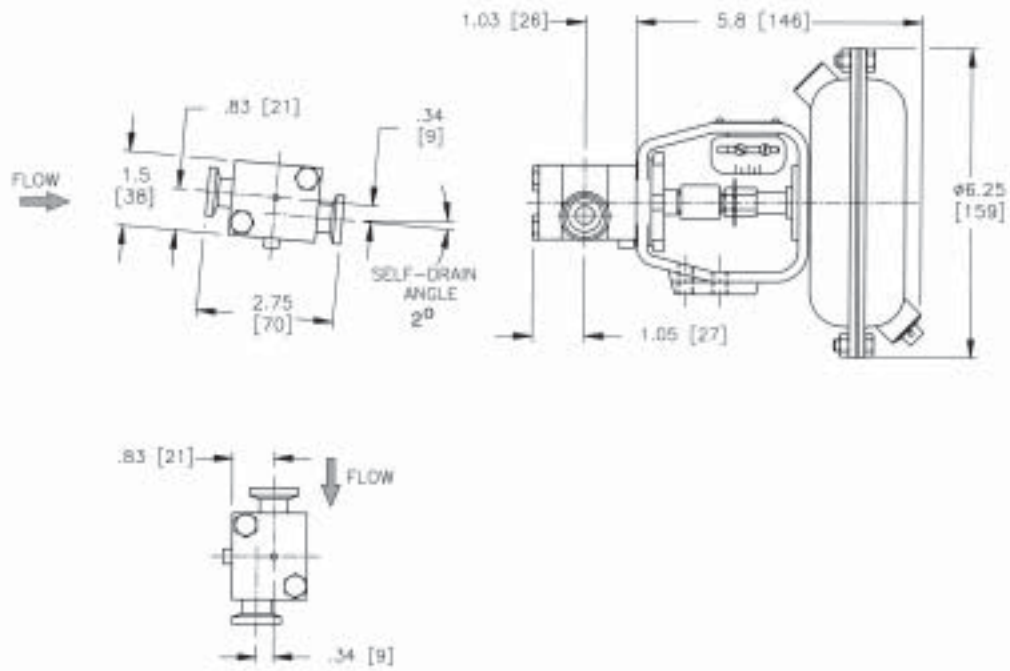
As shown in the drawing, a flexible sleeve is inserted through the length of the valve and sealed between the body and bonnet by o-rings. The actuator motivated valve stem has a tapered groove that pushes a ceramic ball against the inside of the sleeve and, thereby, the sleeve against a valve seat.



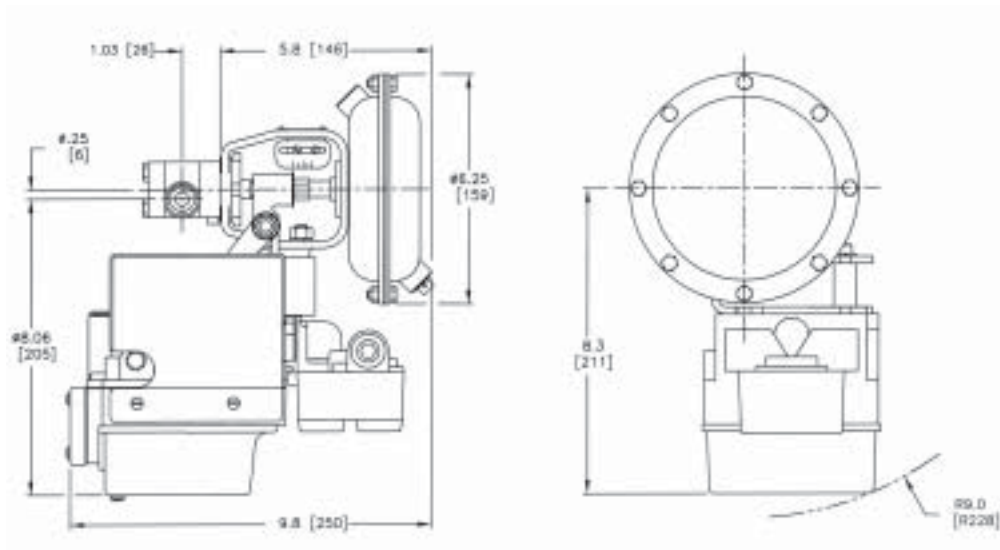
DWG M87000-2 R00

MATERIALS OF CONSTRUCTION

KEY NO	DESCRIPTION	MATERIAL
1	Valve Body	316L Stainless Steel
2	Bonnet, Upper	316 Stainless Steel
3	Bonnet, Lower	316 Stainless Steel
4	Shaft	Nitronic 60
5	Ceramic Ball	Grade 25 Ceramic
6	Sleeve Bushing	303 Stainless Steel
7	Sleeve	Silicone, Viton, EPDM, Kalrez
8	Anvil	Nitronic 60
9	O-Ring	Silicone, Viton, EPDM, Kalrez
10	Spring, Stem	Passivated Stainless Steel
11	Retaining Ring	Ph 15-7 MO
12	Hex Head Cap Screw	18-8 Stainless Steel
13	Spring Seat	Nylon 6/6
14	Protecting Cap	303 Stainless Steel
15	Alignment Pin	18 - 8 Stainless Steel
16	Drive Nut, Actuator Yoke	304 Stainless Steel
27	Nut, Jam	304 Stainless Steel
50	O-Ring	Viton
58	Travel Indicator	304 Stainless Steel



DWG MCP-00469 R01



DWG MCP-01000 R00

Figure 7. Dimensions

RECOMMENDED MOUNTING FOR SELF-DRAINING (Actuator should be mounted horizontally)

NOTE: Actuator requires 4-1/2" (115 mm) vertical clearance.

Must purchase an actuator support when purchasing a FIELDVUE Digital Valve Controller.

This product may be covered under one or more of the following patents 5,284,319, 5,288,056, 5,310,162, 5,421,546, 5,441,080 or under pending patent applications.

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