

Pneumatic Actuators for B and U Series Bellows Valves

5 and 6 Series



Features

- Low actuation pressures
- Cast construction
- Aluminum and stainless steel components
- Optional microswitch available

Actuation Modes

Normally closed (C)—air opens, spring closes.

Normally open (O)—air closes, spring opens.

Double acting (D)—air opens and closes.



Integral mounting bracket allows easy panel or U-bolt installation.



Technical Data

Actuator Series	Minimum Actuation Pressure psig (bar)	Pressure Rating ^① psig (bar)	Temperature Rating °F (°C)	Air Displacement in. ³ (cm ³)	Weight lb (kg)
5	50 (3.4)	150 (10.3)	-10 to 300 (-23 to 148)	0.83 (13.6)	C—6.7 (3.0) O—4.6 (2.1) D—4.5 (2.0)
6	65 (4.4)				C—7.3 (3.3) O—4.9 (2.2) D—4.8 (2.1)

^① Maximum actuator cycle life achieved at actuator pressure of 100 psig (6.8 bar) or less.

Materials of Construction

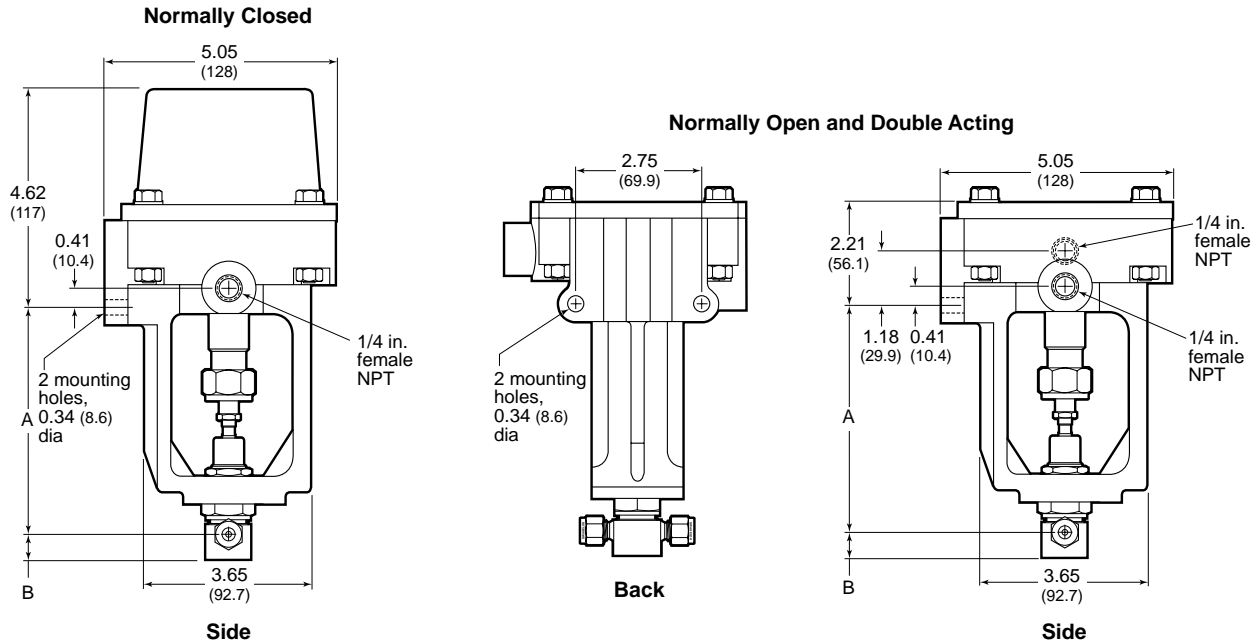
Component	Material
Housing	Cast aluminum
Internal hardware	Stainless steel
External hardware	316 SS
O-rings	Buna N

Microswitch Option

- Signals OPEN or CLOSED position of valve to panel or process controller
- Features single-pole, double-throw switch
- Meets NEMA standard for type 1 and type 3 enclosures
- Includes stainless steel mounting bracket
- Is available factory assembled or as a retrofit kit.

Dimensions

Dimensions, in inches (millimeters), are for reference only and are subject to change.



Valve Series	Dimensions, ^① in. (mm)	
	A	B
5 Series Actuator		
4B	4.87 (124)	0.56 (14.2)
6B, 8B	5.05 (128)	0.50 (12.7)
6 Series Actuator		
4U	6.60 (168)	0.56 (14.2)
6U, 8U	6.76 (172)	0.50 (12.7)

① Not applicable to valves with VCR®, VCO®, and pipe weld end connections.

Ordering Information

To order a B or U series valve with pneumatic actuator, add a designator to the valve ordering number from the product catalog.

Examples: SS-4BG-TW-5O is an SS-4BG-TW valve with normally open actuator; SS-8UW-6CM is an SS-8UW valve with normally closed actuator and microswitch.

Actuator and Microswitch Kits

The **actuator conversion kit** converts a valve with a Swagelok® 3 or 4 series pneumatic actuator to a valve with a 5 or 6 series pneumatic actuator.

The **microswitch retrofit kit** includes microswitch and mounting hardware for 5 or 6 series pneumatic actuators.

Valve Series	Actuation Mode	Designators		Kit Ordering Numbers	
		Valve with Actuator	Valve with Actuator and Microswitch	Actuator Conversion	Microswitch Retrofit
4B	Normally closed	-5C	-5CM	MS-5CK-4B	MS-5CMK-4B
	Normally open	-5O	-5OM	MS-5OK-4B	
	Double acting	-5D	-5DM	MS-5DK-4B	
6B 8B	Normally closed	-5C	-5CM	MS-5CK-8B	MS-5CMK-8B
	Normally open	-5O	-5OM	MS-5OK-8B	
	Double acting	-5D	-5DM	MS-5DK-8B	
4U 6U 8U	Normally closed	-6C	-6CM	MS-6CK	MS-6CMK-U
	Normally open	-6O	-6OM	MS-6OK	
	Double acting	-6D	-6DM	MS-6DK	

Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

Caution: Do not mix or interchange parts with those of other manufacturers.