

Actuated Valves Product Guide & Engineering Specifications
Pneumatic Diaphragm Options Overview



The basic options and accessories listed in this section represent many of the most commonly used for Pneumatic actuation of Pneumatic Diaphragm Valves (see previous section for Pneumatic Ball Valves and Butterfly Valves) factory configured to order on the actuation package. Contact Spears® for any desired accessories, options, functions, or special controls not listed.

Overview of Basic Options & Accessories Available

Pneumatic Actuator Features	Premium Pneumatic Diaphragm Valves
Spring Return	✓
80 psi Operating Pressure	✓
Declutchable Manual Override	✓
Pneumatic Positioner	✓
Electro-Pneumatic Positioner	✓
Micro Limit Switch Module	✓
3 & 4-Way Solenoid Valve	✓
Stainless Steel 3-Gauge Set	✓
ID Tag - SS	✓

Contact Spears® for any desired accessories, options, functions, or special controls not listed in this guide.

Spring Return (Fail Safe)

An internal spring in the actuator is configured to either open or close upon loss of air supply. Spring return can be specified as either Air-to-Open when spring return close is desired or Air-to-Close when spring return open is desired.

Operating Pressure (for Diaphragm Valves)

Spears® Diaphragm Valves use a 80 to 90 psi standard operating pressure. Other optional pressures are available. Specify pressure requirements at time of order.

3 to 15 psi Pneumatic Positioner (for Diaphragm Valves)

Positioner is used to control or throttle flow by modulating the air to the actuator in response to an external 3-15 psi control signal input. Available with NEMA 4x enclosure mounted on top of actuator with 180° visual indicator. Positioner can be top or bottom loading, with or without gauges. Gauge set includes: 1 input pressure gauge 0-30 psi and 2 output pressure gauges 0-160 psi. Optional Stainless Steel gauge set available.





Actuated Valves Product Guide & Engineering Specifications Pneumatic Options & Accessories Overview



Electro-Pneumatic Positioner (for Diaphragm Valves), not for air-to-air 4 to 20 mA

Positioner is used to control or throttle flow by modulating the air to the actuator in response to an external 4-20 milliamp control signal input which is converted to a proportional 3-15 psi pneumatic signal used by the positioner. Available with NEMA 4x, enclosure mounted on top of actuator with 180° visual indicator. Used with air-to-spring only



3-Way Solenoid Valves 4-Way Solenoid Valves (for Diaphragm Valves)

Universal operation design allows pressure to any port. 4-way solenoid valve is used for double acting (air-to-air) actuators. 3-way solenoid valve is used for spring return (fail open/fail close) actuators. Air inlet is 1/4" NPT. Enclosures are molded epoxy NEMA 4, 4x (standard) or NEMA 4/4x/7/9 combination with 1/2" conduit connection and brass body (stainless steel body available by special order). Standard 115 VAC with voltage options of 230 VAC, 24 VAC, 12 VDC, and 24 VDC.



Micro Limit Switch Module (for Diaphragm Valves) SPDT (2) or DPDT (2)

Module of two (2) auxiliary mechanical limit switches. Switches are SPDT rated at 10 amp 125/250 VAC. Switch module includes 180° visual indicator. Switch enclosure is NEMA 4/4x/7/9 rated.



Custom ID Tag

Stainless steel valve/actuator ID Tag imprinted to user specified identification criteria. Each tag is 1/2" x 3" and accommodates up to 3 lines of text, maximum of 12 characters and spaces per line.

