

# PNEUMATIC ACTUATOR OPTIONS & ACCESSORIES For Ball Valves & Butterfly Valves

The basic options and accessories listed in this section represent many of the most commonly used for Pneumatic actuation of Ball Valves and Butterfly Valves (see next section for Pneumatic Diaphragm Valves). Contact Spears® for any desired accessories, options, functions, or special controls not listed. For differentiation, "Option" is used to identify a basic variation in the actuator while "Accessory" is used to identify an add-on function to the actuator. Both options and accessories are factory configured to order on the actuation package.

### Overview of Basic Options & Accessories Available

Standard Pneumatic Actuator Features	Premium Pneumatic True Union Ball Valves	Premium Pneumatic Butterfly Valves
Spring Return (Fail Safe)	Option	Option
40 or 60 psi Operating Pressure	Option	Option
Declutchable Manual Override	1/2" - 2" Option 2-1/2" - 6" Option	Accessory
Pneumatic Positioner	Accessory	Accessory
Electro-Pneumatic Positioner	Accessory	Accessory
Transmitter	Accessory	Accessory
Dome Position Indicator	Accessory	Accessory
Mechanical Limit Switches	Accessory	Accessory
Output Signal Mechanical Limit Switches	Accessory	Accessory
Output Signal Proximity Limit Switches	Accessory	Accessory
3 & 4-Way Solenoid Valve	Accessory	Accessory
Dual Power 3 & 4-Way Solenoid Valve	Accessory	Accessory
Stainless Steel 3-Gauge Set	Accessory	Accessory
ID Tag - SS	Accessory	Accessory

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

## Spring Return (Fail Safe) (Air-to-Open or Air-to-Close) Option

Available for all Premium Pneumatic actuated valves. 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 (fail-close) when spring return close is desired or Air-to-Close (fail-open) when spring return open is desired.

#### **Operating Pressure Option**

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. Standard ball and butterfly valve actuators require an 80 psi supply pressure. With this option, the actuator is configured for lower supply pressures of either 40 psi or 60 psi (must specify).

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# 3 to 15 psi Pneumatic Positioner (for Ball & Butterfly Valves)

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly 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 4 or 4X rated enclosure mounted on top of actuator with flat top green/black indicator or optional high visibility Dome Indicator. Includes pressure gauge set of one (1) input gauge 0-30 psi and two (2) output gauges 0-160 psi. Optional Stainless Steel gauge set available.



## Electro-Pneumatic Positioner 4-20mA, 0-5 VDC, or 0-10 VDC

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. Positioner is used to control or throttle flow by modulating the air to the actuator in response to an external 4-20 milliamp (current), 0-5 VDC (resistive), or 0-10 VDC (resistive) control signal input which is converted to a proportional 3 - 15 psi pneumatic signal used by the positioner. Available with NEMA 4, 4X, 7 or Intrinsically Safe NEMA 7 rated enclosure mounted on top of actuator with flat top green/black indicator or dome indicator with green/red 180° high visibility. Includes pressure gauge set of one (1) input gauge 0-30 psi and two (2) output gauges 0-160 psi. Optional Stainless Steel gauge set available.



#### **Dome Indicator**

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. Dome style beacon with high visibility green/red indicator for improved viewing of valve position. Indicator only. **Note:** Dome indicators may be included with certain selections of positioners or limit switches.



#### 3 & 4-Way Solenoid Valves

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. This combination valve operates either as a 3-way or 4-way pilot valve mounted to the actuator. The 3way valve is a normally closed poppet design to insure tight shut-off. These valves are designed for use with spring return actuators. The 4-way valve can be used as either a 4-way 2 position design or a 3-way normally closed design merely by rotating a gasket located in the sub-base prior to assembly to the actuator. The 3-way operation routes the exhaust pressure to the spring side of the actuator to prevent corrosion problems within the actuator. An optional speed control can be purchased. Air inlet connection is 1/4" NPT. Thermoplastic composite enclosure is NEMA 4, 4x (standard) or NEMA 4, 4x, 7, 9 combination with 1/2" male conduit connection. Standard 115 VAC with voltage options of 230 VAC, 24 VAC, 12 VDC, and 24 VDC.



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#### **Dual Power Solenoid Valves**

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. This configuration of 3 & 4-way solenoid valves accepts two separate power sources, one to open and one to close the valve, for use on Air-to-Air (double acting) actuators only.



# Output Signal Limit Switches Mechanical SPDT (2) or DPDT (2) Proximity SPDT (2) or DPDT (2)

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. Set of two (2) auxiliary limit switches. Switches deliver a specified output current signal of 4-20mA or resistive signals of 0-5 or 0-10 VDC. Mechanical switches are SPDT or DPDT rated at 10 amp 125/250 VAC. Proximity (non-contact) switches are SPDT or DPDT rated at 1 amp 120 VAC. These limit switches are available with or without 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.

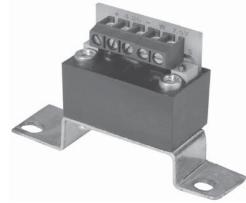


#### **Limit Switch with Indicator**



### **Stainless Steel Gauge Set**

Three (3) gauge set. Stainless steel gauge replacement for use on Pneumatic and Electro-Pneumatic Positioners. Includes one (1) input pressure gauge 0-30 psi, and two (2) output pressure gauges 0-160 psi.



#### **Transmitter**

Available for Premium Pneumatic actuated True Union Ball Valves and Butterfly Valves. The Transmitter is an internally mounted module for use in the Positioner. The module is designed to give a 4-20 milliamp linear output signal with a 0-90° Positioner shaft rotation. The unit is environmentally sealed and loop powered. Transmitter is designed for use in General Purpose Locations and is not approved for Hazardous Locations as classified by the NEC.