



Low Pressure (20-30 PSI) Pneumatic Piston Type Spring Return Actuators for Butterfly Valves



The Pneumatic Piston Type Spring Return Actuators provide actuation on butterfly valves in sizes up to 10 inches.

These actuators are sized and installed for 70° disc rotation and require 20 to 30 PSIG (140 to 210 kPa) maximum input air pressure at the diaphragm to deliver the rated torque output.

Maximum Available Force* (lbs)				
Actuator Model No.	Stroke	20 PSIG Air Supply Nominal Spring Range (PSI)		
		3 to 7	5 to 10	8 to 13
PS-1	Power	195.0	150.0	105.0
	Return	45.0	75.0	120.0
PS-2	Power	—	—	163.8
	Return	—	—	187.2
PS-3	Power	—	—	163.8
	Return	—	—	187.2
PS-4	Power	—	—	327.6
	Return	—	—	374.4
PS-5	Power	—	—	327.6
	Return	—	—	374.4

Notes:

- Nominal Spring Range is the interval over which the piston moves from one extreme to the other when no external load is applied to the actuator. It is expressed in terms of the control pressure on the diaphragm.
- Return Force based on 0 PSIG supply.
- * Work = Force x Stroke

Actuator Torque Comparison Data	
Actuator Model No.	Torque (in-lbs)/PSI**
PS-1	22.5
PS-2	46.8
PS-3	70.2
PS-4	93.6
PS-5	140.2

Notes:

- Total Torque = Supply Pressure - Spring Pressure x Torque/PSI (Power Stroke)
- Total Torque = Spring Pressure x Torque/PSI (Return Stroke)
- ** The torque is based on 90° angular rotation and computed for 1 PSI.