

V-3801-8001

Pneumatic Valve Actuator

Description

The V-3801-8001 Pneumatic Valve Actuator is designed to accurately position steam or water valve modulating plugs in response to a pneumatic signal from a controller. The small oval top makes the V-3801-8001 ideally suited for 1/2 and 3/4 in. VG7000 Series valve applications with restricted mounting space. This actuator has a molded synthetic rubber diaphragm design. The molded diaphragm provides a constant effective area throughout the actuator stroke. All parts are protected by a sturdy die-case aluminum housing.

Refer to *V-3801-8001 Pneumatic Valve Actuator Product Bulletin (LIT-977253)* for important product information.

Features

- compact design fits into restricted mounting spaces
- single set screw design provides easy assembly
- rolling diaphragm design provides constant effective diaphragm area throughout stroke for optimal force output
- easily field mounted to the valve bonnet with a single set screw, refer to the accessories chart.

Applications

The V-3801-8001 Valve Actuator is used on 1/2 and 3/4 in. VG7000 Series Valves. The V-3801-8001 is not recommended for sequencing because its relatively small size and small output force may result in unacceptable spring shift. Where pneumatic sequencing is required, the V-3000-800x Series actuators are recommended. The V-3802-1 and V-3801-8001 are not interchangeable.



V-3801-8001 Pneumatic Valve Actuator

Repair Information

If the V-3801-8001 Series Actuator fails to operate within its specifications, replace the unit. For a replacement actuator, contact the nearest Johnson Controls® representative.

Selection Charts

V-3801-8001 Pneumatic Valve Actuator

Code Number	Description	
V-3801-8001	Pneumatic Valve Actuator	

Accessories for V-3801-8001

Code Number	Description	
VG7000-1010	Spring kit with 3 to 6 psig spring	
VG7000-1011	Spring kit with 4 to 8 psig spring	
VG7000-1012	Spring kit with 9 to 13 psig spring	
VG7000-1015	Spring kit with 3 springs: 3 to 6, 4 to 8 and 9-13 psig (includes hardware to adapt to one valve)	

Technical Specifications

V-3800-8001 Pneumatic Valve Actuator		
Maximum Control Pressure	30 psig (207 kPa)	
Air Connection	1/8 in. NPT Barbed Fitting for 1/4 or 5/32 in. O.D. Polytubing	
Ambient Operating Temperature Limits	-20 to 150°F (-29 to 66°C) ¹	
Maximum Storage Temperatures	150°F (66°C)	
Effective Diaphragm Area	4 sq. in.	
Materials	Housing: Die-cast Aluminum Diaphragm: Synthetic Rubber	
Shipping Weight	0.5 lb (0.23 kg)	

^{1.} For use on steam systems with 15 psig (103 kPa) or less inlet pressure.