

# V-3000-8012, V-3000-8003 Pneumatic Valve Actuators

#### Description

The V-3000-8012 and V-3000-8003 Pneumatic Valve Actuators are designed to accurately position steam or water valve modulating plugs in response to a pneumatic signal from a controller. A V-9502 Valve Positioner can be ordered separately for use with the V-3000-8012 only, in applications where sequential operation is desired or additional positioning power is necessary. The actuators have a molded synthetic rubber diaphragm design. This molded diaphragm provides a constant effective area throughout the actuator stroke. All parts are protected by a sturdy die-cast aluminum housing.

Refer to V-3000-8012 (Exposed) and V-3000-8003 (Enclosed) Pneumatic Valve Actuators Product Bulletin (LIT-977252) for important product information.

#### Features

- universal valve mounting design is
- compatible for use on all Johnson Controls® valves with V-3000 mounting configurations
- rolling diaphragm design provides constant effective diaphragm area throughout stroke for optimal force output
- integral stroke position indicator provides visual reference to valve position

#### Applications

Used on the following: VG7000 Series, VTM Series, V-3752 Series, V-3754 Series, V-3762 Series, V-3766 Series, V-3966 Series, V-3974 Series, V-4324 Series, V-4332 Series, V-4334 Series, and V-4440 Series.

The V-3000-8012 and V-3000-8003 can replace the V-3000-1 and V-3000-2.



#### Exposed V-3000-8012 and V-3000-8003 Pneumatic Valve Actuators

## **Repair Information**

See the Accessories selection chart for replacement diaphragms. For a replacement actuator, contact the nearest Johnson Controls representative.

## Selection Charts

V-3000 Series Actuators		
Code Number	Description	
V-3000-8012	Exposed Yoke	
V-3000-8003	Enclosed Yoke	

#### Accessories for V-3000 Series Actuators (Ordered

Separately)		
Code Number	Description	
Exposed Model (V-3000-8012) Accessories		
V-3000-600	Replacement diaphragm for V-3000-8012.	
V-9502-90	Pilot positioner (less spring), mounts to V-3000-8012 only.	
V-9502-6801	Pilot positioner springs: 5/16 in. stroke (8 mm lift) - 3 psi (21 kPa) span 1/2 in. stroke (13 mm lift) - 5 psi (34 kPa) span 3/4 in. stroke (19 mm lift) - 10 psi (69 kPa) span	
V-9502-6802	<b>Pilot positioner springs:</b> 5/16 in. stroke (8 mm lift) - 8 psi (55 kPa) span 1/2 in. stroke (13 mm lift) - 12 psi (83 kPa) span	
V-9502-6803	Pilot positioner springs: 3/4 in. stroke (19 mm lift) 4 psi span	
	Valve spring kits: Refer to the specific valve product for spring kit code numbers	
Enclosed Model (V-3000-8003) Accessory		
V-3000-6001	Replacement diaphragm for V-3000-8003.	

#### Technical Specifications V-3000 Series Actuators

## Maximum Control Pressure 25 ps

Maximum Control Pressure	25 psig (172 kPa)
Air Connection	Barb Fitting: 5/32 or 1/4 x 1/8 National Pipe Thread (NPT)
Ambient Operating Temperature Limits	-20 to 150°F (-29 to 66°C)
Maximum Storage Temperature	150°F (66°C)
Effective Diaphragm Area	8 in. <sup>2</sup> (51.2 cm <sup>2</sup> )
Materials	Housing: Die-cast Aluminum Diaphragm: Synthetic Rubber
Shipping Weight	V-3000-8012: 1.1 lb (0.49 kg) V-3000-8003: 1 lb (0.45 kg)