V11 Series
Three-Way Solenoid Air Valve

Product Bulletin

LIT-7171550P
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Overview

V11 Series Three-Way Solenoid Air Valves are for use in applications where the operation of a pneumatically operated device is dependent upon an electrical circuit. The valves directly supply air to the pneumatic device when the coil is energized or de-energized, depending on the supply and exhaust air connections.
All V11 Series valves are designed for use only as operating devices. Where system closure, improper flow, or loss of pressure due to valve failure can result in personal injury and/or loss of property, it is recommended that additional devices be added to indicate proper system operation, (for example, blade position indication on the damper blades in smoke damper applications).

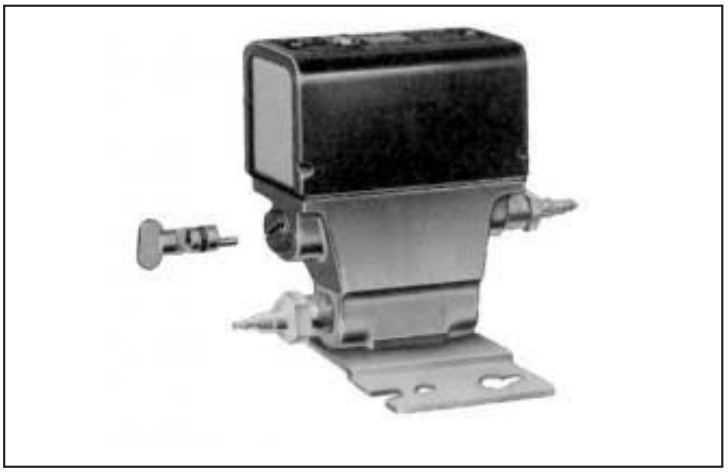


Figure 1: V11 Series Three-Way Solenoid Valve with optional manual opener key.

Features and benefits

Positive air seal	No foreign material entering ports
Manual operation	Easier testing and checkout
Compact and lightweight	Fits in small spaces
360 mounting	Mountable in any position

Application

The valve is furnished for two-position action and has three identified connections: a normally open (N.O.) port with 1/8 in. FNPT connection, a normally closed (N.C.) port, and a common (COM) port with 1/4 in. barbed fittings.
The ports in the die cast aluminum valve body have No. 60 mesh (217 micron openings) monel screens to stop foreign material from entering the valve ports to give positive air seal.
In a typical application, supply air is connected to the normally closed port and the control device is connected to the common port. When the solenoid is energized, a magnetic field activates a plunger-type valve stem and supply air is directed to the control device. When the solenoid is de-energized, the supply air connection is closed and the normally open port exhausts air from the control device. Reverse action may be obtained by connecting the supply air to the normally open port, using the normally closed port for exhaust.

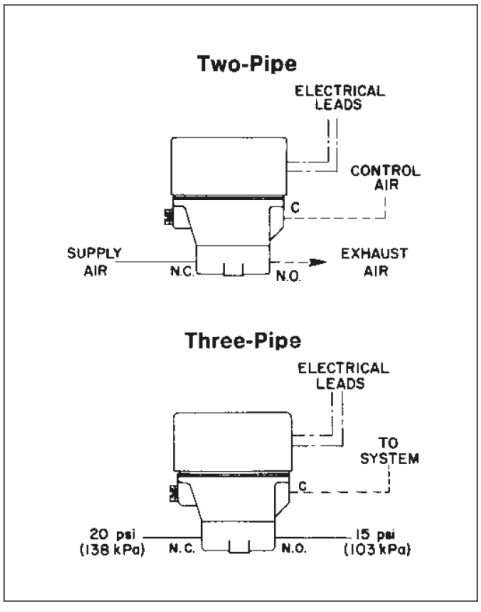


Figure 2: Dimensions

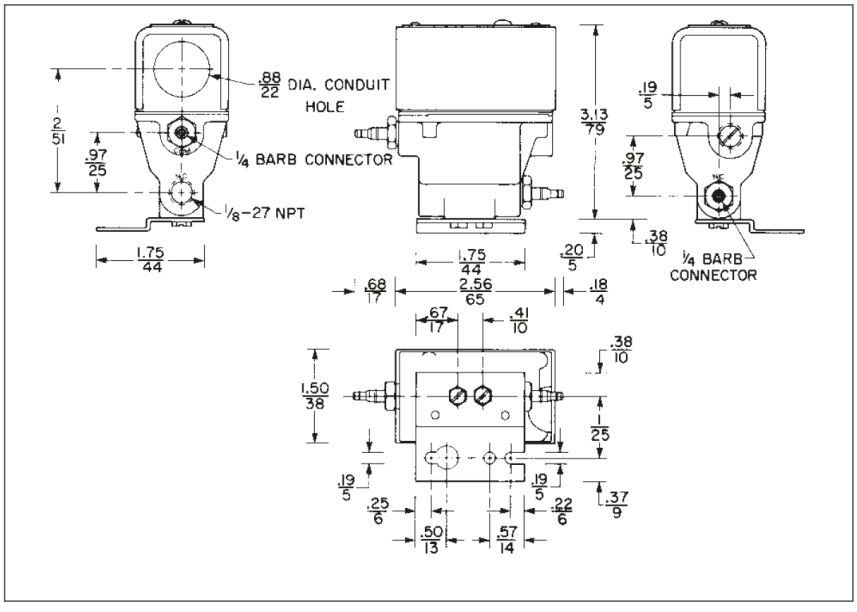


Figure 3: Typical application diagrams

Technical specifications

Product number		V11HAA-100	V11HAA-115	V11HBA-100	V11HCA-100	V11HDA-100	V11HFA-100	V11HGA-100(G)
Power		110/220 V, 50/60 Hz		220/240 V, 50/60 Hz	208 V, 50/60 Hz	440/480 V, 50/60 Hz	277 V, 50/60 Hz	24 V, 50/60 Hz
Temperature rating		60 C max			60 C max @ 60 Hz 55 C max @ 50 Hz	60 C max	60 C max @ 60 Hz 55 C max @ 50 Hz	
Ambient temperatures		Minimum 32° F (0° C) maximum 140° F (60° C)						
Conduit openings		7/8” diameter						
Finish	**Valve body**	Dull gray (iridate)						
	Cover and case	Gray baked enamel						
Material	**Valve body**	Die cast aluminum						
	Cover and case	Cold rolled steel						
Maximum pressure rating		30 PSIG (207 kPa)						
Operating pressure (all three ports)		0 to 20 PSIG (0 - 138 kPa)						
Packaging		Bulk pack normally supplied to OEMs. Individual pack available at extra cost.						
Power consumption		6 watts						
Pressure and flow ratings		15 PSIG (103 kPa) inlet and 0 PSIG (0kPa) outlet. The valve will pass 1.5 cfm (2592 SCIM) (0.71 l/s) of air from the common to the normally closed connections (when energized) or from the common to the normally open connection (when de-energized).						
Shipping weights	**Bulk pack - 60 units per carton**	55 lb (24.9 kg)						
	Individual pack - 56 units per carton	50 lb (22.7 kg)						
Wiring connections		18” wire leads						
Air connections		1/4” barb connections in common port and normally closed. Normally open port is 1/8” FNPT.						
Compliance		**United States:** UL Listed, CCN YIOZ, File MH3536, to UL 429: Electrically Operated Valves. **Canada:** cUL Listed, CCN YIOZ7, File MH3536, to CAN/CSA-C22.2 No. 139: Electrically Operated Valves.						

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Patents

Patents: https://jcipat.com

Contact information

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