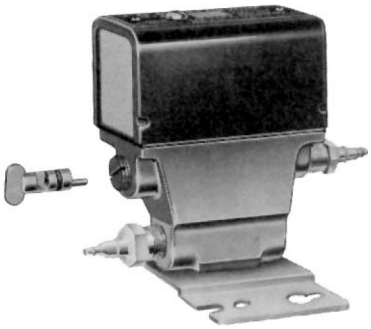
Honeywell

RP Series Three-Way Solenoid Air Valve

SPECIFICATION DATA



APPLICATION

RP three-way valves are for use in applications where the operation of a pneumatically operated device is dependent upon an electrical circuit. The valve directs supply air to the pneumatic device when the coil is energized or de-energized, depending on the supply and exhaust air connections.

Do not install where the ambient temperature for the alternating current models exceeds 140°F (60°C) or for the direct current models exceeds 104°F (40°C). The maximum pressure should not exceed 30 psig (207 kPa).

All Series RP air 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).

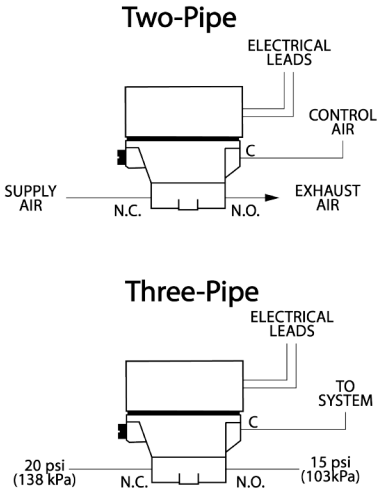


Fig. 1. Application diagram.

OPERATION

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. (See Fig. 1.)

INSTALLATION

IMPORTANT:

Contaminants, including water, in the air supply may affect valve operation. It is recommended that a filtering device be added at the air supply or within the pneumatic system to avoid damage to system components.

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This air valve may be mounted in any position. It can be supported by the piping, when used, or conduit to which it is attached. When tubing is used, the bracket supplied on the valve may be used for adequate support. Tubing connections are made to the barbed connectors.

Check the voltage shown on the valve data plate against the voltage of the power source to see that the right unit is being installed.

WIRING

⚠ CAUTION

Risk of Electric Shock.
Disconnect the power supply before making electrical connections to avoid electric shock.

⚠ MISE EN GARDE

Risque de décharge électrique.
Débrancher l'alimentation avant de réaliser tout raccordement électrique afin d'éviter tout risque de décharge électrique.

All wiring must conform to the National Electrical Code and local regulations.

Make wiring connections to the 18 in. wire leads from the coil. The wire is brought through a 7/8 in. diameter conduit opening in the end of the case. All splices should be made using approved solderless connectors or by soldering and then taping the connections.

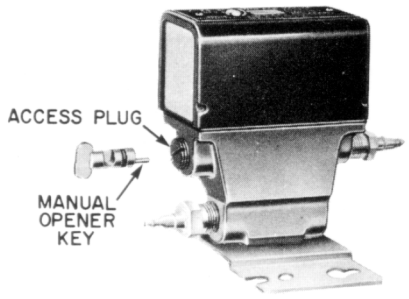

Fig. 2. RB Three-Way Solenoid Air Valve. Optional manual opener key is shown in the proper position for insertion.

SPECIFICATIONS

Table 1. Models.

Product Number	Description
RP419B1071	110/120V, 50/60Hz, Lead wire connection.
RP419A1107	110/120V, 50/60Hz, Junction box and Lead wire connections.
RP419A1057	120V, 60Hz, Junction box and Lead wire connections.
RP419A1081	208V, 60Hz, Junction box and Lead wire connections.
RP419A1065	480V/60Hz or 440V/50Hz, Junction box and Lead wire connections.
RP819B1002	24V, 60Hz, Lead wire connection.
RP819A1004	24V, 60Hz, Junction box and Lead wire connections.
RP819B1010	24V, 50Hz, Lead wire connection.

Air Connections: 1/4 in. Barb Connections in Common Port and Normally Closed Port;
Normally Open Port is 1/8 in. NPT (Internal)

AMBIENT TEMPERATURES
Alternating Current Models: Minimum 32°F (0°C); Maximum 140°F (60°C)

Direct Current Models: Minimum 32°F (0°C); Maximum 104°F (40°C)

Conduit Opening: 7/8 in. 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 (210 kPa)

Operating Pressure (All Three Ports): 0 to 20 psig (0 to 138 kPa)

POWER CONSUMPTION
Alternating Current Models: 6 Watts

24 VDC Models: 9 Watts

Pressure and Flow Ratings: With a 15 psig (103 kPa) Inlet and 0 psig (0 kPa) Outlet. The valve will pass 1.5 cfm (2592 scim [0.71l/s]) of air from the Common to the Normally Closed connection (when energized) or from the Common to the Normally Open connection (when de-energized).

Wiring Connections: 18 in. Wire Leads

Agency Listing: UL Guide No. YIOZ, UL file MH3536.

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