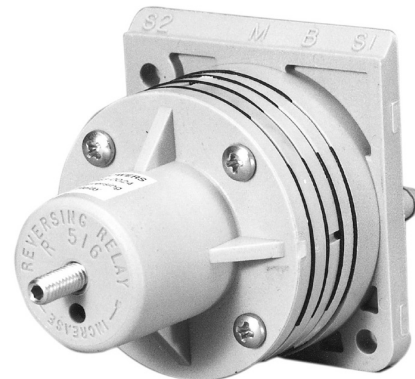


Reverse Acting Relay



243 Reverse Acting Relay.

Description

The 243 Reverse Acting Relay provides a proportional output signal that varies inversely with the input signal. A spring adjustment is provided to allow setting a desired reverse acting schedule required by a particular application.

Features

- Lightweight and compact
- Can be mounted in any position
- Mounting bracket and screws included
- Field adjustable spring range
- Can be used as a signal inverting relay
- Force-balance operation minimizes air consumption
- Internal relief provides fail-safe operation
- Amplifies air volume to minimize system lag

Applications

The 243 Reverse Acting Relay has two applications. For both, the supply air pressure must be equal to or greater than the spring setting.

Signal Reverse Acting Relay Application: The relay reverses a controller signal to match the operation of a control element. An increase in input pressure causes equivalent decrease in output pressure.

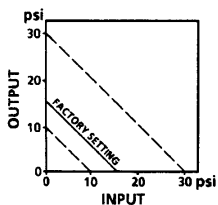
Signal Inverting Application: A typical application reverses the action of a face and bypass damper actuator on a coil used for both heating and cooling. The output pressure is directly proportional to the input pressure until one-half the spring setting is reached. After this point, the output pressure is inversely proportional to the input until the output reaches zero.

F-75

Pneumatics

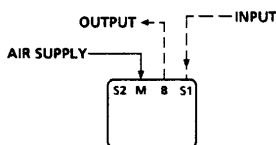
Typical Input/Output Drawings

Reverse Acting Relay Application

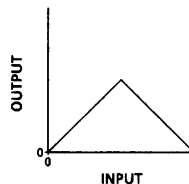


Input S1	Input B
0	15
5	10
10	5
15	0

An increase in input pressure causes equivalent decrease in output pressure.

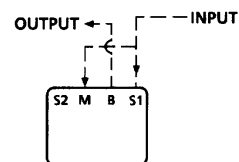


Signal Inverting Application



Input S1+M	Output B
3	3
7.5	7.5
12	3
15	0

The output pressure is directly proportional to the input pressure until one-half the spring setting is reached. After this point, the output pressure is inversely proportional to the input until the output reaches zero.



Key

- B Output Pressure
- M Supply Air
- S1 Input Pressure
- S2 Not Used
- SP Spring Setting

243 Reverse Acting Specifications

Operating Range 0 to 30 psi (0 to 207 kPa)
Adjustment Using 5/64" (2 mm) Hex Wrench
 Range Adjustment 10 to 30 psi (69 to 207 kPa)
 Factory Setting 15 psi (103 kPa)
Maximum Ambient Temperature 104°F (60°C)
Maximum Air Pressure 30 psi (207 kPa)
Air Capacity 230 scim (63 ml/s)

Air Consumption for Air Compressor Sizing 29 scim (8 ml/s)
Material
 Housing Glass-filled Nylon
Air Connections Barbed nipple for 1/4" (6 mm) OD polyethylene tubing
Mounting Mounting bracket included
Shipping Weight 0.27 lb. (0.13 kg)

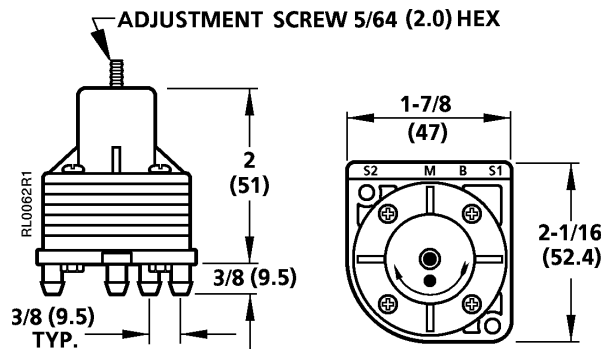
243 Reverse Acting Product Ordering

Description	Part No.
Reverse Acting Relay	243-0024

Dimensions

F-76

Pneumatics



Dimensions shown in inches (mm).