

MODEL 3327 NORMALLY CLOSED ADJUSTABLE DIFFERENTIAL AIR PILOT RELAY VALVE $1 / 4$ " NPT

## DESCRIPTION

The 3327 is a poppet-type normally closed relay valve. The diaphragm spring keeps this valve in a closed position. This stops the flow of supply air and vents the accumulated air from the device actuated to exhaust. Various springs are available for this valve to bring the pilot pressure setting to a maximum of 120 psi. When air pressure enters pilot port number one and accumulates to a pressure higher than the spring setting, it will open the supply to the OUT port and close the OUT port to exhaust. The valve can be cancelled (returned to closed position) by lowering the pilot pressure in number one pilot port. It can also be closed by sending a signal to pilot port number two, which will overcome
pilot pressure number one. This valve lends itself extremely well for a multitude of dual piloting applications. The purpose of the dual diaphragm is to avoid deflection of the diaphragms in two directions.


Schematic Symbol

## SPECIFICATIONS

Weight: $3.2 \mathrm{lbs}(1.4 \mathrm{~kg}$ )
Materials: Die cast silicon bronze and stainless steel hardware
Maximum Supply Pressure: 200 psi (13.8 bar)
Maximum Pilot Pressure: 140 psi (9.7 bar)
Operating Temperature Range: $-40^{\circ} \mathrm{C}$ to $+90^{\circ} \mathrm{C}$
Pipe Port Size: $1 / 4$ " NPT

## ORDERING INFORMATION

Model Designation Code:
A - Standard inlet cap
B - With flow control inlet cap
C - Heavy spring, 40-120 psi range
D - Light spring, 25-60 psi range
DD - Extra light spring, 10-20 psi range
E - Left hand model
F - Right hand model (as shown in picture)
The standard Model 3327 Relay Valve is supplied as follows:

- Standard inlet cap
- Heavy spring, 40-120 psi range
- Left or right hand model (to specify)

To order, state model number followed by desired designation code.
Example: 3327-ACE for standard left hand valve.

Repair kit 3327-RK is available for seal repair.

## DIMENSIONS AND PARTS LIST MODEL 3327



3327

| Item | Qty | Part Number Description |  |
| :---: | :---: | :---: | :--- |
| 1 | 1 | $3326-0001$ | End cap |
| 2 | 2 | $1022-0212$ | Jam nut |
| 3 | 1 | $3326-0004$ | Spool |
| 4 | 1 | $3326-0002$ | Pilot port 1 |
| 5 | 1 | $1101-0012$ | "O" ring |
| 6 | 1 | $1105-2002$ | Diaphragm |
| 7 | 2 | $3326-0006$ | Washer |
| 8 | 2 | $3325-0007$ | Washer |
| 9 | 2 | $1102-0005$ | "U" Cup |
| 10 | 1 | $1201-0016$ | Spring |
| 11 | 1 | $1101-0016$ | "O" Ring |
| 12 | 1 | $3804-0004$ | Poppet |
| 13 | 1 | $1022-0112$ | Nut |
| 14 | 1 | $3326-0005$ | Retainer |
| $* 15$ | 1 | $1201-0050$ | Spring 10-20 psi |
| $* 15$ | 1 | $1201-0010$ | Spring 25-60 psi |
| 15 | 1 | $1201-0012$ | Spring 40-120 psi |
| 16 | 1 | $1001-1010$ | Hex head screw |
| 17 | 1 | $1022-0262$ | Jam nut |
| 18 | 1 | $1105-2001$ | Diaphragm |
| 19 | 1 | $3325-0006$ | Spooi |
| 20 | 1 | $3804-0003$ | Seat |
| 21 | 1 | $1201-0009$ | Spring |
| 22 | 2 | $1010-0806$ | Round head screw |
| 23 | 4 | $1001-1020$ | Hex head screw |
| 24 | 1 | $3327-0003$ | Spacer |
| 25 | 1 | $3327-0001$ | Spacer |
| 26 | 1 | $3325-0013$ | Pilot port 2 - R.H. |
| 26 | 1 | $3325-0002$ | Pilot port 2 - L.H. |
| 27 | 1 | $3325-0008$ | Exhaust port |
| 28 | 1 | $3325-0009$ | Outlet port |
| 29 | 1 | $3325-0010$ | Inlet cap |
| 30 | 2 | $1001-1044$ | Hex head screw |
| $* 31$ | 1 | $3325-0012$ | Inlet cap |
| $* 32$ | 1 | $1101-0008$ | "O" Ring |
| $* 33$ | 1 | $1022-0262$ | Jam nut |
| $* 34$ | 1 | $3325-0011$ | Needle |
| $*$ | optional |  |  |
|  |  |  |  |
| 10 |  |  |  |



All Dimensions in inches (mm)


* Alternative inlet cap with flow control can be used to replace item 29.

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