



SERIES 80 AIR SWITCHES

Differential
Vacuum
Pressure



80JW2

80JD2
80JSV2

GENERAL DESCRIPTION:

Fireeye Series 80 Air Switches provide dependable proof of Air Flow or Pressure. Their design includes rugged die cast aluminum housings with sensitive diaphragms, single pole double throw snap action switches and visible on-off indicators. Ad-

justable switches have dual scales calibrated in millimeter and inches water column. Fireeye Series 80 air switches are approved by UL-FM-CSA and IRI Approvable for air flow interlocking safety switch applications.

SPECIFICATIONS

For Differential, Vacuum, or Pressure Applications. Available in 3 Adjustable Ranges

- 80JD2-1000-.07" to 1.7" WC
(2mm to 43 mm WC)
- 80JD2-1001-.07" to 4" WC
(2mm to 102mm WC)
- 80JD2-1002-.1" to 24" WC
(3mm to 600mm WC)

For Vacuum Applications

80JSV2-1001-.07" to 4"

For Vacuum or Pressure Applications

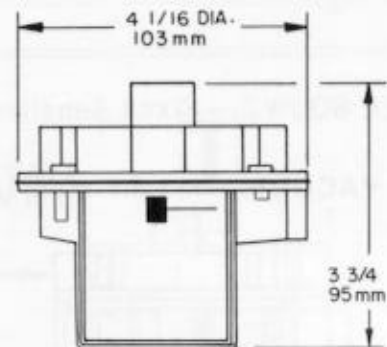
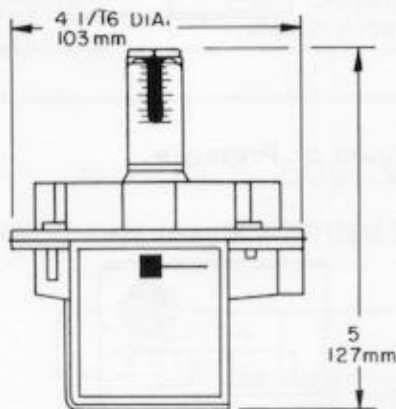
- 80JW2-1000 Preset for Vacuum-.11" to .13" WC
(3mm WC)
- 80JW2-1001 Preset for Pressure-.20" to .22" WC
(5mm WC)

Switch Rating: 10 Amps - 1/4 HP at 120VAC
5 Amps - 1/4 HP at 240 VAC

Ambient Temperature Limits 140°F (60°C) Max
-25°F (-30°C) Min

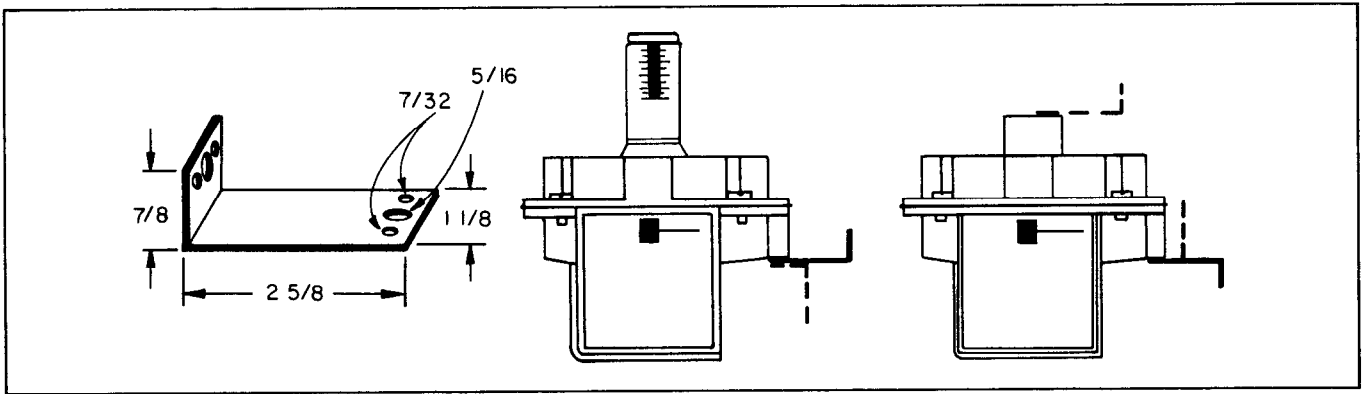
Maximum Pressure Surge 3 PSIG

DIMENSIONS



FIREYE DIVISION

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MOUNTING

80JD2 and 80JSV2 Air Switches must always be mounted with the *stem up*.

80JW2 Air Switch *must* be mounted *stem up* for vacuum applications and *must* be mounted *stem down* for pressure applications.

All Models must be mounted horizontally, but do not require exact levelling. A tapped hole ($5/16'' \times 18$ thread) is provided in the casting for bolting the air switch rigidly.

A steel bracket #36-717 is available as optional equipment. Brackets fasten to the casting with a bolt (supplied). On Model 80JW2 the bracket may be fastened to the top of the stem.

*CAUTION

1. Installer must be trained and qualified.
2. Turn off power before installation.
3. When installation is completed, test the operation to verify the unit functions properly.
4. Test the complete installation at least once a month to verify proper operation.

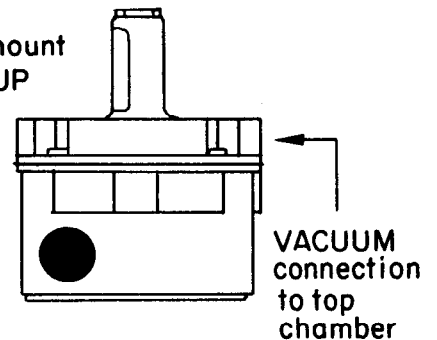
AIR CONNECTIONS

TUBING: Recommended as minimums: $1/4''$ copper or aluminum tubing; or $1/8''$ pipe. All tubing and pipe must be clean and free from oil, dirt, and chips. If piping run is over five feet long, use larger size tubing or pipe, and reduce size at switch connection.

AIR SUPPLY: should be connected as shown in drawings.

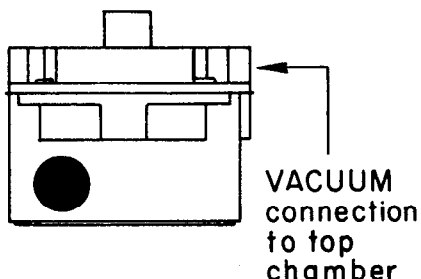
MODEL 80JSV2 – Spring-adjustable – – Vacuum only

Always mount
stem UP

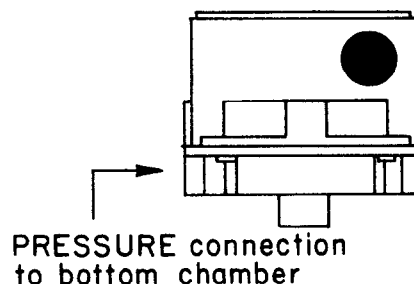


MODEL 80JW2 – Fixed Sensitivity Range – For Vacuum or Pressure

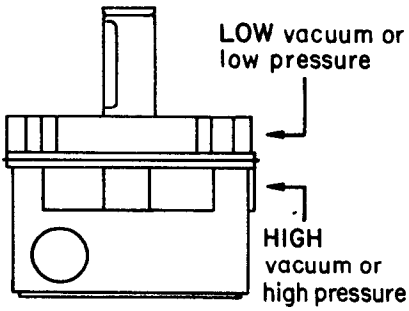
VACUUM – Mount stem UP



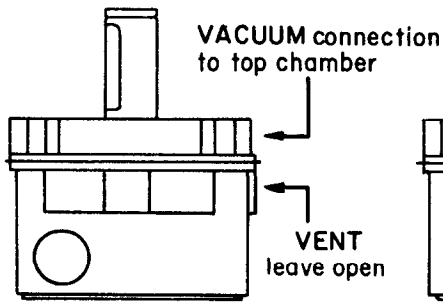
PRESSURE – Mount stem DOWN



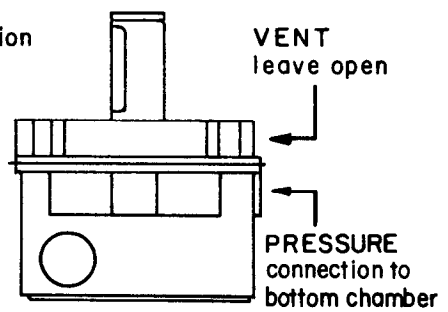
DIFFERENTIAL



VACUUM ONLY

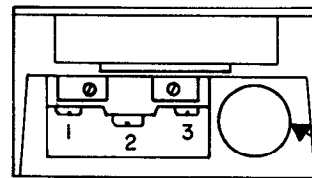


PRESSURE ONLY

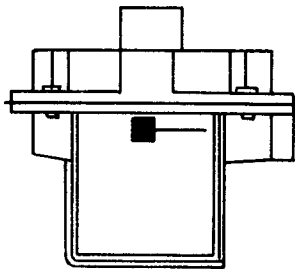


TERMINAL CONNECTIONS

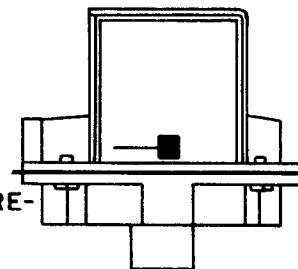
MODEL 80JW2



HOLE FOR CONDUIT CONNECTION



FOR VACUUM-STEM UP



FOR PRESSURE-STEM DOWN

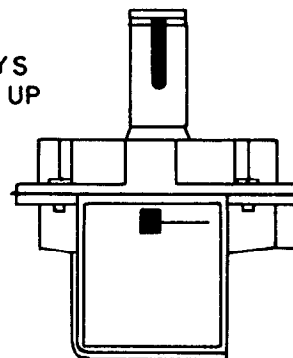
INDICATOR POSITION	CONTACTS
ON	1 and 3 closed 1 and 2 open
OFF	1 and 3 open 1 and 2 closed

INDICATOR POSITION	CONTACTS
ON	1 and 3 open 1 and 2 closed
OFF	1 and 3 closed 1 and 2 open

MODELS 80JSV2 and 80JD2

ALWAYS
STEM UP

INDICATOR POSITION	CONTACTS
ON	1 and 3 closed 1 and 2 open
OFF	1 and 3 open 1 and 2 closed



RANGE ADJUSTMENT

Setting on Models 80JSV-2 and 80JD-2 is spring-adjustable, to very close tolerances.

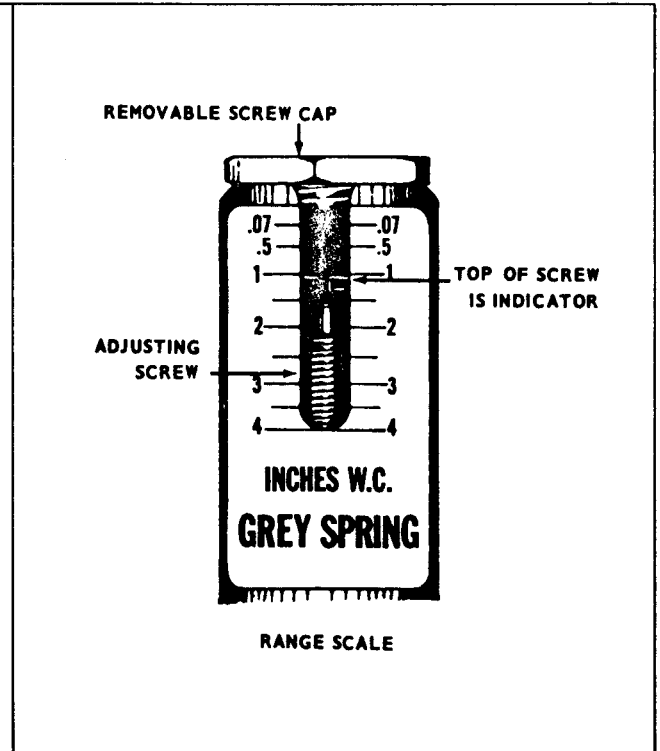
Three Ranges are available.

All settings are made with the switch in horizontal position, using vacuum unless otherwise specified.

To readjust, remove the hexagon cap screw at top of indicator stem, and turn the adjusting screw with screwdriver. To increase pressure setting, turn adjusting screw DOWN in clockwise direction. To decrease pressure setting, turn adjusting screw UP, in counter-clockwise direction. Top of adjusting screw is indicator.

Because of slight variances in spring tension characteristics, range setting and marking are nominal. If more accurate setting is required, a "U" tube or inclined manometer should be used.

If adjusting screw is removed, apply a non-hardening pipe compound to the threads before replacing. Snap-On Tool Co.'s "Never Seez" compound is recommended. If screw cap is removed to adjust setting, be sure to replace this cap, to prevent tampering.



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