

- HIGH ACCURACY
0.1 % STANDARD
- 2 WIRE OPERATION
- RUGGED NEMA 4X
ENCLOSURE
- RFI PROTECTION



GENERAL DESCRIPTION

The DEVAR Model 18-268B is a two-wire pneumatic to current transmitter. It accepts a pressure input and provides a proportional 4 to 20 milliamp output. This transmitter features a piezoresistive silicon, pressure transducer, which provides excellent signal conversion and long term stability. The transducer includes laser-trimmed resistors, which provide temperature compensation over a range of 0 to 50 °C as well as interchangeability of $\pm 1\%$. The pressure transducer is unaffected by vibration and does not consume signal air. All internal parts which come in contact with the input media are either silicon or gold plated kovar. The 18-268B provides easily accessible span and zero pots for calibration as well as a linearity pot which is used to calibrate out any nonlinearity which might be present in the pressure transducer. Other features of the 18-268B include effective RFI protection in the 20 to 500 MHz frequency range and a rugged die cast aluminum, NEMA 4X, explosion proof housing.

The Model 18-268B is primarily used for converting 3 to 15 psi inputs to 4 to 20 milliamp outputs. By connecting the 18-268B transmitter to existing tubing runs, pneumatic field devices can easily be interfaced with modern electronic instrumentation. The 18-268B is not limited to use with instrument air, but can also be used as a general purpose pressure transmitter, with pressure inputs ranging between 2 and 50 psi.

The Model 18-268B provides true 2-wire operation in which the output signal and input power are transmitted over the same pair of wires. An external DC power supply is used to source current to the loop while the 18-268B regulates the current flow as a function of the input pressure. Because the 18-268B derives its power from the loop, it requires a certain amount of loop voltage to operate. The 18-268B typically puts a 9 to volt drop on the loop.

Specifications 18-268B

General

- a. Calibration Accuracy 0.1% of span
- b. Repeatability0.1% of span
- c. Hysteresis0.01% of span
- d. Operating Temp -40 to 80 ° C
- e. Thermal Zero Shift0.01% of span / ° C
- f. Thermal Span Shift0.01% of span / ° C
- g. Vibration Effect Negligible
- h. Mounting Position Any plane

Input

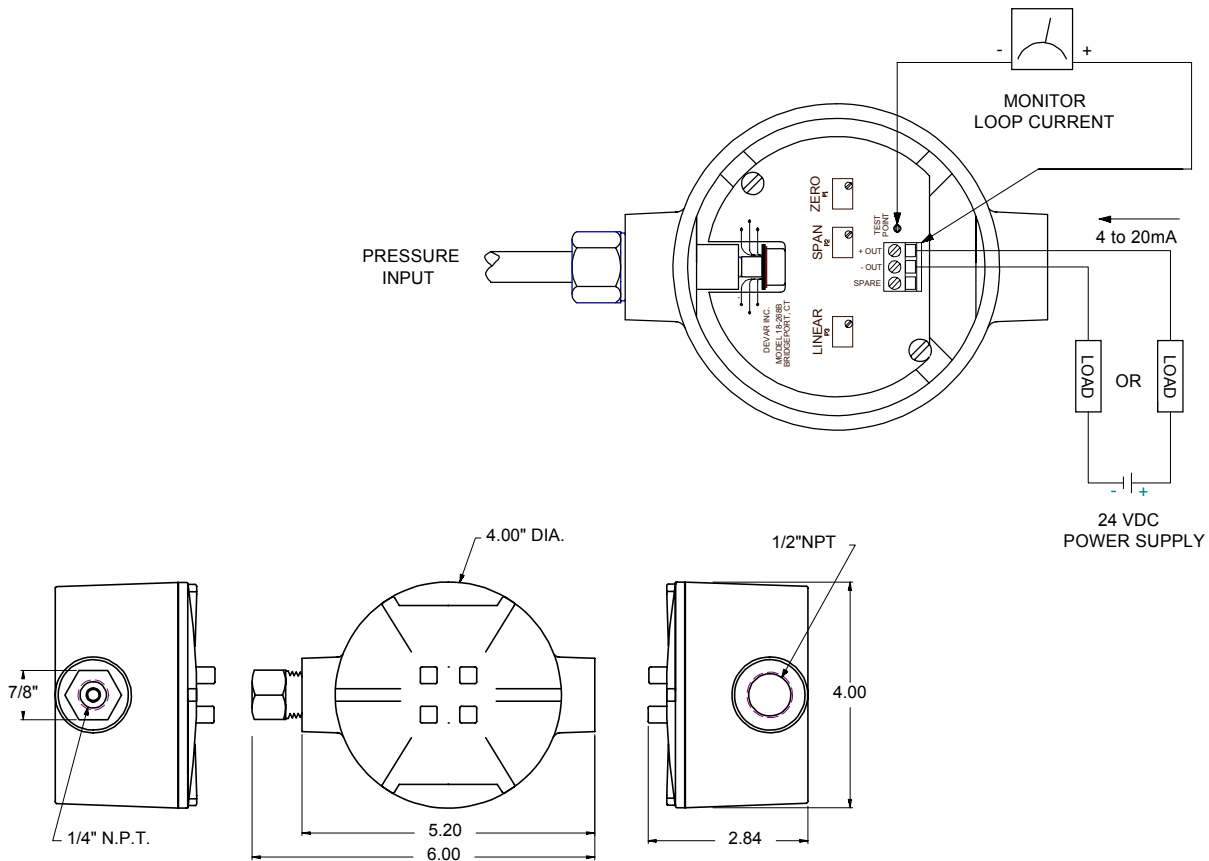
- a. Pressure MediumNon-corrosive gases
- b. Input Range3 to 15 PSIG standard
- c. Non-standard Inputs2 to 50 PSIG
- d. Max. Input Pressure..... 3 x Full Scale
- e. Burst Pressure 500 PSI, Input > 10 PSI
20 PSI, Input < 10 PSI

Output

- a. Output Current4 to 20 milliamps
- b. Operating Voltage 10 volts Max., 9 volts Typ.
- c. Power Supply 24 volts Standard
(10 to 42 volts)
- d. Max. Output Load700 ohms, with 24 V supply

Mechanical

- a. Housing Die cast aluminum
- b. Pressure Fitting 1/4" NPT, female,
brass 7/8" hex
- c. Conduit Fitting 1/2 inch NPT
- d. Electrical Connection ..Top access, compression,
22 to 14 AWG wire range
- e. Weight 1.8 lbs.



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