

- ACCURACY 0.2% STANDARD
0.1% OPTIONAL
- HIGH DENSITY PACKAGING
- EXCELLENT RFI PROTECTION
- 10-50 mA OUTPUT SIGNAL
AVAILABLE



INTRINSICALLY SAFE
FOR CLASS 1, DIVISION 1
GROUP A, B, C, AND D

GENERAL DESCRIPTION

Solid State pneumatic signal conversion is accomplished within the Devar Model 18-218A, Two-Wire Pneumatic to Current Signal Converter. By utilizing a diffused silicon semiconductor pressure transducer, excellent signal conversion is obtained, impervious to vibration and noise without consumption of air. The incorporating of two-wire techniques for supplying power and signal conversion facilitate field wiring and provides the utmost in economical and reliable signal conversion.

The unit features intrinsically safe design, compact size, and is supplied in an aluminum enclosure.



Front access to input/output connections, span, and zero adjustments provide for ease of single loop servicing. It is fully protected from RFI noise and provides effective operation within the 20 MHz to 500 MHz frequency spectrum. (per SAMA PMC 331.1978.)

Typical applications for the 18-218A unit are for interfacing between existing pneumatic field signal transmitters and new electronic devices by leaving existing tubing runs in place and simply connecting to the pneumatic to current converters in a high density rack at the control room. High density mounting racks are available for both hard wired or plug in options.

SPECIFICATIONS Model 18-218A

Accuracy: 0.2% Guaranteed
0.15% Typical
(includes combined effects of linearity, hysteresis and repeatability)

High Accuracy Option: 0.1% Guaranteed
0.05% Typical

Repeatability: 0.1% F.S.

Hysteresis: Negligible

Power Requirement: 12 to 42 VDC (44 VDC Max.)

Temperature Limit: -40 to +180°F

Temperature Effect: Zero shift ±0.007% F.S./°F Max.

High Accuracy Option: 0.005%/°F

Maximum Pressure Input: 3 × F.S. (5 min.) without recalibration
4 × F.S. (1 min.) without failure

Burst Pressure: 60 PSI

RFI Effect: Negligible from 20 MHz per SAMA 33.1-1978

Calibration Adjustments: Multiturn zero offset and span

Input: 3 to 15 PSI (for other calibrated ranges up to 50 PSI Max., specify -SC)

Input Connection: 1/8-27 NPT female air inlet

Output: 4-20 mA, 600 Ohms with 24 VDC Power Supply
10-50 mA, 240 Ohms with 24 VDC Power Supply

Monitor: Current Output signal may be monitored locally w/out disconnecting output.
LED indicates pressure applied

Field Connections: #6-32 screw terminals

Mounting Position: Any plane

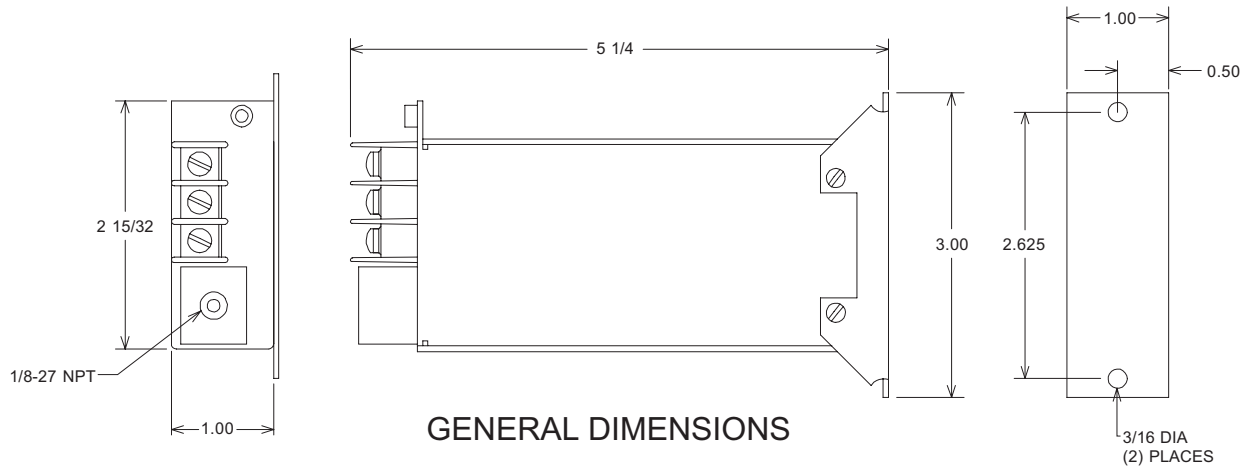
Dimensions: 1" wide × 2-15/32" H × 5-1/16" D

Weight: 7.5 oz.

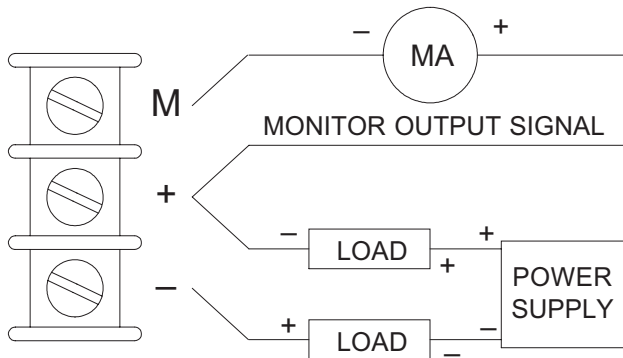
Warranty: 2 years

Model No 18-218A-1 4-20 mA output
18-218A-2 10-50 mA output

Options: -H 0.1% Accuracy
-SC Special Calibration
-M31 Surface Mounting Bracket
-M14S Stainless Steel Tag
-R Reverse Operation



GENERAL DIMENSIONS



FIELD WIRING

MOUNTING RACKS

MODEL	# OF UNITS	SIZE (in.)
18-017	17	3.5 H × 19 × 10.5 Deep
18-034	34	5.25 H × 19 × 10.5 Deep
18-016	16	5.25 H × 10 × 10.5 Deep

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