American Sensing Inc (ASI)



FLUSH MOUNT NON OIL FILLED PRESSURE TRANSDUCER



Model ASI 2075
Flush Mount Non Oil Filled
Pressure Transducer

MODEL ASI 2075

FEATURES:

- Aircraft and space Aerospace Application
- · Compact, lightweight stainless steel design
- High accuracies up to ±0.1% FSO (BFSL)
- Wide operating temperature range from -70 °F to +275 °F (-56 °C to +135 °C)
- Designed to meet MIL-STD-810F shock and vibration specification*

APPLICATIONS:

- · Commercial and defense satellites
- Launch vehicles
- Unmanned aerial vehicles
- Military and civilian aircraft
- Ground support and engine test stands

PRODUCT OVERVIEW:

Model ASI 2075 Aerospace Grade, low level pressure transducer is designed to provide high-accuracy measurements of $\pm 0.1\%$ FSO. It is ideal for use within demanding aerospace and defense applications, including those in which higher shock and vibration levels may be present. Its compact and lightweight design facilitates ease of installation within space constrained environments.

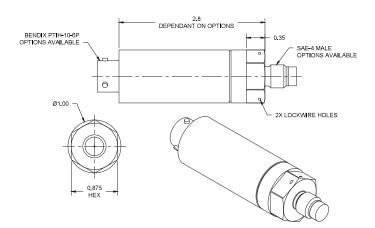
FIELD OPTIONS:

- Amplified electronics available
- Temperature output
- Inconel 718, Hastelloy C276 wetted parts
- · Wide selection of pressure ports and electrical connections

MODEL ASI 2075

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



WIRING CONFIGURATION

PIN(A/#)	4-20 mA	0-5V
A/1	+EXCITATION(R)	+EXCITATION(R)
B/2	-EXC/OUTPUT(B)	-EXC/COM(B)
C/3	NO CONNECT	+OUTPUT(G)
D/4	NO CONNECT	NO CONNECT
E/5	NO CONNECT	NO CONNECT
F/6	NO CONNECT	NO CONNECT

COMMONS JUMPERED

"PARENTHESES() REPRESENT COLORS FOR CABLE OPTION, (R) = RED, (B) = BLACK, (G) = GREEN, (W) = WHITE

"CUSTOM PINOUTS AVAILABLE. SHUNTS AND TEMPERATURE PINS MAY BE USED WITH ADDITIONAL COLORS

SPECIFICATIONS

ELECTRICAL

- Output Signal: Non-amplified 1-3 mV/V (pressure dependent) 5 mV/V (10mV/V and non-standard outputs available)
- Supply Voltage: 10 Vdc, max
- Bridge Resistance: 5K Ω standard, 350 Ω optional
- · Response Time: 3-5 kHz typical
- Connection: PTIH-10-6P standard, options available

ACCURACY (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70°F)

- Static Accuracy (RSS): <±0.3% FSO, ± 0.10% FSO available (Linearity calculated using BFSL)
- Zero/span balance: ±1.0%, 0.5% FSO option available

THERMAL SPECIFICATION

• Compensated : 0 °F to +180 °F (-18 °C to +82 °C)

= ±1.0% FSO/100 °F

Expanded -40 °F to 250 °F (-40 °C to 120 °C)

= ±2.0% FSO/100 °F

Optional -65 °F to +250 °F (-54 °C to +120 °C)

= ±2.5% FSO/1 00 °F

• Operating: -70 °F to +275 °F (-56 °C to +135 °C)

MECHANICAL

- · Process connection: 7/16-20UNF-2A, optional pressure ports available
- Proof Pressure: 1.5X FSO
- Burst Pressure 3.0X FSO
- Secondary containment: Rated at 4,500 PSI (310 BAR)
- Random Vibration: >25 G RMS (20 Hz to 2,000 Hz) (options available
- shock: 100 G half-sine shock pulse over 11msec (options
- Approximate Weight: 4 oz (0.1 kg) some options may affect weight

PRESSURE RANGES

• 0 to 100PSI thru 0 to 10,000PSIA, PSIG, PSIV, PSISG options (7 thru 700 BAR)

(Ranges below 1000 PSI require oil-filled sensor, consult factory)

MATERIALS OF CONSTRUCTION

- Wetted Parts: 17-4 PH, or 316L pressure range dependent (Inconel 718, Hastelloy C276 available)
- Housing: 304SS

*Please consult factory for your specific needs.

Standard configurations shown.

Please consult factory for other options.

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact ASI for assistance with your application, updated: Jan, 2021

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