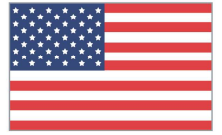


# American Sensing Inc (ASI)



Made in the USA

## AEROSPACE GRADE PRESSURE TRANSDUCER

### MODEL ASI 2020

#### FEATURES:

- Up to  $\pm 0.1\%$  FSO accuracy (BFSL)
- Optional 4X proof pressure
- 0 to 5 thru 0 to 15K PSI (350 MBAR to 1,034 BAR)
- Designed to meet MIL-STD-810F\* high shock and vibration specifications



Model ASI 2020  
Aerospace Grade Pressure Transducer

#### APPLICATIONS:

- Aviation and suborbital spacecraft
- Unmanned aerial vehicles
- Helicopter and rotorcraft
- Commercial and military satellites
- Launch vehicles
- Ground and engine testing

#### PRODUCT OVERVIEW:

The Model ASI 2020 series from ASI is a Aerospace Grade static pressure transducer, designed to provide high-accuracy pressure measurements within commercial aviation, military, aerospace, UAV, satellite, and defense applications. This highly rugged pressure transducer is designed to meet both MIL-STD-461\* and MIL-STD-810G\* standards. It is available in both test and program volumes to suit a variety of requirements.

#### FIELD OPTIONS:

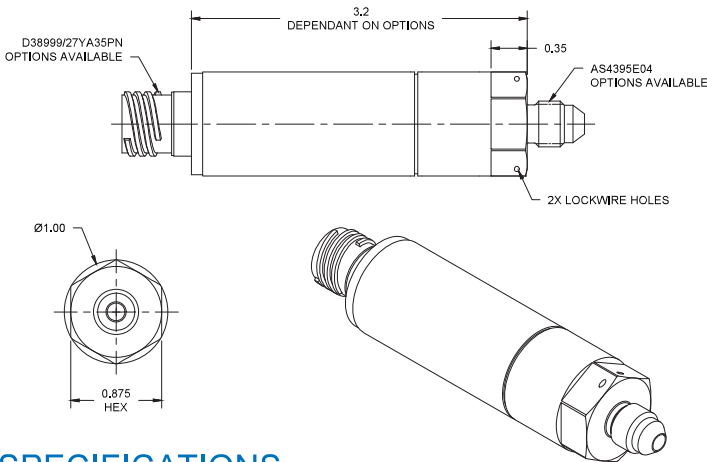
- mV/V
- Temperature output
- Inconel 718, Hastelloy C276 wetted parts
- Wide selection of pressure ports and electrical connections
- Improved Static Accuracy less than  $\pm 0.1\%$  FSO see Option.

Sold in North America by:  
Servoflo Corporation  
75 Allen Street  
Lexington, MA 02472  
[www.servoflo.com/info@servoflo.com](http://www.servoflo.com/info@servoflo.com)  
781-862-9572

# MODEL ASI 2020

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)



### WIRING CONFIGURATION

PIN(A/#)	mV/V
A/1	+EXCITATION(R)
B/2	+OUTPUT(G)
C/3	-OUTPUT(W)
D/4	-EXCITATION(B)
E/5	NO CONNECT
F/6	NO CONNECT

\*COMMONS JUMPED  
 \*\* 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
<ul style="list-style-type: none"> <li>• Output Signal: mV/V</li> <li>• Supply Voltage: 10V max for mV/V 9 to 32 Vdc (0-5 Vdc output), 14-32 Vdc (0-10 Vdc output) 9 to 32 Vdc (4-20 mA output)</li> <li>• Load Impedance: 1,350 Ω max. at 36 Vdc 750 Ω max. at 24 Vdc 300 Ω max. at 18 Vdc</li> <li>• Input Current: Less than 20mA</li> <li>• Response Time: &lt;2 ms typical</li> <li>• Connection: D38999/27YA35PN standard, options available</li> </ul>
ACCURACY
<ul style="list-style-type: none"> <li>• Static Accuracy (BFSL): &lt;±0.25 FSO and ± 0.10 FSO and</li> <li>• Zero/span balance: Less than ±1.0% FSO</li> <li>• Non-repeatability: Less than ±0.1% FSO</li> <li>• Hysteresis: &lt; ±0.1% FSO</li> <li>• Non-linearity: &lt; ±0.2 FSO</li> <li>• Total Error Band: Less than ±1.5% FSO</li> </ul>
MATERIALS OF CONSTRUCTION
<ul style="list-style-type: none"> <li>• Wetted Parts: 17-4 PH sensor (&lt;50 PSI 316L stainless steel) (Inconel 718, Hastelloy C276 optional)</li> <li>• Housing: 304SS</li> <li>• Pressure ranges &lt; 50 PSI contain silicone or fomblin oil</li> </ul>

MECHANICAL
<ul style="list-style-type: none"> <li>• Process connection: 7/16-20UNF-2A standard. Consult factory for other options</li> <li>• Proof Pressure: 1.5X FSO, 4X optional</li> <li>• Burst Pressure 3.0X FSO, 10X optional</li> <li>• Random Vibration: &gt;25 G RMS (20 Hz to 2,000 Hz)</li> <li>• Sinusoidal Vibration: 7.5 G's from 5 Hz to 100 Hz</li> <li>• Shock: 100 G</li> <li>• Weight: &lt;8 oz (&lt;0.2 kg)</li> </ul>
PRESSURE RANGES
<ul style="list-style-type: none"> <li>• 0 to 5 thru 0 to 15K PSIA, PSIG, PSIV, PSISG options (0.35 thru 1,034.2 BAR)</li> </ul>
THERMAL SPECIFICATION
<ul style="list-style-type: none"> <li>• Operating: -65 °F to +250 °F (-35 °C to +125 °C)</li> <li>• Compensated : -4 °F to +185 °F (-20 °C to +85 °C)</li> <li>• Thermal Error: ±0.5% FSO/100 °F (±0.25% FSO improved)</li> </ul>

\*Please consult factory for your specific needs.

**Standard configurations shown.**  
Please consult factory for other options.