

Pressure Sensit HPS-A Series Active mV Output Pressure Transducer

Product Data Sheet DS2807

Four wire, millivolt output transducers with integral voltage regulator and amplifier offering superb chemical and corrosion resistance. Gauge or Absolute pressure is detected using a four active arm strain gauge bridge sensor, fused to a high-purity ceramic diaphragm. Available in three classes of accuracy and stability specified below, with ranges from 100mbar to 600 bar or scaled to customer requirements.

- Stainless Steel housing
- Rugged construction
- Excellent linearity
- Excellent long term stability
- Wide temperature range

Class A High Specification Transducer

Output Span
Output Zero
Non Linearity, Hysteresis &
Repeatability (NLH)
Compensated Temp Range
Operating Temp Range
Thermal Zero Shift

Thermal Span Shift Long Term Stability Power Supply 200mV ±0.5% 0mV ±0.5% of span

 $\pm 0.1\%$ of span (best fit straight line) -20°C to 125°C -20°C to 125°C 0 to 100°C, $\pm 0.01\%$ of span/°C

<0°C &>100°C, ±0.015% of span/°C ±0.015% reading/ ^OC typical 0.1% / 12 months typical 10 to 32Vdc

Class B Industrial Transducer

Output Span
Output Zero
Non Linearity, Hysteresis &
Repeatability (NLH)
Compensated Temp Range
Operating Temp Range
Thermal Zero Shift
Thermal Span Shift
Long Term Stability

Power Supply

200mV ±1% 0mV ±1% of span

±0.15% of span (best fit straight line)
0°C to 100°C
-20°C to 125°C
±0.015% span/°C
±0.015% reading/°C typical
0.1% / 12 months typical
10 to 32Vdc

Class C General Purpose/OEM Transducer

Output Span
Output Zero
Non Linearity, Hysteresis &
Repeatability (NLH)
Compensated Temp Range
Operating Temp Range
Thermal Zero Shift
Thermal Span Shift
Long Term Stability

200mV ±1% 0mV ±1% of span

±0.25% of span (best fit straight line)
0°C to 80°C
-20°C to 125°C
±0.04% span/°C
±0.015% reading/°C typical
0.1% / 12 months typical
10 to 32Vdc

Options

Power Supply

Pressure Connection

G¼" BSP male or female G½" BSP male ¼" NPT male or female ½" NPT male Others available on request

Electrical Connection

IP65 mini plug & socket IP65 large plug & socket IP65 cable & ferrule IP68 glanded cable Others available on request

Housing Material

316L Stainless Steel Others available on request

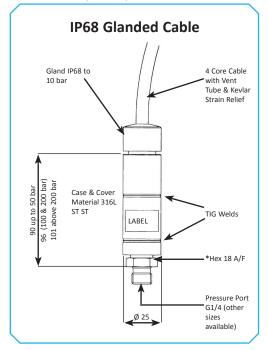
Electrical Output

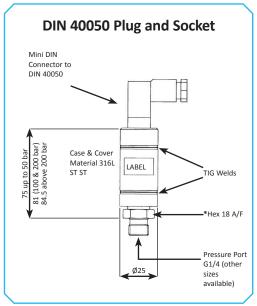
0-100mV Others available on request



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Dimensions (mm)





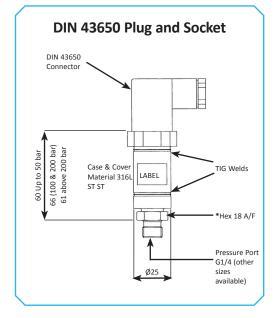
* Note: >200 bar, Hexagon 27 A/F and diameter 27

SENSIT pressure transducers are also available with the following outputs:

Voltage: 0-5V, 0-10V or 1-5VActive mV: 0-100mV or 0-200mV

mA : 4-20mA

IP65 Cable and Ferrule 4 Core Black FEP Cable (PTFE) Cable Outlet, Sleeved & Bonded 81 (100 & 200 bar) 85 above 200 bar 75 up to 50 bar Case & Cover TIG Welds Material 316L LABEL ST ST *Hex 18 A/F Pressure Port G1/4 (other Ø 25 sizes available)



Mechanical Specification

Safe Over-range Pressure Burst Pressure Wetted Materials 1.5 x rated range 3 x rated range minimum Stainless steel, alumina ceramic, Viton

(other O-ring materials available)

For level or depth measurement, use the **NEW TRIDENT Series of submersible pressure transducers**, or if your application requires something special, contact sales. If we do not already have the solution our OEM design team are ready to help.

Every effort has been made during the preparation of this document to ensure the accuracy of statements and specifications. However, we do not accept liability for damage, injury, loss or expense caused by errors or omissions made. We reserve the right to withdraw or amend products or documentation without notice.



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