

# HPS-A Series Voltage Output Pressure Transducer



## DS2806

### Features:

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



### Description:

Three wire, amplified voltage output transducer 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.

### CLASS A HIGH SPECIFICATION TRANSDUCER

|   |  |
|---|--|
| Output Span                                     | 4V ±0.5%   |
| Output Zero                                     | 1V ±0.5% of span   |
| Non Linearity, Hysteresis & Repeatability (NLH) | ±0.1% of span (best fit straight line)                                 |
| Compensated Temp Range                          | -20°C to 125°C   |
| Operating Temp Range                            | -20°C to 125°C   |
| Thermal Zero Shift                              | 0 to 100°C, ±0.01% of span / °C<br><0°C & >100°C, ±0.015% of span / °C |
| Thermal Span Shift                              | ±0.015% reading/ °C typical  |
| Long Term Stability                             | 0.1% / 12 months typical   |
| Power Supply                                    | 10 to 32Vdc  |

### CLASS B INDUSTRIAL TRANSDUCER

|   |   |
|---|---|
| Output Span                                     | 4V ±1%                                  |
| Output Zero                                     | 1V ±1% of span                          |
| Non Linearity, Hysteresis & Repeatability (NLH) | ±0.15% of span (best fit straight line) |
| Compensated Temp Range                          | 0°C to 100°C                            |
| Operating Temp Range                            | -20°C to 125°C                          |
| Thermal Zero Shift                              | ±0.015% of span / °C                    |
| Thermal Span Shift                              | ±0.015% reading / °C typical            |
| Long Term Stability                             | 0.1% / 12 months typical                |
| Power Supply                                    | 10 to 32Vdc                             |

### CLASS C GENERAL PURPOSE/OEM TRANSDUCER

|   |   |
|---|---|
| Output Span                                     | 4V ±1%                                  |
| Output Zero                                     | 1V ±1% of span                          |
| Non Linearity, Hysteresis & Repeatability (NLH) | ±0.25% of span (best fit straight line) |
| Compensated Temp Range                          | 0°C to 80°C                             |
| Operating Temp Range                            | -20°C to 125°C                          |
| Thermal Zero Shift                              | ±0.04% of span / °C                     |
| Thermal Span Shift                              | ±0.015% reading/ °C typical             |
| Long Term Stability                             | 0.1% / 12 months typical                |
| Power Supply                                    | 10 to 32Vdc                             |



#### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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## OPTIONS

### Pressure Connection

- G1/4" BSP male or female
- G1/2" BSP male
- 1/4" NPT male or female
- 1/2" 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

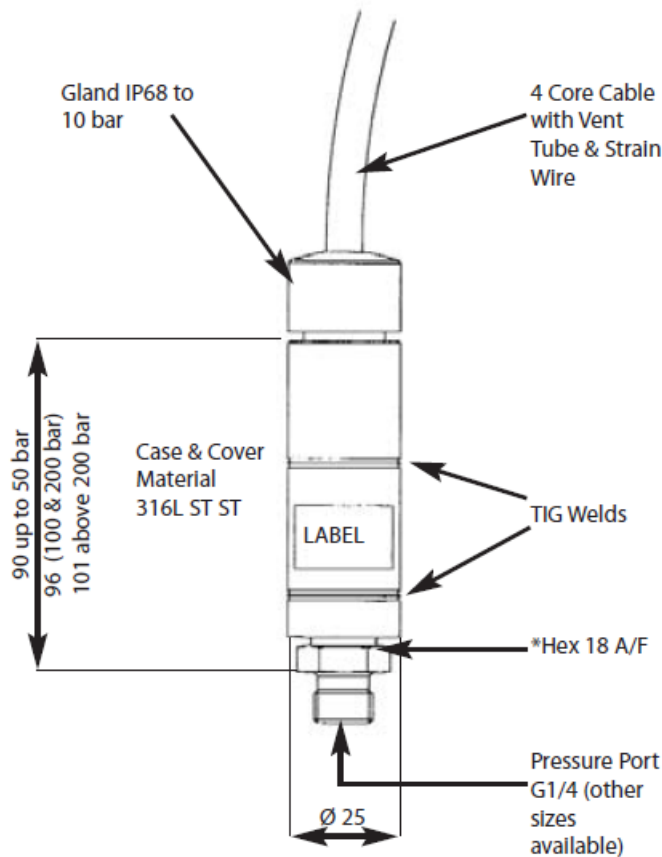
### Housing Material

- 316L Stainless Steel
- Others available on request

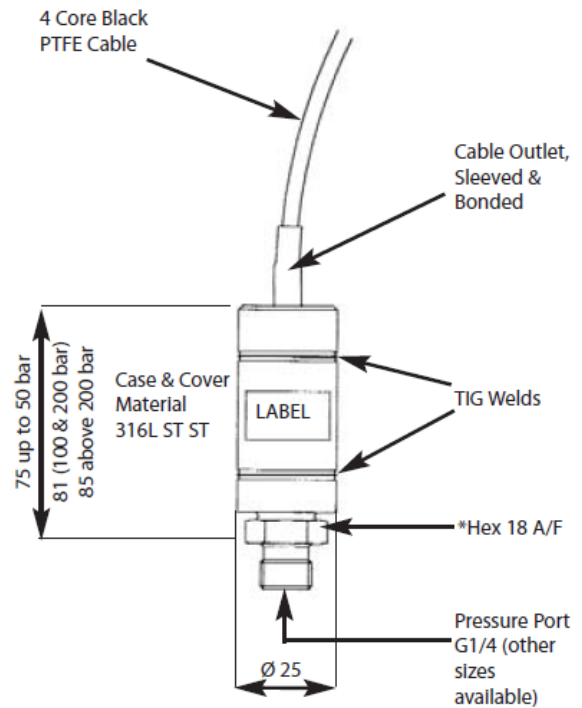
### Electrical Output

- 0-10V\*, 0-5V
  - Others available on request
- \* minimum supply: 13V

## IP68 GLANDED CABLE



## IP65 CABLE & FERRULE



### General Note

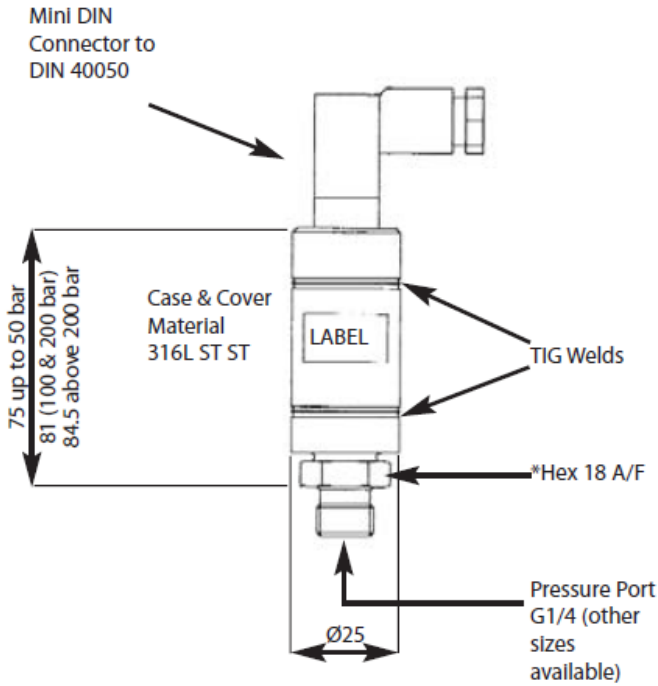
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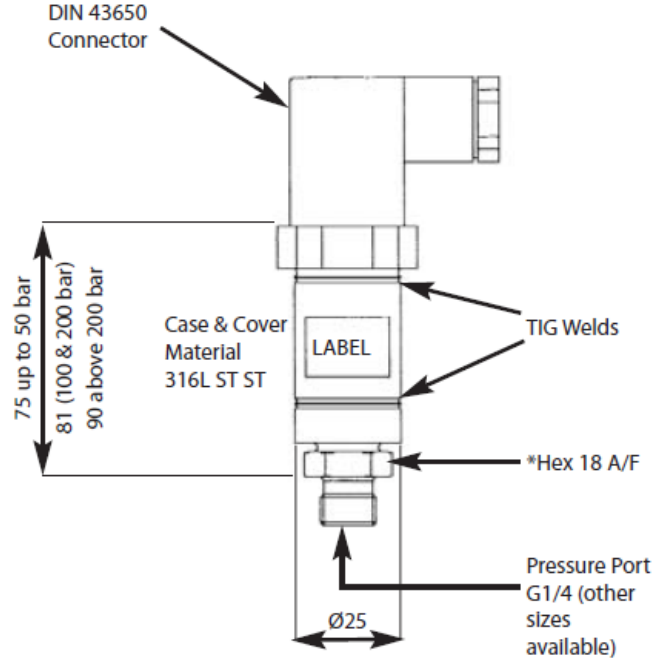
# HPS-A Series Voltage Output Pressure Transducer



## DIN 40050 PLUG & SOCKET



## DIN 43650 PLUG & SOCKET



\* 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 1-5V
- Active mV : 0-100mV or 0-200mV
- mA : 4-20mA

### MECHANICAL SPECIFICATION

|                          |  |
|--------------------------|--|
| Safe Over-range Pressure | 1.5 x rated range  |
| Burst Pressure           | 3 x rated range minimum  |
| Wetted Materials         | 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.

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