

# Pressure

## Sensit HPS - C Series Rationalised mV Output Pressure Transducer

### Product Data Sheet DS2808

Four wire, ratiometric, mV 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.

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

### Class A High Specification Transducer

<b>Output Span</b>	Dependent on range. $\pm 1\text{mV}$
<b>Output Zero</b>	$0\text{mV} \pm 0.1\text{mV/V}$
<b>Non Linearity, Hysteresis &amp; Repeatability (NLH)</b>	$\pm 0.2\%$ of span (best fit straight line)
<b>Compensated Temp Range</b>	$-20^{\circ}\text{C}$ to $125^{\circ}\text{C}$
<b>Operating Temp Range</b>	$-20^{\circ}\text{C}$ to $125^{\circ}\text{C}$
<b>Thermal Zero Shift</b>	$<0$ to $100^{\circ}\text{C}$ , $\pm 0.01\%$ span / $^{\circ}\text{C}$
	$<0^{\circ}\text{C}$ & $>100^{\circ}\text{C}$ , $\pm 0.015\%$ span / $^{\circ}\text{C}$
<b>Thermal Span Shift</b>	$\pm 0.015\%$ reading / $^{\circ}\text{C}$ typical
<b>Long Term Stability</b>	0.1% / 12 months typical
<b>Power Supply</b>	2-10Vdc regulated

### Class B Industrial Transducer

<b>Output Span</b>	Dependent on range $\pm 1\text{mV}$
<b>Output Zero</b>	$0\text{mV} \pm 0.1\text{mV/V}$
<b>Non Linearity, Hysteresis &amp; Repeatability (NLH)</b>	$\pm 0.2\%$ of span (best fit straight line)
<b>Compensated Temp Range</b>	$0^{\circ}\text{C}$ to $100^{\circ}\text{C}$
<b>Operating Temp Range</b>	$-20^{\circ}\text{C}$ to $125^{\circ}\text{C}$
<b>Thermal Zero Shift</b>	$\pm 0.015\%$ span / $^{\circ}\text{C}$
<b>Thermal Span Shift</b>	$\pm 0.015\%$ reading / $^{\circ}\text{C}$ typical
<b>Long Term Stability</b>	0.1% / 12 months typical
<b>Power Supply</b>	2-10Vdc regulated

### Class C General Purpose/OEM Transducer

<b>Output Span</b>	Dependent on range $\pm 1\text{mV}$
<b>Output Zero</b>	$0\text{mV} \pm 0.1\text{mV/V}$
<b>Non Linearity, Hysteresis &amp; Repeatability (NLH)</b>	$\pm 0.25\%$ of span (best fit straight line)
<b>Compensated Temp Range</b>	$0^{\circ}\text{C}$ to $80^{\circ}\text{C}$
<b>Operating Temp Range</b>	$-20^{\circ}\text{C}$ to $125^{\circ}\text{C}$
<b>Thermal Zero Shift</b>	$\pm 0.04\%$ span / $^{\circ}\text{C}$
<b>Thermal Span Shift</b>	$\pm 0.015\%$ reading / $^{\circ}\text{C}$ typical
<b>Long Term Stability</b>	0.1% / 12 months typical
<b>Power Supply</b>	2-10Vdc regulated

### Options

#### Pressure Connections

$G\frac{1}{4}$ " BSP male or female  
 $G\frac{1}{2}$ " BSP male  
 $\frac{1}{4}$ " NPT male or female  
 $\frac{1}{2}$ " NPT male  
 Others available on request

#### Electrical Connection

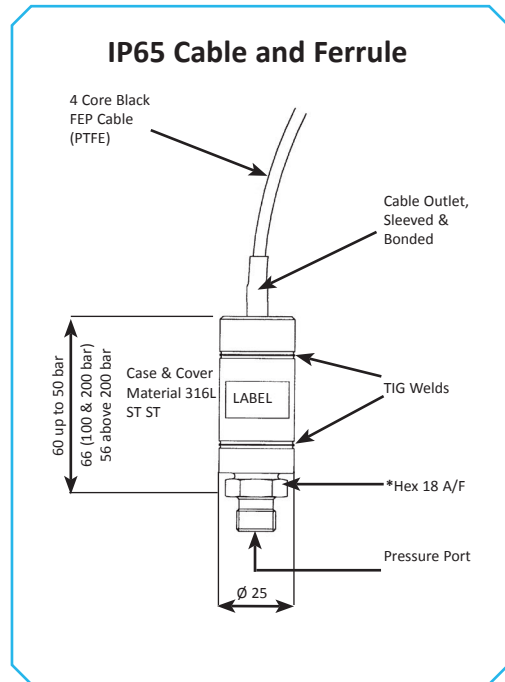
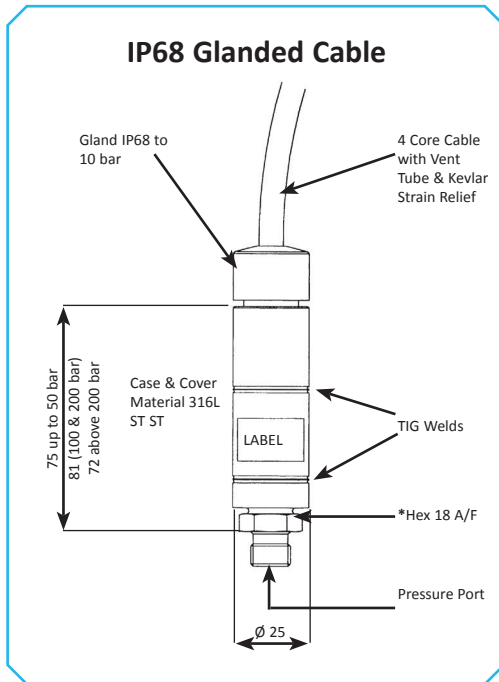
IP65 mini plug & socket  
 IP65 large plug & socket  
 IP65 cable & ferrule  
 IP68 glanded cable  
 Others available on request

#### Housing Material

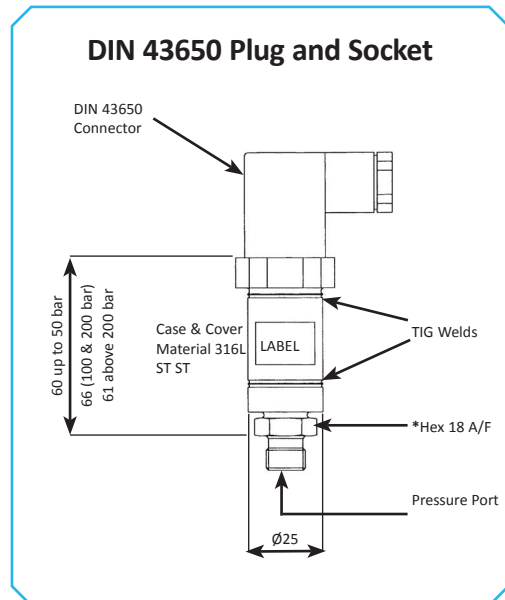
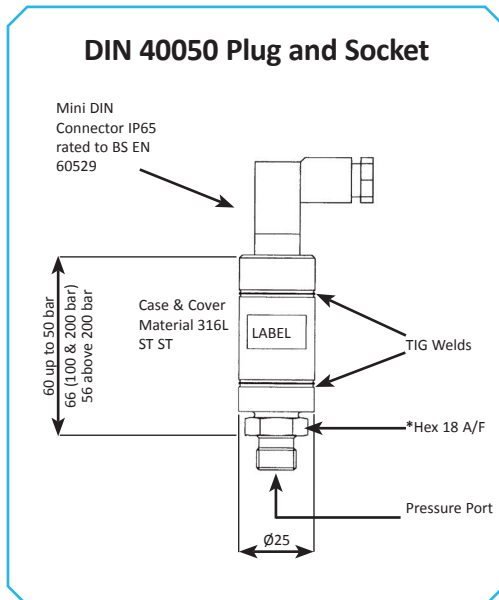
316L Stainless Steel  
 Others available on request



## Dimensions (mm)



Sensor Range (bar)	Span (mV/V)
0.1	1.0
0.4	2.5
1	2.7
2	3.0
3	2.7
5	3.2
10	4.2
20	4.5
50	4.5
100	4.2
200	4.5
400	4.0
600	3.0



\* 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

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.

## 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)



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