

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

Output Span	Dependent on range. $\pm 1\text{mV}$
Output Zero	$0\text{mV} \pm 0.1\text{mV/V}$
Non Linearity, Hysteresis & Repeatability (NLH)	$\pm 0.2\%$ 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 , $\pm 0.01\%$ span / $^{\circ}\text{C}$
	$<0^{\circ}\text{C}$ & $>100^{\circ}\text{C}$, $\pm 0.015\%$ span / $^{\circ}\text{C}$
Thermal Span Shift	$\pm 0.015\%$ reading / $^{\circ}\text{C}$ typical
Long Term Stability	0.1% / 12 months typical
Power Supply	2-10Vdc regulated

Class B Industrial Transducer

Output Span	Dependent on range $\pm 1\text{mV}$
Output Zero	$0\text{mV} \pm 0.1\text{mV/V}$
Non Linearity, Hysteresis & Repeatability (NLH)	$\pm 0.2\%$ 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	$\pm 0.015\%$ span / $^{\circ}\text{C}$
Thermal Span Shift	$\pm 0.015\%$ reading / $^{\circ}\text{C}$ typical
Long Term Stability	0.1% / 12 months typical
Power Supply	2-10Vdc regulated

Class C General Purpose/OEM Transducer

Output Span	Dependent on range $\pm 1\text{mV}$
Output Zero	$0\text{mV} \pm 0.1\text{mV/V}$
Non Linearity, Hysteresis & Repeatability (NLH)	$\pm 0.25\%$ 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	$\pm 0.04\%$ span / $^{\circ}\text{C}$
Thermal Span Shift	$\pm 0.015\%$ reading / $^{\circ}\text{C}$ typical
Long Term Stability	0.1% / 12 months typical
Power Supply	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

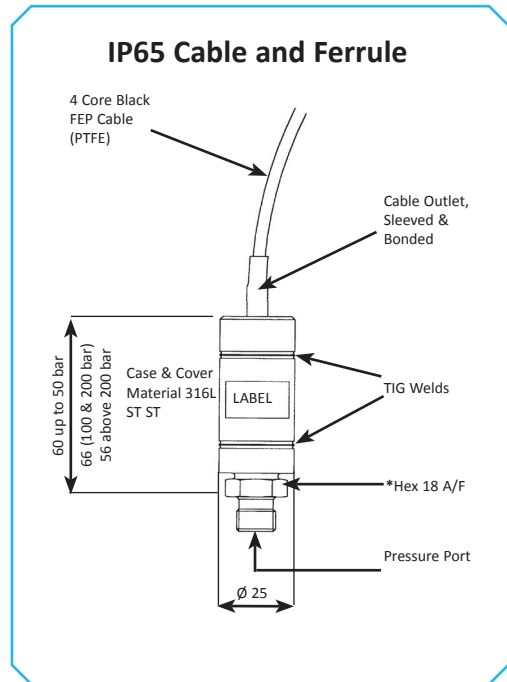
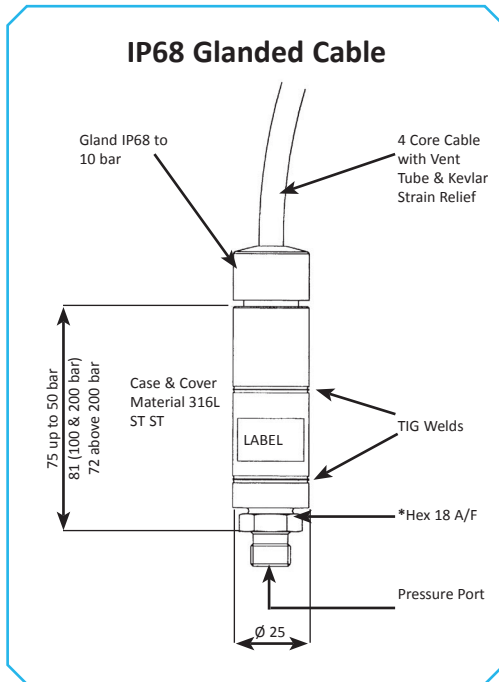
IP65 mini plug & socket
 IP65 large plug & socket
 IP65 cable & ferrule
 IP68 glanded cable
 Others available on request

Housing Material

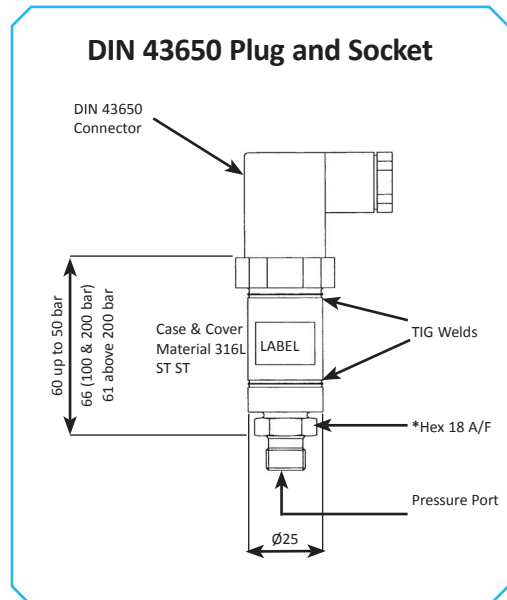
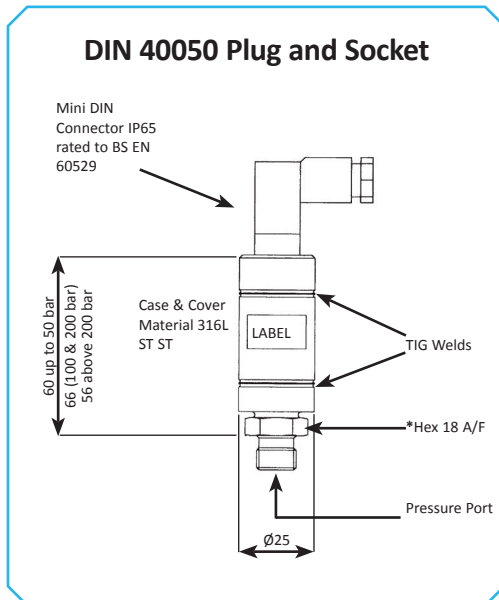
316L Stainless Steel
 Others available on request



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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