

II-P001

INDUSTRIAL RANGE OF PRESSURE TRANSMITTERS

- Compact and rugged constructions
- Accuracies to $< \pm 0.05\%$
- Wide range of process and electrical connections
- Stable, repeatable and reliable
- Compensated Ceramic Technology
- Cost effective for OEM's & End users
- Special sensors to your specification



Description

The IIP01 range of pressure transducers and transmitters has been chosen by Industrial Interface as a range that meets the needs of both OEM and end-users in the competitive pressure measurement market.

There is also a ZigBee wireless transmitter which can be used to take pressure readings in hard to reach places or drastically reduce installation costs.

The instruments are designed around a standardised stainless steel housing with a wide range of process and electrical connection options. Electrical connections include DIN, cable gland and Amphenol variants with signal outputs of mV, volts and mA.

Pressure ranges from 250mB through to 700 Bar are available as standard in both absolute and gauge versions.

The use of ASIC based technology allows accuracies ranging from the standard 0.25% through to an exceptional 0.05% and a range of thermal specifications to suit both OEM and end users.

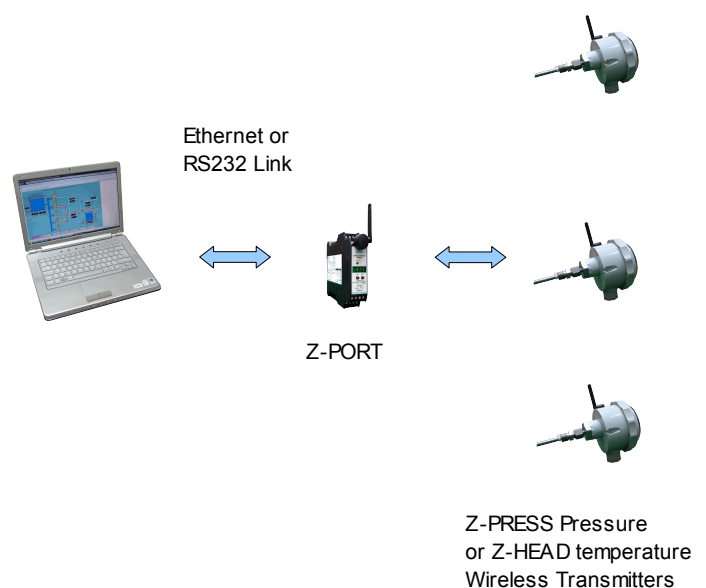
Variants with in-built displays and alarm contacts are also available, please contact sales if you have a particular requirement.

Typical Applications

Typical applications include:

Pneumatic & hydraulic controlled
Process Control
Tank level measurement
Compressors / pumping
Heating & Ventilation
OEM machines

Application Example: Wireless Pressure and Temperature Measurement



Pressure Specification

Pressure Ranges	0.25, 0.5, 0.75, 1, 1.6, 2, 5, 10, 16, 20, 35, 50, 100, 200, 250, 400, 600, 700
Pressure Datum	Gauge, Sealed Gauge or Absolute
Burst Pressures	> x 3 rated calibrated range (for 600 & 700 bar ranges Contact Sales)
Overpressure	X 1.5 rated calibrated range (for 600 & 700 bar ranges Contact Sales)
Pressure Media	Liquids and Gases compatible with Stainless Steel, Alumina Al ₂ O ₃ & seal of choice

Input Specifications

Electrical Excitation	millivolt 100/200mV 4 – 20 mA 1 – 5 V 0 – 10 V 0.5 to 4.5 V	2 – 32V dc 10 – 32V dc 10 – 32V dc 10 – 32V dc 13 – 32V dc 5V dc	Supply Voltage Effects	millivolt 100/200mV 4 – 20 mA 1 – 5 V 0 – 10 V 0.5 to 4.5 V	ratiometric <0.001% span <0.001% span <0.001% span <0.001% span ratiometric
Input Current	millivolt voltage	< 3mA < 4mA	Input Resistance	millivolt	11 k ohm
Reverse Polarity Protection	-	Yes	Insulation Resistance	-	>500M ohm @ 50Vdc

Output Specification

Zero Output	millivolt 100/200mV 4 – 20 mA 1 – 5 V 0 – 10 V 0.5 to 4.5 V	0mV +/- 0.2mV/V 0mV +/- 1% 4mA +/- 1% span 1V +/- 1% span 0V +/- 1% span 0.5V +/- 1% span	Span Output	millivolt 100/200mV 4 – 20 mA 1 – 5 V 0 – 10 V 0.5 to 4.5 V	Various mV/V 100/200mV +/-1% 16mA +/- 1% 4V +/- 1% 10V +/- 1% 4V +/- 1%
Accuracy (Includes non-linearity, hysteresis, repeatability at ambient temperatures)	Option 1 Option 2 Option 3	<+/- 0.25% span BFS <+/- 0.1% span BFS <+/- 0.01% span BFS	Output Resistance	millivolt voltage -	11 k ohm < 500 ohm -

Environmental Specification

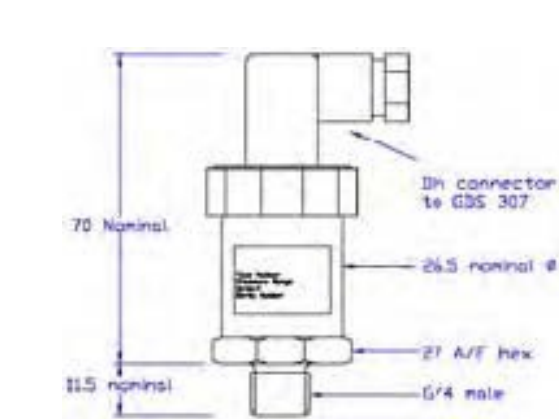
Operating Temperature	-	- 20 °C to +135 °C	Compensated Temperature	- 20 °C to +80 °C
Max. Process Temp	-	+150 °C (short periods)	Storage Temperature	- 40 °C to +140 °C
Thermal Zero Shift (TZS)	Option 1 Option 2 Option 3	<+/- 0.04% / span / °C <+/- 0.02% / span / °C <+/- 0.01% / span / °C	Thermal Span Shift (TSS)	<+/- 0.015% / °C
Shock	-	100 g / 11mS	Vibration	10g RMS (20-2000 Hz)

Miscellaneous

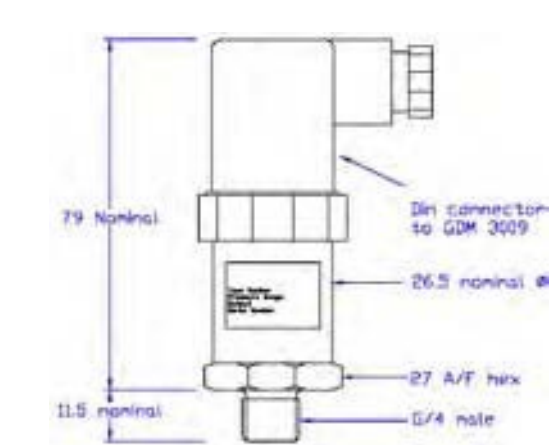
Weight	100 g
Response Time	millivolt: < 1 mS, amplified < 10mS
EMC Immunity	EN 50082-1 (< +/- 2% errors)

Dimensions and Connections

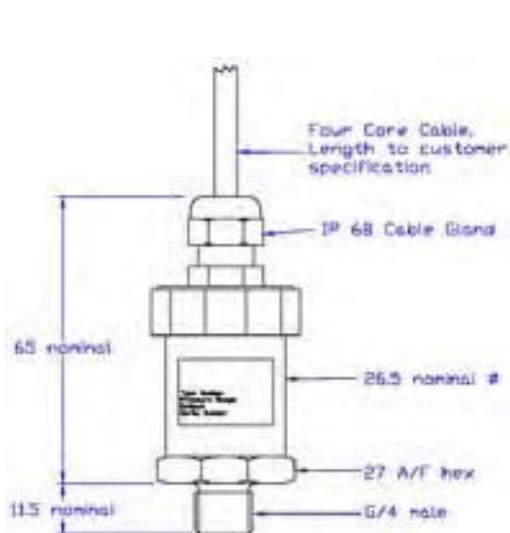
GDS 307 DIN 43650 Plug & Socket



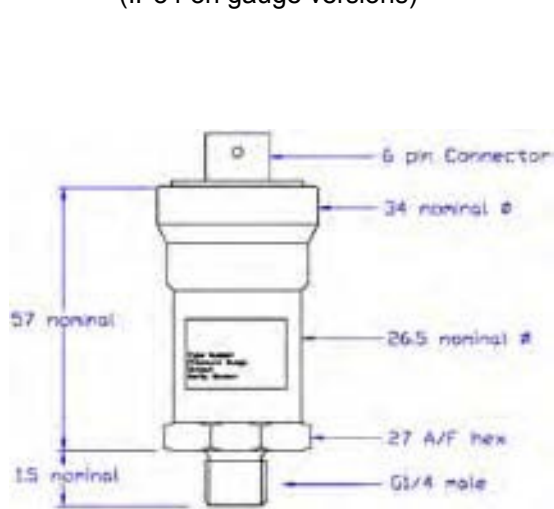
GDM 3009 DIN 43650 Plug & Socket



IP65 Cable Gland Assembly



IP67 Amphenol Connector
(IP54 on gauge versions)



Connection Details

Output Type	Connection	GDS 307	GDM 3009	Cable	Amphenol
mV	+ve Supply	1	1	Red	1
	+ve Output	2	2	Green	2
	-ve Supply	3	3	Blue	3
	-ve Output	earth	earth	Yellow	4
4 – 20 mA	+ve Supply	1	1	Red	1
	-ve Supply	2	2	Blue	2
	earth	earth	earth	Yellow	earth
Volts	+ve Supply	1	1	Red	1
	-ve Supply	2	2	Blue	2
	Output	3	3	Green	3

