IPSU-M12 Series

Industrial Pressure Sensor - Ceramic - with M12 4-Pin Connector



- ***Piezo-resistive thick film ceramic sensor***
- ***Stainless steel body***
- ***Accuracy <±0.25% FS BFSL***
- ***0-5V or 4-20mA output***
- ***Pressure ranges from -14.5 to 5800 psi***
- ***M12 4-pin connector***
- ***1/4" NPT process connection***

The IPSU-M12 series is suitable for use in a wide range of industrial applications. The probe uses a piezo-resistive ceramic sensor, giving excellent media compatibility within a stainless steel housing

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially industrial applications..

Each device is temperature compensated, calibrated and supplied with a traceable serial number and calibration data. *

Mating cable and plug assemblies are available - see datasheet M12 Cable Set Series

Electrical Protection

Supply reverse polarity	No damage/no function
Electromagnetic compatibility	CE Compliant

Mechanical Stability

Shock	100g / 11s
Vibration	10g RMS (20 - 2000Hz)

Temperatures & Thermal Effects

Media Temperature	-40ºC to +135ºC
Ambient Temperature	-20ºC to +80ºC
Storage temperature	-40ºC to +125ºC
Compensated temperature range	+20ºC to +80ºC
Thermal Zero Shift (TZS)	<±0.04% /FS/ºC
Thermal Span Shift	<±0.015% /ºC

Performance

Accuracy (Non-Linearity & Hysteresis)		<±0.25% / FS (BFSL)
Setting Errors (offsets)	2-wire	Zero & Full Scale, <±0.5% / FS
	3-wire	Zero & Full Scale, <±0.5% / FS

Material Specifications

Housing	316L Stainless Steel
"O" ring seals	Viton
Diaphragm	Ceramic Al_2O_3 96%
Media wetted parts	Housing & connection, "O" ring seal, diaphragm
Weight	Approx 100g
Installation position	Any
Operational Life	> 100x 10^6 cycles
Insulation resistance	> 50MOhms at 50Vdc
Environmental protection	IP67 (only when used with a similarly rated connector)

Pressure Ranges and Passive mV/V Outputs

Nominal Pressure, Gauge,	psi	15	30	75	150	300	750	1500	3750	6000
Compound range	psi	-7.5 to 0	-7.5 to 30	-15 to 75	-15 to 1235	-15 to 285	-15 to 360			
Permissible Overpressure	psi	30	60	150	300	600	1500	3000	6000	9750
Burst Pressure	psi	60	75	180	375	750	1800	3750	7500	9750

Output Signals and Supply Voltages

Wire system	Output	Supply Voltage	Connection Pin Nos		
2-wire	4-20mA	9-32Vdc	+ve Supply Pin 1	-ve Supply Pin 2	Ground Earth Pin
3-wire	0-5Vdc	9-32Vdc	+ve Supply Pin 1 Output Pin 3	-ve Supply Pin 2 Earth Pin 4	

**Calibration data is supplied as a sticker affixed to the product packaging - do not discard*

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ISO9001 CERTIFIED

Made in the UK

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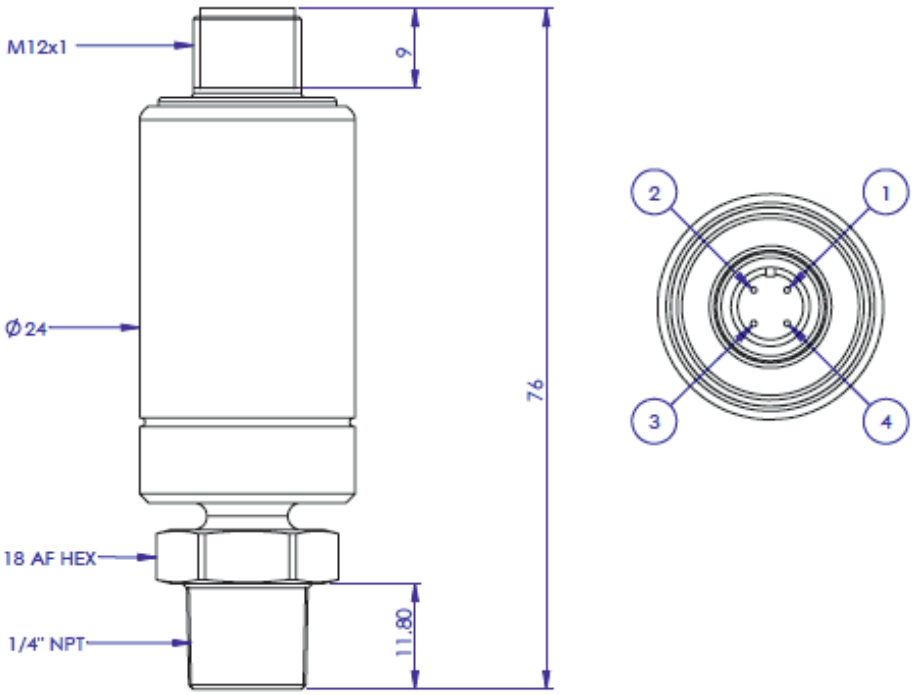
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Part Number	Range	Output
IPSU-GP015-5M12	0-15 psi G	4-20mA
IPSU-GP015-6M12	0-15 psi G	0-5V
IPSU-GP030-5M12	0-30 psi G	4-20mA
IPSU-GP030-6M12	0-30 psi G	0-5V
IPSU-C0446-5M12	-14.5 to +150 psi G	4-20mA
IPSU-C0446-6M12	-14.5 to +150 psi G	0-5V
IPSU-GP075-5M12	0-75 psi G	4-20mA
IPSU-GP075-6M12	0-75 psi G	0-5V
IPSU-GP100-5M12	0-100 psi G	4-20mA
IPSU-GP100-6M12	0-100 psi G	0-5V
IPSU-C0447-5M12	-14.5 to +350 psi G	4-20mA
IPSU-C0447-6M12	-14.5 to +350 psi G	0-5V
IPSU-GP150-5M12	0-150 psi G	4-20mA
IPSU-GP150-6M12	0-150 psi G	0-5V
IPSU-GP300-5M12	0-300 psi G	4-20mA
IPSU-GP300-6M12	0-300 psi G	0-5V
IPSU-GP750-5M12	0-750 psi G	4-20mA
IPSU-GP750-6M12	0-750 psi G	0-5V
IPSU-GP1K5-5M12	0-1500 psi SG*	4-20mA
IPSU-GP1K5-6M12	0-1500 psi SG*	0-5V
IPSU-GP3K6-5M12	0-3600 psi SG*	4-20mA
IPSU-GP3K6-6M12	0-3600 psi SG*	0-5V
IPSU-GP5K8-5M12	0-5800 psi SG*	4-20mA
IPSU-GP5K8-6M12	0-5800 psi SG*	0-5V

* sealed gauge

Mechanical Dimensions



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