



ENGLISH

Datasheet

Stock No.s: 1755006, 1755008, 1755010, 1755012, 1755014, 1755016, 1755007, 1755009, 1755011, 1755013, 1755015, 1755017

IPSL-M12 Series Low Range Industrial Pressure Sensor - 1/4"BSP



- **Piezo-resistive sensor**
- **Stainless steel body & diaphragm**
- **Accuracy $\leq \pm 0.25\%$ FS BFSL**
- **0-5 Volts or 4-20 mA outputs**
- **Pressure ranges from 50 mbar to 1000 mbar**
- **M12 4-Pin connector**

Options available on the IPSL pressure transmitter.

Pressure range
Output type

The IPSL-M12 is suitable for use in a wide range of applications. The probe uses a piezo-resistive silicon sensor, giving excellent media compatibility within an oil filled 316L stainless steel housing

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially in high vibration/shock applications.

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

Custom versions can be made for particular applications.

Suitable applications

HVAC	Mechanical engineering
Pneumatics	Environmental engineering
Rainwater harvesting	Automotive testing
Agricultural machinery	Tank gauging
Laboratory testing	IBC, IBC Tote or pallet tank

Performance

Accuracy (Non-Linearity & Hysteresis) $\leq \pm 0.25\%$ / FS (BFSL) for gauge, $\leq \pm 0.5\%$ for Absolute

Setting Errors (offsets)	2-wire	Zero & Full Scale, $\leq \pm 0.5\%$ / FS
	3-wire	Zero & Full Scale, $\leq \pm 0.5\%$ / FS
Permissible Load	2-wire	$R_{max} = [(Supply-9min)/0.02]\Omega$
	3-wire	$R_{min} = 10k\Omega$
Influence Effects	Supply	$< 0.005\%$ FS / 1V
	Load	0.05% FSO / $k\Omega$

Material Specifications

Housing	316L Stainless Steel
"O" ring seals	Viton
Diaphragm	316L Stainless Steel
Media wetted parts diaphragm	Housing & connection, "O" ring seal,

Miscellaneous

Current consumption	2 -wire Limits at 28mA 3-wire Typical 6mA
Weight	Approx 100g
Installation position	Any, small zero shift when tilted through 90°
Operational Life	$> 100 \times 10^6$ cycles
Insulation resistance	$> 50M\Omega$ at 50Vdc
Environmental protection	IP67 (only when used with a similarly rated connector)

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	-40°C to +125°C
Ambient Temperature	-20°C to +80°C
Storage temperature	-40°C to +125°C
Compensated temperature range	+20°C to +80°C
Thermal Zero Shift (TZS)	$\leq \pm 0.04\%$ /FS/°C
Thermal Span Shift	$< -0.015\%$ /°C



Made in the UK

IPSL RS Pro 2018

Specifications are subject to change without prior notice.

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



IPSL Series - Low Range Industrial Pressure Sensor

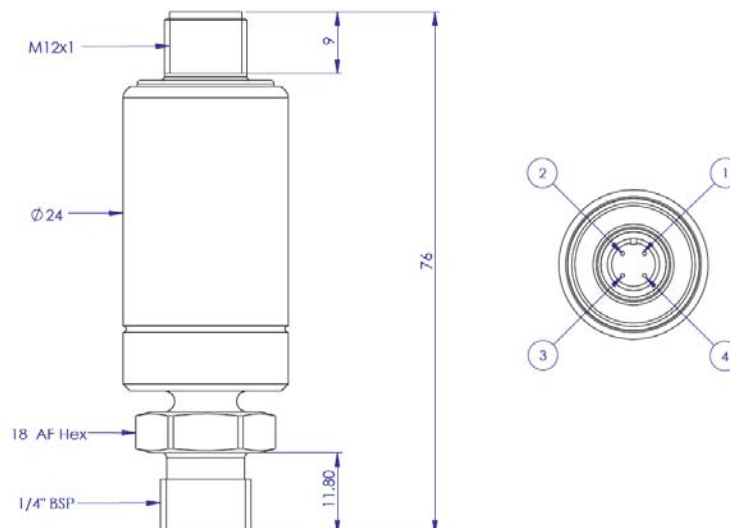
Pressure Ranges and Passive mV/V Outputs

Nominal Pressure, Gauge, mbar	50	100	250	500	750	1000
Nominal Pressure, Absolute mbar				500	750	1000
Permissible Overpressure mbar	2 bar	2 bar	2 bar	5 bar	5 bar	5 bar

Output Signals and Supply Voltages DIN 43650

Wire system	Output	Supply Volts	Connection	Pin No.
2-wire	4-20mA	9-32Vdc	+ve Supply -ve Supply Ground	Pin 1 Pin 2 Earth pin
3-wire	0 - 5Vdc	9-32 Vdc	+ve Supply -ve Supply +ve Output Ground	Pin 1 Pin 2 Pin 3 Earth Pin

RS Stock No.	Pressure Range	Output
1755006	0-50mbarG	4-20mA
1755008	0-100mbarG	4-20mA
1755010	0-250mbarG	4-20mA
1755012	0-500mbarG	4-20mA
1755014	0-750mbarG	4-20mA
1755016	0-1000mbarG	4-20mA
1755007	0-50mbarG	0-5V 3-wire
1755009	0-100mbarG	0-5V 3-wire
1755011	0-250mbarG	0-5V 3-wire
1755013	0-500mbarG	0-5V 3-wire
1755015	0-750mbarG	0-5V 3-wire
1755017	0-1000mbarG	0-5V 3-wire



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