



ENGLISH

Datasheet

Stock No.s: 1755018, 1755020, 1755022, 1755024, 1755026, 1755028, 1755019, 1755021, 1755023, 1755025, 1755027, 1755029

IPSLU-M12 Series Low Range Industrial Pressure Sensor - 1/4"NPT



- **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 1 to 15 psi**
- **M12 4-Pin connector**

Options available on the IPSLU pressure transmitter.

Pressure range
Output type

The IPSLU-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 Ω |

Material Specifications

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

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

IPSLU 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



IPSLU Series - Low Range Industrial Pressure Sensor

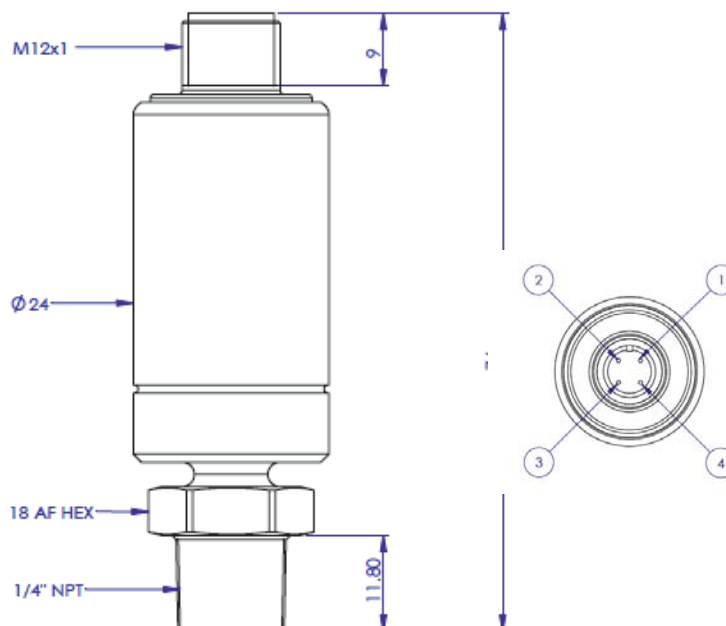
Pressure Ranges

| | | | | | | | |
|--------------------------|-----|------|-----|------|-----|-------|----|
| Nominal Pressure, Gauge, | psi | 0.75 | 1.5 | 3.75 | 7.5 | 11.25 | 15 |
| Permissible Overpressure | psi | 30 | 30 | 30 | 75 | 75 | 75 |

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 |
|--------------|----------------|---------------|
| 1755018 | 0-1 psi G | 4-20mA |
| 1755020 | 0-2 psi G | 4-20mA |
| 1755022 | 0-5 psi G | 4-20mA |
| 1755024 | 0-8 psi G | 4-20mA |
| 1755026 | 0-10 psi G | 4-20mA |
| 1755028 | 0-15 psi G | 4-20mA |
| 1755019 | 0-1 psi G | 0 to 5V 3Wire |
| 1755021 | 0-2 psi G | 0 to 5V 3Wire |
| 1755023 | 0-5 psi G | 0 to 5V 3Wire |
| 1755025 | 0-8 psi G | 0 to 5V 3Wire |
| 1755027 | 0-10 psi G | 0 to 5V 3Wire |
| 1755029 | 0-15 psi G | 0 to 5V 3Wire |



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