

FEATURES

- Piezo-resistive thick film ceramic sensor
- Compact and rugged
- Output 4mA-20 mA
- BSP 1/4
- CE Compliant

RS PRO Pressure Sensor for Oil, Water, 0.25bar Max Pressure Reading Current

RS Stock No.: 828-5717



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

These IPSL-series Pressure Sensors, also known as pressure transmitters from our own RS PRO brand are suitable for wide range of industrial applications. These devices change pressure forces into electrical signals. They are used to measure the pressure of the specific quantity like air, water and gas by changing the pressure into electrical energy. The probe uses a piezo-resistive ceramic sensor, giving excellent media compatibility within a stainless-steel housing.

General Specifications

| | |
|---------------------------------|---|
| Pressure Reading Type | Relative |
| Sensor Type | Piezo-resistive sensor |
| Pressure Reading Range | 0Bar to 0.25Bar |
| Accuracy | <±0.25% |
| Hysteresis | <±0.25% |
| Output Type | Current |
| Media Measured | Oil, Water |
| Process Connection | G1/4 |
| Overpressure Resistance | 2bar |
| Burst Pressure | 24bar |
| Mounting Type | Threaded |
| Calibration Availability | Yes |
| Applications | Mechanical engineering, Environmental engineering, Automotive testing, Pneumatics, Agricultural machinery, Laboratory testing |

Electrical Specifications

| | |
|-----------------------------------|-------------------|
| Supply Voltage | 9V dc to 32V dc |
| Output Signal | 2-wire 4mA-20mA |
| Maximum Current | 28mA |
| Voltage Supply Influence | <0.005% /1V |
| Electrical Connection | DIN 43650 Type A |
| Reverse Voltage Protection | Yes |
| Insulation | >50Mohms at 50Vdc |

Mechanical Specifications

| | |
|---------------------------|---|
| Housing Material | Stainless Steel |
| Type of Seal | “O” ring seal |
| Diaphragm Material | 316L Stainless Steel |
| Dimensions | 1/4” BSP Male, 18.0mm A/F Hex, Ø24.0, 112mn nominal |
| Weight | Approx.100g |
| Fatigue Life | > 100x106cycles |

Operation Environment Specifications

| | |
|--------------------------------------|-------------------|
| Operating Temperature Range | -20°C to 80°C |
| Storage Temperature Range | -40°C to 125°C |
| Compensated temperature range | 20°C to 80°C |
| Shock | 100g/11s |
| Vibration | 10g(20Hz- 2000Hz) |

Protection Category

| | |
|------------------|------|
| IP Rating | IP65 |
|------------------|------|

Approvals

| | |
|----------------------------------|----------|
| Compliance/Certifications | CE, RoHs |
|----------------------------------|----------|



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

| 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 | 0.5 - 4.5Vdc (non-ratiometric) | 9-32 Vdc | +ve Supply -ve Supply +ve Output Ground | Pin 1 Pin 2 Pin 3 Earth Pin |

| RS Stock No. | Pressure Range | Output |
|--------------|------------------|-------------------|
| 8285707 | 0 - 50mbar G | 4-20mA |
| 8285710 | 0 - 100mbar G | 4-20mA |
| 8285717 | 0 - 250mbar G | 4-20mA |
| 8285729 | 0 - 500mbar G | 4-20mA |
| 8285732 | 0 - 750mbar G | 4-20mA |
| 8285739 | 0 - 1000mbar G | 4-20mA |
| 8285701 | 0 - 50mbar G | 0.5 to 4.5V 3Wire |
| 8285713 | 0 - 100mbar G | 0.5 to 4.5V 3Wire |
| 8285726 | 0 - 250mbar G | 0.5 to 4.5V 3Wire |
| 8285723 | 0 - 500mbar G | 0.5 to 4.5V 3Wire |
| 8285735 | 0 - 750mbar G | 0.5 to 4.5V 3Wire |
| 8285748 | 0 - 1000mbar G | 0.5 to 4.5V 3Wire |
| 8285690 | 0 - 500mbar Abs | 4-20mA |
| 8285694 | 0 - 750mbar Abs | 4-20mA |
| 8285704 | 0 - 1000mbar Abs | 4-20mA |

