

## FEATURES

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

## RS PRO Pressure Sensor for Oil, Water, 50mbar Max Pressure Reading Voltage

RS Stock No.: 828-5701



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

<b>Pressure Reading Type</b>	Relative
<b>Sensor Type</b>	Piezo-resistive sensor
<b>Pressure Reading Range</b>	0Bar to 50mBar
<b>Accuracy</b>	<±0.25 %
<b>Hysteresis</b>	<±0.25 %
<b>Output Type</b>	Voltage
<b>Media Measured</b>	Oil, Water
<b>Process Connection</b>	G1/4
<b>Overpressure Resistance</b>	2bar
<b>Mounting Type</b>	Threaded
<b>Calibration Availability</b>	Yes
<b>Applications</b>	Mechanical engineering, Environmental engineering, Automotive testing, Pneumatics, Agricultural machinery, Laboratory testing

## Electrical Specifications

<b>Supply Voltage</b>	9V dc to 32V dc
<b>Output Signal</b>	3-wire 0.5V - 4.5Vdc
<b>Maximum Current</b>	6mA
<b>Voltage Supply Influence</b>	<0.005% / 1V
<b>Electrical Connection</b>	DIN 43650 Type A
<b>Reverse voltage protection</b>	Yes
<b>Insulation</b>	> 50Mohms at 50Vdc

## Mechanical Specifications

<b>Housing Material</b>	Stainless Steel
<b>Type of Seal</b>	"O" ring seal
<b>Diaphragm Material</b>	316L Stainless Steel
<b>Dimensions</b>	1/4" BSP Male, 18.0mm A/F Hex, Ø24.0, 112mm nominal
<b>Weight</b>	Approx.100g
<b>Fatigue Life</b>	> 100x10 <sup>6</sup> cycles

## Operation Environment Specifications

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

## Protection Category

<b>IP Rating</b>	IP65
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## Approvals

<b>Compliance/Certifications</b>	CE, RoHS
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## 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	0.5 - 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

