

FEATURES

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

RS PRO Pressure Sensor for Oil, Water, 0.1bar Max Pressure Reading Current

RS Stock No.: 828-5710



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 0.1Bar
Accuracy	<±0.25%
Hysteresis	<±0.25%
Output Type	Voltage
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	6mA
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, 112mm nominal
Weight	Approx.100g
Fatigue Life	>100x10 ⁶ cycles

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
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Approvals

Compliance/Certifications	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

