

FEATURES

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

RS PRO Pressure Sensor for Grey Water, Sewage, Viscous Fluid , 10bar Max Pressure Reading Analogue

RS Stock No.: 102-4140



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 silicon sensor
Pressure Reading Range	0Bar to 10Bar
Accuracy	<±0.25%
Hysteresis	<±0.25%
Output Type	Analogue
Pressure Setting Range	100Bar max.
Media Measured	Sewage, Viscous Fluid, Grey Water
Process Connection	G3/4
Overpressure Resistance	20Bar
Mounting Type	Semi-Flush
Calibration Availability	Yes
Applications	Mechanical engineering, Environmental engineering, Automotive testing, Pneumatics, Agricultural machinery, Laboratory testing

Electrical Specifications

Supply Voltage	12Vdc to 28Vdc
Output Signal	2-wire 4mA-20mA
Maximum Current	28mA
Electrical Connection	M12 4-pin
Insulation	> 50Mohms at 50Vdc

Mechanical Specifications

Housing Material	Stainless Steel
Type of Seal	"O" ring seal
Diaphragm Material	316L Stainless Steel
Dimensions	G3/4" BSP Male, 35mm A/F Hex, 40.8mm, 61.5mm
Weight	Approx. 100g
Fatigue Life	> 100x 10 ⁶ cycles

Operation Environment Specifications

Operating Temperature Range	-20°C to 120°C
Storage Temperature Range	-40°C to 110°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
Hazardous Area Certification	ATEX, IECEx



IPSSAT series

Intrinsically Safe, Semi-Flush Mount Pressure Transmitter

Input Pressure Ranges

Nominal pressure, Gauge,	Bar	0.1	0.5	1	2	5	10	20	50	100
Nominal pressure*, Absolute	Bar	-	-	1	2	5	10	20	-	-
Nominal pressure*, Compound	Bar	-1 to +1	-1 to +5	-1 to +9	-1 to +19					
Permissible Overpressure	Bar	2	2	5	5	10	20	50	100	200

* Ceramic sensor only

Output Signal and Supply Voltage

Wire system	Output	Supply Volts	Wiring Designation	Pin No.
2-wire	4-20mA	10-28Vdc	+ve Supply	Pin 1
			-ve Supply	Pin 2
			Ground	Pin 3

Part No	Sensor type	Pressure Range
1024134	Silicon	0-100mbar G (0-1.4psi)
1024135	Silicon	0-500mbar G (0-7.25psi)
1024137	Silicon	0-1000mbar G (0-14.5psi)
1024138	Ceramic	0-2 Bar G (0-29psi)
1024139	Ceramic	0-5 Bar G (0-73psi)
1024140	Ceramic	0-10 Bar G (0-145psi)
1024141	Ceramic	0-20 Bar G (0-290psi)
1024143	Ceramic	0-50 Bar G (0-725psi)
1024144	Ceramic	0-100 Bar G (1450psi)
1024145	Ceramic	-1 to +1 Bar G (-14.5 to +14.5psi)
1024146	Ceramic	-1 to +5 Bar G (-14.5 to +73psi)
1024147	Ceramic	-1 to +9 Bar G (-14.5 to +131psi)
1024148	Ceramic	-1 to +19 Bar G (-14.5 to +276psi)
1024149	Ceramic	0-1 Bar Abs (0-14.5psiA)
1024150	Ceramic	0-2 Bar Abs (0-29psiA)
1024151	Ceramic	0-5 Bar Abs (0-73psiA)
1024152	Ceramic	0-10 Bar Abs (0-1345psiA)

