

FEATURES

- Compact and rugged
- Output 4mA-20mA
- BSP 1/4
- M12 4-pin connector
- Piezo-resistive thick film ceramic sensor

RS PRO Pressure Sensor for Air, Gas, Hydraulic Fluid, Liquid, Water , 1bar Max Pressure Reading Current

RS Stock No.: 797-4983



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 IND-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 thick film ceramic sensor
Pressure Reading Range	0Bar to 1Bar
Accuracy	±0.25%FS
Hysteresis	<±0.25%
Output Type	Current
Pressure Setting Range	-1 to 400 bar
Media Measured	Air, Gas, Hydraulic Fluid, Liquid, Water
Process Connection	G1/4
Overpressure Resistance	2bar
Burst Pressure	4bar
Mounting Type	Threaded
Applications	Mechanical engineering, Environmental engineering, Automotive testing, Pneumatics, Agricultural machinery, Laboratory testing

Electrical Specifications

Supply Voltage	9v to 32v dc
Output Signal	2-wire 4mA-20mA
Maximum Current	20mA
Electrical Connection	DIN 43650 Type C
Insulation	>50M ohms at 50Vdc

Mechanical Specifications

Housing Material	Stainless Steel
Type of Seal	"O" ring seal,
Diaphragm Material	Ceramic Al ₂ O ₃ 96%
Dimensions	1/4" male thread -11.8mm, 50mm Nominal, 81mm Nominal, Ø 24mm, 18mm Hex
Weight	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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Pressure Ranges and Passive mV/V Outputs

Nominal Pressure, Gauge, bar	1	2	5	10	20	50	100	250	400
Compound range bar	-1 to 0	-1 to 2	-1 to 5	-1 to 9	-1 to 19	-1 to 24			
Permissible Overpressure bar	2	4	10	20	40	100	200	400	650
Burst Pressure bar	4	5	12	25	50	120	250	500	650

Output Signals and Supply Voltages

Wire system	Output	Supply Voltage	Connection Pin Nos		
2-wire	4-20mA	9-32Vdc	+ve Supply Pin 1	-ve Supply Pin 2	Ground Earth Pin
3-wire	0-5Vdc	9-32Vdc	+ve Supply Pin 1	-ve Supply Pin 2	Ground Earth Pin
			+ve Output Pin 3	Ground Earth Pin	
4-wire (amplified)	10mV/V (ratiometric)	3-12Vdc	+ve Supply Pin 1	-ve Supply Pin 2	
			+ve Output Pin 3	-ve Output Earth Pin	

Industrial Pressure Sensor - Ceramic

RS Stock No.	Pressure Rating	Output
7974989	0 - 1 Bar G	0 - 100mV
7974983	0 - 1 Bar G	4 - 20mA
7975043	0 - 1 Bar G	0 - 5V
7975009	0 - 6 Bar G	0 - 100mV
7975011	0 - 6 Bar G	4 - 20mA
7975046	0 - 6 Bar G	0 - 5V
7975024	-1 to +9 Bar G	4 - 20mA
7974970	-1 to +9 Bar G	0 - 5V
7974992	0 - 10 Bar G	0 - 100mV
7975018	0 - 10 Bar G	4 - 20mA
7975037	0 - 10 Bar G	0 - 5V
7974964	0 - 16 Bar G	0 - 100mV
8285741	0 - 16 bar G	4-20mA
8285745	0 - 16 bar G	0-5V
7974999	-1 to +24 Bar G	4 - 20mA
7974961	-1 to +24 Bar G	0 - 5V
7975052	0 - 25 Bar G	0 - 100mV
7975015	0 - 25 Bar G	4 - 20mA
7975030	0 - 25 Bar G	0 - 5V
7974977	0 - 40 Bar G	0 - 100mV
7975027	0 - 40 Bar G	4 - 20mA
7975033	0 - 40 Bar G	0 - 5V
7974995	0 - 100 Bar G	0 - 100mV
7975021	0 - 100 Bar G	4 - 20mA
7975005	0 - 100 Bar G	0 - 5V
7975049	0 - 250 Bar G	0 - 100mV
7974967	0 - 250 Bar G	4 - 20mA
7974986	0 - 250 Bar G	0 - 5V
7975002	0 - 400 Bar G	0 - 100mV
7974955	0 - 400 Bar G	4 - 20mA
7974973	0 - 400 Bar G	0 - 5V

