



ENGLISH

## Datasheet

**Stock Nos:** 7974989, 7974983, 7975043, 7975009, 7975011, 7975046, 7975024, 7974970, 7974992, 7975018, 7975037, 7974964, 7974999, 7974961, 7975052, 797501, 57975030, 7974977, 7975027, 7975033, 7974995, 7975021, 7975005, 7975049, 7974967, 7974986, 7975002, 7974955, 7974973, 8285741, 8285745

# IPS Series Industrial Pressure Sensor



- *Piezo-resistive thick film ceramic sensor*
- *Stainless steel body*
- *Accuracy  $<\pm 0.25\%$  FS BFSL*
- *Various outputs including mV, Volts and mA.*
- *Pressure ranges from -1 to 400 bar*

The IND series is suitable for use in a wide range of industrial applications. The probe uses a piezo-resistive ceramic sensor, giving excellent media compatibility within a stainless steel housing

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially for industrial applications..

Each device is temperature compensated, calibrated and supplied with a traceable serial number and calibration data\*

### Electrical Protection

Supply reverse polarity  
Electromagnetic compatibility

No damage/no function  
CE Compliant

### Performance

Accuracy (Non-Linearity & Hysteresis)  $<\pm 0.25\%$  / FS (BFSL)  
Setting Errors (offsets)  
2-wire Zero & Full Scale,  $<\pm 0.5\%$  / FS  
3-wire Zero & Full Scale,  $<\pm 0.5\%$  / FS  
4-wire Zero & Full Scale,  $<\pm 0.5\%$  / FS  
@ 10 Volts

### Mechanical Stability

Shock 100g / 11s  
Vibration 10g RMS (20 - 2000Hz)

### Material Specifications

Housing 303 Stainless Steel  
"O" ring seals Viton  
Diaphragm Ceramic  $Al_2O_3$  96%  
Media wetted parts Housing & connection, "O" ring seal, diaphragm  
Weight Approx 100g  
Installation position Any  
Operational Life  $> 100 \times 10^6$  cycles  
Insulation resistance  $> 50M\Omega$  at 50Vdc

### Temperatures & Thermal Effects

Media Temperature  $-40^\circ C$  to  $+135^\circ C$   
Ambient Temperature  $-20^\circ C$  to  $+80^\circ C$   
Storage temperature  $-40^\circ C$  to  $+125^\circ C$   
Compensated temperature range  $+20^\circ C$  to  $+80^\circ C$   
Thermal Zero Shift (TZS)  $<\pm 0.04\%$  /FS/ $^\circ C$   
Thermal Span Shift  $<\pm 0.015\%$  / $^\circ C$

### Pressure Ranges and Passive mV/V Outputs

	1	2	5	10	20	50	100	250	400
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
4-wire (amplified)	10mV/V (ratiometric)	3-12Vdc	+ve Supply Pin 1	-ve Supply Pin 2	-ve Output Earth Pin
			+ve Output Pin 3		



Made in the UK

IPS & PS RS Pro 2017

Specifications are subject to change without prior notice.

\*Calibration data is supplied as a sticker affixed to the product packaging - do not discard

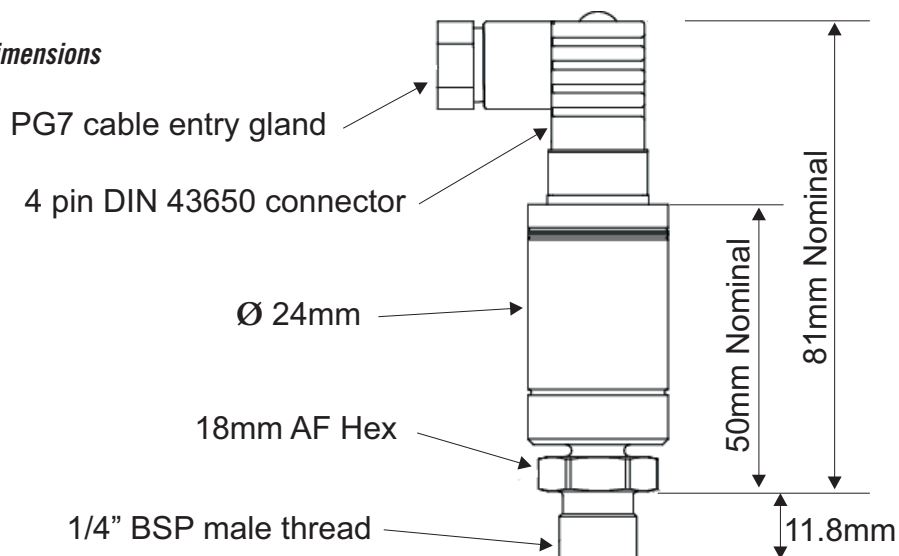


## IND Series

### 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

#### Mechanical Dimensions



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