



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		Performance	
Supply reverse polarity	No damage/no function	Accuracy (Non-Linearity & Hysteresis)	$<\pm 0.25\%$ / FS (BFSL)
Electromagnetic compatibility	CE Compliant	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		Material Specifications	
Shock	100g / 11s	Housing	303 Stainless Steel
Vibration	10g RMS (20 - 2000Hz)	"O" ring seals	Viton
Temperatures & Thermal Effects		Diaphragm	Ceramic Al <sub>2</sub> O <sub>3</sub> 96%
Media Temperature	-40°C to +135°C	Media wetted parts	Housing & connection, "O" ring seal,
Ambient Temperature	-20°C to +80°C	diaphragm	
Storage temperature	-40°C to +125°C	Weight	Approx 100g
Compensated temperature range	+20°C to +80°C	Installation position	Any
Thermal Zero Shift (TZS)	$<\pm 0.04\%$ /FS/°C	Operational Life	$> 100 \times 10^6$ cycles
Thermal Span Shift	$<\pm 0.015\%$ /°C	Insulation resistance	$> 50\text{M}\Omega$ at 50Vdc

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		
			+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	



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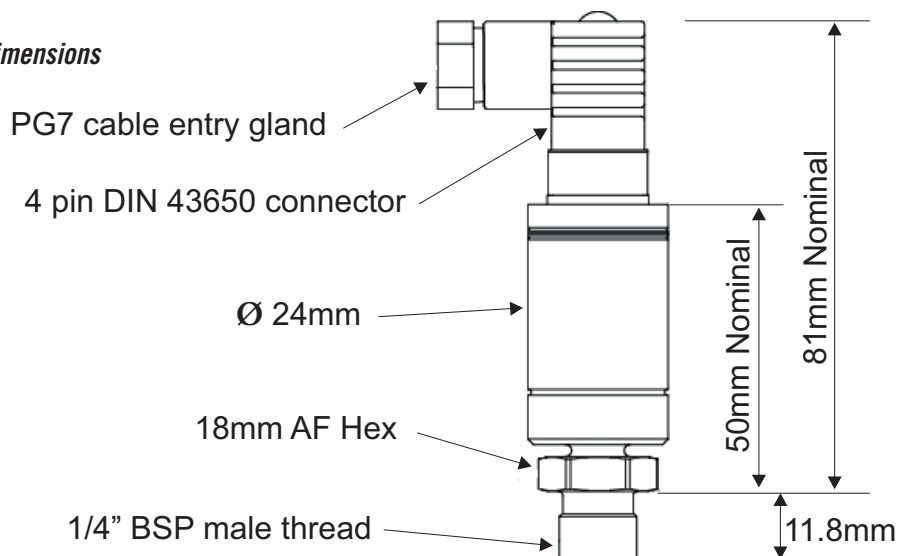


## IND Series

### 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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Specifications are subject to change without prior notice.