



ENGLISH

Datasheet

**Stock Nos:** 1754983, 1754984, 1755001, 1755002, 1755003, 1755005, 1754985, 1754986, 1754990, 1754991, 1754981, 1754982, 1754992, 1754993, 1754998, 1754999, 1754987, 1754989, 1754995, 1754996, 1754999, 1755000

## IPS-M12 Series Industrial Pressure Sensor



- Piezo-resistive thick film ceramic sensor
- Stainless steel body
- Accuracy  $\lt\pm 0.25\%$  FS BFSL
- 0-5V or 4-20mA outputs
- Pressure ranges from -1 to 400 bar
- M12 4-pin connector

The IPS-M12 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\*.

Mating cable and plug assemblies are available.

Electrical Protection		Performance	
Supply reverse polarity	No damage/no function	Accuracy (Non-Linearity & Hysteresis)	$\lt\pm 0.25\%$ / FS (BFSL)
Electromagnetic compatibility	CE Compliant	Setting Errors (offsets)	2-wire Zero & Full Scale, $\lt\pm 0.5\%$ / FS 3-wire Zero & Full Scale, $\lt\pm 0.5\%$ / FS
Mechanical Stability		Material Specifications	
Shock	100g / 11s	Housing	316L 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, diaphragm
Ambient Temperature	-20°C to +80°C	Weight	Approx 100g
Storage temperature	-40°C to +125°C	Installation position	Any
Compensated temperature range	+20°C to +80°C	Operational Life	> 100x 10 <sup>6</sup> cycles
Thermal Zero Shift (TZS)	$\lt\pm 0.04\%$ /FS/°C	Insulation resistance	> 50MΩ at 50Vdc
Thermal Span Shift	$\lt\pm 0.015\%$ /°C	Environmental protection	IP67 (only when used with a similarly rated connector)

Pressure Ranges and Passive mV/V Outputs										
Nominal Pressure, Gauge,	bar	1	2	5	10	20	50	100	250	400
Compound range	bar	-0.5 to 0	-0.5 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



Made in the UK

IPS & PS -M12 RS Pro 2018

Specifications are subject to change without prior notice.

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

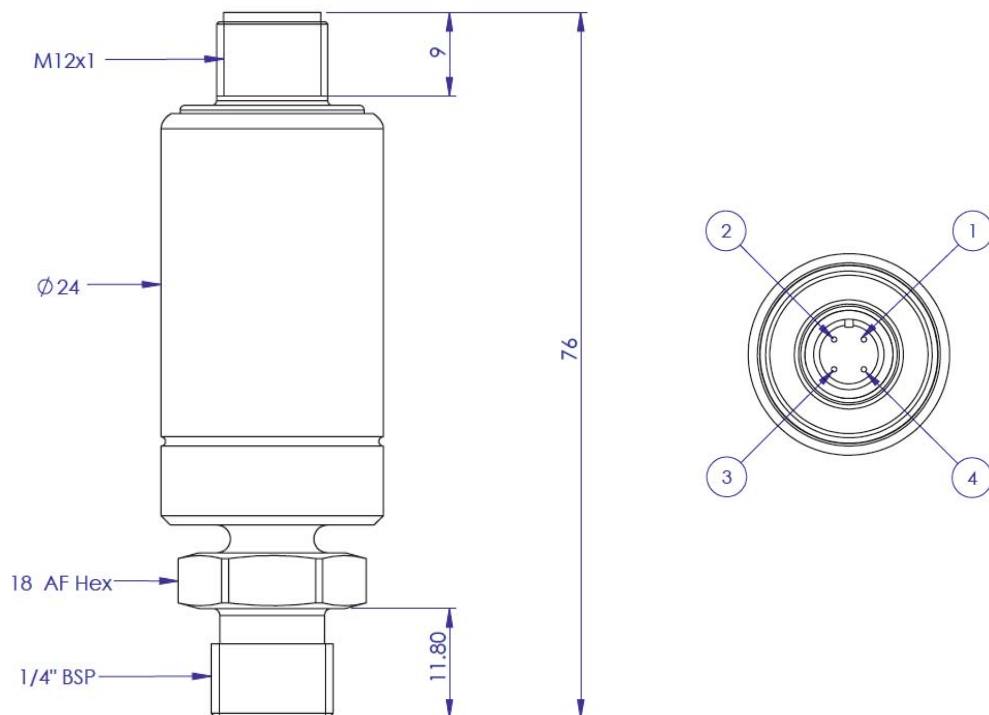


## IPS-M12 Series Industrial Pressure Sensor

RS Stock No.	Pressure Rating	Output
1754983	0 - 1 Bar G	4 - 20mA
1754984	0 - 1 Bar G	0 - 5V
1755001	0 - 6 Bar G	4 - 20mA
1755002	0 - 6 Bar G	0 - 5V
1755003	-1 to +9 Bar G	4 - 20mA
1755005	-1 to +9 Bar G	0 - 5V
1754985	0 - 10 Bar G	4 - 20mA
1754986	0 - 10 Bar G	0 - 5V
1754990	0 - 16 bar G	4-20mA
1754991	0 - 16 bar G	0-5V
1754981	-1 to +24 Bar G	4 - 20mA
1754982	-1 to +24 Bar G	0 - 5V
1754992	0 - 25 Bar G	4 - 20mA
1754993	0 - 25 Bar G	0 - 5V
1754998	0 - 40 Bar G	4 - 20mA
1754999	0 - 40 Bar G	0 - 5V
1754987	0 - 100 Bar SG*	4 - 20mA
1754989	0 - 100 Bar SG*	0 - 5V
1754995	0 - 250 Bar SG*	4 - 20mA
1754996	0 - 250 Bar SG*	0 - 5V
1754999	0 - 400 Bar SG*	4 - 20mA
1755000	0 - 400 Bar SG*	0 - 5V

\* sealed gauge

### Mechanical Dimensions



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