



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# IPS-M12 Series

## Industrial Pressure Sensor - Ceramic - with M12 4-Pin Connector



- Piezo-resistive thick film ceramic sensor
- Stainless steel body
- Accuracy  $\leq \pm 0.25\%$  FS BFSL
- 0-5V or 4-20mA output
- 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 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 - see datasheet M12 Cable Set Series

### Electrical Protection

Supply reverse polarity	No damage/no function
Electromagnetic compatibility	CE Compliant

### Performance

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

### Mechanical Stability

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

### Material Specifications

Housing	316L Stainless Steel
"O" ring seals	Viton
Diaphragm	Ceramic Al <sub>2</sub> O <sub>3</sub> 96%
Media wetted parts	Housing & connection, "O" ring seal, diaphragm
Weight	Approx 100g
Installation position	Any
Operational Life	> 100x 10 <sup>6</sup> cycles
Insulation resistance	> 50MΩ at 50Vdc
Environmental protection	IP67 (when used with a similarly rated connector)

### Temperatures & Thermal Effects

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

### 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	Earth Pin 4
			Output Pin 3		

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Made in the UK

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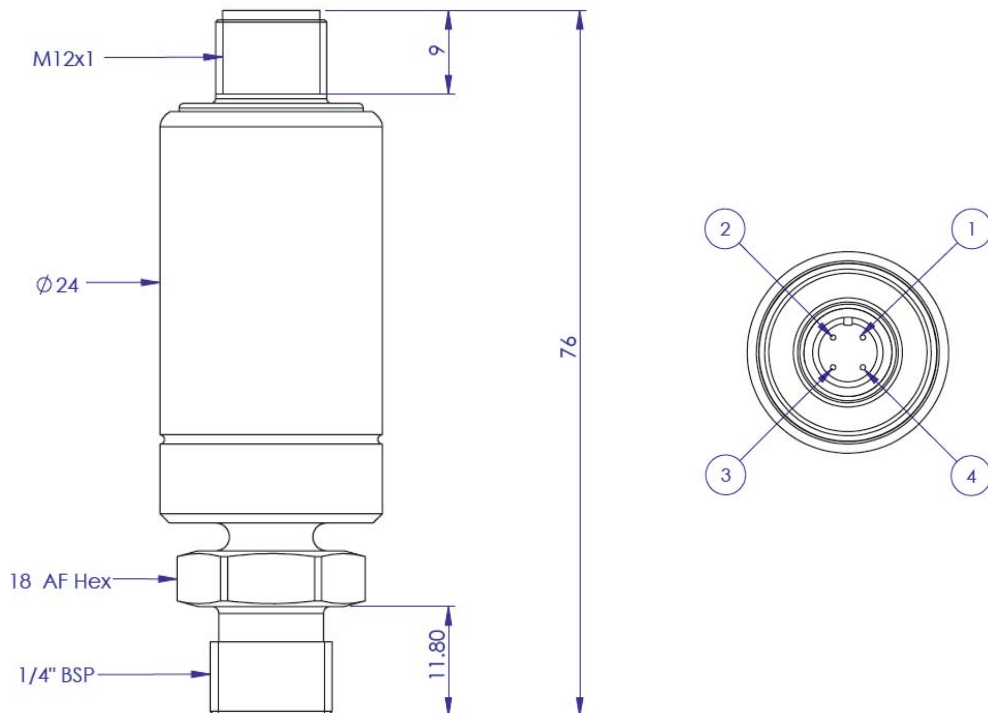
# IPS-M12 Series

## Industrial Pressure Sensor - Ceramic - with M12 4-Pin Connector

Part Number	Pressure Rating	Output
IPS-G1000-5M12	0 - 1 Bar G	4 - 20mA
IPS-G1000-6M12	0 - 1 Bar G	0 - 5V
IPS-G6000-5M12	0 - 6 Bar G	4 - 20mA
IPS-G6000-6M12	0 - 6 Bar G	0 - 5V
IPS-GM1P9-5M12	-1 to +9 Bar G	4 - 20mA
IPS-GM1P9-6M12	-1 to +9 Bar G	0 - 5V
IPS-G1002-5M12	0 - 10 Bar G	4 - 20mA
IPS-G1002-6M12	0 - 10 Bar G	0 - 5V
IPS-G1602-5M12	0 - 16 bar G	4-20mA
IPS-G1602-6M12	0 - 16 bar G	0-5V
IPS-C0184-5M12	-1 to +24 Bar G	4 - 20mA
IPS-C0184-6M12	-1 to +24 Bar G	0 - 5V
IPS-G2502-5M12	0 - 25 Bar G	4 - 20mA
IPS-G2502-6M12	0 - 25 Bar G	0 - 5V
IPS-G4002-5M12	0 - 40 Bar G	4 - 20mA
IPS-G4002-6M12	0 - 40 Bar G	0 - 5V
IPS-G1003-5M12	0 - 100 Bar SG*	4 - 20mA
IPS-G1003-6M12	0 - 100 Bar SG*	0 - 5V
IPS-G2503-5M12	0 - 250 Bar SG*	4 - 20mA
IPS-G2503-6M12	0 - 250 Bar SG*	0 - 5V
IPS-G4003-5M12	0 - 400 Bar SG*	4 - 20mA
IPS-G4003-6M12	0 - 400 Bar SG*	0 - 5V

\* sealed gauge

### Mechanical Dimensions



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