

# IPSL series

## Low Range Industrial Pressure Sensor



- Piezo-resistive sensor
- Stainless steel body & diaphragm
- Accuracy  $\leq \pm 0.25\%$  FS BFSL
- Various outputs including Volts and mA.
- Pressure ranges from 50 mbar to 1000 mbar
- Gauge or Absolute pressure reference

### Options available on the IPSL pressure transmitter.

Pressure range  
 Pressure reference (G or Abs)  
 Output type

The IPSL is suitable for use in a wide range of applications. The probe uses a piezo-resistive silicon sensor, giving excellent media compatibility within an oil filled 316L stainless steel housing

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially in high vibration/shock applications.

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

There is a choice of internal O ring seals to ensure that the device is compatible with a wide range of media.

Custom versions can be made for particular applications.

### Suitable applications

HVAC	Mechanical engineering
Pneumatics	Environmental engineering
Rainwater harvesting	Automotive testing
Agricultural machinery	Tank gauging
Laboratory testing	IBC, IBC Tote or pallet tank

### Performance

Accuracy (Non-Linearity & Hysteresis)  $\leq \pm 0.25\%$  / FS (BFSL) for gauge,  $\leq \pm 0.5\%$  for Absolute

Setting Errors (offsets)	2-wire	Zero & Full Scale, $\leq \pm 0.5\%$ / FS
	3-wire	Zero & Full Scale, $\leq \pm 0.5\%$ / FS
Permissible Load	2-wire	$R_{max} = [(Supply-9min)/0.02]\Omega$
	3-wire	$R_{min} = 10k\Omega$
Influence Effects	Supply	$< 0.005\%$ FS / 1V
	Load	0.05% FSO / $k\Omega$

### Material Specifications

Housing	303 Stainless Steel
"O" ring seals	Viton
Diaphragm	316L Stainless Steel
Media wetted parts	Housing & connection, "O" ring seal, diaphragm

### Miscellaneous

Current consumption	2-wire Limits at 28mA 3-wire Typical 6mA
Weight	Approx 100g
Installation position	Any, small zero shift when tilted through 90°
Operational Life	$> 100 \times 10^6$ cycles
Insulation resistance	$> 50M\Omega$ at 50Vdc

### Electrical Protection

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

### Mechanical Stability

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

### Temperatures & Thermal Effects

Media Temperature	-40°C to +125°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	$< -0.015\%$ /°C

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

Cynergy3 Components Ltd.  
 7 Cobham Road  
 Ferndown Industrial Estate  
 Wimborne, Dorset BH21 7PE  
 Telephone +44 (0) 1202 897969  
 Email: sales@cynergy3.com  
 IPSL 2018

ISO9001 CERTIFIED



www.cynergy3.com

# IPSL series

## Low Range Industrial Pressure Sensor

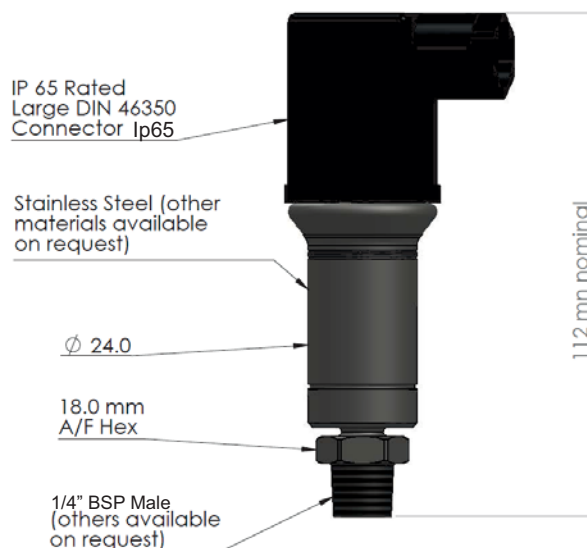
### Pressure Ranges and Passive mV/V Outputs

Nominal Pressure, Gauge, mbar	50	100	250	500	750	1000
Nominal Pressure, Absolute mbar				500	750	1000
Permissible Overpressure mbar	2 bar	2 bar	2 bar	5 bar	5 bar	5 bar

### Output Signals and Supply Voltages DIN 43650

Wire system	Output	Supply Volts	Connection	Pin No.
2-wire	4-20mA	9-32Vdc	+ve Supply -ve Supply Ground	Pin 1 Pin 2 Earth pin
3-wire	0.5 - 4.5Vdc (non-ratiometric)	9-32 Vdc	+ve Supply -ve Supply +ve Output Ground	Pin 1 Pin 2 Pin 3 Earth Pin

Part No	Pressure Range	Output
IPSL-G0050-5	0 - 50mbar G	4-20mA
IPSL-G0100-5	0 - 100mbar G	4-20mA
IPSL-G0250-5	0 - 250mbar G	4-20mA
IPSL-G0500-5	0 - 500mbar G	4-20mA
IPSL-G0750-5	0 - 750mbar G	4-20mA
IPSL-G1000-5	0 - 1000mbar G	4-20mA
IPSL-G0050-D	0 - 50mbar G	0.5 to 4.5V 3Wire
IPSL-G0100-D	0 - 100mbar G	0.5 to 4.5V 3Wire
IPSL-G0250-D	0 - 250mbar G	0.5 to 4.5V 3Wire
IPSL-G0500-D	0 - 500mbar G	0.5 to 4.5V 3Wire
IPSL-G0750-D	0 - 750mbar G	0.5 to 4.5V 3Wire
IPSL-G1000-D	0 - 1000mbar G	0.5 to 4.5V 3Wire
IPSL-A0500-5	0 - 500mbar Abs	4-20mA
IPSL-A0750-5	0 - 750mbar Abs	4-20mA
IPSL-A1000-5	0 - 1000mbar Abs	4-20mA



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Speakers & Transducers](#) category:*

*Click to view products by [Sensata](#) manufacturer:*

Other Similar products are found below :

[FC-30814-P127](#) [AS02832MR-2-R](#) [PB-1220PE](#) [PB-2015PQ](#) [900-00001](#) [AB2025B-LW50-R](#) [SWFK-31736-000](#) [PT-2065FW](#) [PT-4175W](#) [AT-2830-TW-LW35-R](#) [ED-30761-000](#) [CI-30120-A42](#) [SMT-0440-T-2-R](#) [PB-0927PQ](#) [BF-7083-000](#) [SMS2020-08H4.5 LF](#) [BDT1717-08H6.5W56MLF](#) [GSPK1003PN-8R0.2W-L100](#) [GSPK151103TN-8R0.2W](#) [GSPK2014035PN-8R0.5W-L100](#) [AS03608MR-LW100-R](#) [24520](#) [SMT-0540-S-2-R](#) [1450069](#) [9091653](#) [9091661](#) [IPS-G6000-5](#) [9090231](#) [FS50MS0820-H9.7](#) [FS4014-4-2W](#) [PBM4-13.B29R.A115.0663](#) [PBM4-13.B31R.A115.0663](#) [PBM4-13.B33R.A115.0663](#) [PBM4-13.B35R.A115.0663](#) [A-10-6-BG360-HD1Z-GA-M4Z-ZW](#) [A-10-6-BG410-HD1Z-AA-AGZ-ZW](#) [A-10-6-BG410-HD1Z-AA-M4Z-ZW](#) [A-10-6-BG410-HD1Z-FC-AGZ-ZW](#) [A-10-6-BG410-HD1Z-GA-M4Z-ZW](#) [A-10-6-BG310-HD1Z-AA-AGZ-ZW](#) [A-10-6-BG310-HD1Z-AA-M4Z-ZW](#) [A-10-6-BG310-HD1Z-GA-M4Z-ZW](#) [A-10-6-BG316-HD1Z-AA-M4Z-ZW](#) [A-10-6-BG325-HD1Z-AA-AGZ-ZW](#) [A-10-6-BG325-HD1Z-AA-M4Z-ZW](#) [A-10-6-BG340-HD1Z-AA-AGZ-ZW](#) [A-10-6-BG340-HD1Z-AA-M4Z-ZW](#) [A-10-6-BG340-HD1Z-GA-M4Z-ZW](#) [A-10-6-BG360-GT1Z-AA-M4Z-ZW](#) [A-10-6-BG360-HD1Z-AA-AGZ-ZW](#)