

# IPSLAT series

## Low Range, Intrinsically Safe Pressure Sensor



**Approvals:-**  
ATEX / IECEx  
II 1G Ex ia IIC T4 Ga (Ta -see schedule)



- **Piezo-resistive sensor**
- **Stainless steel body & diaphragm**
- **Accuracy  $\leq \pm 0.25\%$  FS BFSL**
- **Pressure ranges from 50 mbar to 1000 mbar**
- **Gauge or Absolute pressure reference**



The IPSLAT is suitable for use in a wide range of applications in hazardous areas. 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.

### 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

### Options available on the IPSLAT pressure transmitter.

Pressure range  
Pressure reference (G or Abs)

### Material Specifications

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

### Miscellaneous

Weight	Approx 100g
Installation position	Any, small zero shift when tilted through 90°
Operational Life	> 100x 10 <sup>6</sup> cycles
Insulation resistance	> 50MΩ 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)

### Environment & Thermal Effects

Ambient Temperature Range	-20°C to +75°C
Storage temperature	-40°C to +80°C
Compensated temperature range	+20°C to +80°C
Thermal Zero Shift (TZS)	$\leq \pm 0.04\%$ /FS/°C
Thermal Span Shift	$\leq -0.015\%$ /°C
Permissible environment	Zone 0

Cynergy3 Components Ltd.  
7 Cobham Road  
Ferndown Industrial Estate  
Wimborne, Dorset BH21 7PE  
Telephone +44 (0) 1202 897969  
Email: sales@cynergy3.com  
IPSLAT 2017

ISO9001 CERTIFIED



www.cynergy3.com

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### Pressure Ranges

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 Signal and Supply Voltage

Wire system	Output	Supply Volts	Connection	Pin No.
2-wire	4-20mA	10-28Vdc	+ve Supply	Pin 1
			-ve Supply	Pin 2
			Ground	Earth pin

Part No	Pressure Range
IPSLAT-G0050-5	0 - 50mbar G
IPSLAT-G0100-5	0 - 100mbar G
IPSLAT-G0250-5	0 - 250mbar G
IPSLAT-G0500-5	0 - 500mbar G
IPSLAT-G0750-5	0 - 750mbar G
IPSLAT-G1000-5	0 - 1000mbar G
IPSLAT-A0500-5	0 - 500mbar Abs
IPSLAT-A0750-5	0 - 750mbar Abs
IPSLAT-A1000-5	0 - 1000mbar Abs

Custom versions can be made for particular applications

### Mechanical Dimensions

