

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 $<\pm 0.25\%$ 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) $<\pm 0.25\%$ / FS (BFSL) for gauge, $<\pm 0.5\%$ for Absolute

Setting Errors (offsets) 2-wire Zero & Full Scale, $<\pm 0.5\%$ / 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	$> 100 \times 10^6$ cycles
Insulation resistance	$> 50 \text{ MOhms}$ 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)	$<\pm 0.04\%$ /FS/°C
Thermal Span Shift	$<-0.015\%$ /°C
Permissible environment	Zone 0

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ISO9001 CERTIFIED



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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 DIN 43650

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

