

IPSLUAT 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 1psi to 15psi**
- **Gauge or Absolute pressure reference**



The IPSLUAT 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 IPSLUAT 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

Media Temperature	-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



Made in the UK

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Pressure Ranges

Nominal Pressure, Gauge, psi	0.75	1.5	3.75	7.5	11.25	15
Nominal Pressure, Absolute psi				7.5	11.25	15
Permissible Overpressure psi	30	30	30	75	75	75

Output Signal and Supply Voltage

Wire system	Output	Supply Volts	DIN 43650 Connection	Pin No.
2-wire	4-20mA	10-28Vdc	+ve Supply	Pin 1
			-ve Supply	Pin 2
			Ground	Earth pin

Part Number	Pressure Rating
IPSLUAT-GP001-5	0 - 1psi G
IPSLUAT-GP002-5	0 - 2psi G
IPSLUAT-GP005-5	0 - 5psi G
IPSLUAT-GP008-5	0 - 8psi G
IPSLUAT-GP010-5	0 - 10psi G
IPSLUAT-GP015-5	0 - 15psi G
IPSLUAT-AP005-5	0 - 5psi Abs
IPSLUAT-AP010-5	0 - 10psi Abs
IPSLUAT-AP015-5	0 - 15psi Abs

Mechanical Dimensions

