

# 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  $\leq \pm 0.25\%$  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	$> 50 \text{M}\Omega$ 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)

### 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

