



ENGLISH

## Datasheet

**Stock No.s:** 1024153, 1024154, 1024155, 1024156, 1024157, 1024158, 1024159, 1024160, 1024161

## IPSLAT series - Low Range, Intrinsically Safe Pressure Sensor



**Approvals:-**  
ATEX / IECEx

Ex II 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\*.

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

### 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

Media Temperature	-20°C to +120°C
Storage temperature	-40°C to +110°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
Permissible environment zone 0	-20°C to +60°C with patm 0.8 to 1.1 bar



Made in the UK

IPSLAT RS Pro 2017

Specifications are subject to change without prior notice.

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



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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
1024153	0 - 50mbar G
1024154	0 - 100mbar G
1024155	0 - 250mbar G
1024156	0 - 500mbar G
1024157	0 - 750mbar G
1024158	0 - 1000mbar G
1024159	0 - 500mbar Abs
1024160	0 - 750mbar Abs
1024161	0 - 1000mbar Abs

### Mechanical Dimensions

