



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 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 ⁶ 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	$< -0.015\%$ /°C
Permissible environment	Zone 0



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

