



ENGLISH

Datasheet 1024134, 1024135, 1024137, 1024138, 1024139, 1024140,
Stock No.s: 1024141, 1024143, 1024144, 1024145, 1024146, 1024147,
1024148, 1024149, 1014150, 1024151, 1024152

IPSSAT - Intrinsically Safe, Semi-Flush Mount Pressure Transmitter



Approvals:-
ATEX / IECEx

Ⓜ II Ex ia IIC T4 Ga Ta (see schedule)



- Piezo-resistive sensor, Ceramic or Silicon
- Accuracy $\leq \pm 0.25\%$ FS BFSL
- Pressure ranges from 100mbar to 100 bar
- Pressure reference, Gauge or Absolute

The intrinsically safe, semi-flush mount pressure transmitter, IPSSAT, has a piezo-resistive silicon or ceramic pressure sensor. The sensor is semi-flush to the housing making this product ideal for viscous or paste like media. The sensor and housing are made from stainless steel with a choice of internal 'O' ring seals to ensure the product is suitable for a wide range of applications.

The electronics incorporate a microprocessor-based amplifier, requiring no adjusting and giving stable electronics - especially in high vibration or shock applications.

Every 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)
Setting Errors (offsets)	Zero & Full Scale, $< \pm 0.5\%$ / FS

Material Specifications

Housing	316 Stainless Steel
"O" ring seals	Viton
Diaphragm	316L Stainless Steel or Ceramic
Media wetted parts	Housing & process connection, "O" ring seal, diaphragm

Miscellaneous

Weight	Approx 100g
Installation position	Any, small zero shift when tilted through 90° for silicon
Operational Life	$> 100 \times 10^6$ cycles
Insulation resistance	$> 50\text{M}\Omega$ at 50Vdc

Electrical Protection

Supply reverse polarity	No damage but also no function
Electromagnetic compatibility	CE Compliant

Mechanical Stability

Shock	100g / 11s
Vibration	10g RMS (20 - 2000Hz)

Environment & Thermal Effects

Operating Temperature	-20°C to +120°C
Storage temperature	-40°C to +110°C
Compensated temperature	+20°C to +80°C
Thermal Zero Shift (TZS)	$< \pm 0.04\%$ / FS/°C
Thermal Span Shift (TSS)	$< -0.015\%$ / °C
Permissible environment zone 0	-20°C to +60°C with patm 0.8 to 1.1 bar

IPSSAT RS Pro 2017



Made in the UK

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

Specifications are subject to change without prior notice.

IPSSAT series

Intrinsically Safe, Semi-Flush Mount Pressure Transmitter

Input Pressure Ranges

Nominal pressure, Gauge,	Bar	0.1	0.5	1	2	5	10	20	50	100
Nominal pressure*, Absolute	Bar	-	-	1	2	5	10	20	-	-
Nominal pressure*, Compound	Bar	-1 to +1	-1 to +5	-1 to +9	-1 to +19					
Permissible Overpressure	Bar	2	2	5	5	10	20	50	100	200

* Ceramic sensor only

Output Signal and Supply Voltage

Wire system	Output	Supply Volts	Wiring Designation	Pin No.
2-wire	4-20mA	10-28Vdc	+ve Supply	Pin 1
			-ve Supply	Pin 2
			Ground	Pin 3

Part No	Sensor type	Pressure Range
1024134	Silicon	0-100mbar G (0-1.4psi)
1024135	Silicon	0-500mbar G (0-7.25psi)
1024137	Silicon	0-1000mbar G (0-14.5psi)
1024138	Ceramic	0-2 Bar G (0-29psi)
1024139	Ceramic	0-5 Bar G (0-73psi)
1024140	Ceramic	0-10 Bar G (0-145psi)
1024141	Ceramic	0-20 Bar G (0-290psi)
1024143	Ceramic	0-50 Bar G (0-725psi)
1024144	Ceramic	0-100 Bar G (1450psi)
1024145	Ceramic	-1 to +1 Bar G (-14.5 to +14.5psi)
1024146	Ceramic	-1 to +5 Bar G (-14.5 to +73psi)
1024147	Ceramic	-1 to +9 Bar G (-14.5 to +131psi)
1024148	Ceramic	-1 to +19 Bar G (-14.5 to +276psi)
1024149	Ceramic	0-1 Bar Abs (0-14.5psiA)
1024150	Ceramic	0-2 Bar Abs (0-29psiA)
1024151	Ceramic	0-5 Bar Abs (0-73psiA)
1024152	Ceramic	0-10 Bar Abs (0-1345psiA)

