



ENGLISH

Datasheet

Stock No.s: 1024123,1024124, 1024125, 1024126, 1024127, 1024128  
1024129, 1024130, 1024131, 1024132, 1024133

IPSAT Series - Intrinsically Safe Pressure Transducer - 1/4"BSP



Approvals:-  
ATEX / IECEx

- Ex II 1G Ex ia IIC T4 Ga (Ta -20°C to +75°C)
- Ex II 1D Ex ia IIIC T135°C Da (Ta -20°C to +65°C)



- Piezo-resistive thick film ceramic sensor
- Stainless steel body
- Accuracy  $\leq \pm 0.25\%$  FS BFSL
- Pressure ranges from -1 to 400 bar
- 4-20mA Output
- Gas and Dust approvals

The IPSAT series is ideally suited for use in a wide range of industrial applications in hazardous areas. The transducer uses a piezo-resistive ceramic sensor in a stainless steel housing giving excellent media compatibility for the harshest of applications.

The product is both ATEX and IECEx approved for use in zone 0 gaseous and dust laden environments, and is compatible with off-the-shelf safety barriers.

Each transducer is temperature compensated, calibrated and supplied with a traceable serial number and calibration data\*.

Pressure Ranges

Calibrated Pressure, Gauge, bar	1	6	10	16	25	40	100	250	400
Compound range bar			-1 to 9		-1 to 24				
Permissible Overpressure bar	2	15	15	35	100	100	150	500	500
Burst Pressure bar	3	20	20	50	120	120	200	650	650

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

Performance

Accuracy (Non-Linearity & Hysteresis)	$\leq \pm 0.25\%$ / FS (BFSL)
Setting Errors (offsets)	Zero & Full Scale, $\leq \pm 0.5\%$ / FS

Environment & Thermal Effects

Ambient Temperature Range *	-20°C to +75°C (65°C for dust)
Storage temperature	-20°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	$\leq \pm 0.015\%$ /°C (typical)

\* Ensure that media temperature does not cause transducer temperature to exceed the ambient temperature rating

Electrical Protection

Supply reverse polarity	No damage but also no function
Insulation resistance	> 500Vac

Material Specifications

Housing	316 Stainless Steel
Seals	Viton
Diaphragm	Ceramic Al <sub>2</sub> O <sub>3</sub> 96%
Media wetted parts	Housing & connection, "O" ring seal, diaphragm
Weight	Approx 100g
Installation position	Any

Mechanical Stability

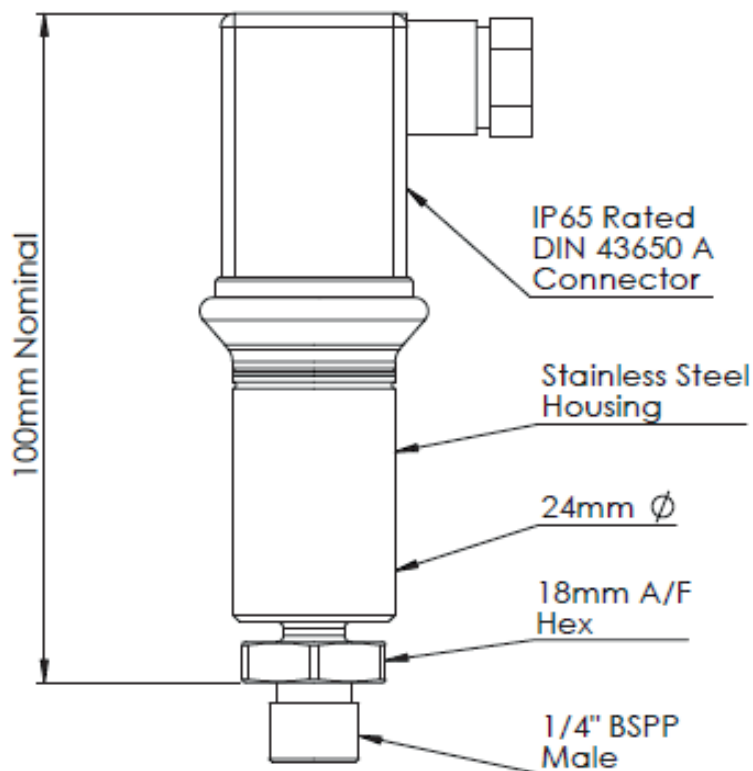
Shock	100g / 11s
Vibration	10g RMS (20 - 2000Hz)



## IPSAT Series Intrinsically Safe Pressure Transducer

Part Number	Pressure Rating
1024123	0 - 1 Bar G
1024124	0 - 6 Bar G
1024125	-1 to +9 Bar G
1024126	0 - 10 Bar G
1024127	0 - 16 bar G
1024128	-1 to +24 Bar G
1024129	0 - 25 Bar G
1024130	0 - 40 Bar G
1024131	0 - 100 Bar G
1024132	0 - 250 Bar G
1024133	0 - 400 Bar G

### Mechanical Dimension



Made in the UK

