IPSUAT SERIES

INTRINSICALLY SAFE PRESSURE TRANSDUCER - 1/4" NPT



The IPSUAT series is ideally suited or 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.

Approvals

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

Features

- Piezo-resistive thick film ceramic sensor
- Stainless steel body
- Accuracy <±0.25% FS BFSL
- Pressure ranges from -15 to 5800 psi
- 4-20mA Output
- Gas and Dust approvals

SPECIFICATIONS

Performance

Accuracy (Non-linearity & Hysteresis)	<±0.25% / FS (BFSL)
Setting Errors (Offsets)	Zero & Full Scale, <±0.5% / FS

Environmental Conditions

Shock	100g / 11s
Vibration	10g RMS (20 - 2000Hz)
Ambient Temperature Range*	-20°C to +75°C (65°C for dust)
Storage Temperature	-20°C to +80°C
Humidity	5% to 95% RH non-condensing

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

Electrical Protection

Supply Reverse Polarity	No damage/no function
Insulation Resistance	> 500Vac

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Material

Housing	316 Stainless Steel
“O” Ring Seals	Viton
Diaphragm	Ceramic $Al_2 O_3$ 96%
Media Wetted Parts	Housing & connection, ‘O’ ring seal, diaphragm
Weight	Approx 100g
Installation Position	Any

Temperature & Thermal Effects

Compensated Temperature Range	+20°C to +80°C
Thermal Zero Shift (TZS)	<±0.04% /FS/°C
Thermal Span Shift	<±0.015% /°C (typical)

PRESSURE RANGES

Nominal Pressure, Gauge	psi	15	30	75	150	300	750	1500	3750	6000
Compound Range	psi	-15 to 0	-15 to 30	-15 to 75	-15 to 1235	-15 to 285	-15 to 360			
Permissible Overpressure	psi	30	60	150	300	600	1500	3000	6000	9750
Burst Pressure	psi	60	75	180	375	750	1800	3750	7500	9750

Output Signal & 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

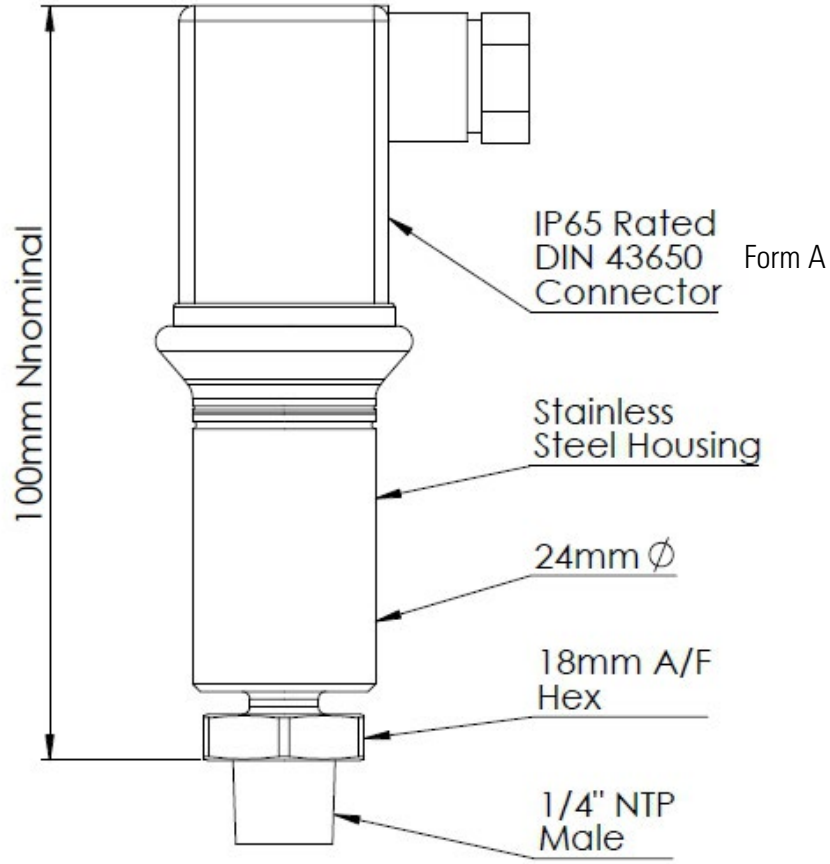
Part Number	Pressure Rating
IPSUAT-GP015-5	0-15psi G
IPSUAT-GP030-5	0-30psi G
IPSUAT-GP075-5	0-75psi G
IPSUAT-C0446-5	-14.5 to +150 psi G
IPSUAT-GP100-5	0-100psi G
IPSUAT-GP150-5	0-150psi G
IPSUAT-C0447-5	-14.5 to +350 psi G
IPSUAT-GP300-5	0-300psi G
IPSUAT-GP750-5	0-750psi G
IPSUAT-GP1K5-5	0-1500psi G
IPSUAT-GP3K6-5	0-3600psi G
IPSUAT-GP5K8-5	0-5800psi G

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DIMENSIONS

All dimensions are in millimeters.



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