| IPSU SERIES

INDUSTRIAL PRESSURE TRANSDUCER - CERAMIC



The IPSU series is suitable for use in a wide range of industrial applications. The probe uses a piezo-resistive ceramic sensor, giving excellent media compatibility within a stainless steel housing.

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially for industrial applications.

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

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

Features

- Piezo-resistive thick film ceramic sensor
- Stainless steel body
- Accuracy <±0.25% FS BFSL
- Various outputs including mV, Volts and mA.
- Pressure ranges from vacuum to +5800psi (Custom ranges available on request)

SPECIFICATIONS

Performance

Accuracy (Non-linearity & Hysteresis)	<±0.25% / FS (BFSL)	
Setting Errors (Offsets)	2-wire	Zero & Full Scale, <±0.5% / FS
	3-wire	Zero & Full Scale, <±0.5% / FS
	4-wire	Zero & Full Scale, <±0.5% / FS
		@ 10 Volts

Material

Housing	303 Stainless Steel
"O" Ring Seals	Viton
Diaphragm	Ceramic Al_2O_3 96%
Media Wetted Parts	Housing & connection, 'O' ring seal, diaphragm
Weight	Approx 3.5oz (100g)
Installation Position	Any
Operation Life	> 100 x 10^6 cycles
Insulation Resistance	> 50MOhms at 50Vdc

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Electrical Protection

Supply Reverse Polarity	No damage / no function
Electromagnetic Compatibility	CE Compliant

Environmental Conditions

Shock	100g / 11s
Vibration	10g RMS (20 - 2000Hz)
Media Temperature	-40°C to +135°C
Ambient Temperature	-20°C to +80°C
Storage Temperature	-40°C to +125°C
Humidity	5% to 95% RH non-condensing

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

PRESSURE RANGES

Pressure Ranges & Passive mV/V Outputs

Nominal 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	10	15	35	100	100	150	350	500
Burst Pressure	bar	3	12	20	50	120	120	200	500	650

Nominal Pressure, Gauge	psi	15	30	75	100	150	300	750	1500	3600	5800
Compound Range	psi					-14.5 to +150	-14.5 to +350				
Permissible Overpressure	psi	30	60	150	225	225	500	1500	2000	5000	7000
Burst Pressure	psi	45	75	180	300	300	700	1800	3000	7000	9500

Output Signal & Supply Voltage

Wire System	**Output**	**Supply Voltage**	**Connection Pin Nos**		
2-wire	4 - 20mA	9 – 32Vdc	+ve Supply Pin 1	-ve Supply Pin 2	Ground Earth Pin
3-wire	0 - 5Vdc	9 – 32Vdc	+ve Supply Pin 1	-ve Supply Pin 2	
			+ve Output Pin 3	Ground Earth Pin	
4-wire (amplified)	10mV/V (ratiometric)	3 – 12Vdc	+ve Supply Pin 1	-ve Supply Pin 2	
			+ve Output Pin 3	-ve Output Earth Pin	

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Part Number	Range	Output
IPSU-GP015-3	0-15 psi G	0-100mV
IPSU-GP015-5	0-15 psi G	4-20mA
IPSU-GP015-6	0-15 psi G	0-5V
IPSU-GP030-3	0-30 psi G	0-100mV
IPSU-GP030-5	0-30 psi G	4-20mA
IPSU-GP030-6	0-30 psi G	0-5V
IPSU-C0446-5	-14.5 to +150 psi G	4 - 20mA
IPSU-C0446-6	-14.5 to +150 psi G	0-5V
IPSU-GP075-3	0-75 psi G	0-100mV
IPSU-GP075-5	0-75 psi G	4-20mA
IPSU-GP075-6	0-75 psi G	0-5V
IPSU-GP100-3	0-100 psi G	0-100mV
IPSU-GP100-5	0-100 psi G	4-20mA
IPSU-GP100-6	0-100 psi G	0-5V
IPSU-C0447-5	-14.5 to +350 psi G	4-20mA
IPSU-C0447-6	-14.5 to +350 psi G	0-5V
IPSU-GP150-3	0-150 psi G	0-100mV
IPSU-GP150-5	0-150 psi G	4-20mA
IPSU-GP150-6	0-150 psi G	0-5V
IPSU-GP300-3	0-300 psi G	0-100mV
IPSU-GP300-5	0-300 psi G	4-20mA
IPSU-GP300-6	0-300 psi G	0-5V
IPSU-GP750-3	0-750 psi G	0-100mV
IPSU-GP750-5	0-750 psi G	4-20mA
IPSU-GP750-6	0-750 psi G	0-5V
IPSU-GP1K5-3	0-1500 psi G	0-100mV
IPSU-GP1K5-5	0-1500 psi G	4-20mA
IPSU-GP1K5-6	0-1500 psi G	0-5V
IPSU-GP3K6-3	0-3600 psi G	0-100mV
IPSU-GP3K6-5	0-3600 psi G	4-20mA
IPSU-GP3K6-6	0-3600 psi G	0-5V
IPSU-GP5K8-3	0-5800 psi G	0-100mV

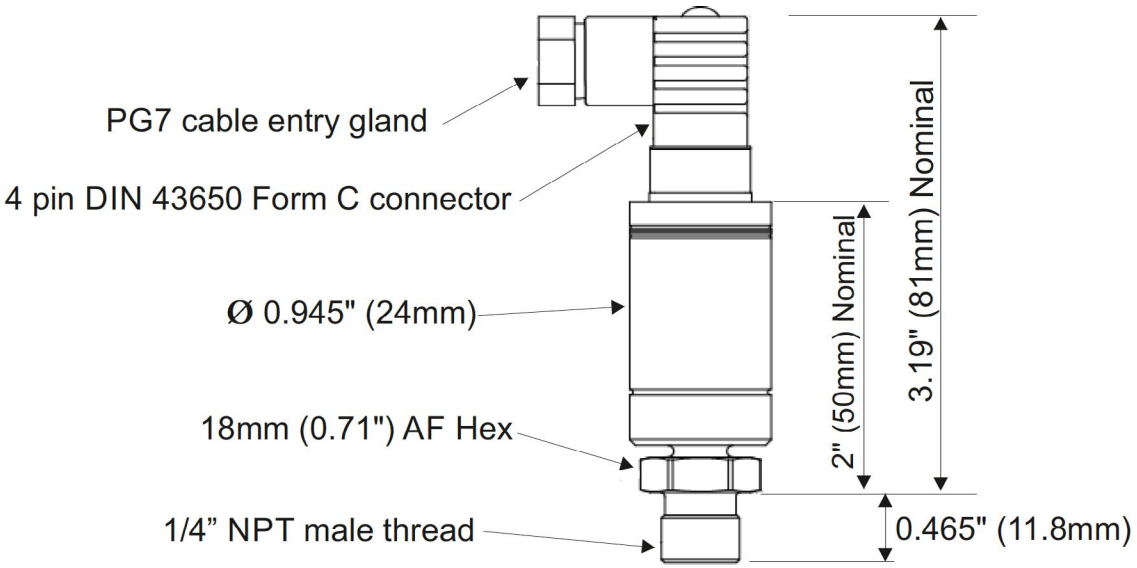
Part Number	Range	Output
IPSU-G1000-3	0-1bar G (0-14.5psi)	0-100mV
IPSU-G1000-5	0-1bar G (0-14.5psi)	4-20mA
IPSU-G1000-6	0-1bar G (0-14.5psi)	0-5V
IPSU-G6000-3	0-6bar G (0-87psi)	0-100mV
IPSU-G6000-5	0-6bar G (0-87psi)	4-20mA
IPSU-G6000-6	0-6bar G (0-87psi)	0-5V
IPSU-GM1P9-5	-1 to +9 Bar G	4 - 20mA
IPSU-GM1P9-6	-1 to +9 Bar G	0-5V
IPSU-G1002-3	0-10bar G (0-145psi)	0-100mV
IPSU-G1002-5	0-10bar G (0-145psi)	4-20mA
IPSU-G1002-6	0-10bar G (0-145psi)	0-5V
IPSU-G1602-3	0-16bar G (0-232psi)	0-100mV
IPSU-G1602-5	0-16bar G (0-232psi)	4-20mA
IPSU-G1602-6	0-16bar G (0-232psi)	0-5V
IPSU-C0184-5	-1 to +24bar G	4-20mA
IPSU-C0184-6	-1 to +24bar G	0-5V
IPSU-G2502-3	0-25bar G (0-363psi)	0-100mV
IPSU-G2502-5	0-25bar G (0-363psi)	4-20mA
IPSU-G2502-6	0-25bar G (0-363psi)	0-5V
IPSU-G4002-3	0-40bar G (0-580psi)	0-100mV
IPSU-G4002-5	0-40bar G (0-580psi)	4-20mA
IPSU-G4002-6	0-40bar G (0-580psi)	0-5V
IPSU-G1003-3	0-100bar G (0-1405psi)	0-100mV
IPSU-G1003-5	0-100bar G (0-1405psi)	4-20mA
IPSU-G1003-6	0-100bar G (0-1405psi)	0-5V
IPSU-G2503-3	0-250bar G (0-3626psi	0-100mV
IPSU-G2503-5	0-250bar G (0-3626psi	4-20mA
IPSU-G2503-6	0-250bar G (0-3626psi	0-5V
IPSU-G4003-3	0-400bar G (0-5802psi)	0-100mV
IPSU-G4003-5	0-400bar G (0-5802psi)	4-20mA

(Custom ranges and outputs available on request)

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