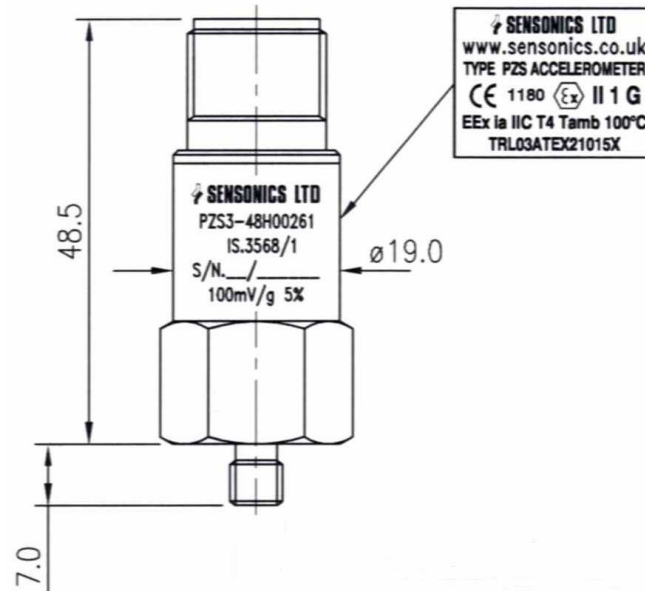


## PZS330400 ACCELEROMETER



- SINGLE POINT MOUNT, TOP EXIT, EASY INSTALLATION
- DIRECT REPLACEMENT FOR BN330400 SERIES
- DUAL CASE, LOW NOISE
- STAINLESS STEEL HERMETICALLY SEALED OUTER CASE
- FREQUENCY RANGE 0.4Hz TO 11KHz
- SHEAR MODE OPERATION
- INTRINSICALLY SAFE OPTION CE Ex II 1G (Ex ia IIC T4)

The PZS330400 accelerometer is intended for use in heavy industrial environments for vibration monitoring on a wide range of rotating machinery. Designed to provide accurate acceleration measurements, the unit is mounted directly to the bearing housing or case for bearing condition monitoring.

The piezo-electric shear mode sensor and amplifier are contained within an inner metal enclosure, which is electrically and thermally insulated from the outer stainless steel body. This arrangement prevents earth loops, minimising the effect of potential electrical interference sources, and also protects against thermal shocks. The shear mode piezo-electric arrangement minimises the effect of base strain, particularly important for low frequency and broadband velocity measurements.

# PZS330400 ACCELEROMETER

## SPECIFICATION

Operating Voltage/current .....	-18 to -28 volts dc, 2mA nominal bias
Output signal .....	100mV/g $\pm$ 5%
Bias Voltage .....	-8.5Vdc $\pm$ 0.5V
Dynamic Range .....	Up to 50g peak
Frequency Range .....	0.8Hz to 10KHz (better than 3dB)
Transverse sensitivity .....	Less than 5%
Amplitude linearity .....	$\pm$ 1% or better
Temperature sensitivity .....	Less than 8% up to 140°C
Residual electrical noise .....	Less than 0.2mg (2.5Hz to 10KHz)
Signal transmission .....	Two-wire system, 500Vac electrical isolation from body
Weight.....	95 gms (nominal)

## Environmental

Acceleration limit:	Vibration .....	200g pk at 120Hz for 10 mins
	Shock .....	500g half sine
Temperature:	Operation .....	-30°C to +140°C (Intrinsic version -30°C to +100°C)
	Survival.....	-55°C to +160°C
		NB. Certain types of connector or cables may limit the temperature performance of the transducer.
Protection (BS.EN60529) .....		Sealed to IP.67
Certification ATEX.....		CE Ex II 1G (Ex ia IIC T4) Tamb = 100°C

## ORDERING INFORMATION

PZS3 - 

A					
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### A Electrical Configuration

4
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 - 3 wire -24V ICP type device

### D Output & Frequency band (3dB point)

1
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 100mV/g  $\pm$  5% (0.8Hz - 10KHz)

### B Connection Method

- |   |   |
|---|---|
| 6 | C |
|---|---|

 Integral Cable Unarmoured
- |   |   |
|---|---|
| 6 | D |
|---|---|

 Integral Cable Armoured
- |   |   |
|---|---|
| 8 | H |
|---|---|

 Integral Connector, 3 pin, circular, threaded

### E Mounting Thread (Male)

- |   |
|---|
| 1 |
|---|

 - 1/4" UNF
- |   |
|---|
| 3 |
|---|

 - M8

### F Hazardous Area Approval

- |   |
|---|
| 0 |
|---|

 - Non Intrinsic
- |   |
|---|
| 1 |
|---|

 - Intrinsically Safe ATEX. (see restrictions below)

### C Cable length (Specify metres)

0	2
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 e.g. = 2 metres (max 25 metres)

