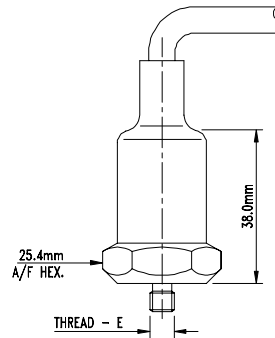




## PZA 1 SERIES ACCELEROMETER



- LOW COST
- LIGHT INDUSTRIAL
- INTERNAL AMPLIFIER
- STAINLESS STEEL HERMETICALLY SEALED CASE
- FREQUENCY RANGE 2.5Hz TO 11KHz (0.8Hz OPTION)
- INTERNALLY SHIELDED
- ELECTRICALLY ISOLATED CASE
- FULLY SCREENED

The PZA1 accelerometer is intended to satisfy the general specification requirements for a low cost vibration transducer for use in multi-point experimental or light industrial vibration monitoring applications.

The two-wire current-loop operating principal permits very long interconnecting cables to be used where necessary and at minimum expense since standard screened pair (or multi-pair) cables may be used.

The piezo-electric sensor and internal electronics are fully screened within a metal body. The instrument is electrically isolated from its base thus preventing earth loops and eliminating electrical interference. External connections are made via a top exit integral cable unarmoured or armoured, length to be confirmed in metres.

# PZA1 ACCELEROMETER

## SPECIFICATION

Operating Voltage/current .....	18 to 28 volts D. C. constant current source of 2 to 10mA
Output signal .....	100mV/g superimposed on 12Vdc +/- 20% (others available)
Dynamic Range .....	Up to 70g peak (at 24Vdc input)
Frequency Range .....	2.5Hz to 11KHz (better than 3dB) (standard) 0.8Hz to 11KHz (better than 3dB)
Transverse sensitivity .....	Less than 5%
Amplitude linearity .....	+/- 1% or better
Temperature sensitivity .....	Less than 5% up to 80°C 1% per 25°C over range -30°C to + 80°C
Residual electrical noise .....	Less than 0.2mg (2.5Hz to 11KHz) or 0.5mg (0.8Hz to 11KHz)
Signal transmission .....	Two wire system, electrically isolated from base up to 500Vac
Weight .....	70 gms (nominal)

## **Environmental**

Acceleration limit:	Vibration .....	200g pk at 120Hz for 10 mins
	Shock .....	500g half sine without connector
Temperature:	Operation .....	-25°C to + 80°C
	Survival .....	-55°C to + 100°C (short periods)
Protection (BS.EN60529) .....		Sealed to IP.66/IP.67

PZA1 - 

A	B	C	D	E	F	
2						0

### **A Electrical Configuration**

2
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 - 2 wire ICP device

### **B Connection Method**

6	A
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 Integral Cable (80°C) Unarmoured

6	B
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 Integral Cable (80°C) Armoured

### **C Cable length (Specify in whole metres)**

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

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

1
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 100mV/g 5% (2.5Hz – 11KHz)

2
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 100mV/g 10% (2.5Hz – 11KHz)

3
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 100mV/g 10% (0.8Hz – 11KHz) low frequency option

### **E Mounting Thread (Male)**

1
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 - ¼ UNF

2
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 - M6

3
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 - M8

4
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 - Quick Release

### **F Hazardous Area Approval**

0
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 - Non Intrinsic