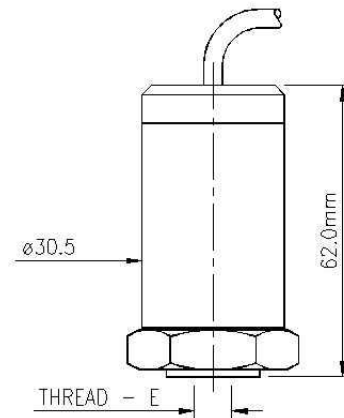


## PZV2 SERIES VELOMETER



- DIRECT VELOCITY VIBRATION OUTPUT
- INTERNAL AMPLIFIER
- STAINLESS STEEL HERMETICALLY SEALED DUAL CASE
- FREQUENCY RANGE 2.5Hz TO 6KHz
- INTERNALLY SHIELDED
- ELECTRICAL AND THERMAL ISOLATION
- FULLY SCREENED
- INTRINSICALLY SAFE OPTION

The PZV2 velometer is intended to satisfy the general specification requirements for a low cost vibration transducer for use in multi-point industrial vibration monitoring applications and is suitable for use with any modern monitoring system, fixed or portable.

The two-wire ICP operating principle 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 amplifier are contained within an inner metal enclosure, which is electrically and thermally insulated from the outer stainless steel body. The arrangement prevents earth loops, eliminating electrical interference, and minimises thermal shocks and base strain. The inner enclosure is connected to the 0V of the two wire system and is therefore an effective electrical screen, making the unit particularly suitable for use in electrical field environments, e.g. on electrical motors and generators. External connections are made via a top exit integral cable or electrical connectors.

# PZV2 ACCELEROMETER

## SPECIFICATION

Operating Voltage/current .....	18 to 28 volts D. C. constant current source of 3.5 to 10mA
Sensitivity .....	4mV/mm/s
Dynamic Range .....	Up to 200g peak (at 24Vdc input)
Frequency Range .....	5Hz to 3.5KHz (better than 1dB)
.....	2.5Hz to 6KHz (better than 3dB)
Transverse sensitivity .....	5%
Amplitude linearity .....	5%
Temperature sensitivity .....	5% over the temp range
Residual electrical noise .....	10 <sup>-4</sup> mm/sec (10Hz)
Signal transmission .....	Two-wire system, electrically isolated from body up to 500Vac
	Three wire & connector variants, contact Sensonics for details
Weight.....	250 g (nominal)
Certification ATEX.....	CE Ex II 1G (EEx ia IIC T4) Tamb = 80°C

## **Environmental**

Acceleration limit:	Vibration .....	200g
	Shock .....	500g
Temperature:	Operation .....	-30°C to +120°C (BNC connector version -30 to +80°C)
	Survival.....	-55°C to +150°C (short periods)
		NB. Certain types of connector or cables may limit the temperature performance of the transducer, see IS. Sheet for details.
Protection (BS.EN60529).....		Sealed to IP.66 / IP.67

## ORDERING INFORMATION

PZV2 - 

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
2					0

### A Electrical Configuration

2
---

 - 2 wire ICP type device

### B Connection Method

- |   |   |
|---|---|
| 6 | A |
|---|---|

 Integral Cable (80°C) Unarmoured
- |   |   |
|---|---|
| 6 | B |
|---|---|

 Integral Cable (80°C) Armoured
- |   |   |
|---|---|
| 6 | C |
|---|---|

 Integral Cable (140°C) Unarmoured
- |   |   |
|---|---|
| 6 | D |
|---|---|

 Integral Cable (140°C) Armoured
- |   |   |
|---|---|
| 7 | G |
|---|---|

 Integral Cable/Waterproof Gland (80°C)  
Unarmoured (IP68 Option)
- |   |   |
|---|---|
| 8 | E |
|---|---|

 Integral Circular 2 pin Connector

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

0	2
---	---

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

### D Output

1
---

 4mV/mm/s ± 5%

### E Mounting Thread (Female)

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

 - ¼ UNF
- |   |
|---|
| 2 |
|---|

 - M6
- |   |
|---|
| 3 |
|---|

 - M8
- |   |
|---|
| 4 |
|---|

 - Quick Release

### F Hazardous Area Approval

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

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

 - Intrinsically Safe option

DS1107\_4



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