



- SINGLE POINT MOUNT, TOP ENTRY, EASY INSTALLATION
- LOW COST GENERAL PURPOSE INDUSTRIAL ACCEL
- SMALL BODY SIZE
- SINGLE CASE, LOW NOISE
- STAINLESS STEEL HERMETICALLY SEALED CASE
- FREQUENCY RANGE 0.4Hz TO 11KHz
- INTERNALLY SHIELDED
- ELECTRICALLY ISOLATED CASE
- SHEAR MODE OPERATION

The PZS2 accelerometer is Sonsonics standard low cost accelerometer with integral cable for the conditioning monitoring of rotating equipment in industry. It is intended to be used as a fixed instrument in multi point condition monitoring schemes. Its design allows it to be used equally well with fixed or portable monitoring/data collectors.

Because the PZS2 is a 'shear' mode accelerometer it is very tolerant of surface irregularities and offers a wide frequency response whilst maintaining good stability at varying ambient temperatures.

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.

PZS2 ACCELEROMETER

SPECIFICATION

| | |
|---------------------------------|---|
| Operating Voltage/current | 18 to 28 volts D. C. constant current source of 2 to 10mA |
| Output signal | 100mV/g |
| Bias Voltage | 12Vdc \pm 20% |
| Dynamic Range | Up to 70g peak (at 24Vdc input) |
| Frequency Range | 0.4Hz to 11KHz (better than 3dB) (standard) |
| Transverse sensitivity | Less than 5% |
| Amplitude linearity | \pm 1% or better |
| Temperature sensitivity | Less than 8% up to 120°C |
| Residual electrical noise | Less than 0.2mg (2.5Hz to 11KHz) |
| Signal transmission | Two-wire system, 500Vac electrical isolation from body |
| Weight..... | 27 gms (nominal) |
| Electrical case isolation | 7×10^9 ohms |

Environmental

| | | |
|------------------------------|-----------------|---|
| Acceleration limit: | Vibration | 200g pk at 120Hz for 10 mins |
| | Shock | 1000g peak |
| Temperature: | Operation | -30°C to +120°C |
| | Survival..... | -55°C to +140°C |
| | | NB. Certain types cable may limit the temperature performance of the transducer, see IS. Sheet for details. |
| Protection (BS.EN60529)..... | | Hermetically sealed & bonded to IP.66 / IP.67 |

ORDERING INFORMATION

PZS2 -

| | | | | | |
|---|---|---|---|---|---|
| A | B | C | D | E | F |
| 2 | | | | | |

A Electrical Configuration

| |
|---|
| 2 |
|---|

 - 2 wire ICP device

B Connection Method

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

 Integral Cable (80°C) Unarmoured

| | |
|---|---|
| 6 | B |
|---|---|

 Integral Cable (80°C) Armoured

| | |
|---|---|
| 6 | D |
|---|---|

 Integral Cable (120°C) Armoured

C Cable length (Specify in whole metres)

| | |
|---|---|
| 0 | 2 |
|---|---|

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

D Output & Frequency band (3dB point)

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

 100mV/g \pm 10% (0.4Hz - 11KHz)

| |
|---|
| 2 |
|---|

 100mV/g \pm 5% (0.4Hz - 11KHz)

| |
|---|
| 3 |
|---|

 100mV/g \pm 20% (0.4Hz - 11KHz)

E Female Mounting Thread

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

 - ¼ UNF

F Hazardous Area Approval

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

 - Non Intrinsic

Mtg studs and magnet mounting bases available.
See DS.1119

DS1161



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