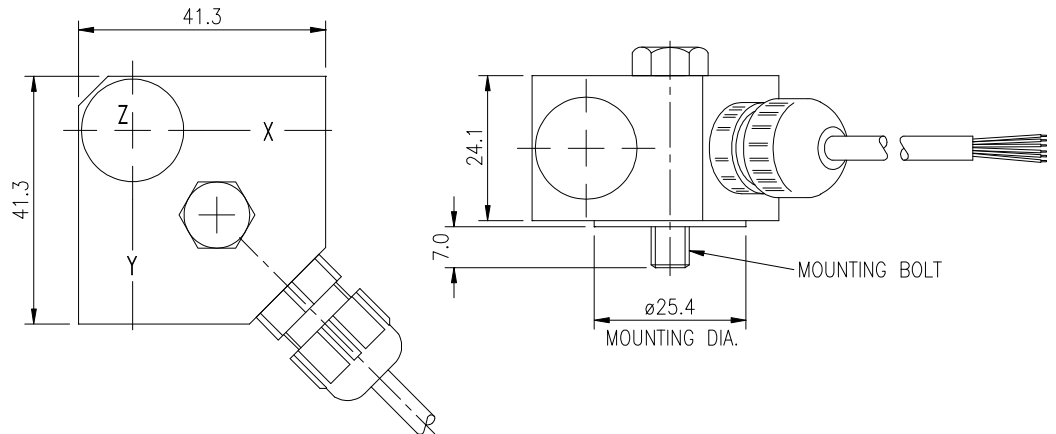


## PZXY TRIAXIAL ACCELEROMETER



- 3-Axis Measurement Transducer
- 0.4Hz to 7kHz
- Wide Dynamic Range
- Low Noise
- Single Point Mount
- Stainless Steel Hermetically Sealed
- Dual Case, Internally Shielded

The PZXY is a robust, portable, sealed instrument suitable for operation in any attitude without modification, intended to satisfy the general specification requirements for a tri-axial vibration transducer for use in harsh environments and industrial vibration monitoring applications.

The two-wire current-loop 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.

Each piezo-electric shear mode sensor and amplifier is contained within an inner metal enclosure, which is electrically and thermally insulated from the outer stainless steel body. The arrangement prevents earth loops and eliminates 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. External connections are made via a side exit integral cable.

The casing is made of hermetically sealed stainless steel, which makes the instrument suitable for field operation or, with an optional underwater connector, for immersion in water.

# PZXY TRIAXIAL ACCELEROMETER

## SPECIFICATION

Frequency Response		: Acceleration 0.4Hz to 7kHz (3dB)
Sensitivity		: 100mV/g or 500mV/g each axis
Dynamic Range		: >90dB
Accuracy		: ±5%
		: ±8% up to 100°C
Residual Electrical Noise		: less than 0.2mg (2.5Hz to 7Khz)
Linearity		: ±1% or better
Maximum Output response per axis		: Up to 70g peak (at 24VDC input)
Cross-axis Sensitivity		: Less than 1%
Signal Transmission		: Two Wire Current Loop
Power Supply (ICP)		: +18V to 28V DC
		: Constant Current 2 to 10mA
Shock Limits		: 1000g peak any direction
Humidity rating		: Hermetically sealed unit
Operating Temperature		: -30°C to +140°C
Survival		: -55°C to +150°C
Mass		: 0.4Kg
Cable Type		: 4 Core Screened 19/0.13, PTFE Insulated
	Red	: X axis Output Hi
	Yellow	: Y axis Output Hi
	Green	: Z axis Output Hi
	Black	: XYZ Lo / Com
Mounting Arrangement		: M6 Male 8.0mm

## ORDERING INFORMATION

PZXY - 

A
---

B
---

C
---

### A Connection Method

7	G	Integral PVC Cable 80°C /Waterproof Gland
8	E	Integral MIL style 6-pin connector

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

0	2	e.g. = 2m Total length, from TxD to free end Max 30m.
---	---	--

### C Sensitivity

0	Output sensitivity per channel = 100mV/g ±5%
1	Output sensitivity per channel = 500mV/g ±5%

DS1165



**Sensonics Ltd**  
 Northbridge Road  
 Berkhamsted  
 Herts, HP4 1EF  
 United Kingdom  
 Tel: +44 (0)1442 876833  
 Fax: +44 (0)1442 876477  
[www.sensonics.co.uk](http://www.sensonics.co.uk)