

CMSS 2230 / CMSS 2230-M6

Small economical accelerometer, side exit

The CMSS 2230 accelerometer is a small, but robust general purpose sensor for restricted access locations in the following industries:

- Metalworking

The firm mounting method of the side exit design can withstand abuse from a variety of sources, including unintended use as a foot-hold, but offers the flexibility of a cable/connector and good measurement characteristics.

Features

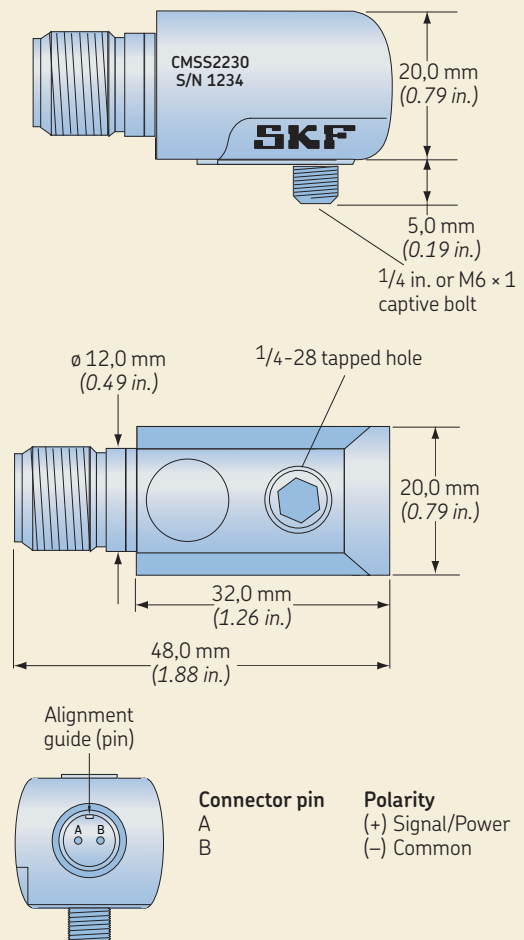
- For use with all SKF on-line surveillance systems and portable data collection instruments
- Economical side exit design with mini-MIL connector
- Small physical size
- Rugged, corrosion resistant and hermetically sealed
- Case isolated
- Meets stringent CE, EMC requirements
- ESD protection
- Reverse wiring protection

Recommended connector/cable assembly

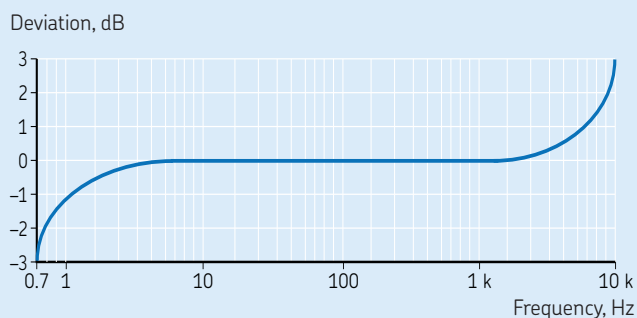
- CMSS 932-64MMI-SY-XXM



Dimensions



Typical frequency response



Specifications

Dynamic

- Sensitivity: 100 mV/g
- Sensitivity precision: $\pm 10\%$
- Frequency range ± 3 dB: 0,7 to 10 000 Hz (42 to 600 000 cpm)
- Resonance frequency, mounted, nominal: 26 kHz (1 560 kcpm)
- Dynamic range: ± 50 g peak

Electrical

- Power requirements:
 - Voltage source: 18 to 30 V DC
 - Constant current diode: 2 to 10 mA
- Electrical noise:
 - Spectral:
 - 10 Hz: $27 \mu\text{g}/\sqrt{\text{Hz}}$
 - 100 Hz: $6,5 \mu\text{g}/\sqrt{\text{Hz}}$
 - 1 000 Hz: $2,5 \mu\text{g}/\sqrt{\text{Hz}}$
- Output impedance: $< 100 \Omega$
- Bias output voltage: 7 to 14 V DC
- Settling time: $< 2,5$ s
- Case isolation: $> 10^8 \Omega$

Environmental

- Temperature range: -50 to $+121$ °C (-60 to $+250$ °F)
- Shock limit: 5 000 g peak
- Sealing: Hermetic, welded
- CE: According to the generic immunity standard for Industrial Environment EN 50082-2
 - Acceptance criteria: The generated “false equivalent g level” under the above test conditions should be less than 2 mg measured peak to peak

Physical

- Dimensions: See drawing
- Weight: 60 g (2.1 oz.)
- Case material: 316L stainless steel
- Sensing element: PZT ceramic
- Sensing structure: Shear mode
- Mounting: Captive mounting bolts provided
 - CMSS 2230: $\frac{1}{4}$ -28
 - CMSS 2230-M6: M6 $\times$ 1,0
- Mounting torque: 2,7 to 6,8 Nm (24 to 60 in. lbs.)
- Connections:
 - Pin A: Signal/Power
 - Pin B: Common
- Mating connector: Two socket mini-MIL connector

Ordering information

CMSS 2230 Small economical accelerometer, side exit with mini-MIL connector, $\frac{1}{4}$ -28 captive bolt.

CMSS 2230-M6 Small economical accelerometer, side exit with mini-MIL connector, M6 captive bolt.

- A calibration data certificate with the actual sensitivity of the accelerometer is included in each package. The nominal sensitivity is etched on each unit.