

CMSS 2200T

Industrial sensor, side exit, acceleration and temperature

The CMSS 2200T is a cost-effective, dual output sensor ideal for light to medium-duty applications, where both vibration and temperature measurements are required. The CMSS 2200T is typically used in the following industries:

- Pulp and Paper
- Food and Beverage

Common applications include general purpose machines such as pumps, motors and fans.

Features

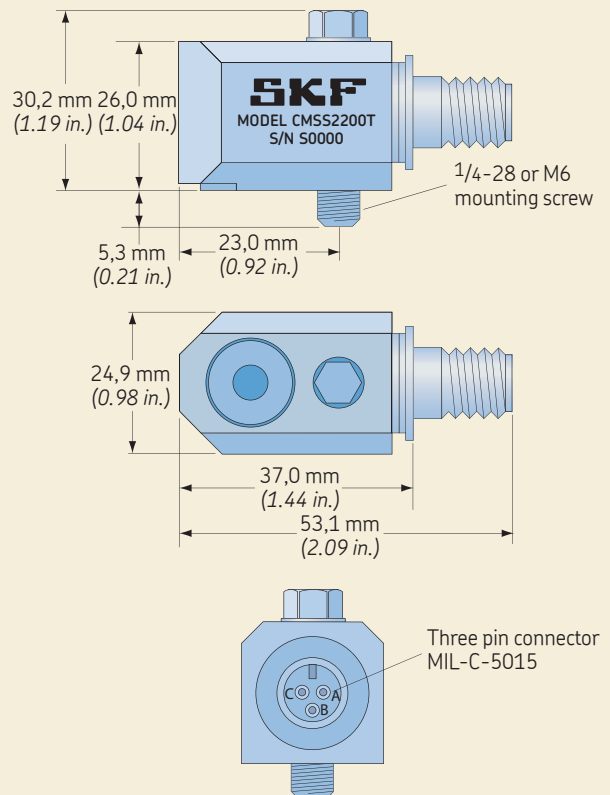
- For use with SKF on-line systems and protection systems (note that DMx requires adapter module CMMA 9700); recommended sensor for the WMx
- Measures both acceleration and temperature
- Low profile
- Rugged, corrosion resistant and hermetically sealed for installation in high humidity areas
- 100 mV/g sensitivity to optimize use in multiple applications
- 10 mV/°C temperature output sensitivity
- CE approved, meets EMC requirements
- ESD protection
- M6 and 1/4-28 captive mounting bolts provided
- Reverse wiring protection

Recommended connector/cable assembly

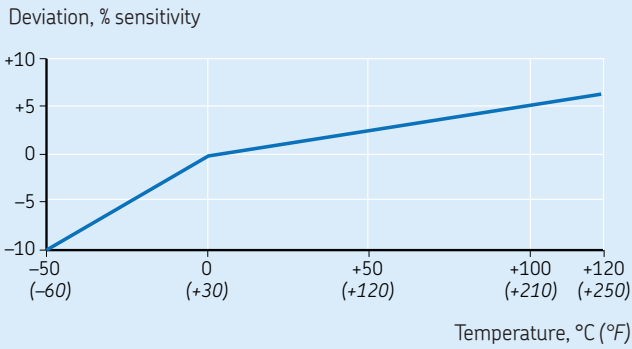
- CMSS 933 series, three pin connector, IP 68 locking, collar or twist lock



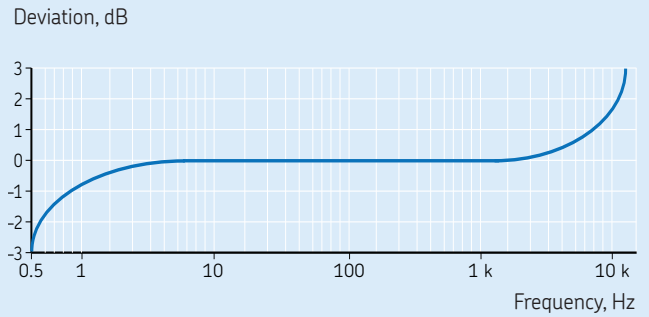
Dimensions



Typical temperature response



Typical frequency response



Specifications

Dynamic

- Sensitivity: 100 mV/g
- Sensitivity precision: $\pm 5\%$ at 25 °C (75 °F)
- Acceleration range: 60 g peak
- Amplitude linearity: 1%
- Frequency range:
 - $\pm 5\%$: 1,0 to 5 000 Hz
 - $\pm 10\%$: 0,7 to 10 000 Hz
 - ± 3 dB: 0,5 to 12 000 Hz
- Resonance frequency, mounted, minimum: 22 kHz
- Transverse sensitivity: $\leq 5\%$ of axial
- Temperature response: See graph
- Temperature output sensitivity:
 - $\pm 1,5$ °C ($\pm 2,7$ °F): 10 mV/°C (18 mV/°F)
- Temperature measurement range: 2 to 120 °C (36 to 250 °F)

Electrical

- Power requirements:
 - Voltage source: 20 to 30 V DC
 - Constant current diode: 2 to 10 mA
- Electrical noise, equivalent g:
 - Broadband:
 - 2,5 Hz to 25 kHz: 700 μ g
 - Spectral:
 - 10 Hz: 10 μ g/ $\sqrt{\text{Hz}}$
 - 100 Hz: 5 μ g/ $\sqrt{\text{Hz}}$
 - 1 000 Hz: 5 μ g/ $\sqrt{\text{Hz}}$
- Output impedance: $\leq 100 \Omega$
- Bias output voltage, nominal: 12 V DC
- Grounding: Case isolated, internally shielded

Environmental

- Temperature range: -50 to +120 °C (-60 to +250 °F) operating temperature
- Vibration limit: 500 g peak
- Shock limit: 5 000 g peak
- Electromagnetic sensitivity, equivalent g, maximum: 70 μ g/gauss
- Sealing: Hermetic
- Base strain sensitivity: 2 mg/ μ strain

Physical

- Dimensions: See drawing
- Weight: 145 g (5.1 oz.)
- Case material: 316L stainless steel
- Mounting: M6 and 1/4-28 mounting studs provided
 - Black stud = M6
 - Silver stud = 1/4-28
- Mounting torque: 3,4 Nm (30 in. lbs.)
- Connections:
 - Pin A: Accelerometer power/signal
 - Pin B: Accelerometer common
 - Pin C: Temperature sensor signal
- Mating connector: CMSS 933-68LC or CMSS 933-68TL, three pin, IP 68, locking collar or twist lock
- Recommended cable: CMSS 933-SY-XXM, three conductors, twisted pair, single shielded, yellow

Ordering information

CMSS 2200T Industrial sensor, side exit, acceleration and temperature, with MIL-C-5015 three pin connector.

- 1/4-28 and M6 mounting studs provided. Calibration sensitivity is provided for each accelerometer package with nominal sensitivity etched on each unit.