

# **CMSS 100F**

Machine tool accelerometer, side exit

The CMSS 100F is a compact sensor with integral cable for use with SKF on-line surveillance systems. The sensor is commonly used to monitor spindles and bearings.

- CNC
- Cutting machine tools
- Milling devices, gearboxes, motors, pumps

# **Features**

- Wide frequency range
- Standardized sensitivity
- Compact, low profile construction to fit in tight spaces
- Isolated designed for IMx-8/16+
- Stud or adhesive mounting
- High resistance to electrical noise
- Meets CE, EMC requirements
- Corrosion and cutting fluid resistant
- RoHS compliant

Dynamic

Sensitivity Sensitivity precision Acceleration range Amplitude linearity Frequency response: ± 10% ±3dB Resonance frequency, mounted, nominal Transverse sensitivity

#### Electrical

Power requirement: . Voltage source Current current diode Electrical noise, equiv. g: Broadband, 2.5 Hz to 25 kHz, nominal 10 Hz Spectral 100 Hz 1000 Hz 10 000 Hz

Output impedance, max at 4 mA CCD Bias output voltage, 4 mA CCD Grounding

#### Environmental

Operational temperature range Vibration limit Shock limit Electromagnetic sensitivity, equiv. g Sealing

#### Physical

Dimensions Weight Case material Mounting Mounting stud Integral cable

### Connections

Function power/signal common no connection at sensor Cable conductor color white black cable shield



1) For optimum performance, sensor housing to be stud or conductive adhesive mounted. 2) To prevent electrical noise, sensor head must be grounded at machine. 10-32 mounting stud is provided.

100 mV/g ±10% at 24 °C (75 °F) 50 g peak

1%

2.0 - 12 000 Hz 1.0 - 16 000 Hz ≥ 30 kHz ≤ 5% of axial

18 to 30 V DC 2 to 10 mA, recommended 4 mA

900 µg

14 μg/√Hz 6 μg/√Hz 6 µg/√Hz 8 µg/√Hz

850 Ω 12 V DC Case isolated

-50 to +120 °C (-60 to +250 °F) 500 g peak 5 000 g peak 70 µg/gauss IP68

See drawing 30 grams (without cable) 316L stainless steel 10-32 tapped hole or adhesive mount 10-32 to M6 two conductor shielded, polyster based, polyurethane jacket, 125 °C, 5 meter (16.4 ft)



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CE

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Due to continued research and product development, the manufacturer reserves the right to amend this specification without notice.

## **Ordering information**

#### **CMSS 100F**

CMSS 100F Machine tool accelerometer, integral cable, side exit, 5 m (16.4 ft) with 10-32 to M6 mounting stud.