

# SKF Pulse™

## Your entry point to predictive maintenance.

SKF Pulse combines an easy-to-use, portable sensor with a free mobile app for iOS and Android to monitor machine health and quickly identify machinery issues before operations are impacted. Acting as a smart vibration tool, the sensor transmits wirelessly to the SKF Pulse app, instantly providing intuitive machine diagnostics.

### Machine monitoring made easy.

- **Easy-to-use, portable** sensor and a free mobile app
- **Easy start-up** with no prior training or experience needed
- **Quickly monitors machine health** and helps identify machinery issues before operations are impacted
- **Instant feedback** from vibration and temperature measurement
- **In-app SKF Pulse™ Checks** provide expert analysis, advice and diagnostic reports from SKF
- All at a **cost-effective price point** – no need to make the case for capital expenditure

#### Sensor features (CMDT390-K-SL):

- Velocity, acceleration and temperature measurements
- Bluetooth® communication with iOS and Android devices
- Rugged, industrial design: drop test at 6 ft (1.8 m), water- and dust-resistant (IP65)
- Rechargeable lithium battery (8 hours with normal usage)
- One year warranty covering manufacturing defects
- Two year calibration certificate



For more information, contact your SKF Representative or visit [skfusa.com/skfpulse](http://skfusa.com/skfpulse).



Part #: CMDT390-K-SL

#### Sensor controls and indicators:

- 1 Power button** – Powers the sensor on and off
- 2 Battery LED (green, red)** – Indicates status of battery charge
- 3 Communication LED (green, red)** – Indicates sensor connection status to app and when firmware updates are in progress
- 4 All-purpose check LED** – For future use

# Technical specifications for CMDT 390-K-SL

## Regulatory specifications

IP rating	IP 65, dust and water ingress protection testing standard
Radio approvals	Europe (CE), USA (FCC), Canada (IC)
CE mark	CE approved

## Measurement range

### Overalls

Velocity	10 Hz to 1 kHz up to 2.17 in/s (55mm/s) Recommended speed range: 600 rpm - 3600 rpm
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Bearing condition	SKF patented envelope acceleration up to 20 gE
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### FFT

Maximum frequency	Velocity 1 kHz, enveloped acceleration 2 kHz
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Lines of resolution	Velocity 400, enveloped acceleration 800
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Detection type	Velocity RMS, enveloped acceleration true peak to peak
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Temperature	Standard operating temperature range is -5 to +140°F (-20 to +60°C). Sensor is capable of measuring beyond the standard SKF Pulse operating temperature range up to 212°F (100°C) for short periods.
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### Power

Main power	Rechargeable lithium battery, 3.7V DC, 0.14 A
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Battery lifetime	Eight hours with normal usage Manual power off: Press and hold power button for 3+ seconds Auto power off: After 15 minutes of no activity
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MAINS supply voltage, charger	Varies up to ±10% of the nominal voltage, TRANSIENT OVERVOLTAGE CATEGORY II; POLLUTION DEGREE 2
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Charger	Input 5 V DC ±10%, 1 A
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AC adapter	Input 100 to 240 VAC, 0.4 A, 47 to 63 Hz Output 5 V DC, 1.6 A
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## Environmental

Storage temperature	-5 to +115 °F (-20 to +45 °C) for less than one month -5 to +95 °F (-20 to +35 °C) for less than six months
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Operating temperature, built in infrared (IR) sensor	-5 to +140°F (-20 to +60°C)
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Operating temperature, battery	32 to +105 °F (0 to +40 °C) for charging -5 to +140 °F (-20 to +60 °C) for discharging
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Operating temperature, charger	32 to +105 °F (0 to +40 °C)
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Altitude	Up to 6,560 ft (2,000 m)
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Humidity	95% non-condensing
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## Physical

Case	Water and dust resistant (IP65)
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Drop test	6 ft (1.8 m) in accordance with MIL-STD-810G
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Dimensions	1.8 x 1.8 x 5.3 in (45 x 45 x 135 mm)
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Weight	7 oz (200 g)
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## SKF Pulse includes

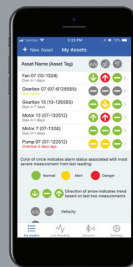
Pulse sensor	CMDT-390-K-SL (includes charger, magnet and rubber boot) 2-year calibration certificate Instructions for app download
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## Ordering information for spare parts, if required

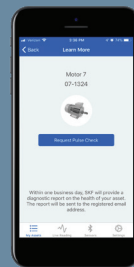
Charger, international DC power supply	CMAC 8004
Magnet	CMAC 8009



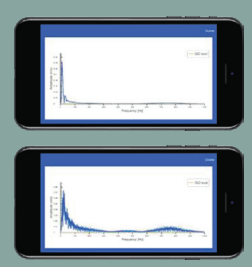
Measure vibration and temperature



Monitor asset health



On-the-spot access to SKF experts



Data collection graphs

For more information, contact your SKF Representative, email [skf.connected@skf.com](mailto:skf.connected@skf.com) or visit [skfusa.com/skfpulse](http://skfusa.com/skfpulse).

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