

CMSS 6165K-AX

Strobe light kit

The CMSS 6165 is a truly portable, battery-operated stroboscope that is suited for a wide range of industrial applications and is able to interface with the SKF Microlog CMXA series.

Sturdy and compact, the strobe can be operated anywhere in the plant or field to permit visual inspection (freeze motion), phase shift studies and digital measurement of rotary, reciprocating or linear motion of various equipment while it is in operation. The CMSS 6165 strobe light has a special "tuning" circuit that allows it to track vibration transducer (accelerometer) signals. This capability makes it different from general purpose strobe lights. It also has a narrow and wide bandwidth filter selection to discriminate fundamentals from harmonics. The narrow bandwidth filter limits the influence of harmonics around the selected frequency, providing a more stable phase reading.

The CMSS 6165 requires an input signal to synchronize the flash rate with an external source, typically a vibration transducer in the tracking mode or optical pickup in the external mode. Using a cable, this signal is applied to the input jack connector on the side of the strobe light. The CMSS 6165 generates a tachometer signal available on the output jack. The CMSS 6165K-AX strobe light kit is ideally suited for:

- Balancing
- Inspection of high speed rotating parts
- Motion analysis or phase shift measurement
- Over-speed trip tests
- On line coupling inspections
- r/min / r/sec measurements
- All applications suited to a general purpose, phase shifting stroboscope

Specifications

- Time base: Ultra stable crystal oscillator
- Display: LCD with six numeric digits 12,7 mm (0.5 in.) high
- Indicators: Battery level, on target, TIME, AUTO, ALT, TACH, LOCK and EXT icons
- Knob adjustment: Digital rotary switch with 36 detents per revolution; velocity sensitive
- Memory: Last setting before power down is remembered and restored on next power up; nine user flash rates can be set
- Output pulse: 40 microseconds positive/negative pulse (menu selectable), 3,3 V DC typical
- Input power: Internal rechargeable batteries 6 V DC, external AC recharger (115 to 230 V AC)



- CMXA 45
- CMXA 45/75-Z2
- CMXA 48
- CMXA 48/80-Z2
- CMXA 51-IS
- CMXA 70/44
- CMXA 75
- CMXA 80

- Light output:
 - Average: 11 W at 3 000 flashes per minute, > 13 W above 3 450 flashes per minute
 - Instantaneous (per flash): 230 mJoule typical to 3 450 flashes per minute
- Flash duration: 10 to 25 microseconds (auto adjust with flash rate)
- Flash tube (lamp) life: 100 million flashes
- Run time: Two hours typical at 1 800 flashes per minute and over one hour at 6 000 flashes per minute with fully charged batteries
- Charge time: Four to five hours typical with PSC-pbxU
- Weight: 0,8505 kg (1.875 lbs.) including batteries

This product is designed to be safe for indoor use under the following conditions (per IEC61010-1):

- Operating temperature*: 0 to 40 °C (30 to 105 °F)
- Humidity: Maximum relative humidity 80% for temperatures up to 30 °C (90 °F), decreasing linearly to 50% relative humidity at 40 °C (105 °F)
- Flash range: 30 to 50 000 flashes per minute
- Tachometer measurements: 5 to 250 000 r/min
- Tracking filter: Selectable wide and narrow bandwidths; the filter may not lock below 100 flashes per minute
- External input: 10 or 100 mVg accelerometer (powered by an analyzer or by the strobe, menu selectable)

* Safety thermal feature will set unit into TACH Mode (stops flashing) in the event of internal overheating.

Note: The CMSS 6165 strobe light is not approved for use in hazardous locations.

Kit contents

- CMSS 6165: Strobe light
- CMAC 5404: Cable – Input to strobe light from the SKF Microlog
- CMAC 5406: Cable – output from strobe light to the SKF Microlog
- Accelerometer input cable with BNC connector, 2 m (6.56 ft.)
- BNC to BNC union connector
- CMAC 5405: Universal power supply / recharger (not compatible with older SKF Microlog models)
- 58-100-0290: Strobe light jacket and shoulder strap
- 58-100-1650: Spare lamp
- Protective carrying/storage case
- User manual



CMSS 6165 strobe light



CMAC 5404 strobe light input cable



CMAC 5406 strobe light output cable



Accelerometer input cable and BNC to BNC union connector



CMAC 5405 universal power supply / recharger



Carrying case (open)



58-100-0290 strobe light jacket and shoulder strap



58-100-1650 spare lamp



Carrying case (closed)