

1) Set sensor, 2) Mounting plate, 3) Status indicator, 4) Operating voltage/mode, 5) Ultrasonic transducer axis



### Basic features

<b>Application</b>	Object detection
<b>Approval/Conformity</b>	CE EAC WEEE
<b>Operating mode</b>	Refl.light scanner (window) Reflectionlight scanner (switching point) Retro-reflector
<b>Series</b>	R06K1

### Display/Operation

<b>Adjuster</b>	button
<b>Setting</b>	Factory setting (Reset) Key disable on/off Normally open/Normally closed Switching distance, 2 values Operating mode

### Electrical connection

<b>Connection</b>	M8x1-Male, 4-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

### Electrical data

<b>Current draw max.</b>	25 mA
<b>Hysteresis H max.</b>	2 mm
<b>Input function</b>	Synchronization signal
<b>Operating voltage U<sub>b</sub></b>	20...30 VDC
<b>Output current max.</b>	200 mA
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Switching frequency</b>	25 Hz
<b>Synchronization</b>	external, any number of sensors
<b>Ultrasonic Frequency</b>	380 kHz

### Environmental conditions

<b>Ambient temperature</b>	-25...70 °C
<b>Protection degree</b>	IP67
<b>Storage temperature</b>	-40...85 °C

### Functional safety

<b>MTTF (40 °C)</b>	516 a
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### Material

<b>Housing material</b>	ABS
<b>Material sensing surface</b>	PU foam/Epoxy resin/Glass

### Mechanical data

<b>Dimension</b>	12 x 42.5 x 21.6 mm
<b>Mounting</b>	Screw M3

**Output/Interface**

**Switching output** PNP normally open/normally closed (NO/NC)

**Range/Distance**

**Range** 20...250 mm  
**Rated operating distance Sn** 150 mm  
**Repeat accuracy** ± 0.15 %FS  
**Resolution** ≤ 0.056 mm

**Remarks**

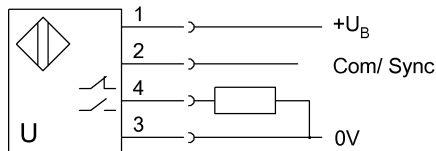
For additional information, refer to user's guide.  
 Order accessories separately.  
 Do not press key using a pointed tool.  
 Reference object for Sn: tube ø10mm. Max. range refers to the aligned plate.  
 The sensor is functional again after the overload has been eliminated.  
 For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

**Connector Drawings**



**Wiring Diagrams**



Technical Drawings

