

1) Display and control panel, 2) rotatable 270°, 3) Cover cap, removable, 4) standard lens, removable, 5) Light exit standard, 6) Light exit optional



**Basic features**

<b>Additional features</b>	Optics convertible (light exit 0°/ 90°), vertical light spot
<b>Approval/Conformity</b>	CE cULus WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Contrast sensor
<b>Series</b>	67M
<b>Style</b>	Square Connection can be rotated

**Display/Operation**

<b>Adjuster</b>	Key (3x)
<b>Display</b>	Output function- LED yellow Ready - LED green Error/short circuit - segment display Short circuit - LED green, flashing PNP/NPN - LED green, flashing Scattered light amount - segment indicator Buttons active: LED green Time function active: LED green

Photoelectric Sensors  
**BKT 67M-005-U-S92**  
Order Code: **BKT0005**

**BALLUFF**

<b>Setting</b>	Contrast (switching point) Switching output PNP/NPN Light-on/dark-on Time function on/off Factory setting (Reset) Delay time Segment display on/off Teach stat./dyn./man. Button lock off Read direction for segment display Hysteresis (3 levels)
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### Electrical connection

<b>Connection</b>	Connector, M12x1-Male
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

### Electrical data

<b>Input function</b>	Same function as SET button
<b>No-load current I<sub>o</sub> max. at U<sub>e</sub></b>	35 mA
<b>Operating voltage U<sub>b</sub></b>	10...30 VDC
<b>Protection class</b>	II
<b>Rated insulation voltage U<sub>i</sub></b>	75 V DC
<b>Rated operating current I<sub>e</sub></b>	100 mA
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Ready delay t<sub>v</sub> max.</b>	300 ms
<b>Ripple max. (% of U<sub>e</sub>)</b>	8 %
<b>Switching frequency</b>	30000 Hz
<b>Turn-off delay t<sub>off</sub> max.</b>	0.017 ms
<b>Turn-on delay t<sub>on</sub> max.</b>	0.017 ms
<b>Voltage drop U<sub>d</sub> max. at I<sub>e</sub></b>	2 V

### Environmental conditions

<b>Ambient temperature</b>	-10...55 °C
<b>Contamination scale</b>	3
<b>EN 60068-2-27, Shock</b>	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6 Half-sinus, 30 g <sub>n</sub> , 6 ms, 3x10000
<b>EN 60068-2-6, Vibration</b>	10...55 Hz, amplitude 1 mm, 3x2 h
<b>IP rating</b>	IP67

### Interface

<b>Duration of time function</b>	0...100 ms
<b>Switching output</b>	PNP/NPN normally open/normally closed (NO/NC)
<b>Time function</b>	switch-off delay Turn-on delay

### Material

<b>Housing material</b>	Aluminium, Die casting, Painted
<b>Material sensing surface</b>	Glass
<b>Surface protection</b>	Painted

### Mechanical data

<b>Dimension</b>	32 x 64 x 82 mm
<b>Mounting part</b>	Screw M5

### Optical features

<b>Ambient light max.</b>	5000 Lux
<b>Beam characteristic</b>	Focused
<b>LED group per IEC 62471</b>	Exempt Group
<b>Light spot size</b>	1.5 x 5 mm at 9 mm
<b>Light type</b>	blue light/green light/red light
<b>Principle of optical operation</b>	Diffuse sensor, focused
<b>Switching function, optical</b>	Light/dark switching
<b>Wave length</b>	465 nm/520 nm/630 nm

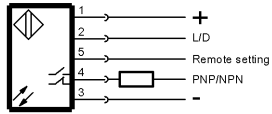
### Range/Distance

<b>Range</b>	6...12 mm
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### Remarks

Do not press key using a pointed tool.  
Order accessories separately.  
For additional information, refer to user's guide.  
The sensor is functional again after the overload has been eliminated.  
Reference object (target): Color bar card, 100 x 100, contrast yellow/white and blue/black, lateral approach of color bars, approach direction vertical to light spot length.

## Wiring Diagrams



## Opto Symbols

