

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

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

Display/Operation

| | |
|-----------------|---|
| Adjuster | Key (3x) |
| Display | Output function- LED yellow Ready - LED green Error - LED green, flashing Short circuit - LED green, flashing PNP/NPN - LED orange, flashing Switchpoint - bar display Buttons active: LED orange Time function active: LED orange |
| Setting | Contrast (switching point) Light-on/dark-on Time function on/off Factory setting (Reset) Switching output PNP/NPN Teach stat./man. Button lock off |

Photoelectric Sensors
BKT 67M-003-U-S92
Order Code: BKT0003

BALLUFF

Electrical connection

| | |
|-----------------------------------|-----------------------|
| Connection | Connector, M12x1-Male |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|------------------------------------|-----------------------------|
| Input function | Same function as SET button |
| Load resistance RL min. (Analog V) | 2.2 kOhm |
| No-load current Io max. at Ue | 85 mA |
| Operating voltage Ub | 10...30 VDC |
| Protection class | II |
| Rated insulation voltage Ui | 75 V DC |
| Rated operating current Ie | 100 mA |
| Rated operating voltage Ue DC | 24 V |
| Ready delay tv max. | 300 ms |
| Ripple max. (% of Ue) | 8 % |
| Switching frequency | 20000 Hz |
| Turn-off delay toff max. | 0.025 ms |
| Turn-on delay ton max. | 0.025 ms |
| Voltage drop Ud max. at Ie | 2 V |

Environmental conditions

| | |
|-------------------------|---|
| Ambient temperature | -10...55 °C |
| Contamination scale | 3 |
| EN 60068-2-27, Shock | Half-sinus, 30 gn, 11 ms, 3x6 Half-sinus, 30 gn, 6 ms, 3x10000 |
| EN 60068-2-6, Vibration | 10...55 Hz, amplitude 1 mm, 3x2 h |
| IP rating | IP67 |

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) for analog output: gray card, 100 x 100, 90 % remission, axial approach.
 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.

Interface

| | |
|---------------------------|---|
| Analog output | Analog, voltage 1...5.5 V |
| Duration of time function | 20 ms |
| Switching output | PNP/NPN normally open/normally closed (NO/NC) |
| Time function | switch-off delay |

Material

| | |
|--------------------------|---------------------------------|
| Housing material | Aluminium, Die casting, Painted |
| Material sensing surface | Glass |
| Surface protection | Painted |

Mechanical data

| | |
|---------------|-----------------|
| Dimension | 32 x 64 x 82 mm |
| Mounting part | Screw M5 |

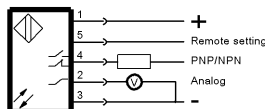
Optical features

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

Range/Distance

| | |
|-------|-----------|
| Range | 6...12 mm |
|-------|-----------|

Wiring Diagrams



Opto Symbols

