

1) Light-on/dark-on, 2) Optical axis receiver, 3) Optical axis emitter, 4) LED Power indicator, 5) LED Stability, 6) LED Error, 7) Sensitivity, 8) LED function indicator



Basic features

Approval/Conformity	cULus CE UKCA WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	R072K
Style	Square Connection 90°

Display/Operation

Adjuster	6-turn potentiometer Rotary switch 2 positions
Display	Output function- LED yellow Stability - LED green
Setting	Rated switching distance (Sn) Light-on/dark-on

Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	70 nF
No-load current I _o max. at Ue	23 mA
Operating voltage U _b	10...30 VDC
Protection class	III
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	120 ms
Ripple max. (% of U _e)	10 %
Switching frequency	1000 Hz
Turn-off delay t _{off} max.	0.5 ms
Turn-on delay t _{on} max.	0.5 ms
Voltage drop U _d max. at I _e	2.5 V

Environmental conditions

Ambient temperature	-25...55 °C
IP rating	IP67

Functional safety

MTTF (40 °C)	509 a
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Interface

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

Housing material	PA 6 PA 12
Material sensing surface	PMMA

Mechanical data

Dimension	12 x 42.5 x 22.7 mm
Mounting part	Screw M3
Tightening torque max.	0.4 Nm
Weight	9 g

Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light spot size	Ø 9 mm at 60 mm
Light type	LED, red light
Principle of optical operation	Diffuse sensor, triangulation
Special optical feature	Background suppression
Switching function, optical	dark-on/light-on
Wave length	634 nm

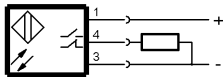
Range/Distance

Range	0...350 mm
Rated operating distance Sn	350 mm, Adjustable

Connector Drawings



Wiring Diagrams (Schematic)



Opto Symbols

