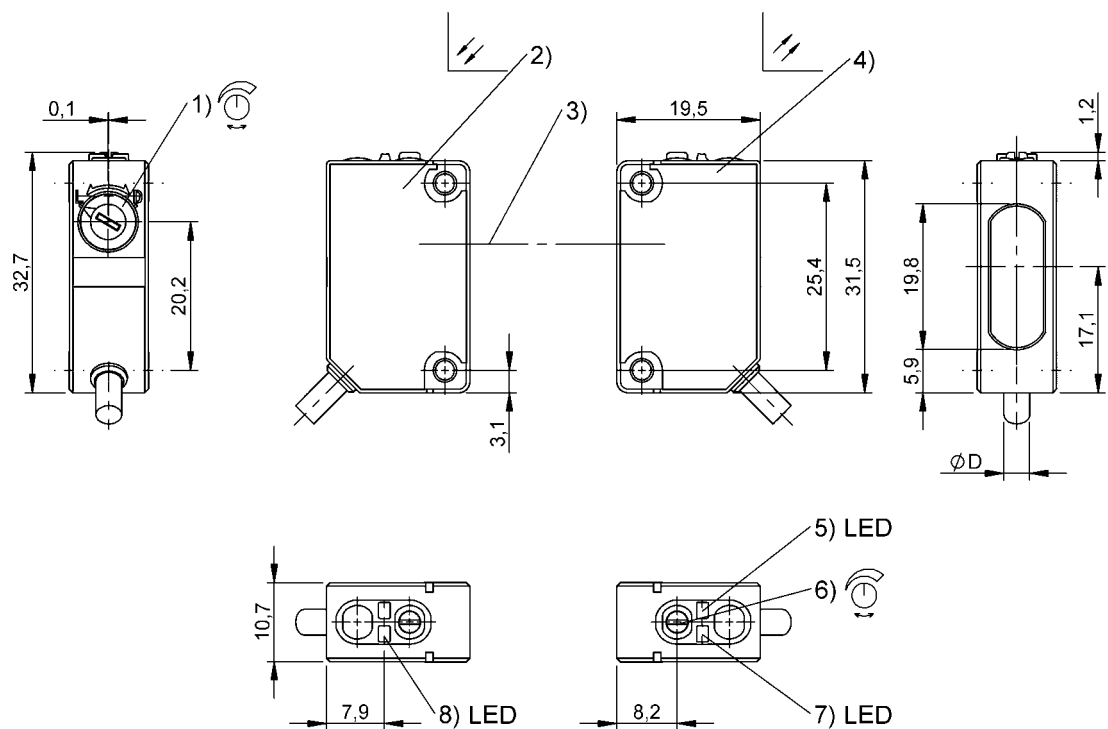




1) Mode settings, 2) Emitter, 3) Optical axis, 4) Receiver, 5) Power indicator, 6) stability, 7) Sensitivity, 8) Sensitivity



Basic features

Approval/Conformity	cULus CE UKCA WEEE
Principle of operation	Photoelectric sensor
Series	R090K
Style	Square Connection 45°

Electrical connection

Cable diameter D	3.50 mm
Cable length L	2 m
Conductor cross-section	0.20 mm ²
Connection	Cable, 2.00 m, PVC
Number of conductors	3
Polarity reversal protected	yes
Short-circuit protection	yes

Display/Operation

Adjuster	Potentiometer 270° Rotary switch 2 positions
Display	Output function- LED yellow Stability - LED green
Setting	Sensitivity (Sn) Light-on/dark-on

Electrical data

No-load current I _o max. at U _e	20 mA
Operating voltage U _b	10...30 VDC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	300 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 V

Environmental conditions

Ambient temperature	-30...55 °C
IP rating	IP67

Functional safety

MTTF (40 °C)	94 a
--------------	------

Interface

Switching output	NPN normally open/normally closed (NO/NC)
------------------	---

Material

Housing material	PC
	PBT
Material jacket	PVC
Material sensing surface	PMMA

Mechanical data

Dimension	10.7 x 32.7 x 19.5 mm
Mounting part	Screw M3
Tightening torque max.	0.5 Nm

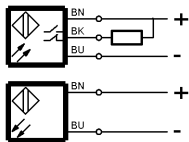
Optical features

Ambient light max.	10000 Lux
Beam characteristic	Divergent
Light type	LED, red light
Principle of optical operation	Through-beam sensor
Switching function, optical	dark-on/light-on
Wave length	660 nm

Range/Distance

Range	0...20 m
Rated operating distance S _n	20 m

Wiring Diagrams



Opto Symbols

