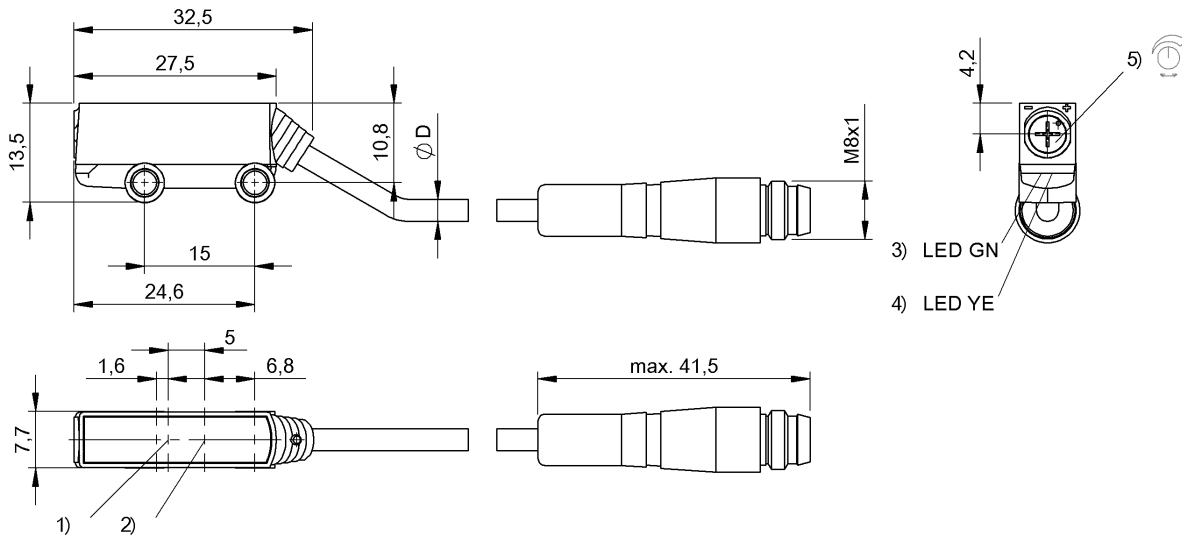
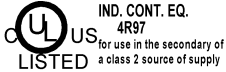


BOS R020K-PS-RH12-00,2-S75 BOS0234



1) Optical axis receiver 2) Optical axis emitter 3) Operating voltage 4) Light reception 5) Sn



Display/Operation

Adjuster	Potentiometer 3-turn (1x)
Setting	Rated switching distance (Sn)

Electrical connection

Cable diameter D	2.40 mm
Cable length	0.2 m
Connection	M8x1-Connector, 4-pole
Connection type	Cable with connector, 0.20 m, PVC
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

MTTF (40 °C)	3487 a
No-load current I _o max. at U _e	20 mA
Operating voltage U _b	10...30 VDC
Rated insulation voltage U _i	50 V DC
Rated operating current I _e DC	50 mA
Rated operating voltage U _e DC	24 V
Switching frequency	800 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	-20...50 °C
Protection class	III
Protection type IEC 60529	IP67

Functional safety

Diagnostic coverage	0 %
Functional safety	no
Mission Time	10 a

General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Series	R020K
Style	Square Connection 60°

Material

Housing material	ABS
Material jacket	PVC
Material sensing surface	PMMA

Mechanical data

Dimension	7.7 x 32.5 x 13.5 mm
Fastening detail	Screw M3

Optical data

Ambient light max.	5000 Lux
Beam characteristic	Focus, typical at 15 mm
Light type	LED Red light
Special optical feature	Background suppression
Wave length	660 nm

BOS R020K-PS-RH12-00,2-S75 BOS0234

Output/Interface

Switching output PNP Normally open (NO)

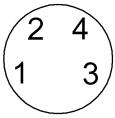
Range/Distance

Measuring range 1...150 mm
 Range 1...150 mm
 Rated operating distance S_n 150 mm
 Ripple max. (% of U_e) 20 %

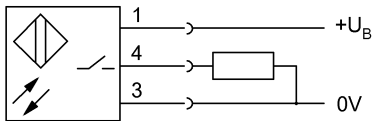
Remarks

Order accessories separately.
 For additional information, refer to user's guide.
 Reference object (target): gray card, 100 x 100 90 % remission, axial approach.
 The sensor is functional again after the overload has been eliminated.
 For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.
 Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors

