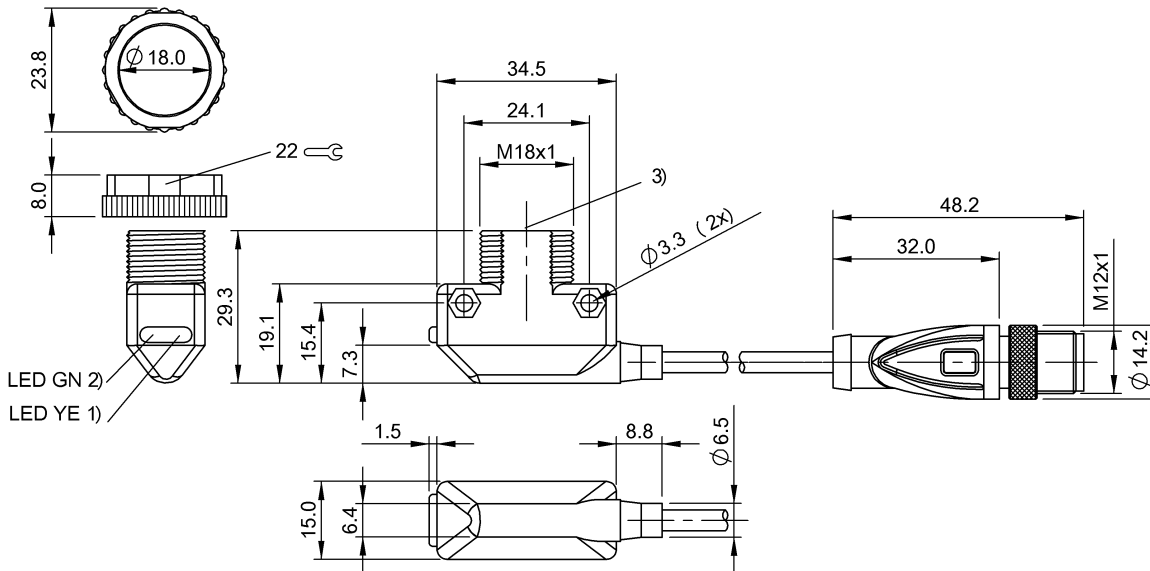


## BOS 11K-NA-RH10-00,15-S4 BOS014U



1) Output function 2) Operating voltage 3) Optical axis



### Electrical connection

Cable length	0.15 m
Connection	M12x1-Connector, 4-pole, A-coded
Connection type	Cable with connector, 0.15 m
Polarity reversal protected	yes
Short-circuit protection	yes

### Electrical data

MTTF (40 °C)	508 a
No-load current $I_0$ max. at $U_e$	30 mA
Operating voltage $U_b$	10...30 VDC
Protected against miswiring	yes
Rated insulation voltage $U_i$	75 V DC
Rated operating current $I_e$ DC	100 mA
Rated operating voltage $U_e$ DC	24 V
Ready delay $t_v$ max.	200 ms
Residual current $I_r$ max.	100 $\mu$ A
Switching frequency	500 Hz
Turn-off delay $t_{off}$ max.	1 ms
Turn-on delay $t_{on}$ max.	1 ms
Voltage drop $U_d$ max. at $I_e$	2 V

### Environmental conditions

Ambient temperature	-20...55 °C
Protection class	II
Protection type IEC 60529	IP67

### Functional safety

Diagnostic coverage	0.0 %
Functional safety	no

### General data

Approval/Conformity	cULus CE
Basic standard	IEC 60947-5-2
Series	11K
Style	Square Connection 90°
Trademark	Global

### Material

Housing material	ABS
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## BOS 11K-NA-RH10-00,15-S4 BOS014U

Material sensing surface PMMA

### Mechanical data

Dimension 15 x 44.8 x 29.3 mm  
Fastening detail Screw M3  
Nut M18x1

### Optical data

Ambient light max. 10000 Lux  
Beam characteristic Divergent  
Light type LED Red light  
Wave length 626 nm

### Output/Interface

Switching output NPN Normally closed (NC)  
NPN Normally open (NO)

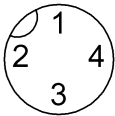
### Range/Distance

Measuring range 10...50 mm  
Range 10...50 mm  
Rated operating distance  $S_n$  50 mm  
Ripple max. (% of  $U_e$ ) 10 %

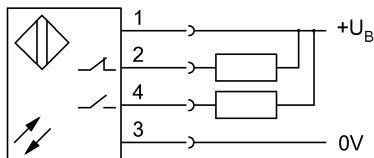
### Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.  
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

