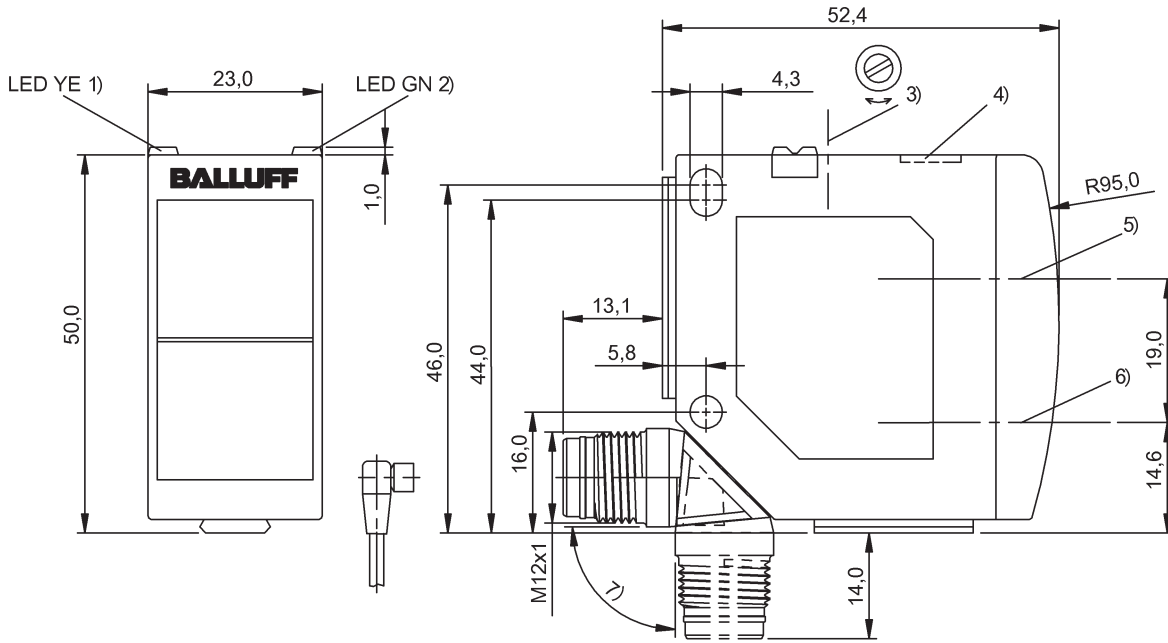


LASER CLASS 1 per IEC 60825-1:  
2003-10



1) Output function/error 2) Power 3) Sn 4) No. of bars/sens. distance 5) Optical axis receiver 6) Optical axis emitter 7) 270° rotatable

- Photoelectric sensor
- Series 23K
- Laser red light
- up to 1 m



**General attributes**

Adjuster  
Approvals / Conformity

Basic standard  
Enclosure Type DIN 40050  
Enclosure Type per IEC 60529  
Indicator

Polarity reversal protected  
Protection Class  
Series  
Setting  
Short circuit protected

**Electrical attributes**

Connection type  
Eff. operating current I<sub>e</sub>  
Eff. operating voltage U<sub>e</sub> DC  
Electrical version  
No-load current max. I<sub>o</sub> at U<sub>e</sub>  
Operating voltage UB max. DC [V]  
Operating voltage UB min. DC [V]  
Rated insulation voltage U<sub>i</sub>  
Ripple max. (% of U<sub>e</sub>)  
Switching freq. f max. (at U<sub>e</sub>)  
Switching function

Adjusting screw (1x)  
CE  
Ecolab  
IEC 60947-5-2  
IPx9K  
IP6x  
Output function - LED YE  
Power - LED GN  
Error - LED YE, flash.  
Switching dist. - bar display  
yes  
II  
Series 23K  
Switching distance (Sn)  
yes

Connector  
100 mA  
24.0 V  
DC, direct current  
30 mA  
30.0 V  
12.0 V  
75 V DC  
10 %  
1000 Hz  
NO-NC

Switching output  
Turn on time t<sub>on</sub> max.  
Voltage drop U<sub>d</sub> max. (at I<sub>e</sub>)

**Mechanical attributes**

Ambient temperature T<sub>a</sub> max.  
Ambient temperature T<sub>a</sub> min.  
Border range energetically  
Connector type  
Detection range S<sub>d</sub>  
Dist. dev. 18 % max. (% of S<sub>r</sub>)  
Eff. operating distance S<sub>r</sub>  
Housing material  
Length 1  
Length 2  
Length 3  
Minimum operating distance  
Mounting type  
Range S<sub>n</sub>  
Sensing face material  
Style  
Tightening torque max.

**Optical attributes**

Average power P<sub>o</sub> max.  
Laser Class per IEC 60825-1  
Light spot size, typical  
Light type  
Optical special feature

PNP (2x)  
0.50 ms  
2.0 V

60 °C  
-20 °C  
1200 mm  
M12x1-S04  
5...800 mm  
30 %  
800 mm  
PC-ABS  
23.0 mm  
52.4 mm  
51.0 mm  
5 mm  
Screw M4  
S<sub>n</sub> = 800 mm, adjustable  
PMMA  
Block, rotatable connection  
1.5 Nm

Photoelectric sensor

**BOS 23K-PA-LH10-S4**  
**BOS01FR**

**BALLUFF**

sensors worldwide

Principle of optical operation  
Switching function, optical  
Wavelength

Light scanner, triangulation  
NO-NC: light-dark / dark-light  
655 nm

**Additional text**

Reference object (target): Gray card, 200 x 200,

90 % remission, axial approach.

For additional information, refer to user's guide.

Order accessories separately.

The sensor is functional again after the overload has been eliminated.

