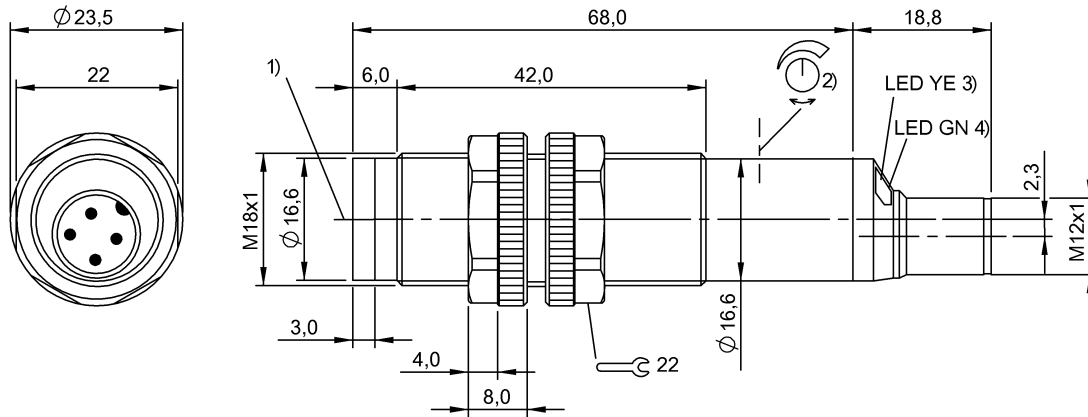


BOS 18K-PS-1LQK-E5-C-S4 BOS00H8



1) Optical axis 2) Sn 3) Output function 4) stability



Display/Operation

Adjuster	Potentiometer 270° (1x)
Setting	Sensitivity (Sn)

Electrical connection

Connection	M12x1-Connector, 4-pole, A-coded
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current I _o max. at Ue	35 mA
Operating voltage U _b	10...30 VDC
Pollution degree	3
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
Residual current I _r max.	50 µA
Switching frequency	1500 Hz
Turn-off delay t _{off} max.	0.33 ms
Turn-on delay t _{on} max.	0.33 ms
Utilization category	DC -13
Voltage drop U _d max. at I _e	2 V

Environmental conditions

Ambient temperature	-10...50 °C
Protection type IEC 60529	IP67
Reference reflector	BOS R-1

General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Series	18K
Style	Cylinder Straight optics

Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Blind zone	100 mm
Dimension	Ø 18 x 86.8 mm
Fastening detail	Nut M18x1

Optical data

Ambient light max.	5000 Lux
Average power P _o max.	390 µW
Laser class per IEC 60825-1	1
Light type	Laser Red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Wave length	650 nm

Output/Interface

Switching output	PNP Normally open (NO)
------------------	------------------------

BOS 18K-PS-1LQK-E5-C-S4 BOS00H8

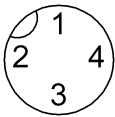
Range/Distance

Measuring range	0...12 m
Range	0...12 m
Rated operating distance S_n	12 m, Adjustable
Ripple max. (% of U_e)	8 %
Temperature drift max. (% of S_r)	10 %

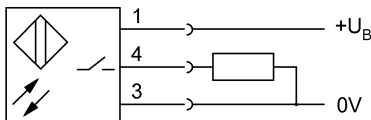
Remarks

The sensor is functional again after the overload has been eliminated. Polarizing filters prevent spurious switching due to reflecting and shiny parts. For additional information, refer to user's guide. Order accessories separately. Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

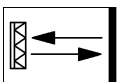
Connector view



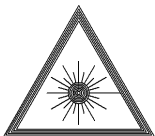
Wiring Diagram



Symbols for Optoelectronic Sensors



Warning Symbols



LASER CLASS 1 per IEC 60825-1