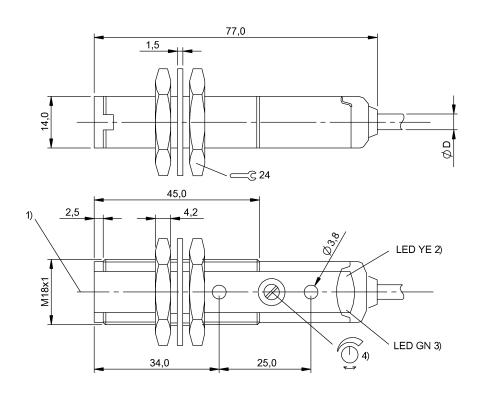
BOS 18KF-NA-1PE-C-02 Order Code: BOS00J4

BALLUFF



1) Optical axis, 2) Output function, 3) Stability, 4) Sn





IND. CONT. EQ
US 1TD4
for use in the secondary of
a class 2 source of supply





Basic features

Approval/Conformity	CE
	cULus
	EAC
	WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	18KF
Style	Flat cylinder
	Straight optics
Trademark	Global

Display/Operation

Adjuster	Potentiometer 270°
Display	Output function- LED yellow
	Stability - LED green
Setting	Rated switching distance (Sn)

Electrical connection

Cable diameter D	4.00 mm
Cable length L	2 m
Conductor cross-section	0.14 mm ²
Connection	Cable, 2.00 m, PVC
Number of conductors	4
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

No-load current lo max. at Ue	35 mA	
Operating voltage Ub	1030 VDC	
Rated insulation voltage Ui	75 V DC	
Rated operating current le	100 mA	
Rated operating voltage Ue DC	24 V	
Ripple max. (% of Ue)	8 %	
Switching frequency	1000 Hz	
Turn-off delay toff max.	0.5 ms	
Turn-on delay ton max.	0.5 ms	
Voltage drop Ud max. at le	2 V	

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BVLLUFF

Environmental conditions

-25...55 °C Ambient temperature

EN 60068-2-27, Shock Half-sinus, 30 gn, 11 ms, 3x6 EN 60068-2-6, Vibration 10...55 Hz, amplitude 0.5 mm,

3x30 min

IP67 **Protection degree**

Functional safety

MTTF (40 °C) 774 a

Material

Housing material PBT PVC Material jacket Material sensing surface **PMMA**

Mechanical data

Dimension Ø 18 x 77 mm Mounting Screw M3 Nut M18x1

Tightening torque max.

Optical features

Ambient light max. 5000 Lux Beam characteristic Divergent Light type LED infrared

Principle of optical operation Diffuse sensor, energetic Switching function, optical Light-on 880 nm Wave length

Output/Interface

Switching output NPN normally open (NO) NPN NC Pins 4-2

Range/Distance

Range 0...700 mm Rated operating distance Sn

700 mm Adjustable

Remarks

Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.

1.5 Nm

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

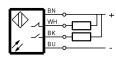
For additional information, refer to user's guide.

Order accessories separately.

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Wiring Diagrams



Opto Symbols

