Photoelectric Sensors
BOS 18KF-PA-1FR-S4-C
Order Code: BOS00JJ

BALLUFF

1) Output function, 2) Stability, 3) Sn

Basic features

Approval/Conformity	CE
	UKCA
	cULus
	WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Fiber optic device
Series	18KF
Style	Flat cylinder
	Straight optics

Display/Operation

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

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Fiber optics connection	Ø 2.2 mm
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

No-load current Io max. at Ue	35 mA
Operating voltage Ub	10...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	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 Ie	2 V

Environmental conditions

Ambient temperature	-25...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 g_n, 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	774 a

Interface

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

Material

Housing material	PBT

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Mechanical data

Dimension	Ø 18 x 87 mm
Mounting part	Screw M3
	Nut M18x1
Tightening torque max.	1.5 Nm

Optical features

Ambient light max.	5000 Lux
Light type	LED, red light
Principle of optical operation	depends on fiber optics
Switching function, optical	Light/dark switching
	Light-on
Wave length	660 nm

Range/Distance

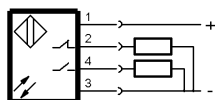|	
Range	depends on fiber optics

Remarks

Order accessories separately.

For additional information, refer to user's guide.

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

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.

Connector Drawings

Wiring Diagrams

Opto Symbols