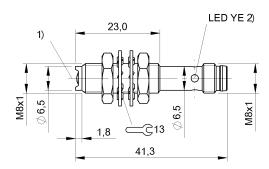
# **BALLUFF**



## 1) Optical axis, 2) Output function









# Basic features

Dasic icatares	
Approval/Conformity	cULus
	CE
	UKCA
	WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	08E
Style	Cylinder
	Straight optics

# Display/Operation

Display	Limit range - LED yellow, flashing
	LED vellow: Light received

# Electrical connection

Connection	Connector, M8x1-Male, 3-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

Load capacitance max. at Ue	0.5 μF
No-load current lo max. at Ue	15 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
Ready delay tv max.	20 ms
Ripple max. (% of Ue)	10 %
Switching frequency	500 Hz
Turn-off delay toff max.	1 ms
Turn-on delay ton max.	1 ms
Utilization category	DC -13
Voltage drop Ud max. at le	0.7 V

Environmental conditions	
Ambient temperature	-555 °C
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6 Half-sinus, 100 gn, 2 ms, 3x8000
EN 60068-2-6, Vibration	102000 Hz, amplitude 1 mm, 30 gn, 3x5 h 1055 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67
Functional safety	
MTTF (40 °C)	1559 a

#### Photoelectric Sensors

# BOS 08E-PS-KD20-S49 Order Code: BOS01NN



#### Interface

Switching output PNP normally open (NO) Material Housing material Stainless steel PMMA Material sensing surface Mechanical data Ø 8 x 40 mm Dimension

Nut M8x1

# Optical features

Beam characteristic LED group per IEC 62471 Light spot size Light type Principle of optical operation Switching function, optical Wave length

Divergent Exempt Group Ø 3.0 mm Light exit LED, red light

Diffuse sensor, energetic

Light-on 645 nm

# Range/Distance

Range 1...60 mm Rated operating distance Sn 60 mm

# Remarks

Mounting part

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

Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

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

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

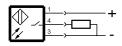
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Subject to change without notice: 265708

# **Connector Drawings**



# Wiring Diagrams



# Opto Symbols

