

Basic features

Approval/Conformity	TÜV cULus CE WEEE
Basic standard	IEC 61496-2
Operating principle	non-contact (photoelectric)
Scope of delivery	1 Emitter + 1 Receiver Mounting material
Series	BLG 4A ...-014-...
Style	Rectangular
Version	Safety light curtain

Electrical connection

Connection 1	Emitter: M12x1-Male, A-coded
Connection 2	Receiver: M12x1-Male, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

Burst	2 kV (EN 61000-4-4)
ESD	8 kV contact, 15 kV air
Emission	EN 55022, Class A
IVW (surge)	2 kV (EN 61000-4-5)
Line-induced noise	30V (EN 61000-4-6)
Load capacitance max. at Ue	2.2 µF
Operating voltage U_b	19.2...28.8 VDC
Output current max.	500 mA
Overload protection	1.4 A max.
Protection class	III
RFI	30 V/m (EN 61000-4-3)
RFI 2000...3000 MHz	3 V/m (EN 61000-4-3)
Rated operating voltage U_e DC	24 V

Environmental conditions

Ambient temperature	0...55 °C
EN 60068-2-27, Shock	16 ms (10 G) 1000 shocks/axis
EN 60068-2-6, Vibration	Amplitude 0.35 mm Frequency 10...55 Hz
Protection degree	IP65
Relative humidity	15...95 %, non-condensing
Storage temperature	-25...70 °C

Functional safety

AOPD type (active opto-electronic protective device)	4
Device type (VDMA 66413)	1
HFT - Hardware failure tolerance (EN 62061)	1
MTTFd	444 a
Mission Time	20 a
PFHd (EN 62061)	2.64 E-9 1/h
Performance Level	e
SIL (IEC 61508)	3
SIL CL (EN 62061)	3
Safety category (EN ISO 13849-1)	4

Material

Housing material	Aluminum, painted (yellow RAL 1003)
Material sensing surface	PMMA
Surface protection	painted (yellow RAL 1003)

Mechanical data

Dimension	32.3 x 983.2 x 37 mm
Mounting	separate holder
Weight	1.30 kg

Optical features

Ambient light	IEC 61496-2
Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light beams, number	96
Light type	Infrared
Wave length	950 nm

Output/Interface

Switching output	2x PNP OSSD
------------------	-------------

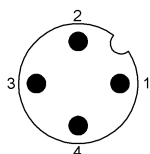
Range/Distance

Detection capability	14 mm
Protective field height (Hp)	900 mm
Range	6 m
Response time max.	29 ms

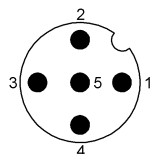
Remarks

Finger protection
 Temperature class: T6 (TX/RX)
 Leakage current: 2 mA
 SELV/PELV power supply required

Connector Drawings

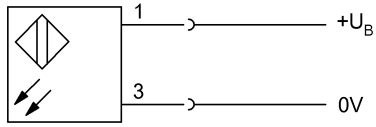


PIN 1: +24V
 PIN 2: n.c.
 PIN 3: 0V
 PIN 4: n.c.

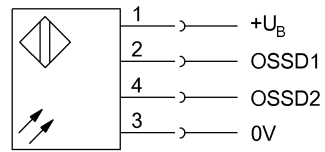


PIN 1: +24V
 PIN 2: OSSD1
 PIN 3: 0V
 PIN 4: OSSD2
 PIN 5: n.c.

Wiring Diagrams



1) Emitter



2) Receiver