



LS 763/4.8, 2500



Protective throughbeam photoelectric sensor

⚠ Safety note:

- The protective throughbeam photoelectric sensor is a contactless active protective device only in connection with a safety-relevant control system, in which the cyclical testing of transmitter and receiver is carried out according to EN 61496-1, category 2 (testing).
- The power supply unit used to operate the photoelectric sensor must be able to compensate for changes and interruptions of the supply voltage acc. to EN 61496-1.
Minimum blackening object: $\varnothing 8\text{mm}$.

Accessories

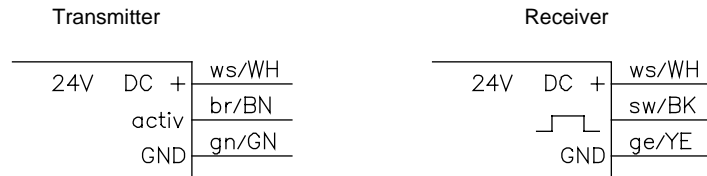
(available separately)

- Mounting system (BT 763)
- Test-monitoring units:
 - TNT 32 (Part No. 50020476)
 - TNT 33 (Part No. 50028158)
 - TNT 34 (Part No. 50081023)
 - TNT 35 (Part No. 50033058)
 - TMC 66 (Part No. 50082121)

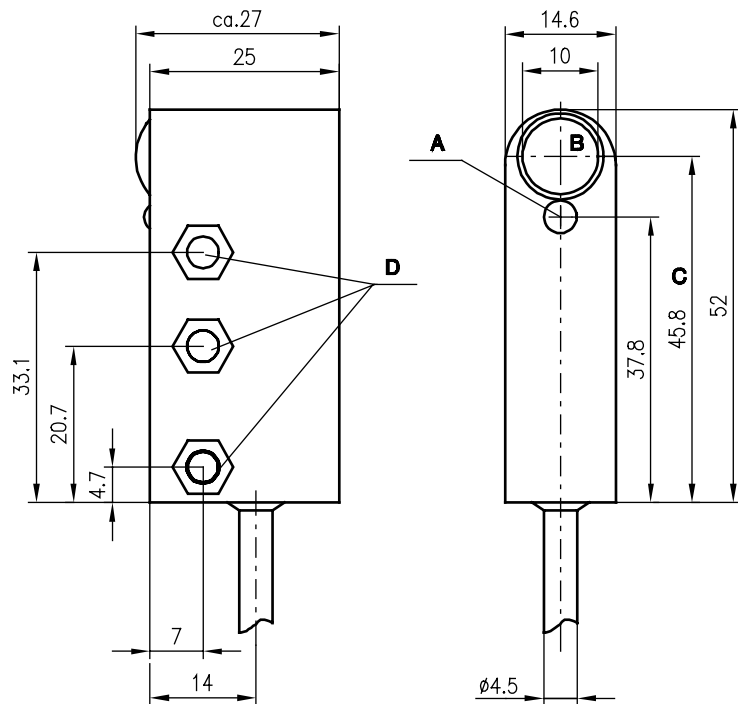
Features

- Protective throughbeam photoelectric sensor with high performance reserve in infrared light
- Activation input for testing and interlinking
- Compact construction with shock-resistant metal housing and glass optics
- LED indicator in transmitter and receiver for function monitoring
- PNP transistor output for PLC applications
- Flexible PUR connection cable for industrial application

Electrical Connection



Dimensional Drawing



- A Indicator diode
- B Transmitter/receiver
- C Optical axis
- D Flat nut M4 for insertion

Order guide

	Designation	Part No.
Transmitter and receiver	LS 763/4.8, 2500	
Transmitter	LS 763/2.8 Se, 2500	500 27465
Receiver	LS 763/4 E, 2500	500 27466





Technical Data

Optical data	
Typ. operating range limit ¹⁾	0 ... 8m
Operating range ²⁾	0 ... 6m
Light source	LED (modulated light)
Wavelength	880nm
Optics diameter	10mm
Shadowing item	8mm
Eff. angle of radiation	max. $\pm 4^\circ$ acc. to prEN50100-2 (edition 08/94)
Timing	
Switching frequency	100Hz
Response time	min. 5ms
Electrical data	
Operating voltage U_B ³⁾	24VDC \pm 15%
Residual ripple	$\leq 10\%$ of U_B (peak/peak)
Bias current	receiver ≤ 15 mA transmitter ≤ 20 mA
Switching output	PNP transistor output
Function characteristics	light switching
Signal voltage high/low	$\geq (U_B - 2V) / \leq 2V$
Output current	max. 100mA
Indicators	
Receiver	
LED red	light path interrupted
LED green	light path free
Transmitter	
LED yellow	transmitter ON
Mechanical data	
Housing	diecast zinc, electroplated
Optics	mineral glass
Weight	130g
Connection type	cable, PUR, length 2.5m
Environmental data	
Ambient temp. (operation/storage)	-20°C ... +60°C / -30°C ... +70°C
Protective circuit ⁴⁾	2,3
Protection class	IP65
Standards applied	IEC 90647-5-2
Options	
Activation input active	
Transmitter active/not active	$\geq 20V / \leq 2V$ or not connected
Activation/disable delay	≤ 0.5 ms
Input resistance	10k Ω \pm 10%

1) Typ. operating range limit: max. attainable range without performance reserve

2) Operating range: recommended range with performance reserve

3) Functional extra-low voltage with reliable disconnection or protective extra-low voltage (VDE 0100/T 410)

4) 2=polarity reversal protection, 3=short circuit protection



LS 763/4.8, L8



Protective throughbeam photoelectric sensor



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Minimum blackening object: $\varnothing 8\text{mm}$.

Accessories

(available separately)

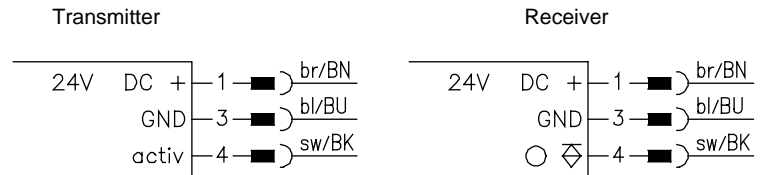
- Mounting system (B 763)
- Connection cable 5m
 - axial BK7 KB-003-5000-3A
 - angled BK7 KB-003-5000-3
- Test-monitoring units:
 - TNT 32 (Part No. 500 20476)
 - TNT 33 (Part No. 500 28158)
 - TNT 34 (Part No. 500 81023)
 - TNT 35 (Part No. 500 33058)
 - TMC 66 (Part No. 500 82121)



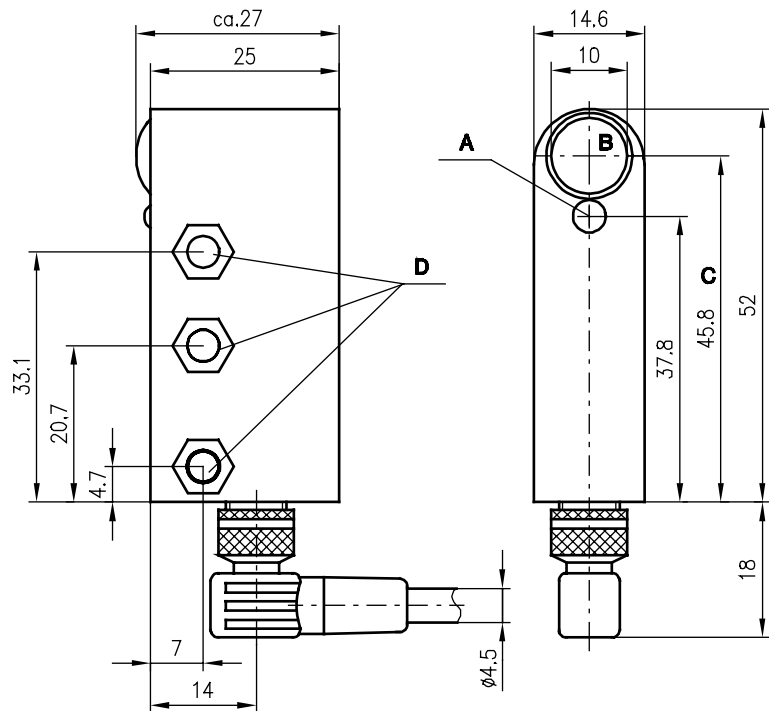
Features

- Protective throughbeam photoelectric sensor with high performance reserve in infrared light
- Activation input for testing and interlinking
- Compact construction with shock-resistant metal housing and glass optics
- LED indicator in transmitter and receiver for function monitoring
- PNP transistor output for PLC applications
- Connection via M8 connector

Electrical Connection



Dimensional Drawing



- A Indicator diode
- B Transmitter/receiver
- C Optical axis
- D Flat nut M4 for insertion

Order guide

	Designation	Part No.
Transmitter and receiver	LS 763/4.8, L8	
Transmitter	LS 763/2.8 Se, L8	500 81024
Receiver	LS 763/4 E, L8	500 81025



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