



## LS 763

## Protective throughbeam photoelectric sensor



8m



- 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

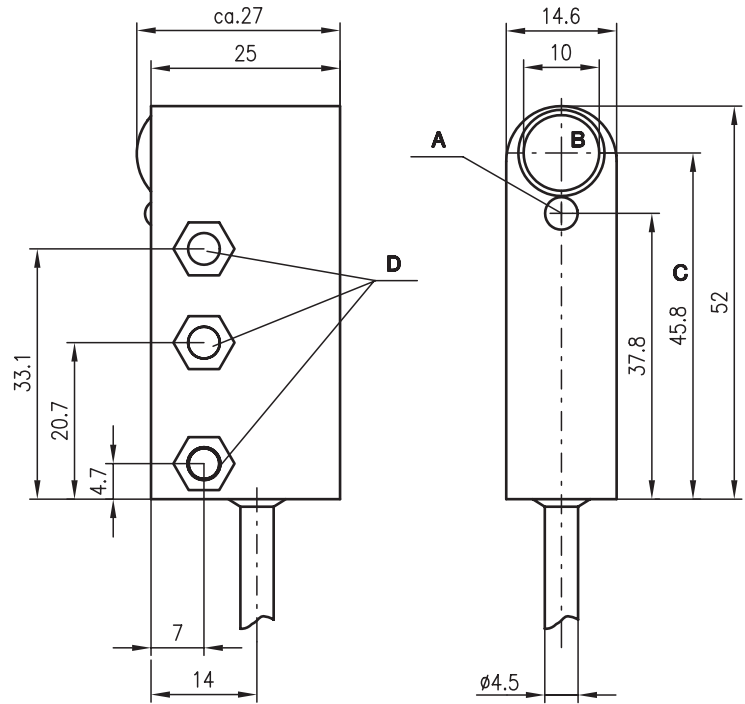


### Accessories:

(available separately)

- Mounting system (BT 763)
- 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)

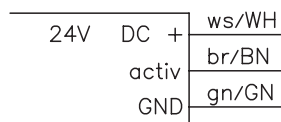
### Dimensioned drawing



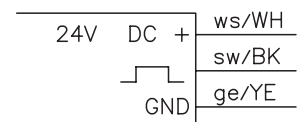
- A Indicator diode
- B Transmitter/receiver
- C Optical axis
- D Flat nut M4 for insertion

### Electrical connection

Transmitter



Receiver





## Specifications

### Optical data

Typ. operating range limit <sup>1)</sup>	0 ... 8m
Operating range <sup>2)</sup>	0 ... 6m
Light source	LED (modulated light)
Wavelength	880nm
Optics diameter	10mm
Shadowing item	8mm
Eff. angle of radiation	max. ± 4° acc. to prEN 50100-2 (edition 08/94)

### Timing

Switching frequency	100Hz
Response time	min. 5ms

### Electrical data

Operating voltage $U_B$ <sup>3)</sup>	24VDC ± 15%
Residual ripple	≤ 10% of $U_B$ (peak/peak)
Bias current	receiver ≤ 15mA transmitter ≤ 20mA
Switching output	PNP transistor output
Function characteristics	light switching
Signal voltage high/low	≥ ( $U_B - 2V$ ) / ≤ 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 <sup>4)</sup>	2, 3
Protection class	IP 65
Standards applied	IEC 90647-5-2

### Options

Activation input activ	
Transmitter active/not active	≥ 20V / ≤ 2V or not connected
Activation/disable delay	≤ 0.5ms
Input resistance	10kΩ ± 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

## 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

## Tables

## Diagrams

## Remarks

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 has to be able to compensate for changes and interruptions of the supply voltage acc. to EN 61496-1. Minimum blackening object: Ø8mm.