LS 763

Through-beam Safety Light Barriers (AOPD type 2)

LS 763

In conjunction with a test monitoring unit, such as for instance the TNT 35 or MSI, this opto-sensor with test input constitutes an active optoelectronic protective device of type 2.

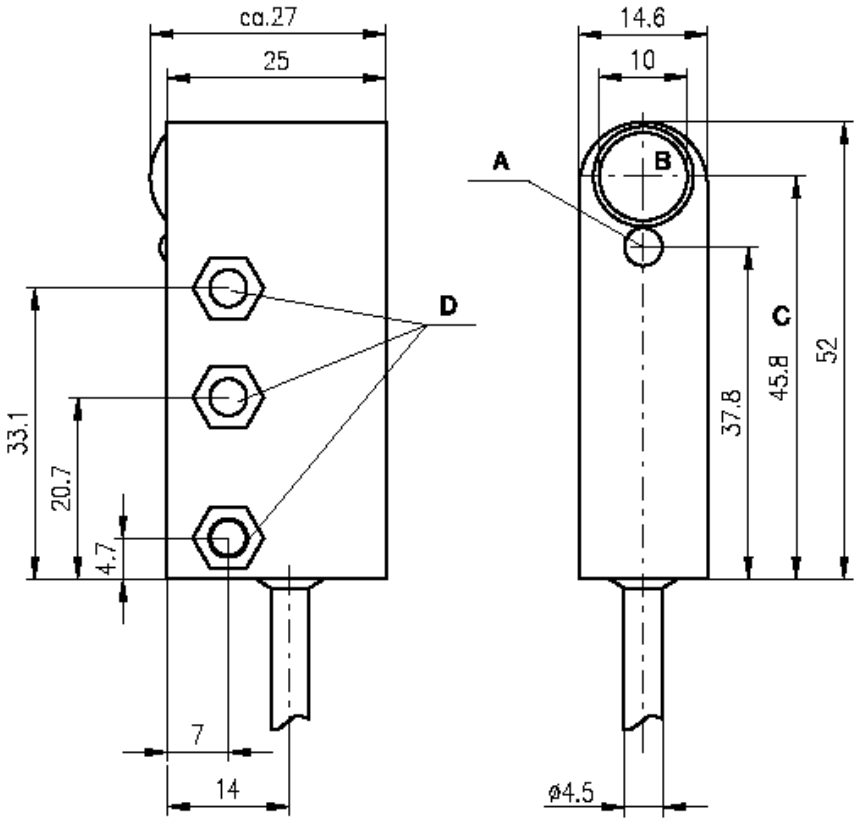
Advantages

- Infrared light protective throughbeam photoelectric sensor with high performance reserve
- 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

LS 763

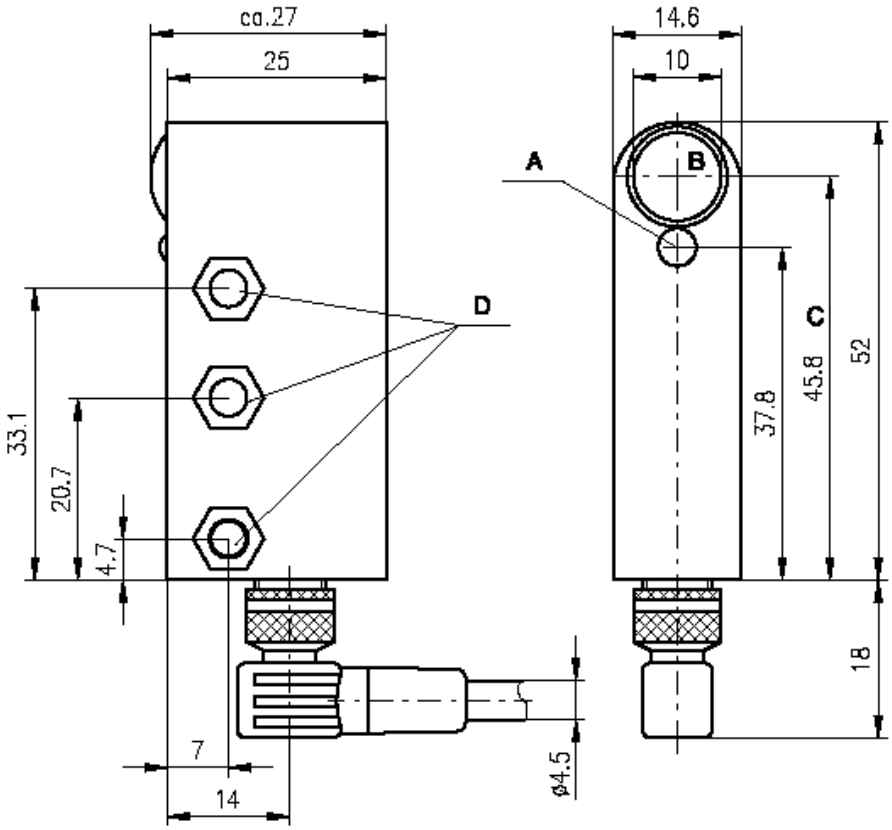
Dimensional Drawings

LS 763/4.8, 2500



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

LS 763/4.8 L8



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

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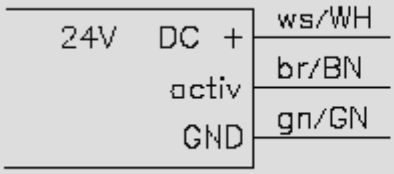
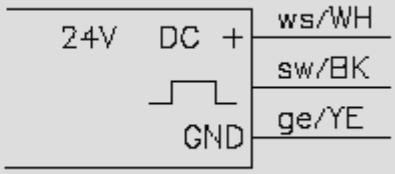
Electrical Connection

Sample connection LS 763/4.8, 2500

Transmitter

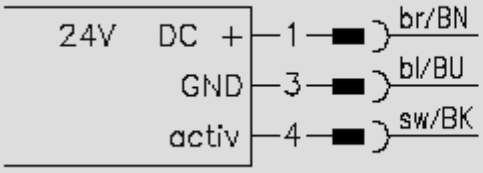


Receiver

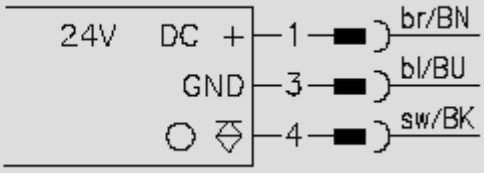


Sample connection LS 763/4.8 L8

Transmitter



Receiver



LS 763
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. ± 4° acc. to prEN 50100-2 (edition 08/94)
Timing	
Switching frequency	100Hz
Response time	min. 5ms
Electrical data	
Operating voltage U_B [3]	24VDC ± 15%
Residual ripple	≤10% von 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 LED green	 light path interrupted 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 (LS 763/4.8, 2500) M8 connector (LS 763/4.8 L8)
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 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

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.