

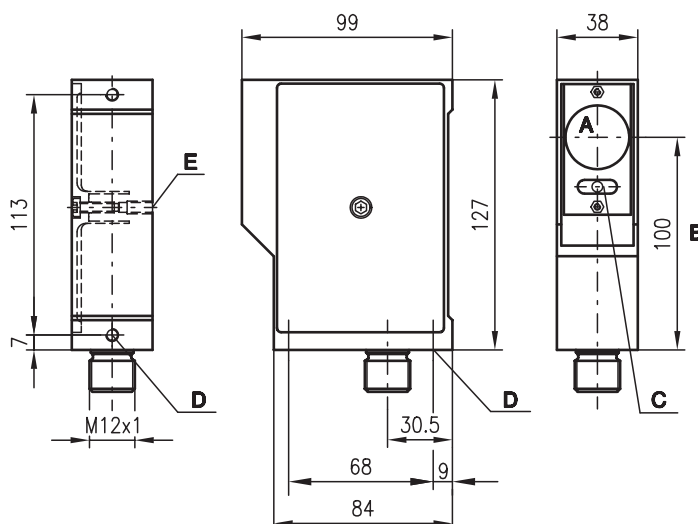
SLS 78
Protective throughbeam photoelectric sensors

0 ... 150m

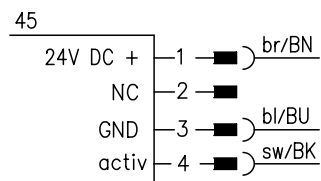
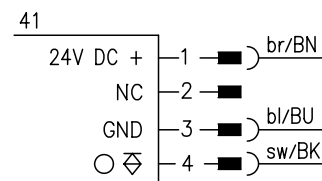

- Activation input for testing and interlinking
- Connection via M12 connector
- Integrated optics heating


Accessories:
(available separately)

- Mounting systems (BT 16, UMS 78)
- Alignment aid ARH 2
- M12 connectors (KD ...)
- 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** Transmitter/receiver
B Optical axis
C Indicator diodes
D Device fixture M6x9
E Device fixture M6x12

Electrical connection
Transmitter

Receiver




Specifications

Optical data

Typ. operating range limit ¹⁾	0 ... 150m
Operating range ²⁾	0 ... 120m
Light source	LED (modulated light)
Wavelength	880nm

Timing

Switching frequency	300Hz
Response time	1.7ms
Delay before start-up	≤ 200ms
Input pulse	min. 1.7ms

Electrical data

Operating voltage U_B	24VDC ± 20%
Residual ripple	≤ 15% of U_B
Bias current	receiver ≤ 35mA transmitter ≤ 60mA
Switching output	PNP transistor output
Function characteristics	light switching
Signal voltage high/low	≥ ($U_B - 2V$) / ≤ 2V
Output current	max. 200mA

Indicators

Receiver

LED red	light path interrupted
LED green	light path free
LED green flashing	light path free, no performance reserve

Transmitter

LED yellow	transmitter ON
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Mechanical data

Housing	diecast aluminium
Optics	glass, eff. angle of radiation ± 4° acc. to prEN 50100-2 (edition 08/94)
Weight	463g
Connection type	M12 connector, 4-pin

Environmental data

Ambient temp. (operation/storage)	-25°C ... +60°C / -30°C ... +70°C
VDE safety class	III
Protective circuit ³⁾	1, 2, 3
Protection class	IP 65
Standards applied	IEC 60947-5-2

Options

Activation input activ	
Transmitter active/not active	≥ 8V / ≤ 2V or not connected
Activation/disable delay	≤ 400µs
Input resistance	4.7kΩ ± 10%

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

2) Operating range: recommended range with performance reserve

3) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection

Tables

Diagrams

Order guide

	Designation	Part No.
Transmitter and receiver	SLS 78M/P-1730-T2-4	
Transmitter	SLSS 78M-1720-T2-45	500 29536
Receiver	SLSE 78 M/P-1730-T2-41	500 80323

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: Ø30mm.