

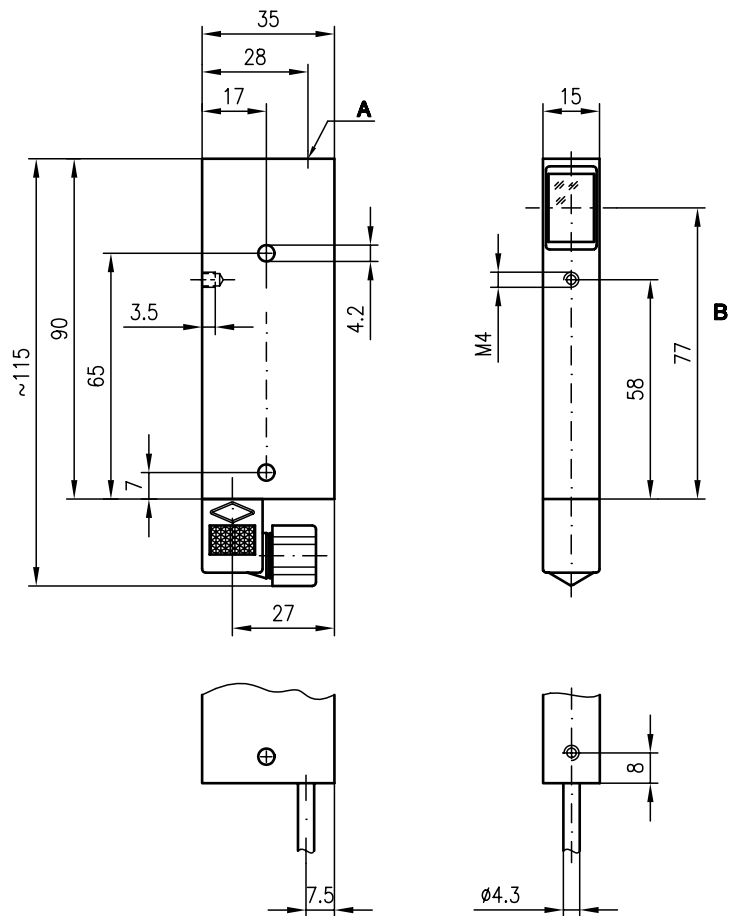


TLS 72

Throughbeam photoelectric sensor with testing



Dimensioned drawing



A Indicator diode (only at receiver)
B Optical axis

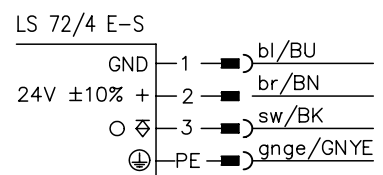
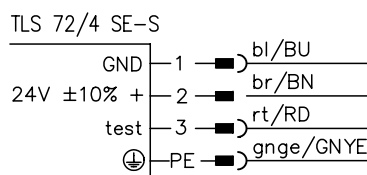
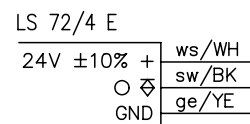
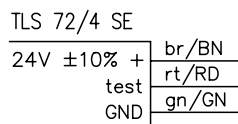


12m



- Slim construction with glass lens and robust metal housing for protection against environmental influences
- LEDs as switching state indicators
- Output is short-circuit proof and polarity reversal protected, thus guaranteeing riskless commissioning
- Mounting holes and M4 threads for fast front side mounting
- Connection via M12 connector, plug or cable
- Test input (active low)

Electrical connection



Accessories:

(available separately)

- Mounting systems (BT 92)
- M12 connectors (KD ...)
- Ready-made cables (KB ...)



We reserve the right to make changes * 72_a02e.fm

Specifications

Optical data

Typ. operating range limit ¹⁾	0 ... 12m
Operating range ²⁾	0 ... 8m
Light source	LED (modulated light)
Wavelength	880nm (infrared)

Timing

Switching frequency	100Hz
Response time	5ms

Electrical data

Operating voltage U_B	24VDC \pm 10% (incl. residual ripple)
Residual ripple	\leq 15% of U_B
Bias current	\leq 70mA
Switching output	PNP transistor output
Function characteristics	light switching
Signal voltage high/low	$\geq (U_B - 3V) / \leq 2V$
Output current	max. 100mA

Indicators

LED green/red	green: light path free red: light path interrupted
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Mechanical data

Housing	diecast
Weight	170g, cable device 480g
Optics	glass lens
Connection type	M12 connector 4-pin, plug 4-pin or cable (cross section 3x0.25mm ²)

Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C / -30°C ... +70°C
Protective circuit ³⁾	2, 3
Protection class	IP 67
LED class	1 (acc. to EN 60825-1)

Options

Test input (active low)	
Transmitter active/not active	$\geq (U_B - 3V) / \leq 2V$

- 1) Typ. operating range limit: max. attainable range without performance reserve
 2) Operating range: recommended range with performance reserve
 3) 2=polarity reversal protection, 3=short circuit protection

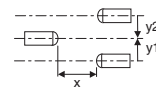
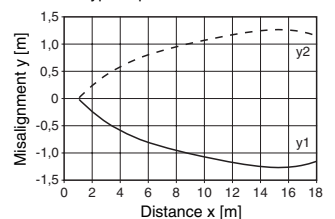
Tables

0	8	12
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	Operating range [m]
	Typ. operating range limit [m]

Diagrams

Typ. response behaviour



Order guide

Selection table		Order code →				
Equipment ↓		TLS 72/4,6000 Part No. 500 03364 (Tr) Part No. 500 00223 (Re)	TLS 72/4 S Part No. 500 06516 (Tr) Part No. 500 06515 (Re)			
Light source	infrared	●	●			
Connection	cable 6m	●				
	M12					
	standard plug 4-pin		●			
Indicator LED	top of housing	●	●			
Features	test input (low active)	●	●			

Remarks