

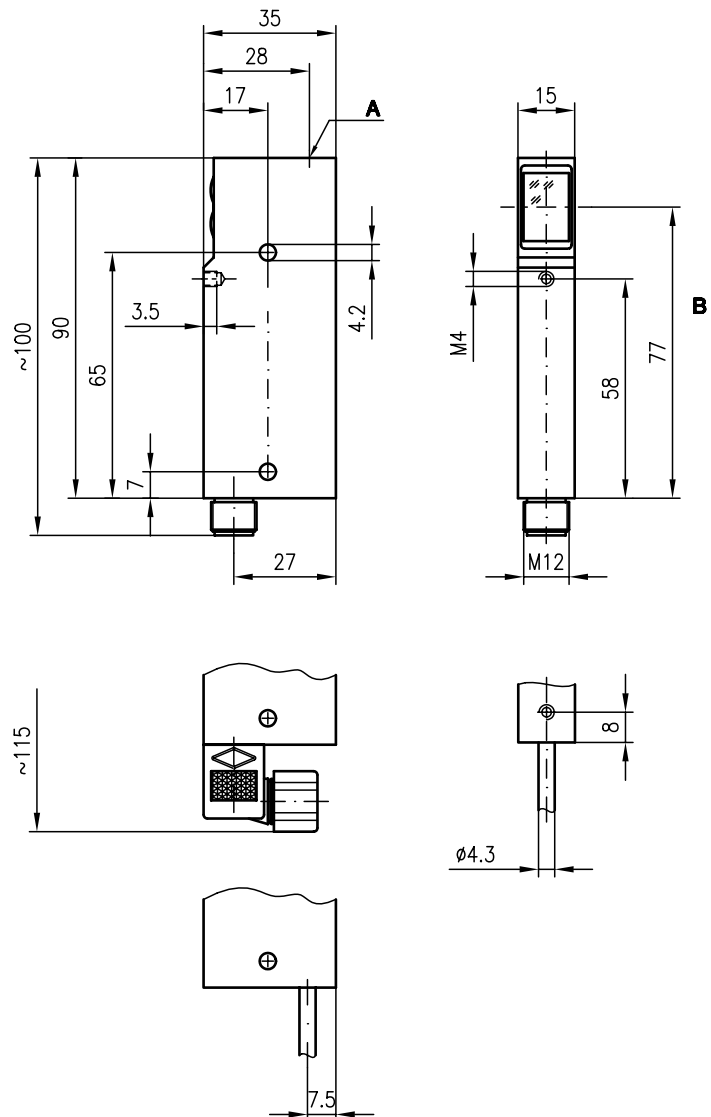


PRK 72

Retro-reflective photoelectric sensors with polarisation filter

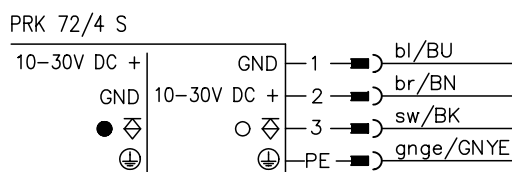
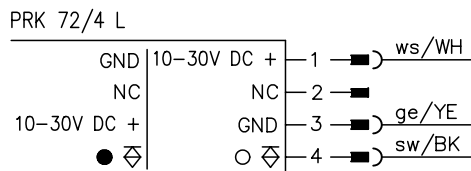
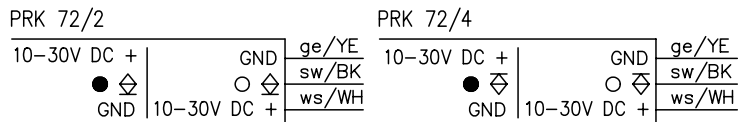


Dimensioned drawing



A Indicator diode (only at receiver)
B Optical axis

Electrical connection



0.1 ... 6m



- 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



Accessories:

(available separately)

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

We reserve the right to make changes * 72_b02e.fm

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾	0.1 ... 6m
Operating range ²⁾	see tables
Light source	LED (modulated light)
Wavelength	660nm (red light)

Timing

Switching frequency	200Hz
Response time	2.5ms

Electrical data

Operating voltage U_B	10 ... 30VDC (incl. residual ripple)
Residual ripple	$\leq 15\%$ of U_B
Bias current	≤ 100 mA
Switching output	PNP or NPN transistor output
Function characteristics	light/dark switching by reversing the polarity
Signal voltage high/low	$\geq (U_B - 3V) / \leq 2V$
Output current	max. 100mA

Indicators

LED red	light path free
LED red flashing	no performance reserve

Mechanical data

Housing	diecast
Weight	130g
Optics	glass lens
Connection type	M12 connector 4-pin, plug 4-pin or cable (cross section 4x0.25mm 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)

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

Reflectors		Operating range
1	TK(S) 100x100	0.1 ... 4m
2	MTK(S) 50x50	0.1 ... 3.5m
3	TK(S) 30x50	0.1 ... 2.5m
4	TK(S) 20x40	0.1 ... 2m
5	Tape 2 100x100	0.1 ... 2.2m

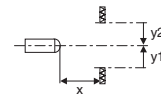
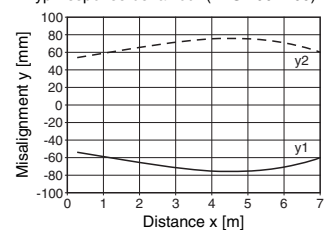
1	0.1		4	6
2	0.1		3.5	4.5
3	0.1	2.5	3	
4	0.1	2	2.5	
5	0.1	2.2	2.5	

Operating range [m]
 Typ. operating range limit [m]

TK ... = adhesive
 TKS ... = screw type
 Tape 2 = adhesive

Diagrams

Typ. response behaviour (TKS 100x100)



Order guide

Selection table		Order code →				
Equipment ↓		PRK 72/2 Part No. 500 00596	PRK 72/4 Part No. 500 00597	PRK 72/4,5000 Part No. 500 06537	PRK 72/4 L Part No. 500 17527	PRK 72/4 S Part No. 500 06538
Light source	red light	●	●	●	●	●
Connection	cable 2m	●	●			
	cable 5m			●		
	cable 6m					
	M12				●	
	standard plug 4-pin					●
Indicator LED	top of housing	●	●	●	●	●
Features	light/dark by reversing the polarity	●	●	●	●	●
	polarisation	●	●	●	●	●

Remarks