



## Specifications

### Optical data

Typ. operating range limit (TK(S) 100x100) <sup>1)</sup>	0.05 ... 6 m
Operating range <sup>2)</sup>	see tables
Light source	LED (modulated light)
Wavelength	660nm (visible red light)

### Timing

Switching frequency	500Hz
Response time	1 ms
Delay before start-up	≤ 100ms

### Electrical data

Operating voltage $U_B$	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of $U_B$
Bias current	≤ 20mA
Switching output/function	/66 ... 2 push-pull switching outputs <sup>3)</sup> pin 2: PNP dark switching, NPN light switching pin 4: PNP light switching, NPN dark switching
	/4 ... 1 PNP switching output; pin 4: light switching
	/4D 1 PNP switching output; pin 2: NC, pin 4: dark switching ≥ ( $U_B - 2V$ ) / ≤ 2V max. 100mA adjustable with multi-turn potentiometer for ".1-models"

Signal voltage high/low	
Output current	
Sensitivity	

### Indicators

LED yellow	light path free
LED yellow flashing	light path free, no performance reserve

### Mechanical data

Housing	plastic
Optics cover	plastic
Weight (plug/cable)	15g/55g
Connection type	M8 and M12 connector, 4-pin, or cable: 2000mm, 4x0.2mm <sup>2</sup>

### Environmental data

Ambient temp. (operation/storage)	-20 °C ... +55 °C / -40 °C ... +70 °C
Protective circuit <sup>4)</sup>	2, 3
VDE safety class <sup>5)</sup>	II, all-insulated
Protection class	IP 67, IP 69K <sup>6)</sup>
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

### Options

<b>Warning output autoControl</b>	PNP transistor, counting principle
Signal voltage high/low	≥ ( $U_B - 2V$ ) / ≤ 2V
Output current	max. 100mA
<b>Activation input activ</b>	≥ 8V / ≤ 2V
Transmitter active/not active	≤ 1 ms
Activation/disable delay	≤ 1 ms
Input resistance	10KΩ ± 10%

- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) The push-pull switching outputs must not be connected in parallel
- 4) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 5) Rating voltage 250VAC
- 6) IP 69K test acc. to DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives, acids and bases are not part of the test

## Order guide

	Designation	Part No.
<b>With M12 connector</b>	PRK 25/66-S12	500 39534
<b>With M8 connector, set with reflector <sup>1)</sup></b>	Set PRK 25/66-S8+TK	501 03352
<b>With M8 connector</b>	PRK 25/66-S8	500 39533
<b>With 150mm cable and M12 connector</b>	PRK 25/66,150-S12	500 40467
<b>With 2m cable</b>	PRK 25/66	500 39532
With sensitivity adjustment		
<b>With M12 connector</b>	PRK 25/66.1-S12	500 39537
<b>With M8 connector</b>	PRK 25/66.1-S8	500 39536
<b>With 2m cable</b>	PRK 25/66.1	500 39535
With activation input		
<b>With M12 connector</b>	PRK 25/4.8-S12	500 39539
With warning output		
<b>With M12 connector</b>	IPRK 25/4-S12	500 39538
For direct connection to AS-i I/O coupling modules		
<b>With M8 connector</b>	PRK 25/4D-S8	501 04197

1) with reflector TKS 20x40

## Tables

Reflectors	Operating range
1 TK(S) 100x100	0.05 ... 5.0m
2 MTK(S) 50x50	0.12 ... 3.3m
3 TK(S) 30x50	0.05 ... 2.0m
4 TK(S) 20x40	0.12 ... 1.6m
5 Tape 4 100x100	0.15 ... 1.8m
6 TK(S) 50x100	0.05 ... 4.0m
7 TK(S) 82	0.10 ... 3.0m
8 TK(S) 82.2	0.05 ... 4.5m

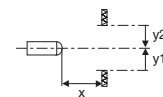
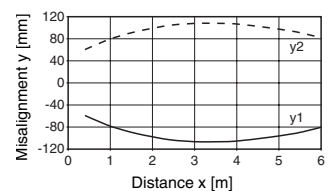
1	0.05				5		6
2	0.12		3.3				4
3	0.05		2		2.5		
4	0.12		1.6		1.8		
5	0.15				1.8		2.2
6	0.05					4	5
7	0.10				3		3.8
8	0.05					4.5	5.5

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

TK ... = adhesive  
 TKS ... = screw type  
 Tape 4 = adhesive

## Diagrams

Typ. response behaviour (TK 100x100)



## Remarks