

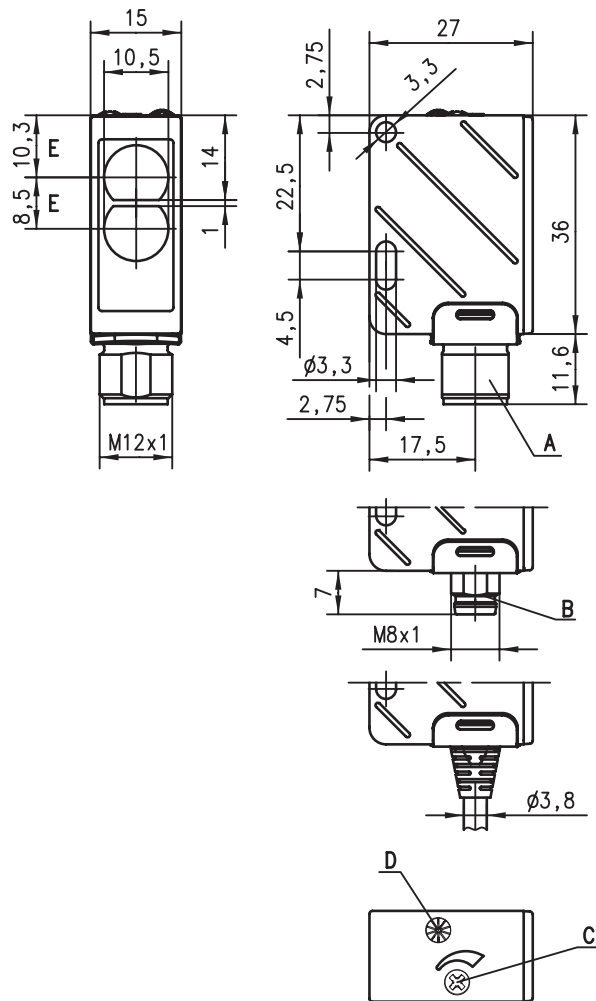


PRK 25

Retro-reflective photoelectric sensors



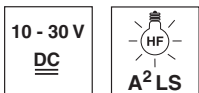
Dimensioned drawing



- A M12 connector
- B M8 connector
- C Sensitivity adjustment
- D Indicator diode
- E Optical axis

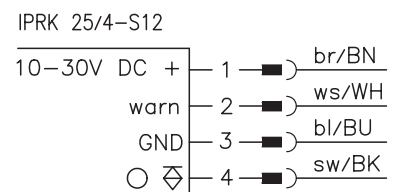
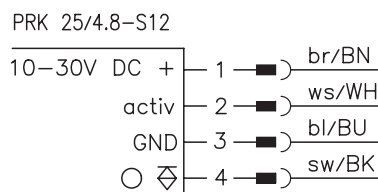
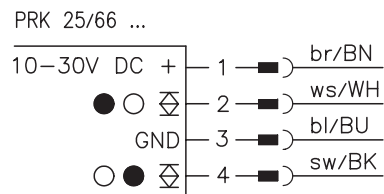


0.05 ... 6m



- Polarised retro-reflective photoelectric sensor using visible red light
- A²LS - active suppression of extraneous light
- Push-pull switching outputs
- Sensitivity adjustment
- Activation input
- Warning output for increased availability

Electrical connection



Accessories:

- (available separately)
- M12 connectors (KD ...)
 - Cable (KB ...)
 - Mounting systems
 - Reflectors
 - Reflective tapes

We reserve the right to make changes • 25_b02e.fm

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾	0.05 ... 6m
Operating range ²⁾	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 ³⁾ 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 $\geq (U_B - 2V) / \leq 2V$ 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 ²

Environmental data

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

Options

warning output autoControl	PNP transistor, counting principle
Signal voltage high/low	$\geq (U_B - 2V) / \leq 2V$
Output current	max. 100mA
Activation input activ	$\geq 8V / \leq 2V$
Transmitter active/not active	≤ 1ms
Activation/disable delay	
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

Order guide

	Designation	Part No.
with M12 connector	PRK 25/66-S12	500 39534
with M8 connector, set with reflector ¹⁾	Set PRK 25/66-S8+TK	501 03352
with M8 connector	PRK 25/66-S8	500 39533
with 150mm cable and M12 connector	PRK 25/66,150-S12	500 40467
with 2m cable	PRK 25/66	500 39532
with sensitivity adjustment		
with M12 connector	PRK 25/66.1-S12	500 39537
with M8 connector	PRK 25/66.1-S8	500 39536
with 2m cable	PRK 25/66.1	500 39535
with activation input		
with M12 connector	PRK 25/4.8-S12	500 39539
with warning output		
with M12 connector	IPRK 25/4-S12	500 39538

1) with reflector TKS 20x40

Tables

Reflector	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 2 100x100	0.15 ... 1.8m
6 TK(S) 50 x 100	0.05 ... 4.0m
7 TK(S) 82	0.10 ... 3.0m
8 TK(S) 82.2	0.05 ... 4.5m

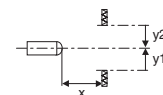
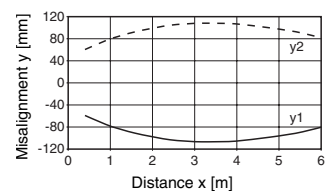
1	0.05			5	6
2	0.12	3.3		4	
3	0.05	2	2.5		
4	0.12	1.6	1.8		
5	0.15	1.8	2.2		
6	0.05			4	5
7	0.10	3	3.8		
8	0.05			4.5	5.5

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

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

Diagrams

Typ. response behaviour (TK 100x100)



Remarks