

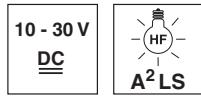
PRK 8



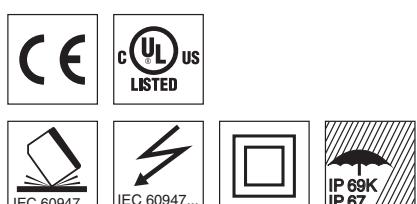
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0.05 ... 8m



- A²LS - active suppression of extraneous light
- Push-pull switching outputs
- M12 turning connector or cable connection
- Visible red light

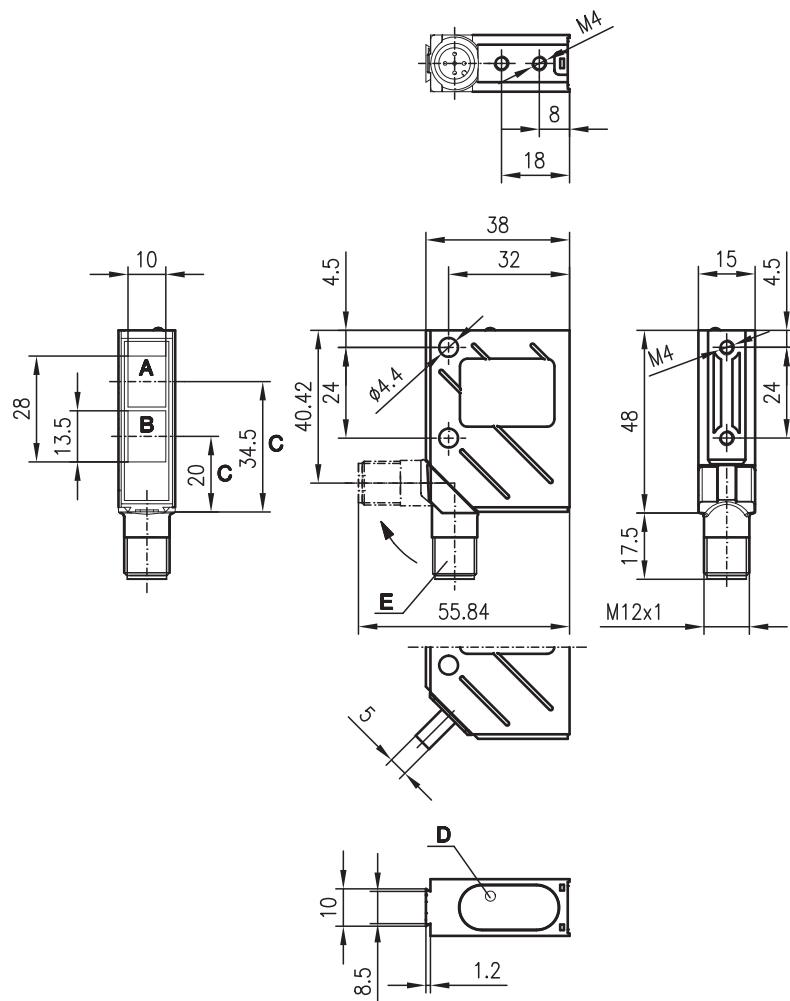


Accessories:

(available separately)

- M12 connectors (KD ...)
- Ready-made cables (K-D ...)
- Mounting systems
- Reflectors
- Reflective tapes
- Control guard

Dimensioned drawing



A Receiver
B Transmitter
C Optical axis
D LED yellow
E 90° turning connector

Electrical connection

PRK 8/44
PRK 8/44-S12

10-30VDC+	1	br/BN
● ○	2	ws/WH
GND	3	bl/BU
○ ●	4	sw/BK
NC	5	gr/GY

PRK 8/66
PRK 8/66-S12

10-30VDC+	1	br/BN
● ○	2	ws/WH
GND	3	bl/BU
○ ●	4	sw/BK
NC	5	gr/GY

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾	0.05 ... 8m
Operating range ²⁾	see tables
Light source	LED (modulated light)
Wavelength	660nm (visible red light)

Timing

Switching frequency	1500Hz
Response time	0.33ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B ³⁾	10 ... 30VDC
Residual ripple	≤ 15% of U_B
Bias current	≤ 35mA
Switching output/function	.../66 2 push-pull switching outputs ⁴⁾ pin 2: PNP dark switching, NPN light switching pin 4: PNP light switching, NPN dark switching .../44 2 PNP switching outputs pin 2: dark switching pin 4: light switching ≥ $(U_B - 2V) / 2V$ max. 100mA not adjustable

Signal voltage high/low
Output current
Sensitivity

Indicators

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

Mechanical data

Housing	metal
Optics cover	glass
Weight (plug/cable)	70g/140g
Connection type	M12 connector, 5-pin (turning), or cable: 2000mm, 5x0.25mm ²

Environmental data

Ambient temp. (operation/storage)	-40°C ... +60°C/-40°C ... +70°C
Protective circuit ⁵⁾	2, 3
VDE safety class ⁶⁾	II, all-insulated
Protection class ⁷⁾	IP 67, IP 69K ⁸⁾
Light source	exempt group (in acc. with EN 62471)
Standards applied	IEC 60947-5-2
Certifications	UL 508, C22.2 No.14-13 3) ⁹⁾

- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) For UL applications: for use in class 2 circuits according to NEC only
- 4) The push-pull switching outputs must not be connected in parallel
- 5) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 6) Rating voltage 250VAC
- 7) In stop position of the turning connector (turning connector locked)
- 8) 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
- 9) These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/CYJV7 or PVVA/PVVA7)

Order guide

	Designation	Part No.
With M12 connector	PRK 8/44-S12	50036360
With 2m cable	PRK 8/44	50036361
With M12 connector	PRK 8/66-S12	50036362
With 2m cable	PRK 8/66	50036363

Tables

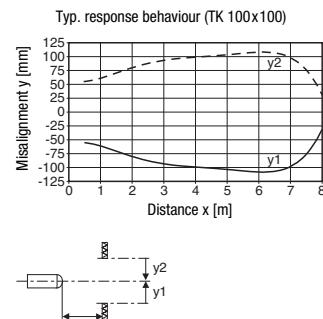
Reflectors	Operating range
TK(S)	100x100
MTK(S)	50x50
TK(S)	30x50
TK(S)	20x40
Tape 2	100x100

1	0.10	6.4	8
2	0.12	4.8	6
3	0.10	2.8	3.5
4	0.13	2.4	3
5	0.15	2.8	3.5

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

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

Diagrams



Remarks

Operate in accordance with intended use!
This product is not a safety sensor and is not intended as personnel protection.
The product may only be put into operation by competent persons.
Only use the product in accordance with the intended use.