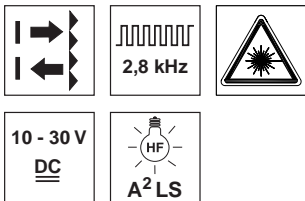


PRKL 8

Laser retro-reflective photoelectric sensor

en 07-2011/04 50115718



0 ... 22m
0 ... 14m

- Laser, red light, laser class 1 and 2
- The autocollimation principle used ensures that the device functions reliably over the entire range (0 ... max.)
- A²LS - Active Ambient Light Suppression
- Adjustable focus
- M12 turning connector or cable connection

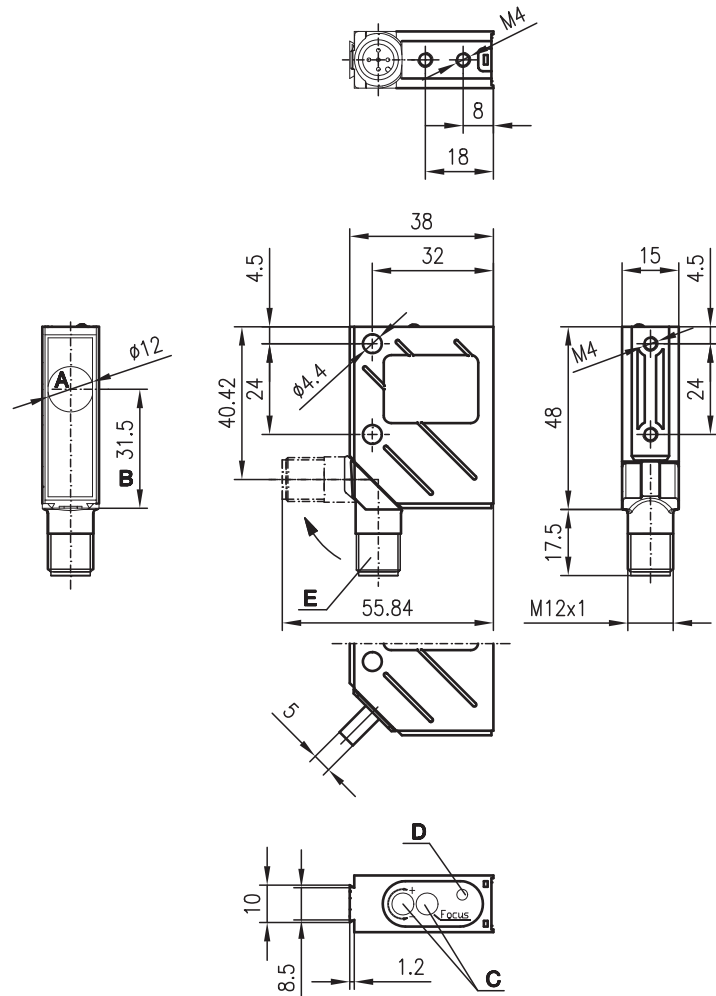


Accessories:

(available separately)

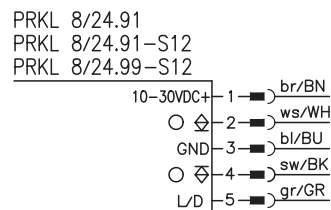
- M12 connectors (KD ...)
- Ready-made cables (K-D ...)
- Mounting systems
- Reflectors
- Reflective tapes
- Control guard

Dimensioned drawing



- A** Transmitter and receiver
- B** Optical axis
- C** Operational control
- D** Yellow LED
- E** Turning connector, 90°

Electrical connection



We reserve the right to make changes • DS_PRKL8_en.fm

Specifications

Optical data

Typ. operating range limit (MTK(S) 50x50) ¹⁾
 Operating range ²⁾
 Light spot diameter

Focus adjustment range
 Beam spread
 Light source
 Wavelength
 Max. output power
 Pulse duration

Timing

Switching frequency
 Response time
 Delay before start-up

Electrical data

Operating voltage U_B ³⁾
 Residual ripple
 Open-circuit current
 Switching output
 Function characteristics
 Signal voltage high/low
 Output current
 Sensitivity

Indicators

Yellow LED
 Yellow LED, flashing

Mechanical data

Housing
 Optics cover
 Weight (plug/cable)
 Connection type

Environmental data

Ambient temp. (operation/storage)
 Protective circuit ⁴⁾
 VDE safety class ⁵⁾
 Protection class ⁶⁾
 Laser class
 Standards applied
 Certifications

Options

L/D input

Dark/light switching
 L/D delay

- 1) Typ. operating range limit: max. attainable range without performance reserve, focus = 16m
- 2) Operating range: recommended range with performance reserve, focus = 16m
- 3) For UL applications: for use in class 2 circuits according to NEC only
- 4) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 5) Rating voltage 250VAC
- 6) In stop position of the turning connector (turning connector locked)
- 7) 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

● Approved purpose:

This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.

Order guide

	Designation	Part No.
Laser class 2	With M12 connector	PRKL 8/24.91-S12 50036364
	With 2m cable	PRKL 8/24.91 50036365
Laser class 1	With M12 connector	PRKL 8/24.99-S12 50115689

Tables

Laser class 2:

Reflectors	Operating range
1 TK(S) 100x100	0 ... 19.0m
2 MTK(S) 50x50	0 ... 17.0m
3 TK(S) 30x50	0 ... 7.0m
4 TK(S) 20x40	0 ... 7.0m
5 REF 6-S- 20x40	0 ... 8.0m
6 Tape 6 50x50	0 ... 8.0m

1	0	19	22
2	0	17	21
3	0	7	9
4	0	7	9
5	0	8	9
6	0	8	9

Laser class 1:

Reflectors	Operating range
1 TK(S) 100x100	0 ... 12.0m
2 MTK(S) 50x50	0 ... 10.0m
3 TK(S) 30x50	0 ... 4.0m
4 TK(S) 20x40	0 ... 4.0m
5 REF 6-S- 20x40	0 ... 5.0m
6 Tape 6 50x50	0 ... 5.0m

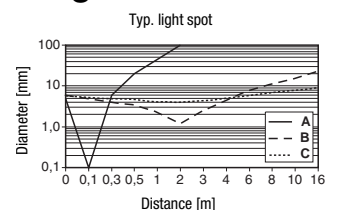
1	0	12	14
2	0	10	12
3	0	4	5
4	0	4	5
5	0	5	6
6	0	5	6

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

* for focus adjusted to 16m (right limit stop)

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

Diagrams



- A Focus adjusted to 0.144m (left limit stop)
- B Focus adjusted to 2m
- C Focus adjusted to 16m (right limit stop)

Remarks

- Use reflectors with small tripel structure – MTK(S), REF 6-S... or tape 6