PRK 95 Retro-reflective photoelectric sensors with polarisation filter

Part No. 501 11241

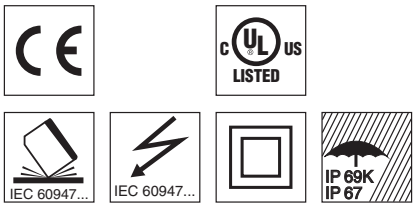




0 … 5m



- Polarised retro-reflective photoelectric sensor using visible red light
- The autocollimation principle used ensures that the device functions reliably over the entire range (0 … max.)
- Polarisation filter blocks unwanted reflections
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67/IP 69K for industrial application
- Mounting holes and M12 connector for fast installation

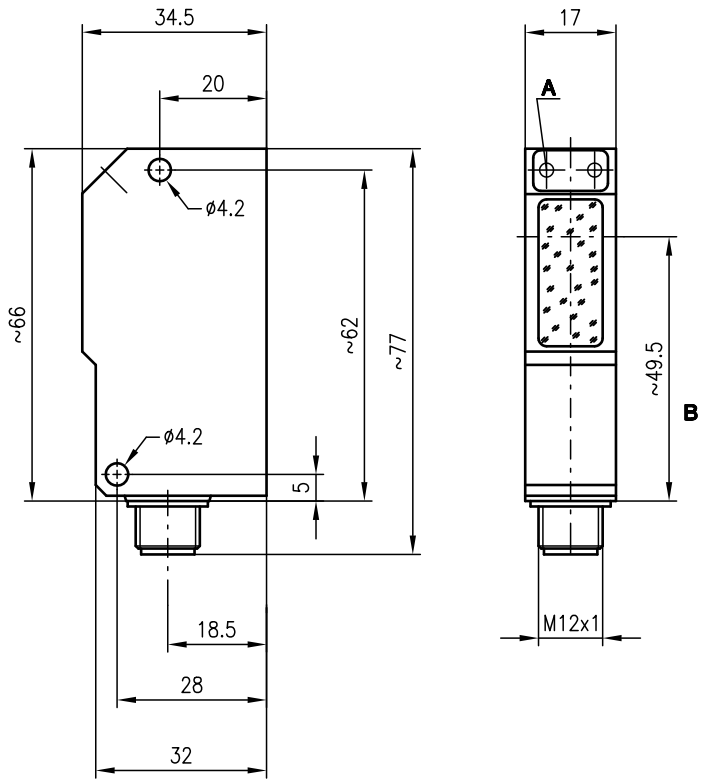


Accessories:

(available separately)

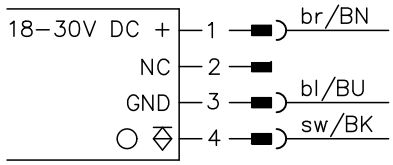
- Mounting systems (BT 95, UMS 1)
- M12 connectors (KD …)
- Reflectors
- Reflective tapes

Dimensioned drawing



A Switching indicator yellow
B Optical axis

Electrical connection



We reserve the right to make changes • 95_b01gb.fm

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) [1]	0 … 5m
Operating range [2]	see tables
Light beam characteristic	divergent
Light source	LED (modulated light)
Wavelength	660nm (visible red light, polarised)

Timing

Switching frequency	200Hz
Response time	2.5ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	18 … 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Bias current	≤ 30mA
Switching output	1 PNP transistor output
Function characteristics	light switching
Signal voltage high/low	≥ (U_B-2V)/≤ 2V
Output current	max. 100mA

Indicators

LED yellow	light path free

Mechanical data

Housing	diecast zinc
Optics cover	glass
Weight	90g
Connection type	M12 connector, stainless steel, 4-pin

Environmental data

Ambient temp. (operation/storage)	-20°C … 60°C/-30°C … +70°C
Protective circuit [3]	2, 3
VDE safety class [4]	II, all-insulated
Protection class	IP 67, IP 69K [5]
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

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 for all outputs
4) Rating voltage 250VAC
5) 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

Tables

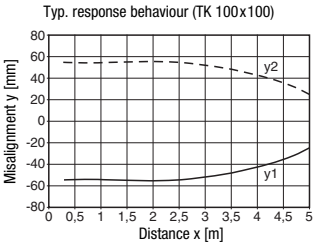
	Reflectors		Operating range
1	TK(S)	100x100	0 … 3.4m
2	MTK(S)	50x50	0 … 2.7m
3	TK(S)	30x50	0 … 1.5m
4	TK(S)	20x40	0 … 1.4m
5	Tape 2	100x100	0 … 0.8m

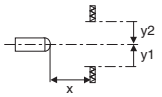
1	0	3.4	5
2	0	2.7	4.5
3	0	1.5	2.5
4	0	1.4	2.4
5	0	0.8	1.2

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

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

Diagrams





Order guide

Designation	Part No.
PRK 95/4 L.2	500 27993

Remarks

- **Approved purpose**:
  The retro-reflective photoelectric sensors are optical electronic sensors for optical, contactless detection of objects.