

**(V)PRK 95****Retro-reflective photoelectric sensors with polarisation filter**

0.15 ... 9m
1.0 ... 12m

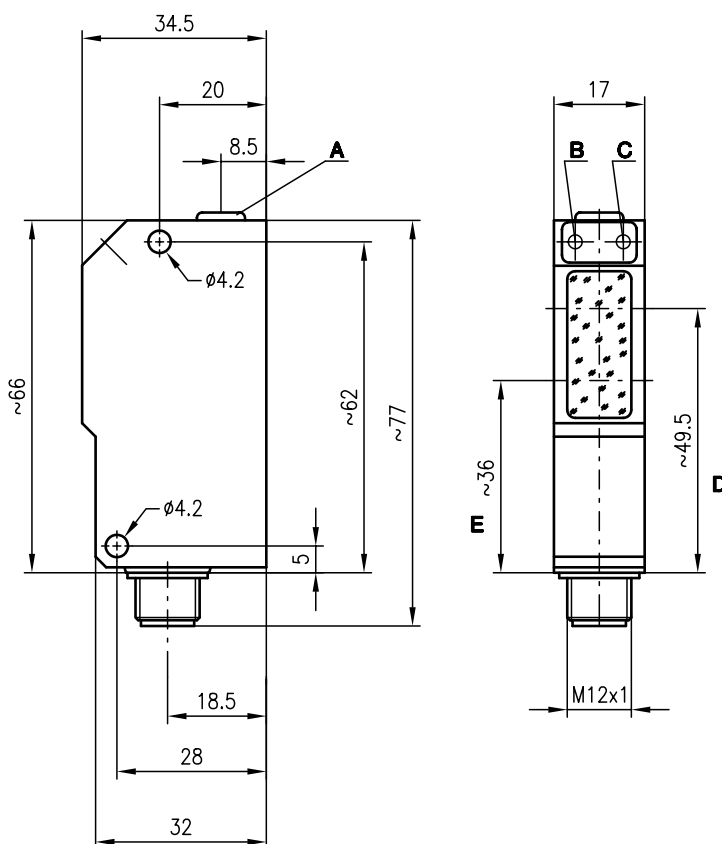


- Polarised retro-reflective photoelectric sensor using visible red light
- High switching frequency for detection of fast events
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67/IP 69K for industrial application
- Polarisation filter blocks unwanted reflections
- Complementary switching outputs for light/dark switching or as a control function

**Accessories:**

(available separately)

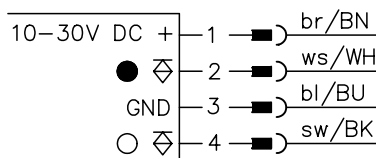
- Mounting systems (BT 95, UMS 1)
- M12 connectors (KD ...)
- Reflectors
- Reflective tapes

Dimensioned drawing

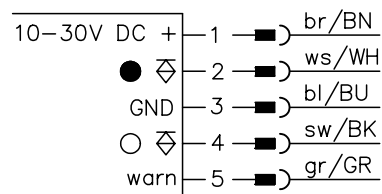
- A** sensitivity adjustment (for IPRK 95/44 L.5)
B Switching indicator yellow
C Operation indicator green
D Optical axis receiver
E Optical axis transmitter

Electrical connection

PRK 95/44 L
VPRK 95/44 L



IPRK 95/44 L.5



Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾
Operating range ²⁾
Light beam characteristic
Light source
Wavelength

(I)PRK 95...

0.15 ... 9m
see tables
divergent
LED (modulated light)
660nm (visible red light, polarised)

VPRK 95...

1.0 ... 12m
see tables

Timing

Switching frequency
Response time
Delay before start-up

1000Hz
0.5ms
≤ 100ms

Electrical data

Operating voltage U_B
Residual ripple
Bias current
Switching output
Function characteristics
Signal voltage high/low
Output current
Sensitivity

10 ... 30VDC (incl. residual ripple)
≤ 15% of U_B
≤ 35mA
2 PNP transistor outputs, complementary
light/dark switching
≥ ($U_B - 2V$) / ≤ 2V
max. 100mA
adjustable with multiturn potentiometer

Indicators

LED green
LED yellow
LED yellow flashing

ready
light path free
light path free, no performance reserve

Mechanical data

Housing
Optics cover
Weight
Connection type

diecast zinc
glass
90g
M12 connector, stainless steel

Environmental data

Ambient temp. (operation/storage) ³⁾
Protective circuit ⁴⁾
VDE safety class ⁵⁾
Protection class
LED class
Standards applied
Warning output autoControl warn
Signal voltage high/low
Output current

-25°C (-30°C) ... +55°C/-40°C ... +55°C
2, 3
II, all-insulated
IP 67, IP 69K ⁶⁾
1 (acc. to EN 60825-1)
IEC 60947-5-2
PNP transistor, counting principle
≥ ($U_B - 2V$) / ≤ 2V
max. 100mA

- 1) Operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) -30°C with operating voltage continuously applied
- 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

With polarisation filter

With polarisation filter and long range

With polarisation filter, sensitivity
adjustment and warning output

Designation

PRK 95/44 L
VPRK 95/44 L
IPRK 95/44 L.5

Part No.

500 34511
500 34608
500 34512

Tables

(I)PRK 95...

Reflectors	Operating range
1 TK(S) 100x100	0.2 ... 6.0m
2 MTK(S) 50x50	0.2 ... 4.2m
3 TK(S) 30x50	0.2 ... 2.5m
4 TK(S) 20x40	0.2 ... 1.9m
5 Tape 2 100x100	0.2 ... 2.4m

1 0.2	6	9
2 0.2	4.2	7.1
3 0.2	2.5	4.1
4 0.2	1.9	3.2
5 0.2	2.4	4.0

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

VPRK 95...

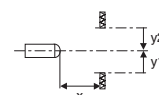
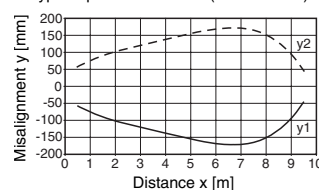
Reflectors	Operating range
TK(S) 100x100	1.0 ... 10.0m
TK(S) 50x50	1.0 ... 6.0m
TK(S) 20x40	1.0 ... 4.0m
Tape 2 100x100	1.0 ... 4.0m

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

Diagrams

(I)PRK 95...

Typ. response behaviour (TK 100x100)



Remarks