

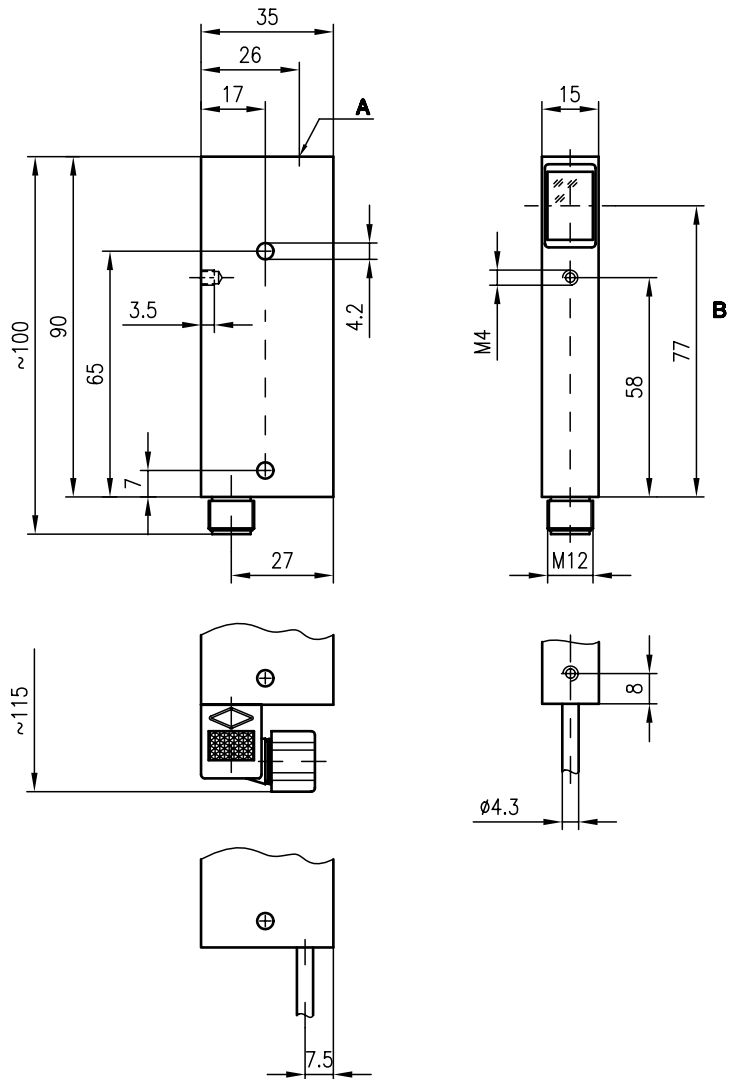


RK 72

Retro-reflective photoelectric sensors



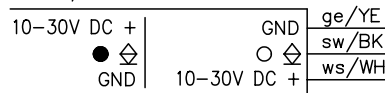
Dimensioned drawing



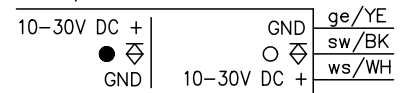
A Indicator diode
B Optical axis

Electrical connection

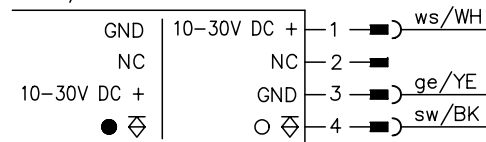
RK 72/2



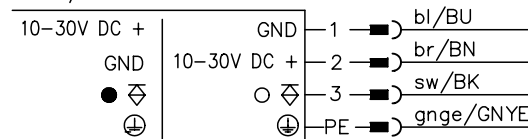
RK 72/4



RK 72/4 L



RK 72/4 S



0 ... 6m



- Slim construction with glass lens and robust metal housing for protection against environmental influences
- LEDs as switching state indicators
- Output is short-circuit proof and polarity reversal protected, thus guaranteeing riskless commissioning
- Mounting holes and M4 threads for fast front side mounting
- Connection via M12 connector, plug or cable



Accessories:

(available separately)

- Mounting systems (BT 92)
- M12 connectors (KD ...)
- Ready-made cables (KB ...)

We reserve the right to make changes * 72_b01e.fm

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾ 0 ... 6m
 Operating range ²⁾ see tables
 Light source LED (modulated light)
 Wavelength 880nm (infrared)

Timing

Switching frequency 100Hz
 Response time 5ms

Electrical data

Operating voltage U_B 12 ... 30VDC (incl. residual ripple)
 Residual ripple $\leq 15\%$ of U_B
 Bias current ≤ 50 mA
 Switching output PNP or NPN transistor output
 Function characteristics light/dark switching by reversing the polarity
 Signal voltage high/low $\geq (U_B - 3V) / \leq 2V$
 Output current max. 100mA

Indicators

LED red light path free
 LED red flashing no performance reserve

Mechanical data

Housing diecast
 Weight 150g
 Optics glass lens
 Connection type M12 connector 4-pin, plug 4-pin or cable (cross section 4x0.25mm²)

Environmental data

Ambient temp. (operation/storage) -20°C ... +60°C / -30°C ... +70°C
 Protective circuit ³⁾ 2, 3
 Protection class IP 67
 LED class 1 (acc. to EN 60825-1)

- 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

Tables

| Reflectors | Operating range |
|------------------|-----------------|
| 1 TK(S) 100x100 | 0.1 ... 4m |
| 2 MTK(S) 50x50 | 0.1 ... 3.5m |
| 3 TK(S) 30x50 | 0.1 ... 2.5m |
| 4 TK(S) 20x40 | 0.1 ... 2m |
| 5 Tape 2 100x100 | 0.1 ... 3m |

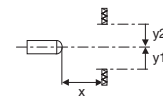
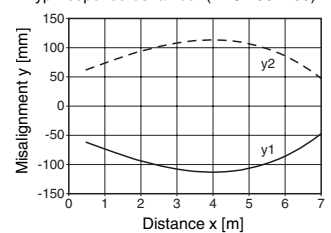
| | | |
|-------|-----|-----|
| 1 0.1 | 4 | 6 |
| 2 0.1 | 3.5 | 5 |
| 3 0.1 | 2.5 | 3 |
| 4 0.1 | 2 | 2.5 |
| 5 0.1 | 3 | 3.5 |

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

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

Diagrams

Typ. response behaviour (TKS 100x100)



Order guide

| Selection table | | Order code → | | | | |
|-----------------|--------------------------------------|-------------------------------|-------------------------------|------------------------------------|---------------------------------|---------------------------------|
| Equipment ↓ | | RK 72/2 Part No. 500 00396 | RK 72/4 Part No. 500 00413 | RK 72/4,5000 Part No. 500 00415 | RK 72/4 L Part No. 500 17372 | RK 72/4 S Part No. 500 00419 |
| Light source | infrared | ● | ● | ● | ● | ● |
| Connection | cable 2m | ● | ● | | | |
| | cable 5m | | | ● | | |
| | cable 6m | | | | | |
| | M12 | | | | ● | |
| | standard plug 4-pin | | | | | ● |
| Indicator LED | top of housing | ● | ● | ● | ● | ● |
| Features | light/dark by reversing the polarity | ● | ● | ● | ● | ● |

Remarks