

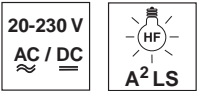


PRK 96

Retro-reflective photoelectric sensors with polarisation filter

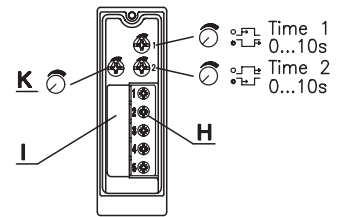
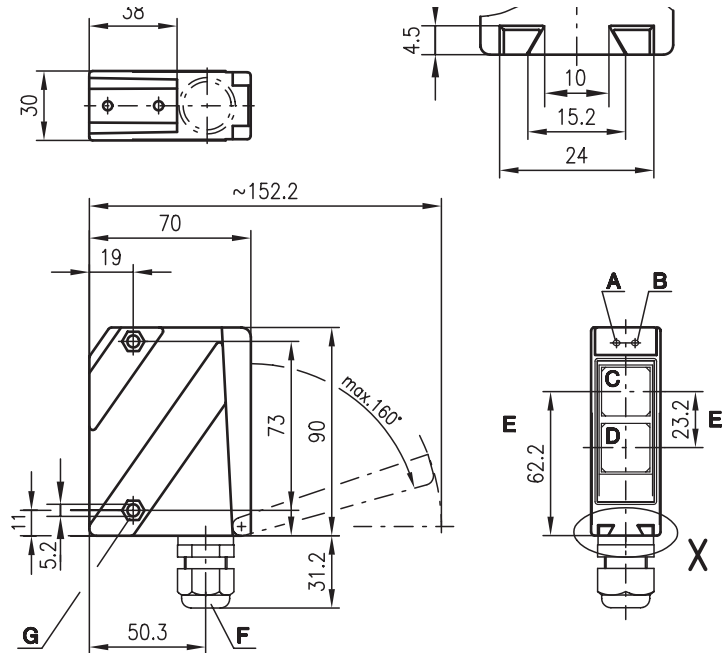


10m
24m



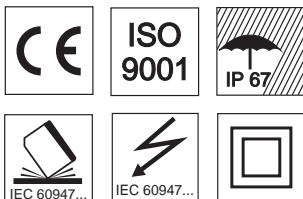
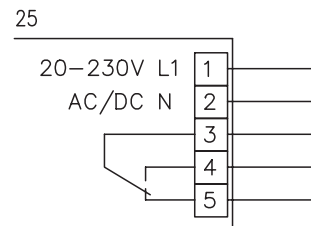
- Polarised retro-reflective photoelectric sensor with large operating range in visible red light
- Robust metal housing with glass cover or plastic housing, protection class IP 67 for industrial application
- All-mains design 20 ... 230VAC/DC with relay output
- Relay with change-over contact, sensitivity adjustment, delay before start-up and various options for optimal adaptation to the application
- Connection via comfortable terminal compartment up to 1.5mm²

Dimensioned drawing



- A Indicator diode green
- B Indicator diode yellow
- C Receiver
- D Transmitter
- E Optical axis
- F Screwed cable gland M16x1.5 for Ø 5 ... 10mm
- G Countersinking for SK nut M5, 4.2 deep
- H Connection terminals
- I Cable entry
- K Sensitivity adjustment

Electrical connection



Accessories:

(available separately)

- Mounting systems (BT 96, BT 96.1, UMS 96, BT 450.1-96)
- Spark extinction
- Reflectors
- Reflective tapes

We reserve the right to make changes • 96_b15e.fm



Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾ 10m/24m
 Operating range ²⁾ see table
 Light spot diameter approx. 130mm at 6m
 Light source LED (modulated light)
 Wavelength 660nm (visible red light, polarised)

Timing

Switching frequency 20Hz
 Response time 25ms
 Delay before start-up ≤ 200ms

Electrical data

Operating voltage U_B 20 ... 230VAC, 50/60Hz
 20 ... 230VDC ± 10%
 Power consumption ≤ 1.5VA
 Switching output ³⁾ relay, 1 change-over contact
 Function characteristics break-contact/make-contact
 Switching voltage, relay 250VAC/DC
 Switching current, relay 250VAC, 3A/30VDC, 3A
 Switching power, relay 750VA, cosφ=1
 Sensitivity adjustable

Indicators

LED green ready
 LED yellow light path free
 LED yellow flashing light path free, no performance reserve

Mechanical data

Housing polycarbonate
 Optics cover plastic
 Weight 150g
 Connection type terminals

Environmental data

Ambient temp. (operation/storage) -20°C ... +55°C/-40°C ... +55°C
 Protective circuit ⁴⁾ 1, 4
 VDE safety class ⁵⁾ II, all-insulated
 Protection class IP 67
 LED class 1 (acc. to EN 60825-1:1994 +A1:2002 +A2:2001)
 Standards applied IEC 60947-5-2

Options

Switching delay (slow oper./release) 0 ... 10s (separately adjustable)

- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) Suitable spark extinction must be provided with inductive or capacitive loads
- 4) 1=transient protection, 4=interference blanking
- 5) Rating voltage 250VAC

Order guide

Selection table		Order code →	PRK 96K/R-1420-25 Part No. 500 25167	PRK 96K/R-1430-25 Part No. 500 25168	PRK 96K/R-3428-25 Part No. 500 35351				
Equipment ↓									
	Housing	metal							
		plastic	●	●	●				
Light source		red light (8m)	●	●					
		red light (15m)							
		red light (20m)			●				
Connection		terminals	●	●	●				
		M12 connector							
Features		optics heating/low temp.							
		switching delay		●					
		UL homologation	●	●					

Tables

10m models

Reflectors	Operating range
1 TK(S) 100x100	0.3 ... 8m
2 MTK(S) 50x50	0.3 ... 7m
3 TK(S) 30x50	0.3 ... 4.5m
4 TK(S) 20x40	0.3 ... 3m
5 TK(S) 82	0.3 ... 6m
6 Tape 2 100x100	0.3 ... 4m

1	0.1	8	10
2	0.1	7	8.5
3	0.1	4.5	5
4	0.1	3	4
5	0.1	6	7.5
6	0.1	4	5.5

24m models

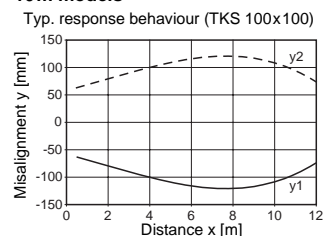
Reflectors	Operating range
1 TK(S) 100x100	0.3 ... 20m
2 MTK(S) 50x50	0.3 ... 15m
3 TK(S) 30x50	0.3 ... 10m
4 TK(S) 20x40	0.3 ... 8m
5 TK(S) 82	0.3 ... 15m
6 Tape 2 100x100	0.3 ... 10m

1	0.1	20	24
2	0.1	15	16
3	0.1	10	12
4	0.1	8	9
5	0.1	15	17
6	0.1	10	12

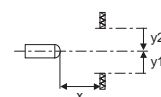
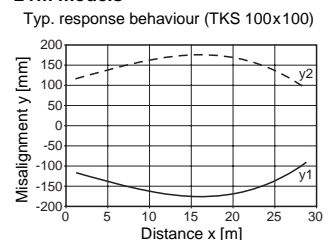
- Operating range [m]
- Typ. operating range limit [m]

Diagrams

10m models



24m models



Remarks