

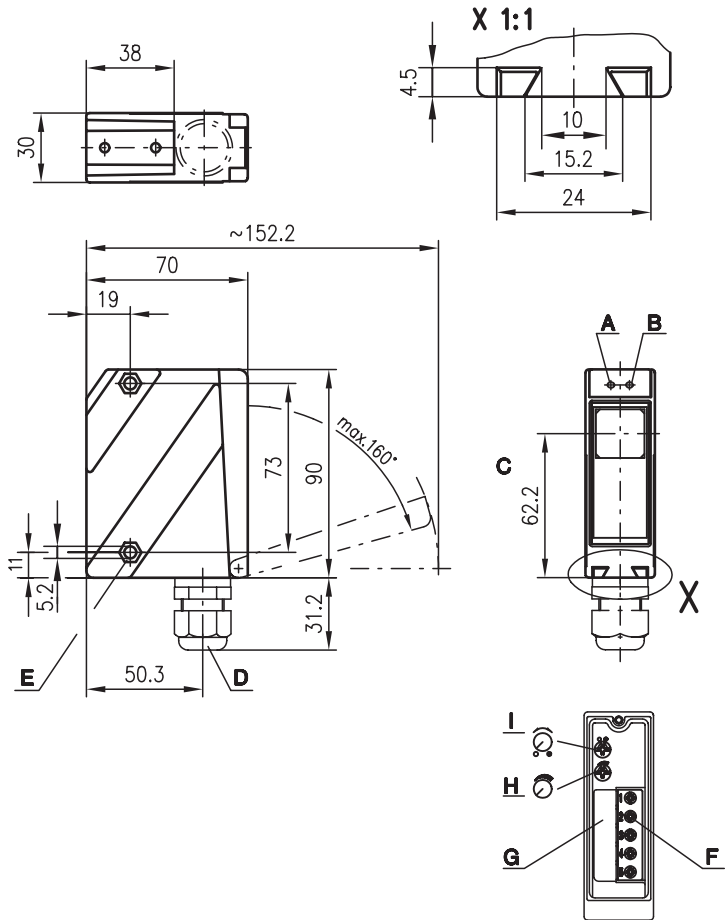


PRK 96

Retro-reflective photoelectric sensors with polarisation filter

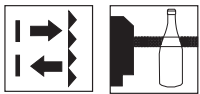


Dimensioned drawing



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

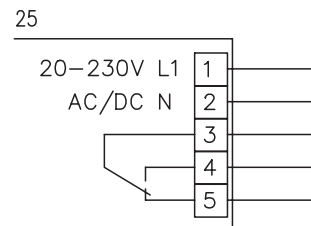
0 ... 8.5m



20-230 V
AC / DC

- Retro-reflective photoelectric sensor for safe detection of transparent media (e.g. clear glass, PE, foil)
- User controlled sensitivity adjustment with high resolution
- The autocollimation principle used ensures that the device functions reliably over the entire range (0 ... max.)
- All-mains design 20 ... 230VAC/DC with relay output
- Connection via comfortable terminal compartment up to 1.5mm²

Electrical connection



Accessories:

(available separately)

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

We reserve the right to make changes • 96_b09e.fm



Specifications

Optical data

Typ. operating range limit (TK(S) 50x50) ¹⁾ 0 ... 8.5m
 Operating range ²⁾ see tables
 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 light/dark switching (reversible)
 Switching voltage, relay 250 VAC/DC
 Switching current, relay 250 VAC, 3A/30VDC, 3A
 Switching power, relay 750 VA, cosφ=1
 Sensitivity adjustable with 10-turn potentiometer

Indicators

LED green ready
 LED yellow

Mechanical data

Housing diecast zinc
 Optics cover glass
 Weight 380g
 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, IP 69K ⁶⁾
 LED class 1 (acc. to EN 60825-1)
 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
- 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

Designation	Part No.
PRK 96M/R-1858-25	500 29881

Tables

Reflectors	Operating range
1 TK(S) 100x100	0 ... 7m
2 MTK(S) 50x50	0 ... 6m
3 TK(S) 30x50	0 ... 4m
4 TK(S) 20x40	0 ... 3.5m
5 TK(S) 82	0 ... 5m
6 Tape 2 100x100	0 ... 3m

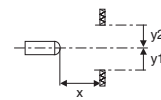
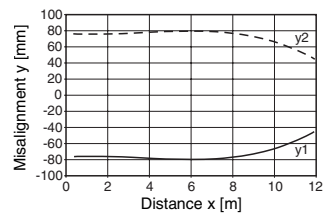
1	0.1		7	8.5
2	0.1		6	7.5
3	0.1	4	5	
4	0.1	3.5	4	
5	0.1	5	6	
6	0.1	3	3.5	

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

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

Diagrams

Typ. response behaviour (TKS 100x100)



Remarks

Objects	Adjustment (indicator LED yellow)
Clear glass, PE, foil	Range 1 Operating pt. 1
Coloured glass	Range 2 Operating pt. 2
Other	Range 3