

PRK 96

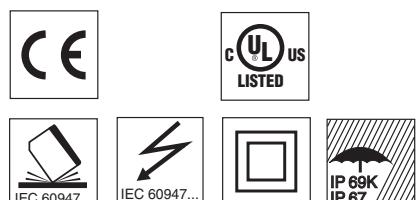
Retro-reflective photoelectric sensors with polarisation filter



0 ... 1.85m

20-230 V
AC / DC
≈

- Retro-reflective photoelectric sensor for safe detection of transparent media (e.g. clear glass, PE, foil)
- Reliable detection of the smallest gaps between transparent objects
- 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

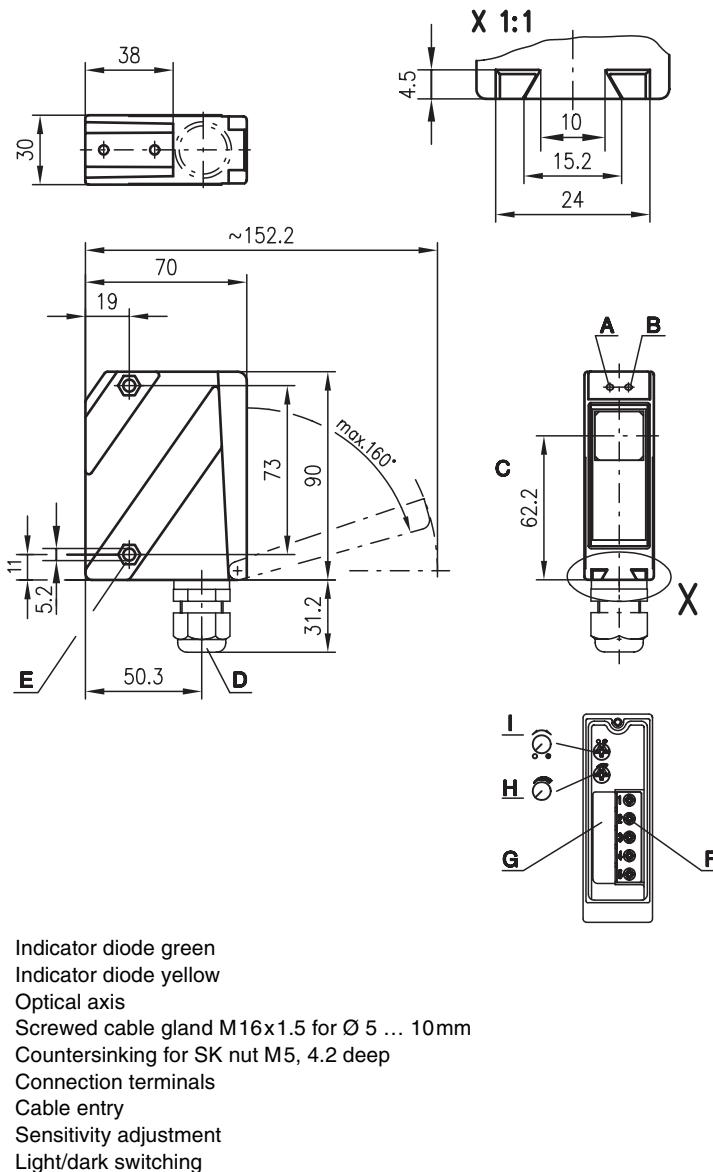


Accessories:

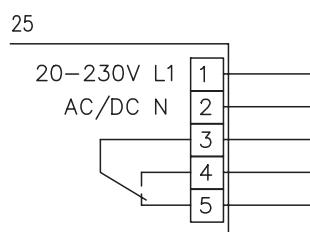
(available separately)

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

Dimensioned drawing



Electrical connection



Specifications

Optical data

Typ. operating range limit (TK(S) 50x50) ¹⁾	0 ... 1.85m
Operating range ²⁾	0 ... 1.5m
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
Power consumption	20 ... 230VDC ±10%
Switching output ³⁾	≤ 1.5VA
Function characteristics	relay, 1 change-over contact
Switching voltage, relay	light/dark switching (reversible)
Switching current, relay	250VAC/DC
Switching power, relay	250VAC, 3A/30VDC, 3A
Sensitivity	750VA, cos φ =1 adjustable with 10-turn potentiometer

Indicators

LED green	ready
LED yellow	clear glass - adjustment range 1 transition from quickly flashing to slowly flashing
	coloured glass - adjustment range 2 transition from cont. illuminated to quickly flashing
	other - adjustment range 3 continuously illuminated

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)
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- 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

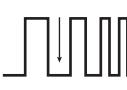
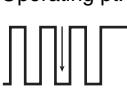
Designation	Part No.
PRK 96M/R-1850-25	500 80470

Tables

Diagrams

Remarks

- Integrated slit diaphragm: 3.7x20mm

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