

RK 96

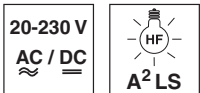
Retro-reflective photoelectric sensors

Dimensioned drawing

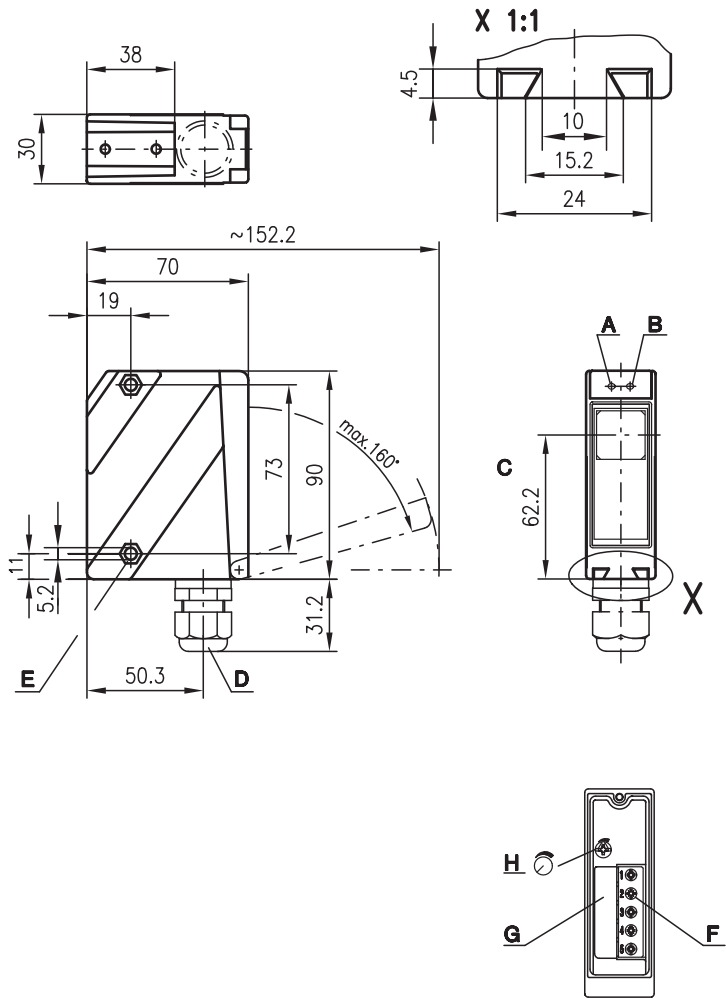
en 07-2012/09 50120811



18m

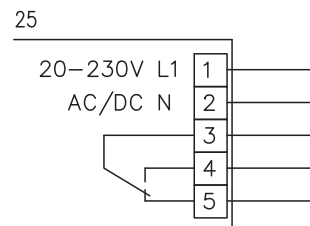


- Retro-reflective photoelectric sensor with a large operating range
- Robust plastic housing, protection class IP 67 for industrial application
- All-mains design 20 ... 230VAC/DC with relay output
- Relay with change-over contact, sensitivity adjustment and delay before start-up for optimal adaptation to the application
- Connection via comfortable terminal compartment up to 1.5mm²



- A** Green indicator diode
- B** Yellow indicator diode
- 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

Electrical connection



We reserve the right to make changes • DS_RK96KR25_en_50120811.fm



Accessories:

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

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾ 18 m
 Operating range ²⁾ see tables
 Light source LED (modulated light)
 Wavelength 880nm (infrared)

Timing

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

Electrical data

Operating voltage U_B 20 ... 230VAC, 50/60Hz
 20 ... 230VDC
 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, $\cos\phi=1$
 Sensitivity adjustable

Indicators

Green LED ready
 Yellow LED light path free
 Flashing yellow LED light path free, no performance reserve

Mechanical data

Housing polycarbonate
 Optics cover plastic
 Weight 150g
 Connection type terminals

Environmental data

Ambient temp. (operation/storage) -30°C ... +55°C/-40°C ... +55°C
 Protective circuit ⁴⁾ 1, 4
 VDE safety class ⁵⁾ II, all-insulated
 Protection class IP 67
 Light source exempt group (in acc. with EN 62471)
 Standards applied IEC 60947-5-2

- 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

Tables

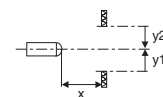
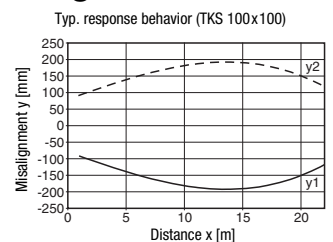
Reflectors			Operating range
1	TK(S)	100x100	0.3 ... 15m
2	MTK(S)	50x50	0.3 ... 11m
3	TK(S)	30x50	0.3 ... 6m
4	TK(S)	20x40	0.3 ... 5m
5	TK(S)	82	0.3 ... 11m

1	0.1		15	18
2	0.1		11	12
3	0.1	6	7.1	
4	0.1	5	6	
5	0.1		11	12

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

TK ... = adhesive
 TKS ... = screw type

Diagrams



Order guide

Designation	Part no.
RK 96K/R-1560-25	50080484

Remarks

- **Approved purpose:**
 This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.