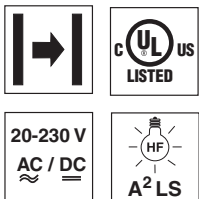




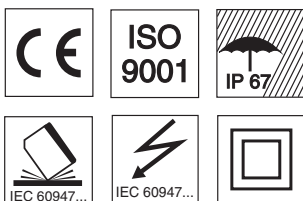
LS 96

Throughbeam photoelectric sensors



65m
150m

- Throughbeam photoelectric sensors with high performance reserve in infrared light
- Robust metal housing with glass cover or plastic housing, protection class IP 67 for industrial application
- All-mains design 20 ... 230VAC/DC
- 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
- Version with additional switching delay

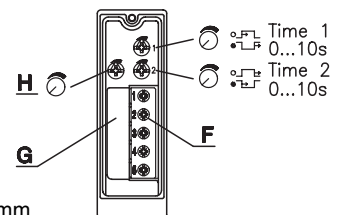
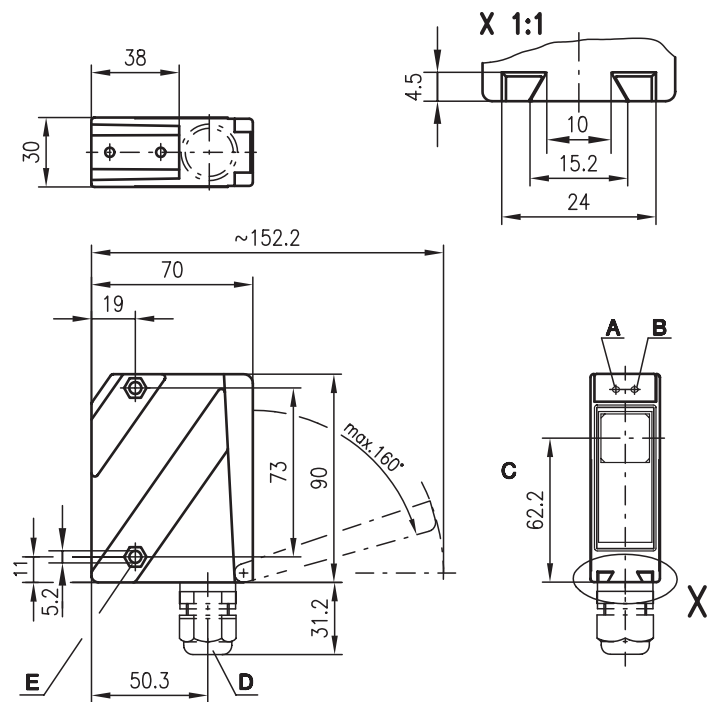


Accessories:

(available separately)

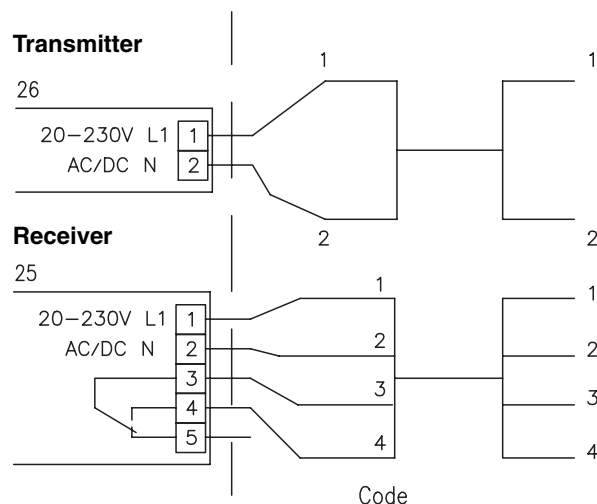
- Mounting systems (BT 96, BT 96.1, UMS 96, BT 450.1-96)
- Spark extinction
- Alignment aid ARH 96

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

Electrical connection (example)



We reserve the right to make changes • 96_a05e.fm

Specifications

Optical data

Typ. operating range limit ¹⁾
 Operating range ²⁾
 Light source
 Wavelength

65m
 0 ... 65m
 0 ... 50m
 LED (modulated light)
 880nm (infrared)

150m
 0 ... 150m
 0 ... 120m

Timing

Switching frequency
 Response time
 Delay before start-up

20Hz
 25ms
 ≤ 200ms

Electrical data

Operating voltage U_B

20 ... 230VAC, 50/60Hz
 20 ... 230VDC

Power consumption
 Switching output ³⁾
 Function characteristics
 Switching voltage, relay
 Switching current, relay
 Bias current
 Sensitivity

≤ 1.5VA
 relay, 1 change-over contact
 break-contact/make-contact
 250 VAC/DC
 250 VAC, 3A/30V, 3A
 750 VA, $\cos\phi=1$
 adjustable

Indicators

LED green
 LED yellow
 LED yellow flashing

ready
 light path free
 light path free, no performance reserve

Mechanical data

Housing
 Optics cover
 Weight
 Connection type

Metal housing

diecast zinc
 glass
 380g
 terminals

Plastic housing

polycarbonate
 plastic
 150g
 terminals

Environmental data

Ambient temp. (operation/storage)
 Protective circuit ⁴⁾
 VDE safety class ⁵⁾
 Protection class
 Standards applied

-20°C ... +60°C/-40°C ... +70°C
 1, 2, 3
 II, all-insulated
 IP 67
 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, 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 5) Rating voltage 250 VAC

Tables

65m models

0	50	65
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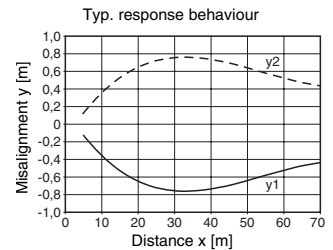
150m models

0	120	150
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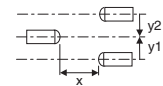
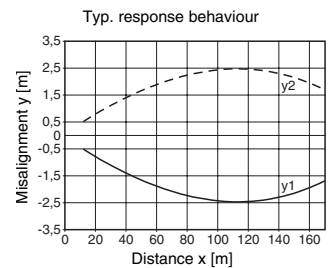
Operating range [m]
 Typ. operating range limit [m]

Diagrams

65m models



150m models



Remarks

- LS 96K/R-131P-2
 P = Reduction M16

Order guide

Selection table		Order code →						
Equipment ↓		LS 96K/R-1310-2 Part No. 500 25253 (Tr) Part No. 500 25257 (Re)	LS 96K/R-1320-2 Part No. 500 25253 (Tr) Part No. 500 25256 (Re)	LS 96M/R-1310-2 Part No. 500 80081 (Tr) Part No. 500 80080 (Re)	LS 96M/R-3310-2 Part No. 500 80081 (Tr) Part No. 500 31651 (Re)	LS 96K/R-131P-2 Part No. 500 30405 (Tr) Part No. 500 30406 (Re)		
Housing	metal			●	●			
	plastic	●	●			●		
Light source	infrared light (50m)	●	●	●		●		
	infrared light (120m)				●			
Connection	terminals	●	●	●	●	●		
Features	switching delay		●					

LS = Pair consisting of
 LSS = Transmitter
 LSE = Receiver

LS 96K/R-1310-2
 LSS 96K-1350-26
 LSE 96K/R-1310-25

LS 96K/R-1320-2
 LSS 96K-1350-26
 LSE 96K/R-1320-25

LS 96M/R-1310-2
 LSS 96M-1350-26
 LSE 96M/R-1310-25

LS 96M/R-3310-2
 LSS 96M-1350-26
 LSE 96M/R-3310-25

LS 96K/R-131P-2
 LSS 96K-135P-26
 LSE 96K/R-131P-25