

LS 96

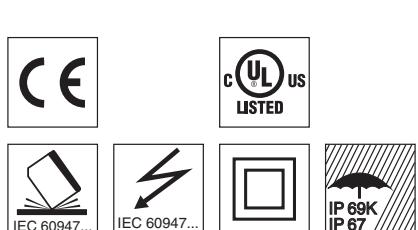
en 2019/05/21 50142048



39m

20-230 V
AC / DC

- Throughbeam photoelectric sensors with high function reserve in red light
- Wide-angle version for simplifying alignment
- Robust metal housing with glass cover, degree of protection IP 67/IP 69K 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

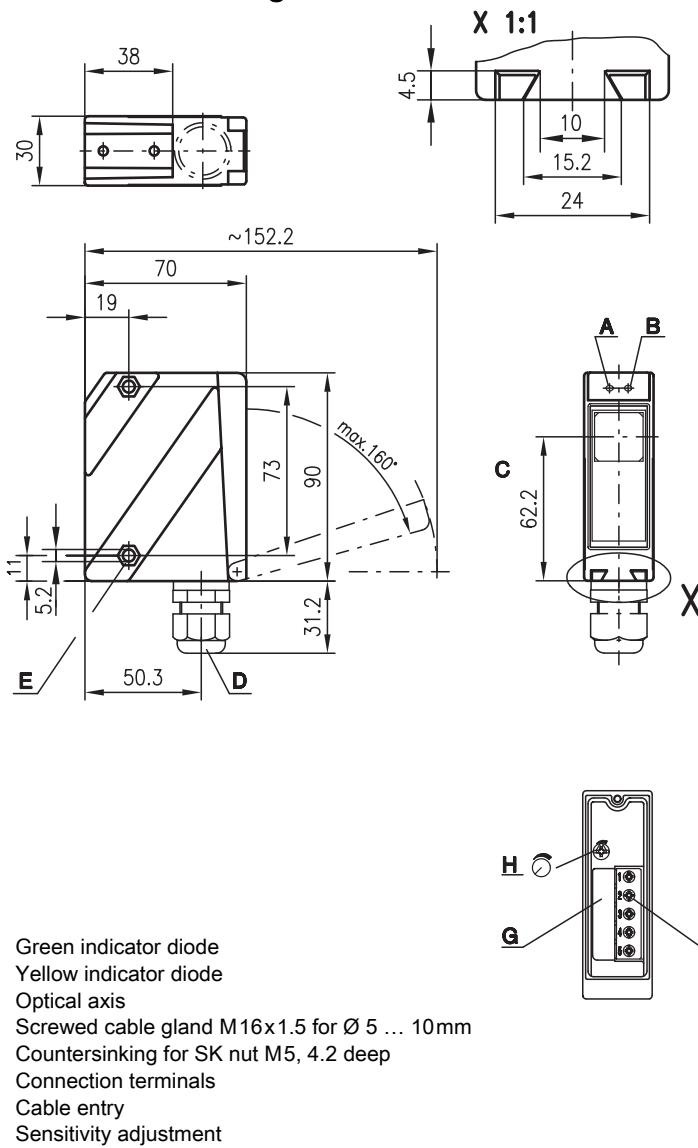


Accessories:

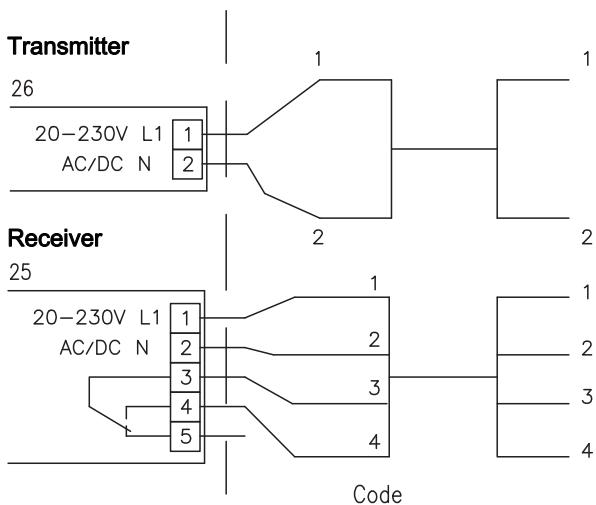
(available separately)

- Mounting systems (BT 96, BT 96.1, BT 96.4, UMS 96, BT 450.1-96)
- Spark extinction
- Alignment aid ARH 96

Dimensioned drawing



Electrical connection (example)



Technical data

Optical data

Typ. operating range limit 1)	0 ... 39m
Operating range 2)	0 ... 30m
Light source	LED (modulated light)
Wavelength	660nm (red light)

Time behavior

Switching frequency	20Hz
Response time	25ms
Readiness delay	≤ 200ms

Electrical data

Operating voltage U_B	20 ... 230VAC, 50/60Hz
Power consumption	20 ... 230VDC
Switching output 3)	≤ 1.5VA
Function	Relay, 1 change-over contact
Switching voltage, relay	NC contact/NO contact
Switching current, relay	250VAC/DC
Open-circuit current	250VAC, 3A/30V, 3A
Sensitivity	750VA, $\cos\phi=1$
	Adjustable

Indicators

Green LED	Ready
Yellow LED	Light path free
Yellow LED, flashing	Light path free, no function reserve

Mechanical data

Housing	Diecast zinc
Optics cover	Glass
Weight	380g
Connection type	Terminals

Environmental data

Ambient temp. (operation/storage)	-30°C ... +60°C/-40°C ... +70°C
Protective circuit 4)	1, 2, 3
VDE protection class 5)	II, all-insulated
Degree of protection	IP 67, IP 69K 6)
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

1) Typ. operating range limit: max. attainable range without function reserve

2) Operating range: recommended range with function reserve

3) Suitable spark extinction must be provided with inductive or capacitive loads

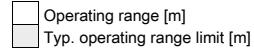
4) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs

5) Rating voltage 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

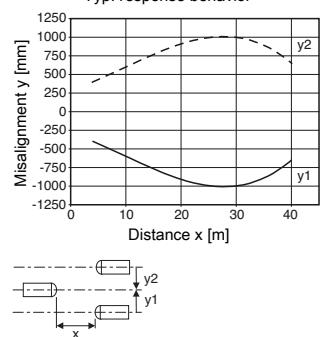
Tables

0	30	39
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Diagrams

Typ. response behavior



Order guide

Selection table		Order code →	LS 96M/R-176W-2 Part No. 500 32004 (Tr) Part No. 500 32003 (Re)				
Equipment ↓							
Housing	Metal	●					
Light source	Red light (30m)	●					
Connection	Terminals	●					
	Cable tail 1.5m						

Notes

- Angle at a distance of 3m:
Transmitter:
 angle of radiation
 typ. 10°
Receiver:
 receiving angle
 typ. 12°
- Cable version
 Assignment code:
 1, 2 = supply
 3, 4 = normally closed contact

LS = Pair consisting of
 LSS = Transmitter
 LSE = Receiver

LS 96M/R-176W-2
 LSS 96M-175W-26
 LSE 96M/R-176W-25