

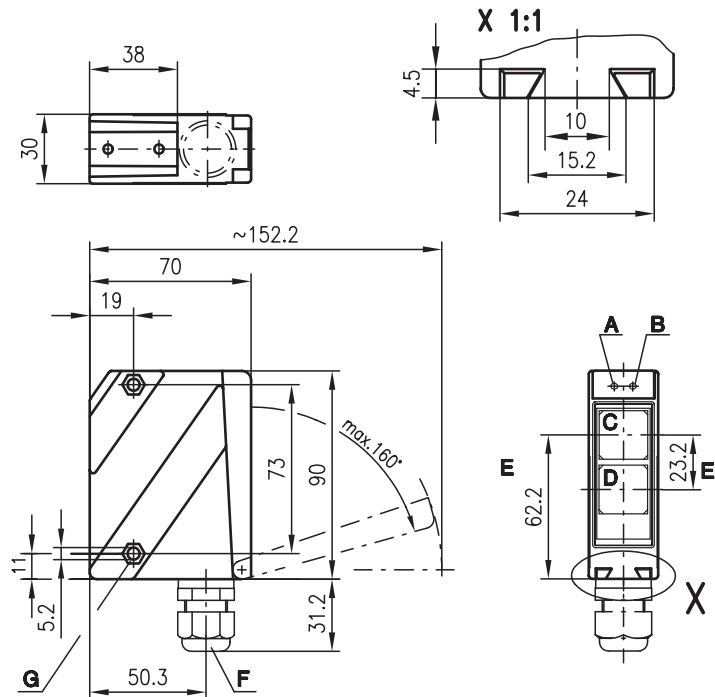


## RT 96

## Energetic diffuse reflection light scanners



### Dimensioned drawing

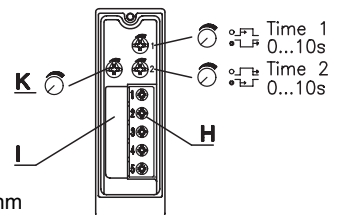


20 ... 1200 mm

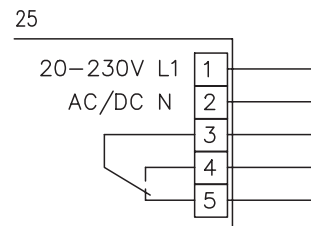


- Robust metal housing with glass cover or plastic housing, protection class IP 67/ IP 69K for industrial application
- Relay with change-over contact, sensitivity adjustment and delay before start-up for optimal adaptation to the application
- Minimal short range
- Version with additional switching delay
- Connection via comfortable terminal compartment up to 1.5mm<sup>2</sup>

- A Indicator diode green
- B Indicator diode yellow
- C Receiver
- D Transmitter
- E Optical axis
- F Screwed cable gland M 16x1.5 for Ø 5 ... 10mm
- G Countersinking for SK nut M5, 4.2 deep
- H Connection terminals
- I Cable entry
- K Sensitivity adjustment



### Electrical connection



### Accessories:

(available separately)

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

We reserve the right to make changes • 96\_c02e.fm

## Specifications

### Optical data

Typ. scanning range limit (white 90%) <sup>1)</sup>	20 ... 1200mm
Scanning range <sup>2)</sup>	20 ... 800mm
Adjustment range	0 ... 100%
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	≤ 2VA
Switching output <sup>3)</sup>	relay, 1 change-over contact
Function characteristics	break-contact/make-contact
Switching voltage, relay	250 VAC/DC
Switching current, relay	250 VAC, 3A/30VDC, 3A
Switching power	750 VA, $\cos\phi=1$

### Indicators

LED green	ready
LED yellow	reflection
LED yellow flashing	reflection, no performance reserve

### Mechanical data

Housing	diecast zinc
Optics cover	glass
Weight	380g
Connection type	terminals

### Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C/-40°C ... +70°C
Protective circuit <sup>4)</sup>	1, 4
VDE safety class <sup>5)</sup>	II, all-insulated
Protection class	IP 67, IP 69K <sup>6)</sup>
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

### Options

<b>Switching delay</b> (slow oper./release)	0 ... 10s (separately adjustable)
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- 1) Typ. scanning range limit: max. attainable range without performance reserve
- 2) Scanning 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

Selection table		Order code →	RT 96M/R-1574-800-25 Part No. 500 41598						
Equipment ↓									
Housing	metal	●							
	plastic								
Light source	red light (500mm)								
	infrared light (800mm)	●							
Connection	terminals	●							
Features	switching delay	●							
	short range (20mm)	●							

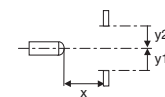
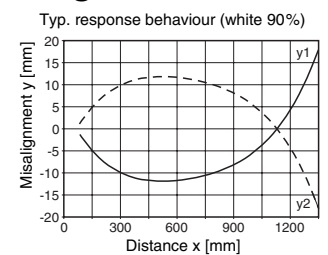
## Tables

1	20	800	1200
2	60	420	950
3	80	290	570

1	white 90%
2	grey 18%
3	black 6%

<input type="checkbox"/>	Scanning range [mm]
<input type="checkbox"/>	Typ. scanning range limit [mm]

## Diagrams



## Remarks

- The upper and lower scanning range limit varies depending on the reflection properties of the material surface.
- **Short range** objects are detected down to a minimum distance of 20mm.