

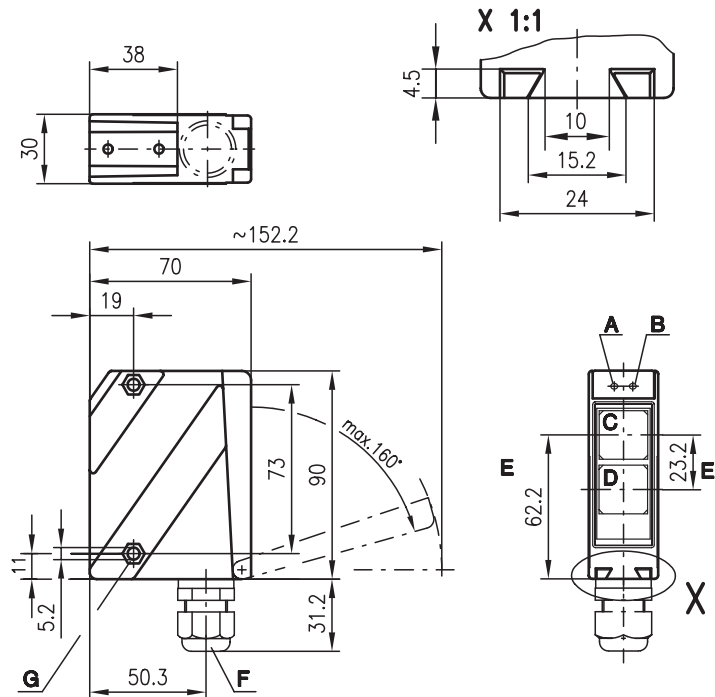


RT 96

Energetic diffuse reflection light scanners



Dimensioned drawing

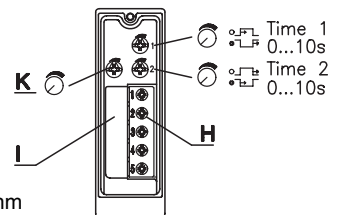


20 ... 1200 mm

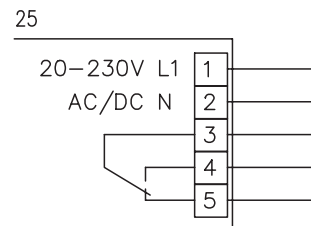


- Robust metal housing with glass cover or plastic housing, protection class IP 67/ IP 69K for industrial application
- Relay with change-over contact, sensitivity adjustment and delay before start-up for optimal adaptation to the application
- Minimal short range
- Version with additional switching delay
- Connection via comfortable terminal compartment up to 1.5mm²

- 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%) ¹⁾	20 ... 1200mm
Scanning range ²⁾	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 ³⁾	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, cosφ=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 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. 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)		●						

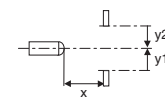
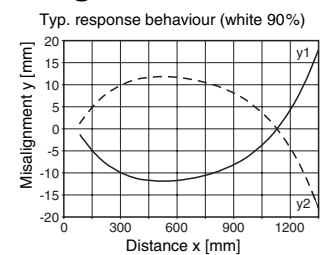
Tables

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.