RT 96



20-230 V н AC / DC A²LS

- 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



Accessories:

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



Dimensioned drawing



- Α Indicator diode green
- в Indicator diode yellow
- С Receiver
- D Transmitter
- Е Optical axis
- F Screwed cable gland M16x1.5 for Ø 5 ... 10mm
- Countersinking for SK nut M5, 4.2 deep G
- н Connection terminals L
 - Cable entry
- κ Sensitivity adjustment

Electrical connection



C •FL Time 1

C 🕂 Time 2

۲

ĕ

Н

<u>K</u> Ø

Specifications

Optical data

Timing

Scanning range 2

Adjustment range Light source Wavelength

Switching frequency

Delay before start-up **Electrical data**

Operating voltage U_B

Power consumption Switching output ³⁾ Function characteristics

Switching voltage, relay

Switching current, relay Switching power

LED yellow flashing

Mechanical data

Connection type

Environmental data

VDE safety class ⁵⁾ Protection class

Standards applied

Ambient temp. (operation/storage) Protective circuit⁴⁾

Indicators

LED green

LED yellow

Housing

Weight

LED class

Options

Optics cover

Response time

RT 96

Tables

1	20		800)	1200
2	60	4	20	9	50
3	80	290		570	
1	white 90%				
2	grey 18%				
	black 6%				

Scanning range [mm]

Typ. scanning range limit [mm]

Diagrams



y1

J

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.

Typ. scanning range limit (white 90%) 1) 20 ... 1200mm 20 ... 800mm 0 ... 100% LED (modulated light) 880nm (infrared)

> 20Hz 25ms ≤ 200 ms

20 ... 230VAC, 50/60Hz 20 ... 230VDC ≤ 2VA relay, 1 change-over contact break-contact/make-contact 250 VAC/DC 250 VAC, 3A/30 VDC, 3A 750VA, cosφ=1

ready reflection reflection, no performance reserve

Metal housing

diecast zinc glass 380 g terminals

-20°C ... +60°C/-40°C ... +70°C 1, 4

II, all-insulated IP 67, IP 69K ⁶⁾ 1 (acc. to EN 60825-1) IEC 60947-5-2

0 ... 10s (separately adjustable)

Typ. scanning range limit: max. attainable range without performance reserve 1)

Scanning range: recommended range with performance reserve 2ĺ

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

4) 1=transient protection, 4=interference blanking

Switching delay (slow oper./release)

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 Equipment ↓	Order code →	RT 96M/R-1574-800-25 Part No. 500 41598			
Housing	metal	٠			
	plastic				
Light source	red light (500mm)				
	infrared light (800mm)	٠			
Connection	terminals	•			
Features	switching delay	•			
	short range (20mm)	•			