

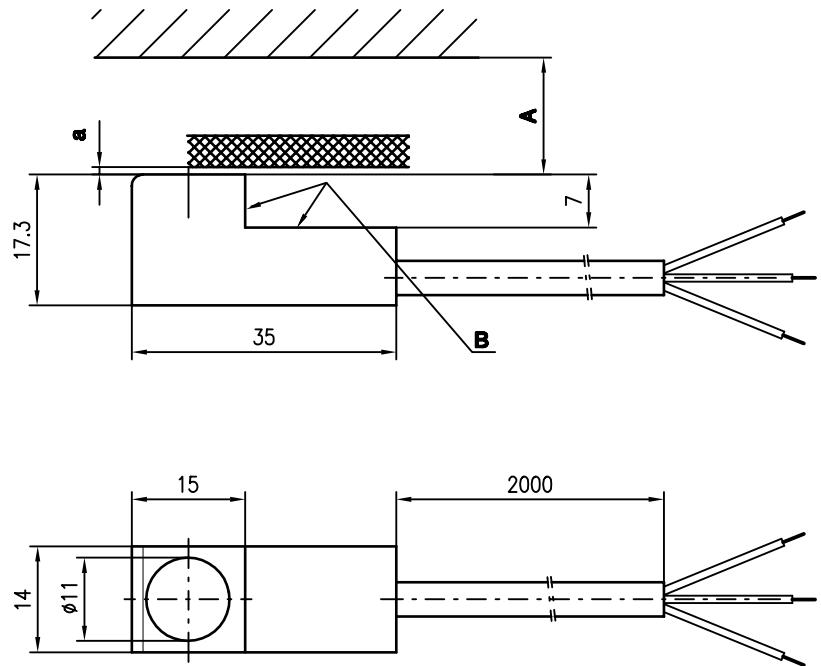


RT 709

Energetic diffuse reflection light scanners



Dimensioned drawing



1 ... 8 mm



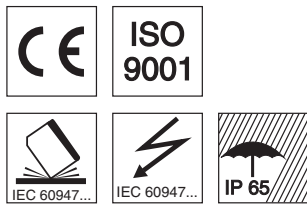
- Miniature construction with completely integrated electronics for 24V technology
- The PNP transistor output is short-circuit proof and polarity reversal protected
- Scratch resistant glass cover

- A** Free space
- B** Plain

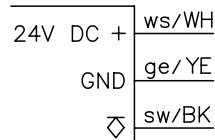
Distance a:
 optimum scanning distance 3mm
 scanning range 1 ... 8mm with white paper (90%)
 scanning range 1 ... 4mm with black paper (6%)

Free space A:
 no reflection from 14mm (background suppression)

Electrical connection



Accessories:



We reserve the right to make changes • MS_c07e.fm



Specifications

Optical data

Scanning range (white 90%)	1 ... 8 mm
Light source	LED (modulated light)
Wavelength	880 nm

Timing

Switching frequency	3000 Hz
Response time	0.16 ms
Delay before start-up	≤ 100 ms

Electrical data

Operating voltage U_B	21.5 V ... 25 VDC
Residual ripple	≤ 10% of U_B
Bias current	≤ 30 mA
Switching output	PNP transistor output
Function characteristics	light switching
Signal voltage high/low	≥ ($U_B - 2V$) / ≤ 2 V
Output current	50 mA

Mechanical data

Housing	aluminium anodised, black
Optics cover	glass
Weight	approx. 15 g
Cable length	2000 mm
Cable cross-section	3 x 0.25 mm ²

Environmental data

Ambient temp. (operation/storage)	0 °C ... +50 °C / -30 °C ... +60 °C
Protective circuit ¹⁾	2, 3
VDE safety class	III
Protection class	IP 65
Standards applied	IEC 60947-5-2

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

Tables

Typical applications:

Paper edge detection in printing machines

Diagrams

Order guide

Designation	Part No.
RT 709/4-4	500 35074

Remarks

- The upper and lower scanning range limit varies depending on the reflection properties of the material surface.