

Diffuse-reflective sensors, range 20/40 cm, ultramini



- Front or back mounting in the direction of the optical axis
- Range adjustable
- Light reserve warning indicator
- Insensitive to foreign light sources, e.g. HF-lamps, etc.
- «Cross-talk» suppression for elimination of mutual disturbances
- Dual transistor outputs, NPN or PNP
- Short-circuit protection, reverse polarity protection and power-up output suppression
- Connections: Cable, 2 meter
Connector, M8
- EMC tested according to IEC 801 and EN50081-1/EN 50082-2



Product designation ¹⁾

Output

Connection

Range adjustment

Optical data ²⁾

Max. range

Emitter

Electrical data ²⁾

Supply voltage U_s

Allowable ripple

Current consumption (without load)

Max. load current I_L

Residual voltage

Max. switching frequency

Environmental data

Sealing

Temperature T_A
(operating and storage)

Weight

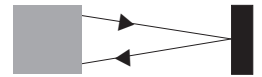
OUT 1NA 100 I3	OUT 1NA 500 I3	OUT 1PA 100 I3	OUT 1PA 500 I3	OUT 1NA 100 I4	OUT 1NA 500 I4	OUT 1PA 100 I4	OUT 1PA 500 I4
NPN (light-/dark-on)		PNP (light-/dark-on)		NPN (light-/dark-on)		PNP (light-/dark-on)	
Cable 2 m	Connector M8	Cable 2 m	Connector M8	Cable 2 m	Connector M8	Cable 2 m	Connector M8
Yes							
20 cm (Kodak card white, 10 x 10 cm)				40 cm (Kodak card white, 10 x 10 cm)			
Infrared-LED, 850 nm, pulsed							
10...30 VDC							
+/- 10% of U_s							
< 15 mA							
100 mA							
< 1,6 V							
1000 Hz							
IP 67							
-25...+65 °C							
ca. 45 g	ca. 4 g	ca. 45 g	ca. 4 g	ca. 45 g	ca. 4 g	ca. 45 g	ca. 4 g

1) For product designation of sensors with options see designation code on page 13.

2) When not otherwise noted, all technical data at $T_A = 25\text{ °C}$ and $U_s = 24\text{ V}$.

10...30 VDC

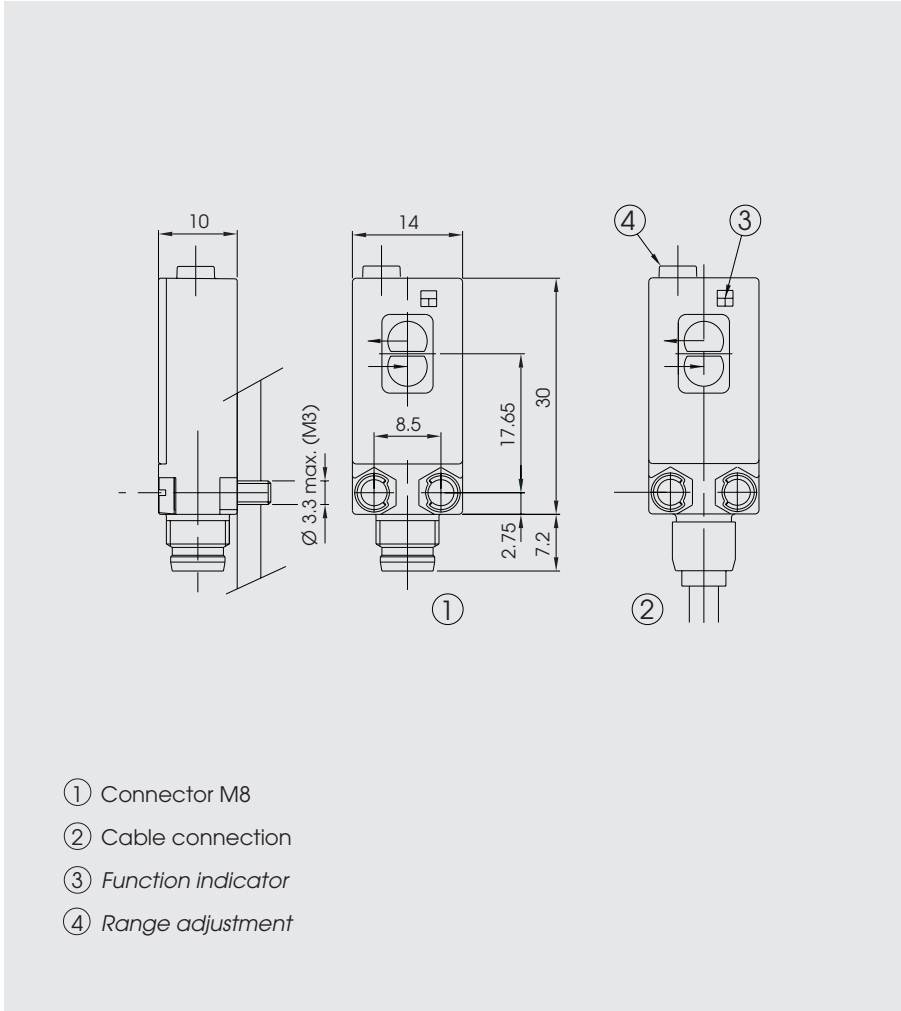
NPN / PNP
light-on and
dark-on output



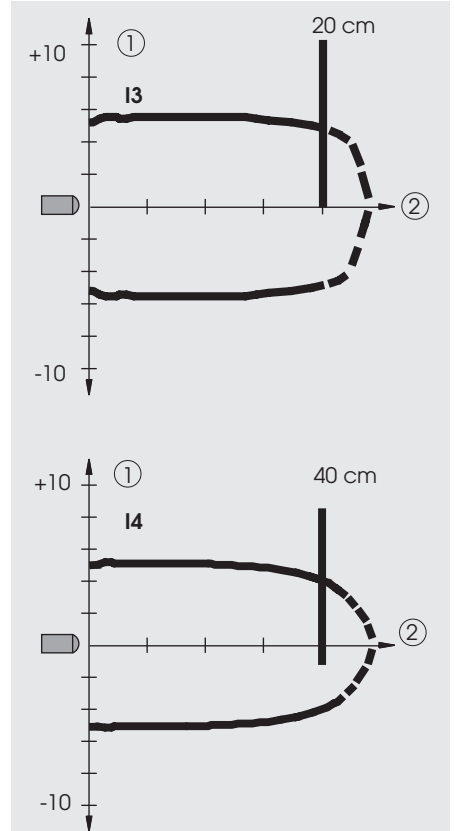
20/40 cm

OUT

Dimensions (30 mm x 10 mm x 14 mm)



Optical diagrams



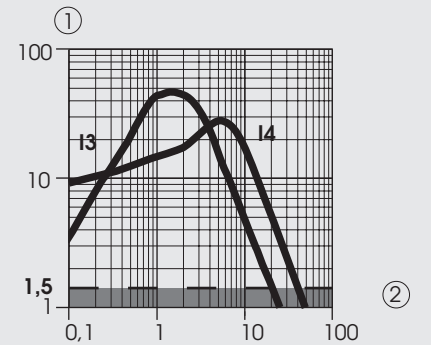
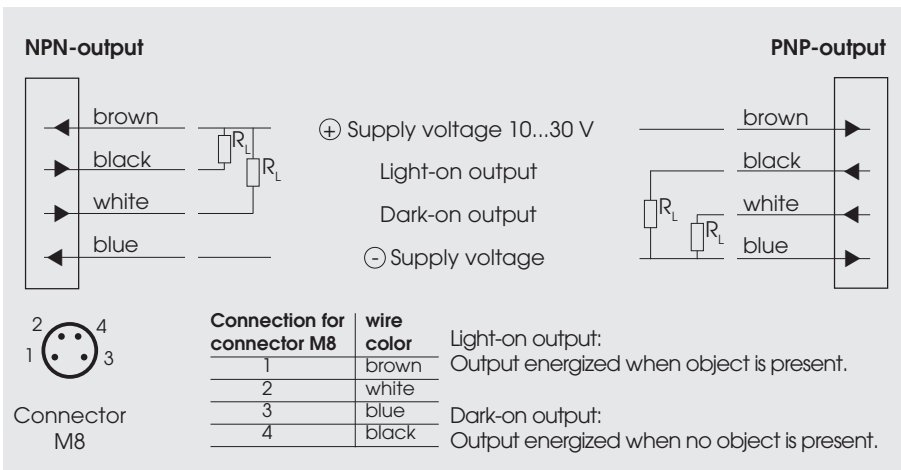
Typical beam diameter

(with Kodak card white, 10 x 10 cm)

① Diameter in (cm)

② Range in (cm)

Wiring diagram



Typical excess gain curve

(with Kodak card white, 10 x 10 cm)

① Gain factor

② Range in (cm)