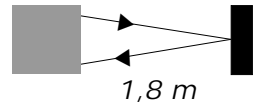


24...240 VAC/DC

10...30 VDC

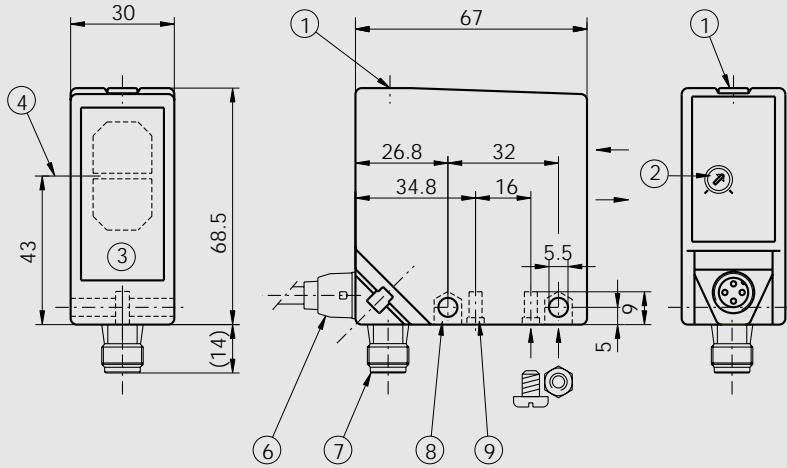
Relay
1 CO contact

NPN / PNP
light-on and
dark-on output



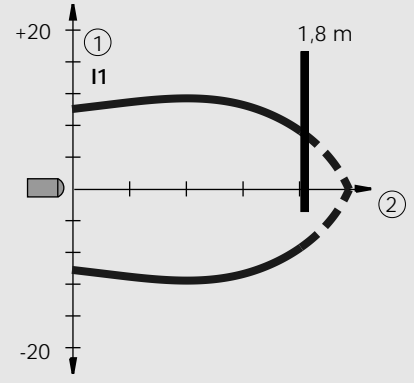
OGT

Dimensions (68,5 mm x 67 mm x 30 mm)



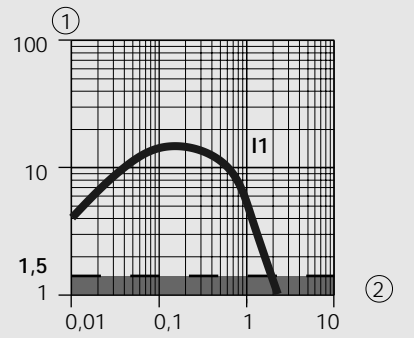
- ① Function indicator
- ② Range adjustment
- ③ Glass covered optics
- ④ Center of the optical axis
- ⑥ Cable connection
- ⑦ Connector M12
- ⑧ Opening for M5 nut
- ⑨ Bore for 5 mm self-tapping screw

Optical diagrams



Typical beam diameter
(with Kodak card white, 20 x 20 cm)

- ① Diameter in (cm)
- ② Range in (m)



Typical excess gain curve
(with Kodak card white, 20 x 20 cm)

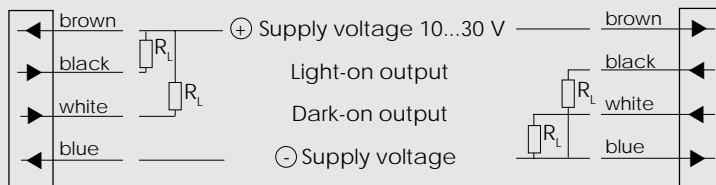
- ① Gain factor
- ② Range in (m)

Wiring diagram

DC version

NPN output

PNP output

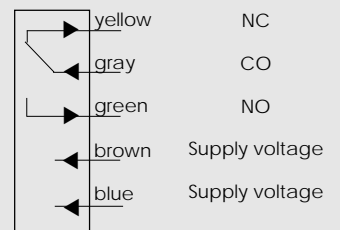


Connection for connector M12	Wire color
1	brown
2	white
3	blue
4	black

Light-on output:
Output energized when object is present.

Dark-on output:
Output energized when no object is present.

AC/DC version



⚠ No protective isolation!

Diffuse-reflective sensors with background rejection, in a robust plastic housing



- DC or AC/DC supply voltage
- Short-circuit protected dual transistor outputs (NPN oder PNP) or relay output with 1 change over contact
- Reverse polarity protection and power-up output suppression
- Light reserve warning indicator
- Electronically adjustable background rejection
- Cable 2 m or connector M12, rotatable
- EMC tested according to IEC 801 and EN 50081-2/EN 50082-2



Product designation¹⁾

Output

Connection

Range adjustment

Optical data²⁾

Range

Emitter

Electrical data²⁾

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

	OGH 1NA 100 I2	OGH 1NA 400 I2	OGH 1PA 100 I2	OGH 1PA 400 I2	OGH 7HW 100 I2
Output	NPN (light- and dark-on)		PNP (light- and dark-on)		Relay (light-on)
Connection	Cable 2 m	Connector M12	Cable 2 m	Connector M12	Cable 2 m
Range adjustment	Yes				
Range	0,2...0,8 m (Kodak card white, 10 x 10 cm)				
Emitter	Infrared-LED, 880 nm, pulsed				
Supply voltage U_s	10...30 VDC				24...240 VAC/DC
Allowable ripple	+/- 10% of U_s				
Current consumption (without load)	< 35 mA				< 2 VA
Max. load current I_L	200 mA				2 A
Residual voltage	< 1,6 V				
Max. switching frequency	200 Hz				25 Hz
Sealing	IP 67				
Temperature T_A (operating and storage)	-25...+65 °C				
Weight	ca. 170 g	ca. 130 g	ca. 170 g	ca. 130 g	ca. 230 g

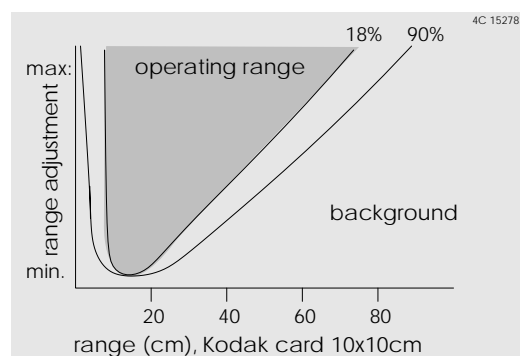
1) For product designation of sensors with options see designation code on page 93.

2) When not otherwise noted, all technical data at $T_A = 25\text{ °C}$ and $U_s = 24\text{ VDC}$ or $U_s = 220\text{ VAC}$, respectively.

Technical explanation

The 18%-linie shows the switching-on distance for a gray object.

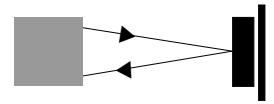
The 90%-linie shows the switching-off distance for a white object.



24...240 VAC/DC 10...30 VDC

Relay
1 CO contact

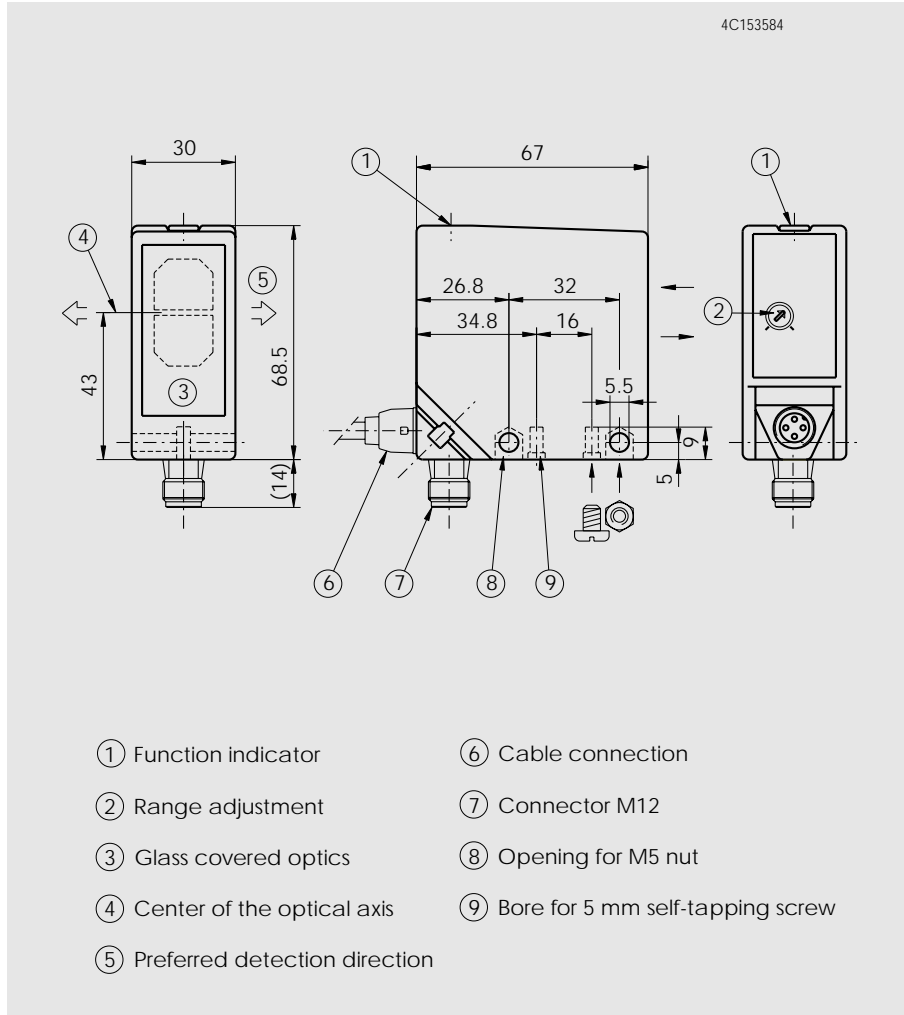
NPN / PNP
light-on and
dark-on output



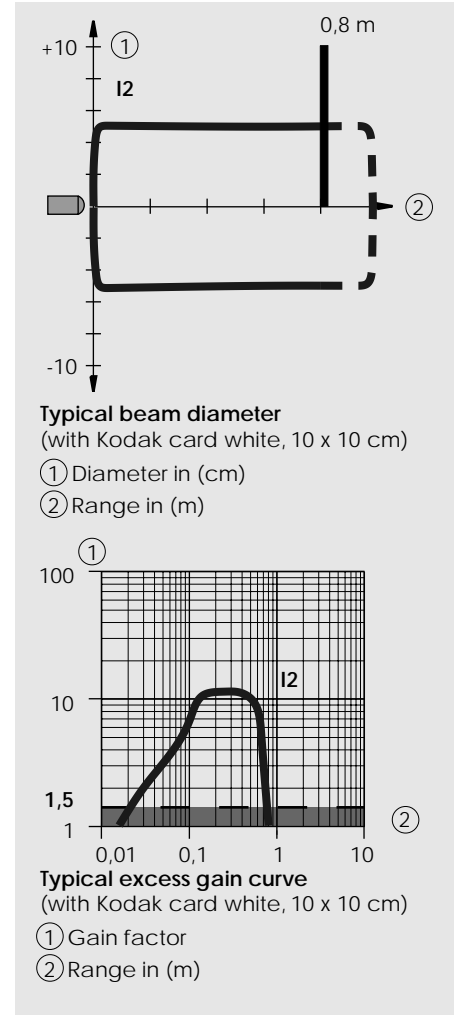
0,2...0,8 m

OGH

Dimensions (68,5 mm x 67 mm x 30 mm)



Optical diagrams



Wiring diagram

