

# 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 designation<sup>1)</sup>

Output

Connection

Range adjustment

## Optical data<sup>2)</sup>

Range

Emitter

## Electrical data<sup>2)</sup>

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

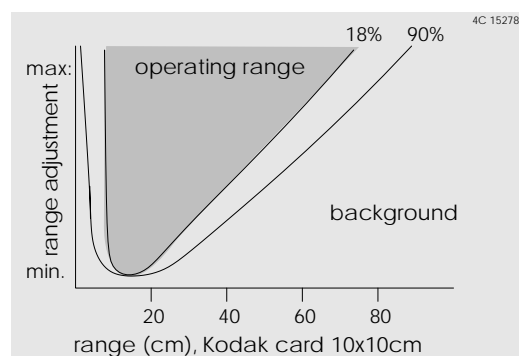
1) For product designation of sensors with options see designation code on page 93.

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.

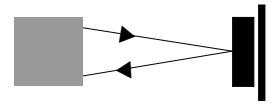
The 90%-linie shows the switching-off distance for a white object.



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

Relay  
1 CO contact

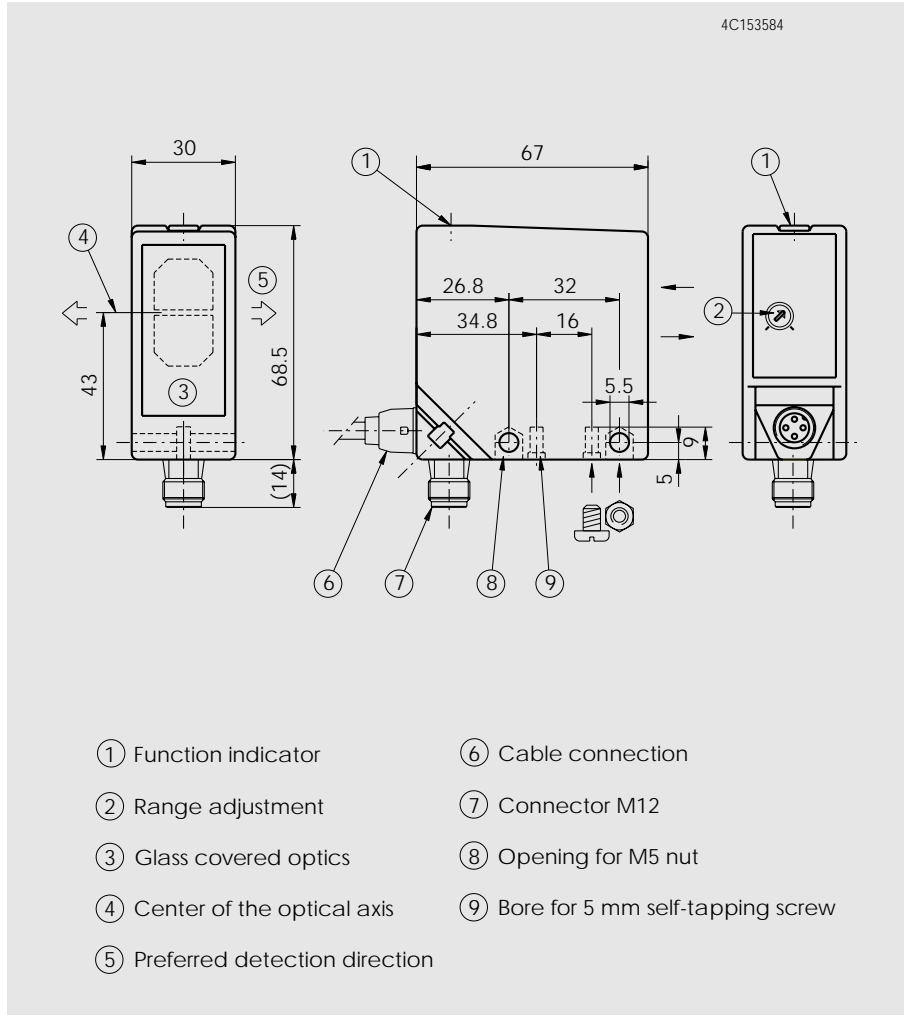
NPN / PNP  
light-on and  
dark-on output



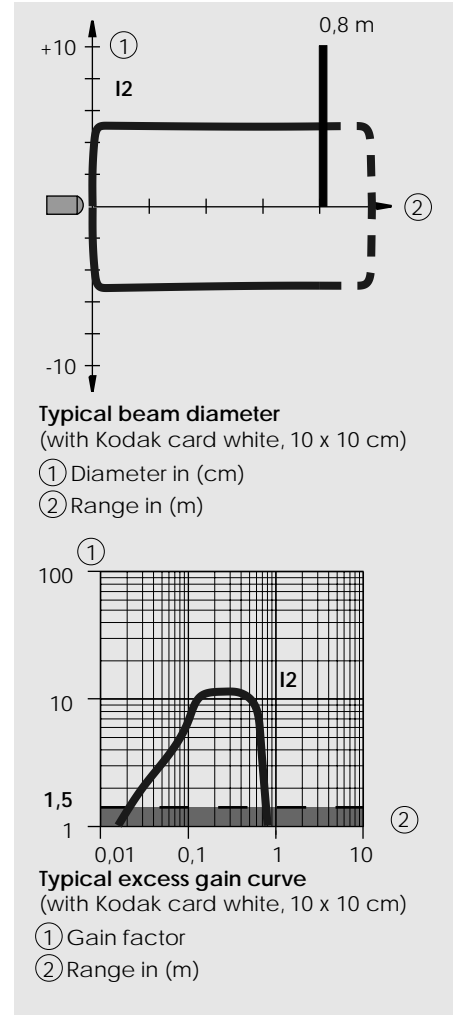
0,2...0,8 m

OGH

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



Optical diagrams



Wiring diagram

