

Retro-reflective sensors with polarizing filters, 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
- Test input (option on DC sensors)
- 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

OGP 1NA 100 R1	OGP 1NA 400 R1	OGP 1PA 100 R1	OGP 1PA 400 R1	OGP 7HW 100 R1
NPN (light- and dark-on)		PNP (light- and dark-on)		Relay (light-on)
Cable 2 m	Connector M12	Cable 2 m	Connector M12	Cable 2 m
Yes				
0,2...9 m (retroreflector OZR 001)				
Visible-red LED, 660 nm, pulsed, with polarizing filter				
10...30 VDC				24...240 VAC/DC
+/- 10% of U_s				
< 15 mA				< 2 VA
200 mA				2 A
< 1,6 V				
1000 Hz				25 Hz
IP 67				
-25...+65 °C				
ca. 140 g	ca. 100 g	ca. 140 g	ca. 100 g	ca. 200 g

Option¹⁾

Test input: emitter on

emitter off

+ U_s or open	
< 1 V	< U_s - 8 V

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

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

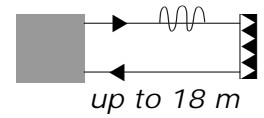
Retro-reflector ●	Range	Retro-reflector ■	Range	Retro-reflective tape	Range
OZR 001	0.20 – 9 m	OZR 101	0.10 – 15 m	OZR 201	0 m
OZR 002	0.15 – 8 m	OZR 102	0.15 – 5 m	OZR 202	0 m
OZR 003	0.20 – 4 m	OZR 103	0.10 – 11 m	OZR 203	0.40 – 4.5 m
		OZR 104	0.10 – 18 m	OZR 204*	0.40 – 3.9 m
				OZR 205*	0.40 – 5.4 m

* 30 cm long

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

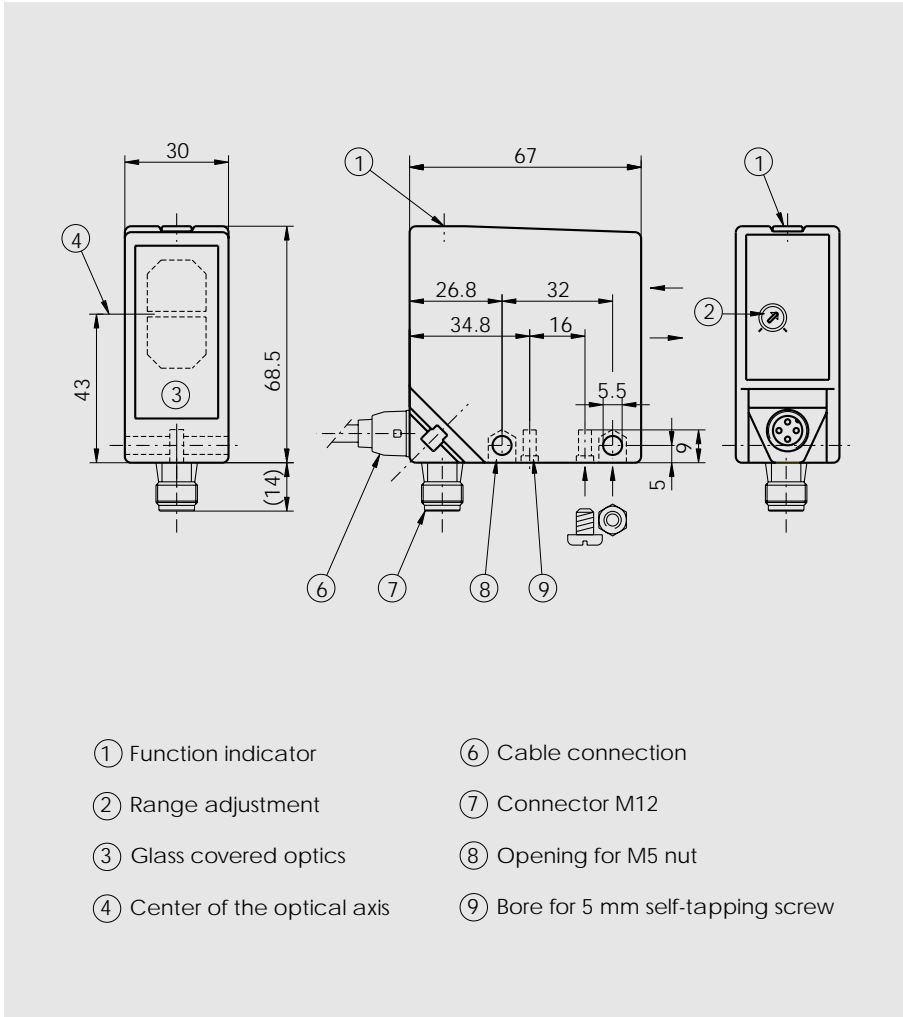
Relay
1 CO contact

NPN / PNP
light-on and
dark-on output

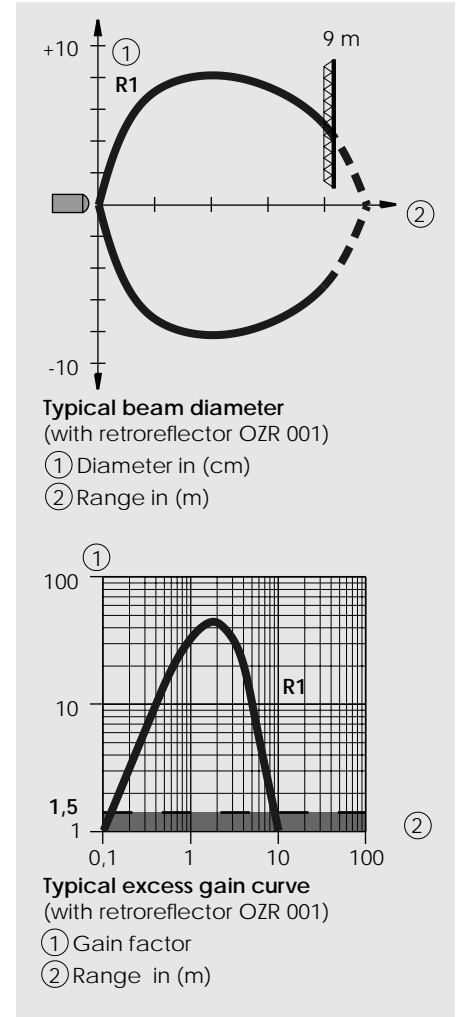


OGP

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



Optical diagrams



Wiring diagram

