

# Retro-reflective sensors with polarizing filters and terminal strip connection



- DC or AC/DC supply voltage
- Short-circuit protected dual transistor outputs (NPN oder PNP) or relay output with 1 change over contact (light-on/dark-on selectable)
- Reverse polarity protection and power-up output suppression
- Light reserve warning indicator
- Plug-in terminal strip connector
- Options:
  - timer with selectable functions (on AC/DC sensors)
  - test input (on DC sensors)
  - light reserve warning output (on DC sensors)
- 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

## Options<sup>1)</sup>

Timer functions (selectable)
Timing range
Test input: emitter on
emitter off
Max. load current of light reserve warning output <sup>3)</sup>

	OFP 1NA 800 R1	OFP 1PA 800 R1	OFP 7RW 800 R1
Output	NPN (light- and dark-on)	PNP (light- and dark-on)	Relay, 1 CO
Connection	Plug-in terminal strip		
Range adjustment	Yes		
Range	0,2...9 m (retroreflector OZR 001)		
Emitter	Visible-red LED, 660 nm, pulsed, with polarizing filter		
Supply voltage $U_s$	10...30 VDC		24...240 VAC/DC
Allowable ripple	+/- 10% of $U_s$		
Current consumption (without load)	< 15 mA		< 2 VA
Max. load current $I_L$	200 mA		3 A
Residual voltage	< 1,6 V		
Max. switching frequency	1000 Hz		25 Hz
Sealing	IP 67		
Temperature $T_A$ (operating and storage)	-25...+65 °C		
Weight	ca. 150 g		ca. 160 g

		on delay off delay one-shot
		0,1...6 sec.
	+ $U_s$ or open	
< 1 V	< $U_s$ - 8 V	
200 mA		

1) For product designation of sensors with options see designation code on page 105.  
 2) When not otherwise noted, all technical data at  $T_A = 25^\circ\text{C}$  and  $U_s = 24\text{ VDC}$  or  $U_s = 220\text{ VAC}$ , respectively.  
 3) Light reserve warning output static or dynamic, normally open or normally closed.

Retro-reflector ●	Range	Retro-reflector ■	Range	Retro-reflective tape	Range
OZR 001	0.20 – 9 m	OZR 101	0.15 – 5 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

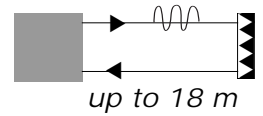
\* 30 cm long

24...240 VAC/DC

10...30 VDC

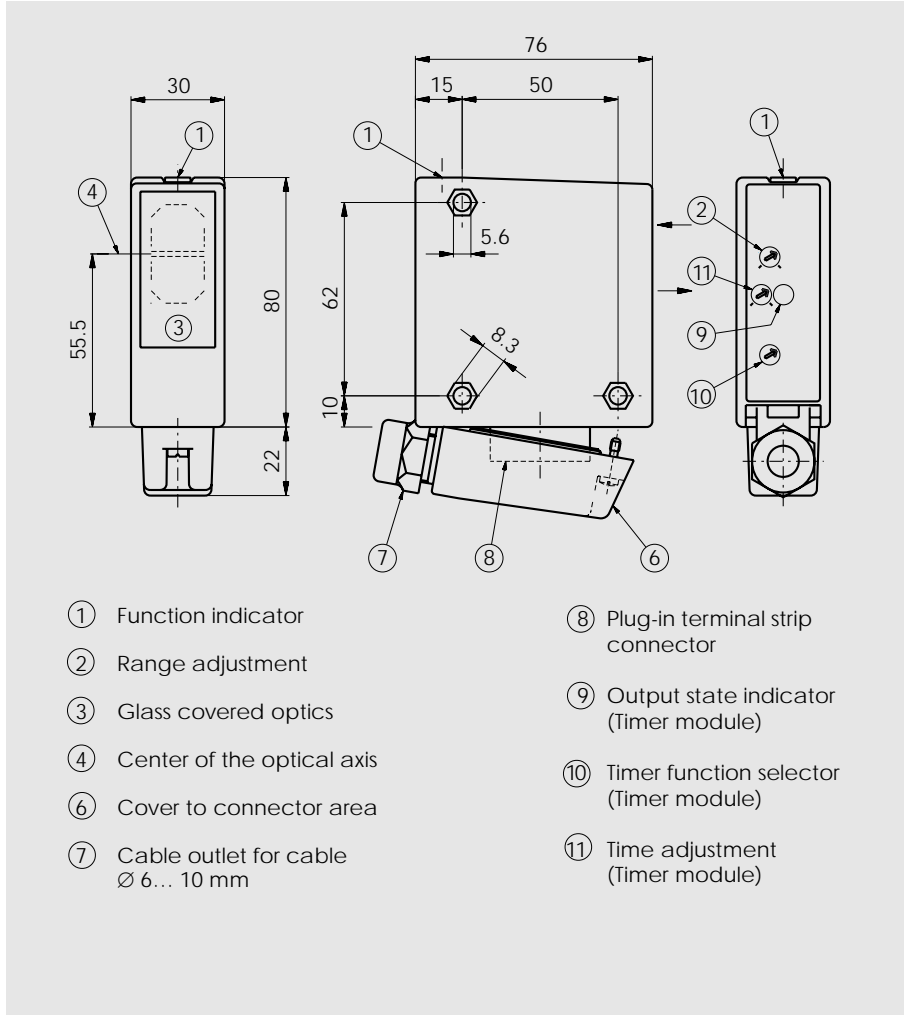
Relay  
1 CO contact

NPN / PNP  
light-on and  
dark-on output

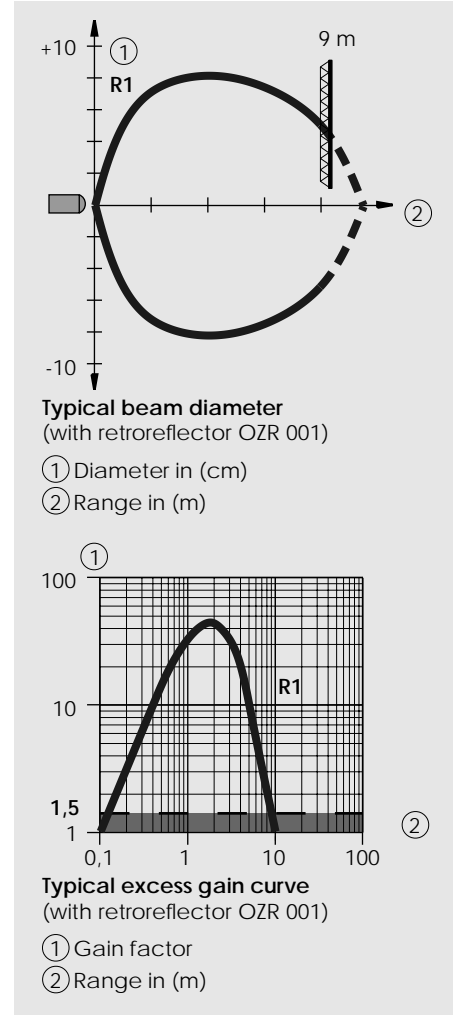


OFF

Dimensions (102 mm x 76 mm x 30 mm)



Optical diagrams



Wiring diagram

