

Retro-reflective sensors, in a small plastic housing



- Light reserve warning indicator
- Dual transistor outputs, NPN or PNP
- 1000 Hz switching frequency
- Short-circuit protection, reverse polarity protection and power-up output suppression
- Test input (option)
- Connections: Cable, 2 meter
Connector, M12
Connector, M8 (option)
Connector, Torson (option)
- EMC tested according to IEC 801 and EN50081-1/EN 50082-2



Product designation ¹⁾

Output
Connection
Range adjustment

Optical data ²⁾

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

Option ¹⁾

Test input: emitter on
emitter off

OPR 1NA 100 I2	OPR 1NA 400 I2	OPR 1PA 100 I2	OPR 1PA 400 I2
NPN (light- and dark-on)		PNP (light- and dark-on)	
Cable 2 m	Connector M12	Cable 2 m	Connector M12
Yes			
0,05...4 m (retroreflector OZR 001)			
Infrared-LED, 950 nm, pulsed			
10...30 VDC			
+/- 10% of U_s			
< 15 mA			
200 mA			
< 1,6 V			
1000 Hz			
IP 65			
-25...+65 °C			
ca. 100 g	ca. 35 g	ca. 100 g	ca. 35 g

+ U_s or open	
< 1,5 V	< U_s - 8 V

1) For product designation of sensors with options see designation code on page 81.

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

Retro-reflector ●	Range	Retro-reflector ■	Range	Retro-reflective tape	Range
OZR 001	0.05 – 4.0 m	OZR 101	0.05 – 6.0 m	OZR 201*	0.15 – 1.4 m
OZR 002	0.03 – 3.5 m	OZR 102	0.05 – 2.2 m	OZR 202	0.15 – 3.0 m
OZR 003	0.03 – 1.6 m	OZR 103	0.03 – 4.8 m	OZR 203	0.15 – 2.3 m
		OZR 104	0.03 – 8.0 m	OZR 204*	0.15 – 2.0 m
				OZR 205*	0.15 – 2.9 m

* 30 cm long

