

Through-beam sensors, with 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
- Test input on DC sensors
- Versions with red light and beam angle $< \pm 2^\circ$ available
- Plug-in terminal strip connector
- Options: - timer with selectable functions (on AC/DC sensors)
- light reserve warning output (on DC sensors)
- EMC tested according to IEC 801 and EN 50081-2/EN 50082-2



Product designation¹⁾

Output
Connection
Range adjustment

Optical data²⁾

Max. range
Emitter

Electrical data²⁾

Supply voltage U_s
Allowable ripple
Current consumption (without load)
Max. load current I_L
Residual voltage
Max. switching frequency
Test input: emitter on emitter off

Environmental data

Sealing
Temperature T_A (operating and storage)
Weight

Options¹⁾

Timer functions (selectable)
Timing range
Max. load current of light reserve warning output ³⁾

Emitter		Receiver		Emitter		Receiver	
OFS 1KA 841 I1		OFE 1NA 800 I1		OFS 7KA 840 I1		OFE 7RW 800 I1	
		NPN (light-/dark-on)		PNP (light-/dark-on)		Relay 1 CO	
Plug-in terminal strip							
No		Yes		No		Yes	
50 m							
Infrared-LED, 880 nm, pulsed				Infrared-LED, 880 nm, pulsed			
10...30 VDC				24...240 VAC/DC			
+/- 10% of U_s							
< 25 mA		< 15 mA		< 2 VA			
		200 mA				3A	
		< 1,6 V					
		1000 Hz				25 Hz	
+ U_s or open < 1 V							
IP 67							
-25...+65 °C							
ca. 150 g				ca. 160 g			

	on delay off delay one-shot
	0,1...6 sec.
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.

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

Relay
1 CO contact

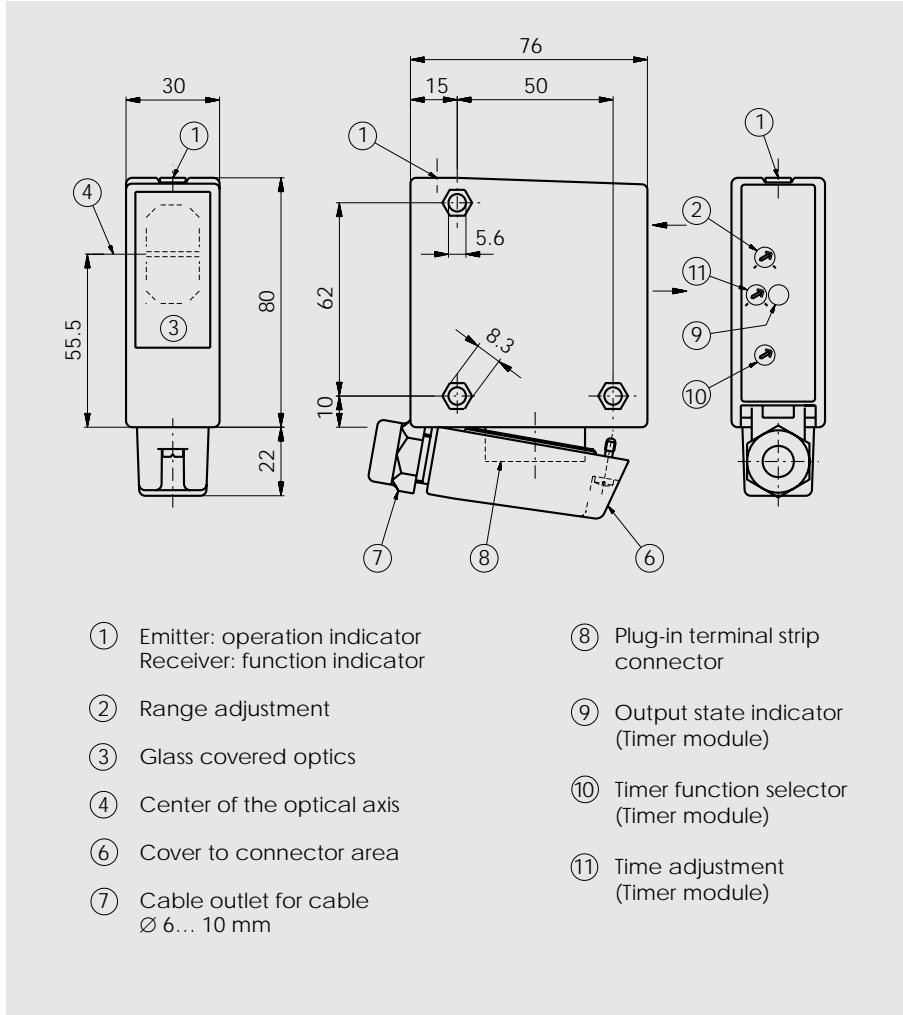
NPN / PNP
light-on and
dark-on output



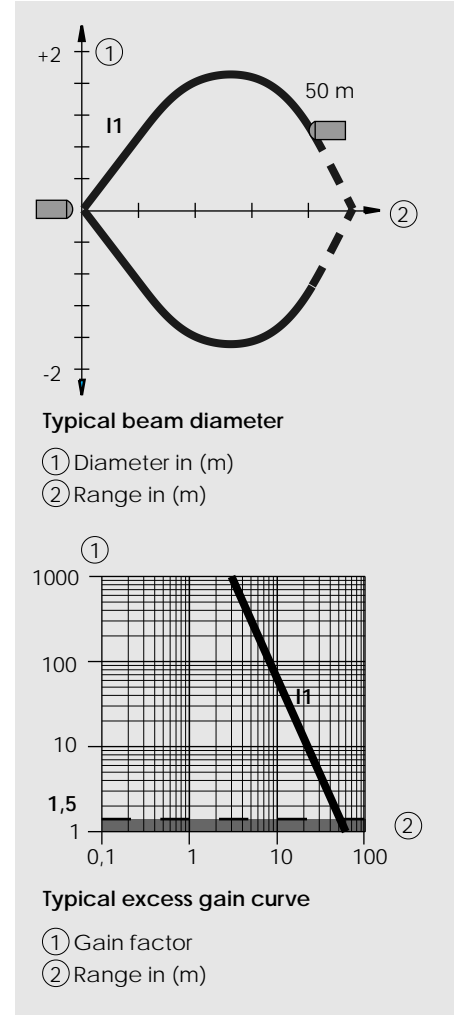
50 m

OFS/OFE

Dimensions (102 mm x 76 mm x 30 mm)



Optical diagrams



Wiring diagram

