

# 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 designation<sup>1)</sup>

Output

Connection

Range adjustment

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

Max. 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

Test input: emitter on  
emitter off

## Environmental data

Sealing

Temperature  $T_A$   
(operating and storage)

Weight

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

Timer functions (selectable)

Timing range

Max. load current of light reserve warning output<sup>3)</sup>

Emitter	Receiver		Emitter	Receiver
OFS 1KA 841 I1	OFE 1NA 800 I1	OFE 1PA 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

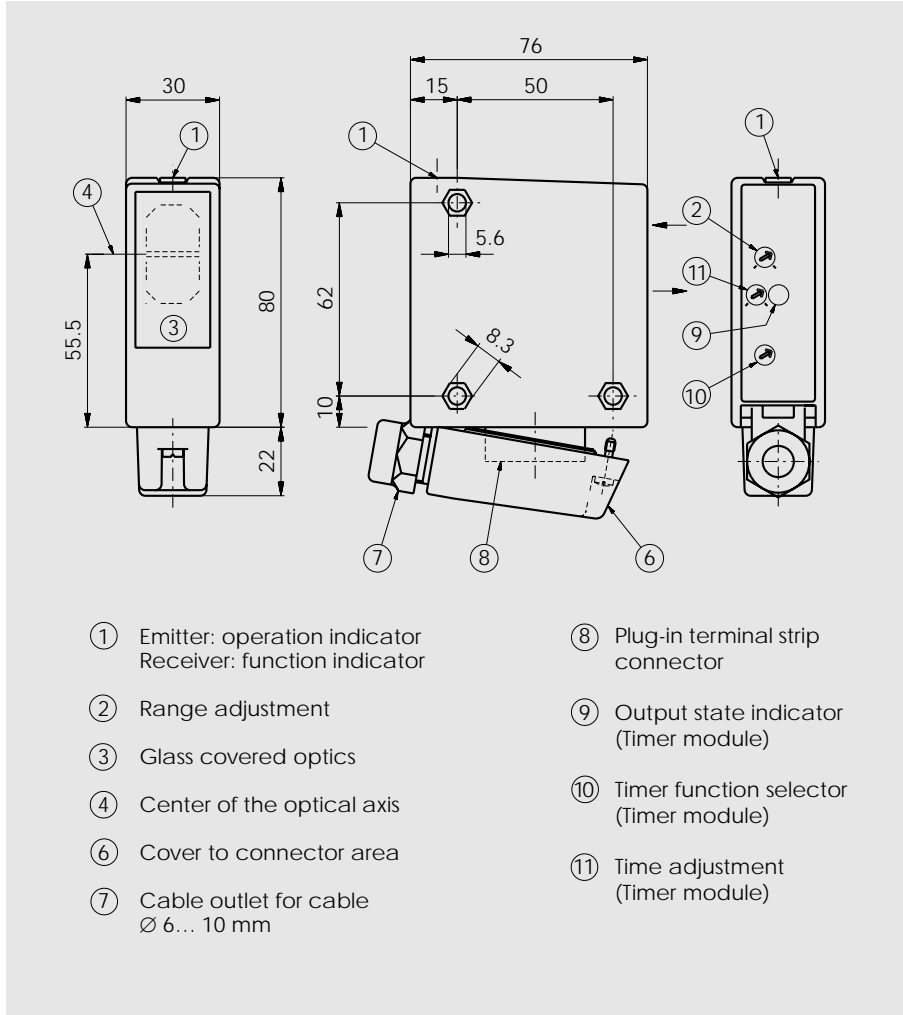
NPN / PNP  
light-on and  
dark-on output



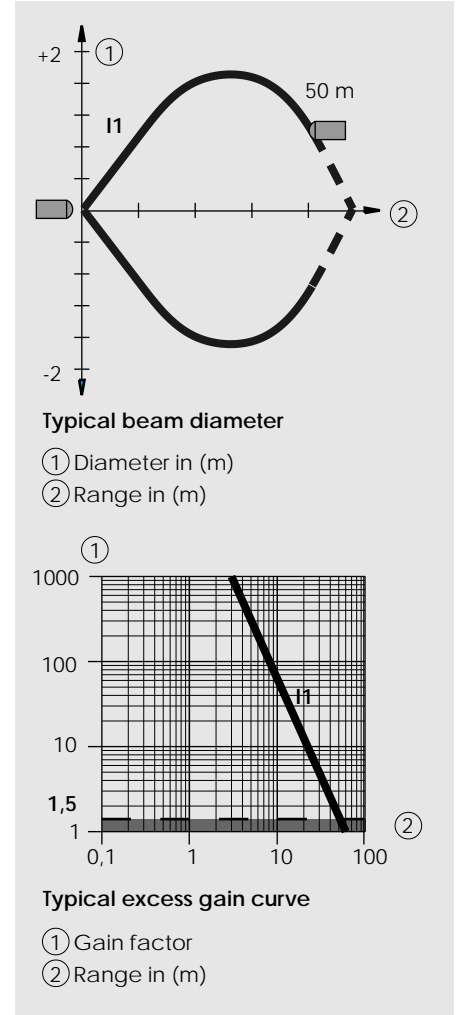
50 m

OFS/OFE

Dimensions (102 mm x 76 mm x 30 mm)



Optical diagrams



Wiring diagram

