

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 1PA 800 I1 | | OFS 7KA 840 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

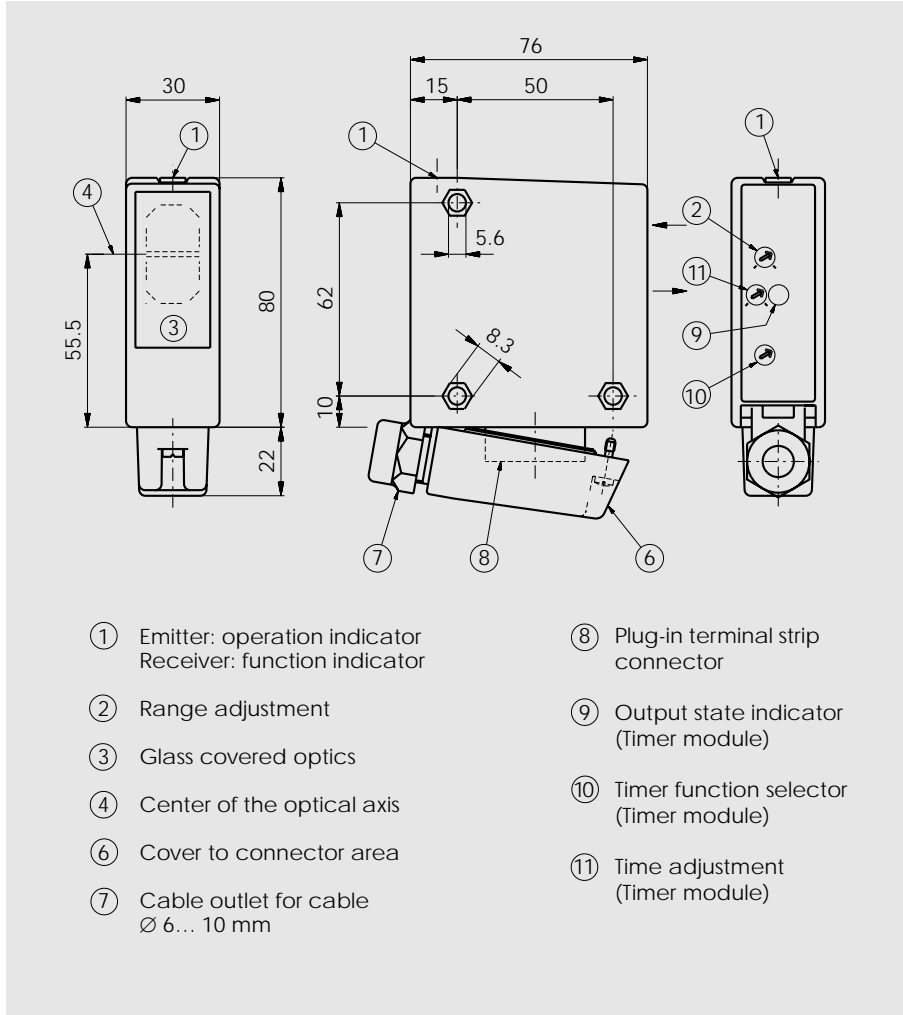
NPN / PNP
light-on and
dark-on output



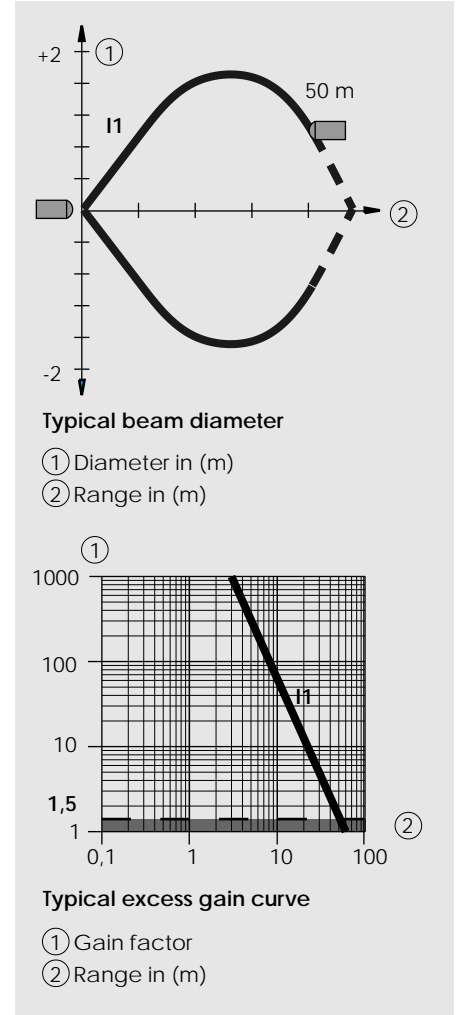
50 m

OFS/OFE

Dimensions (102 mm x 76 mm x 30 mm)



Optical diagrams



Wiring diagram

