

Diffuse-reflective sensors with background rejection 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
- Electronically adjustable background rejection
- Plug-in terminal strip connector
- Options:
 - timer with selectable timing 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 designation¹⁾

| |
|---|
| Output |
| Connection |
| Range adjustment |
| Optical data ²⁾ |
| Range |
| Background rejection |
| 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 |

| OFH 1NA 800 I2 | OFH 1PA 800 I2 | OFH 7RW 800 I2 |
|--|--------------------------|-------------------|
| NPN (light- and dark-on) | PNP (light- and dark-on) | Relay, 1 CO |
| Plug-in terminal strip | | |
| Yes | | |
| 0,2...0,8 m (Kodak card white, 10 x 10 cm) | | |
| see diagram «Technical explanation» page 102 | | |
| Infrared LED, 880 nm, pulsed | | |
| 10...30 VDC | | 24...240 VAC/DC |
| +/- 10% of U_s | | |
| < 35 mA | | < 2 VA |
| 200 mA | | 3 A |
| < 1,6 V | | |
| 200 Hz | | 25 Hz |
| IP 67 | | |
| -25...+65 °C | | |
| ca. 180 g | | ca. 190 g |

Options¹⁾

| |
|---|
| Timer functions (selectable) |
| Timing range |
| Test input: emitter on |
| emitter off |
| Max. load current of light reserve warning output ³⁾ |

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

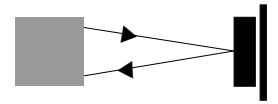
1) For product designation of sensors with options see designation code on page 105.
 2) When not otherwise noted, all technical data at $T_A = 25\text{ °C}$ and $U_s = 24\text{ VDC}$ or $U_s = 220\text{ VAC}$, respectively.
 3) Light reserve warning output static or dynamic, normally open or normally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

24...240 VAC/DC

10...30 VDC

Relay
1 CO contact

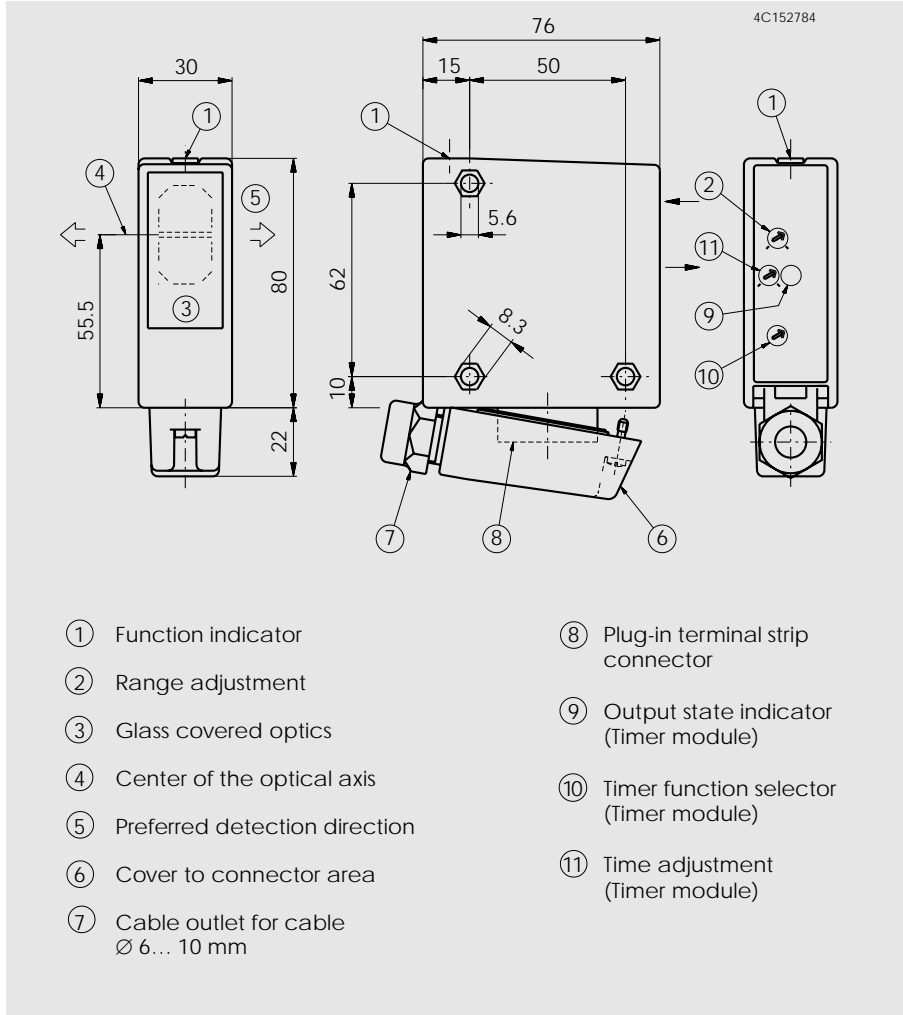
NPN / PNP
light-on and
dark-on output



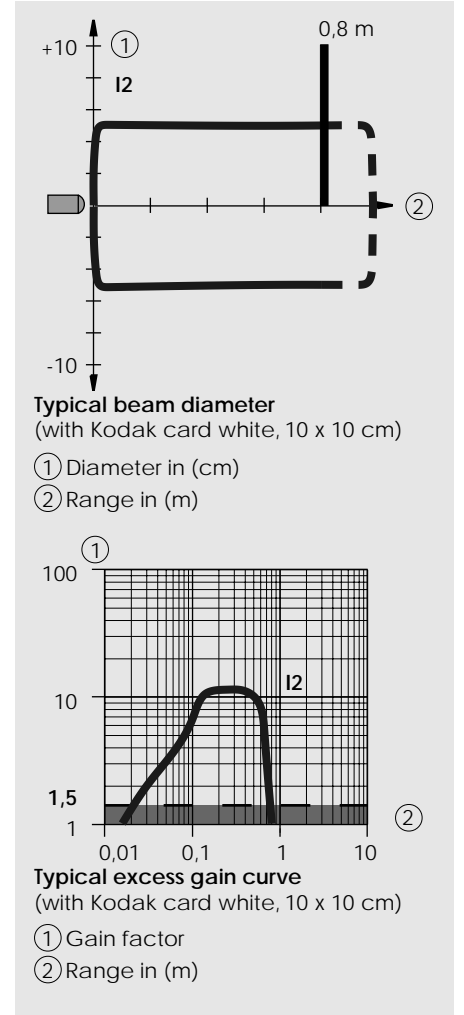
0,2...0,8 m

OFH

Dimensions (102 mm x 76 mm x 30 mm)



Optical diagrams



Wiring diagram

