



## Photoelectric sensors W260, Photoelectric proximity sensor, energetic

WT260-R280



**Model Name** > WT260-R280  
**Part No.** > 6020772



*Illustration may differ*

#### At a glance

- Long sensing ranges
- Background suppression or energetic sensory types
- Mounting bracket included in delivery
- Selectable operation mode (light/dark)
- Optional time stages
- M12 connector or terminal chamber
- DC and universal AC/DC voltage versions

#### Your benefits

- Reliable object detection
- Reliable in difficult ambient light conditions
- Configuration controls are protected by a cover, ensuring less damage and a longer service life
- Simplified integration due to mounting compatibility since variants for DC or DC/AC voltage supply are available in the same design
- Teach button and adjustable time delay versions simplify integration of individual systems



#### Features

|                                   |                                                                                       |
|-----------------------------------|---------------------------------------------------------------------------------------|
| Sensor/detection principle:       | Photoelectric proximity sensor, energetic                                             |
| Dimensions (W x H x D):           | 25 mm x 78 mm x 63 mm                                                                 |
| Housing design (light emission):  | Rectangular                                                                           |
| Sensing range max.:               | 10 mm ... 3,500 mm <sup>1)</sup>                                                      |
| Sensing range:                    | 20 mm ... 3,000 mm                                                                    |
| Type of light:                    | Infrared light                                                                        |
| Light source:                     | LED <sup>2)</sup>                                                                     |
| Light spot (distance):            | 95 mm (3,000 mm)                                                                      |
| Adjustment of operating distance: | Potentiometer, 270°                                                                   |
| Time type:                        | Time delay off, Switch on delay                                                       |
| Delay time:                       | Adjustable via time control:, Adjustable via time delay selector switch: 0.1 ... 10 s |
| Angle of dispersion:              | 1.7 °                                                                                 |

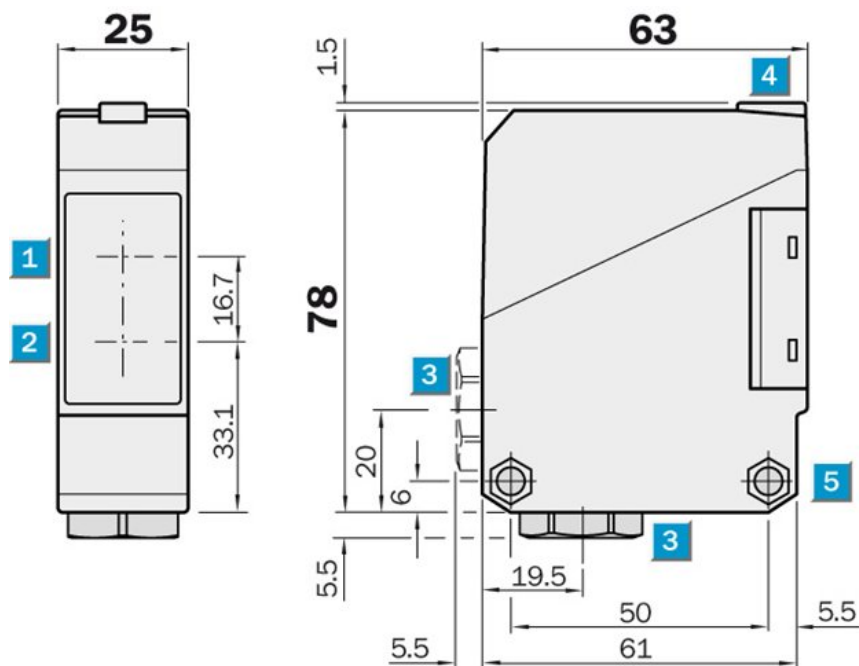
<sup>1)</sup> Object with 90 % reflectance (referred to standard white DIN 5033) <sup>2)</sup> Average service life 100,000 h at Ta = +25 °C

#### Mechanics/electronics

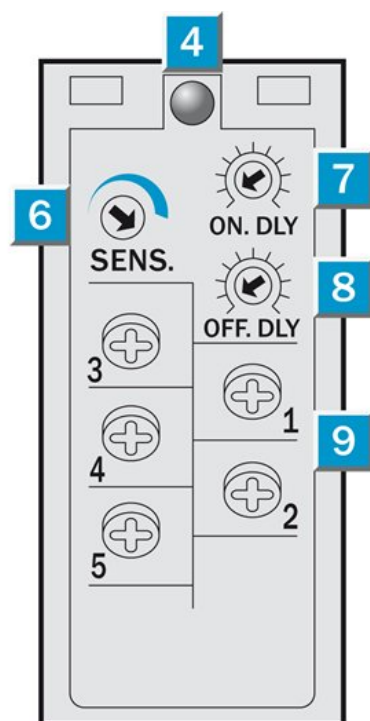
|                                        |                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------|
| Supply voltage::                       | 12 V DC ... 240 V DC, 24 V AC ... 240 V AC <sup>1) 2)</sup>                       |
| Power consumption:                     | ≤ 5 VA                                                                            |
| Output type:                           | Relay, Light-switching, change-over contacts, electrically isolated <sup>3)</sup> |
| Switching current (switching voltage): | 3 A (240 V AC), 3 A (30 V DC)                                                     |
| Response time:                         | ≤ 20 ms                                                                           |
| Switching frequency:                   | 25 Hz <sup>4)</sup>                                                               |
| Connection type:                       | Cable gland                                                                       |
| Circuit protection::                   | A, C <sup>5) 6)</sup>                                                             |
| Protection class:                      | II <sup>7)</sup>                                                                  |
| Weight:                                | 120 g                                                                             |
| Interference emission:                 | Level EN 61000-6-3<br>Residential and commercial areas                            |
| Housing material:                      | ABS                                                                               |
| Optics material:                       | PC                                                                                |
| Enclosure rating:                      | IP 67                                                                             |
| Items supplied:                        | Mounting bracket BEF-W260                                                         |
| Usage category:                        | AC-15, DC-13, According to EN 60947-1                                             |
| Ambient operating temperature:         | -25 °C ... 55 °C                                                                  |
| Ambient storage temperature:           | -40 °C ... 70 °C                                                                  |
| UL File-No.:                           | EN50081-1, 242356                                                                 |

1) 2) ±10 % 3) Provide suitable spark suppression for inductive or capacitive loads 4) With light/dark ratio 1:1 5) A = V<sub>S</sub> connections reverse-polarity protected 6) C = interference suppression 7) Rated voltage 250 V AC/DC

## Dimensional drawing

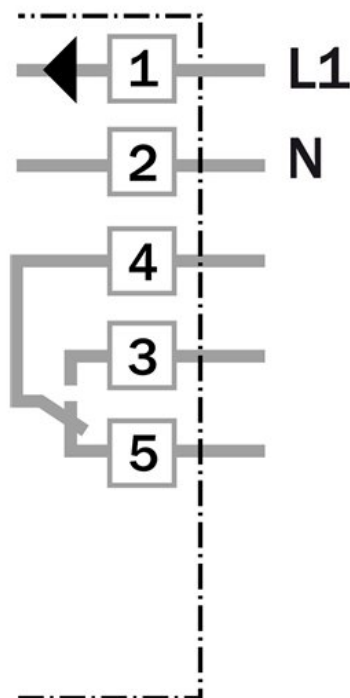


Adjustments possible

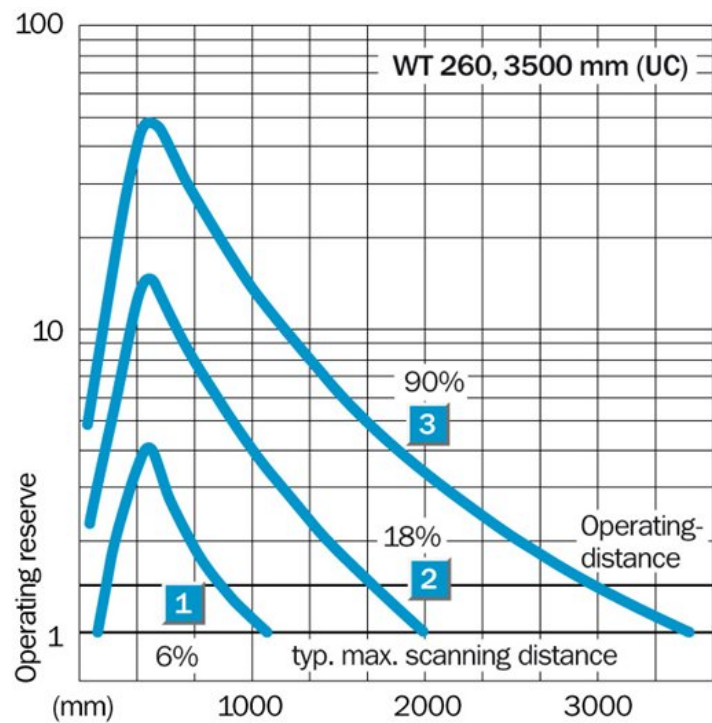


- |4| LED signal strength indicator, red
- |6| Sensitivity adjustment
- |7| Time control ON delay tON
- |8| Time control OFF delay tOFF
- |9| Terminals

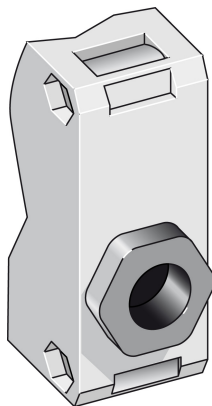
Connection diagram



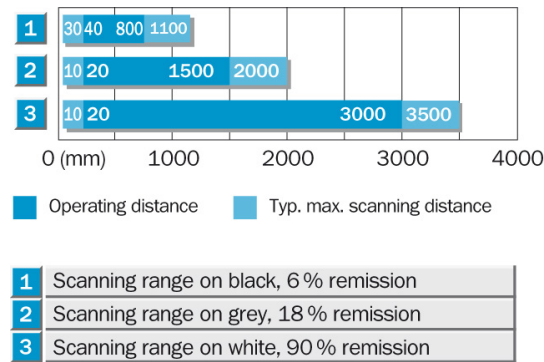
Characteristic curve



Connection type



Sensing range diagram



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