



W280-2

Sensor kit with mounting bracket and reflector

SICK
Sensor Intelligence.



Technical data overview

| | |
|------------------------------------|-------------------------------------------|
| Dimensions (W x H x D) | 23.5 mm x 74.5 mm x 63 mm |
| Functional principle detail | Energetic / Dual lens (depending on type) |
| Light source | LED |
| Type of light | Visible red light |
| Enclosure rating | IP66, IP67 |
| Housing material | Plastic |
| Adjustment | Potentiometer |
| Dimensions (W x H x D) | 23.5 mm x 74.5 mm x 63 mm |
| Functional principle detail | Energetic / Dual lens (depending on type) |
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Product description

The W280-2 consists of three high-performance sensor types – energetic photoelectric proximity sensor, photoelectric retro-reflective sensor and through-beam photoelectric sensor. The AC/DC devices (-2Hxxxx) are compliant with EN 61000-6-3 (electromagnetic interference for “residential, commercial and light-industrial environments”) which makes the sensor especially suitable for door and gates areas. In other branches the fast install kit provides a rotatable M12 connector, cable or screw terminal connection which offer a quick and easy setup even in space-restricted conditions. Devices with potentiometer and light/dark switching provide application flexibility. In addition, these sensors are available in DC and AC/DC versions.

At a glance

- Easily visible red light thanks to BrightLight LED
- Potentiometer for adjusting the sensing range/sensitivity
- Light/dark switching (DC devices only)
- Rotatable male connector, cable connection or terminal connection
- Versions for 10 – 30 V DC or 24 – 240 V DC/AC voltage supply
- AC/DC devices (-2Hxxxx) are compliant with EN-61000-6-3 (electromagnetic interference for "residential, commercial and light industrial environments")
- BEF-W280 mounting bracket made of stainless steel (1.4301) included in delivery

Your benefits

- Simple and fast commissioning with the highly visible light spot of the BrightLight LED
- Simple operation via potentiometer
- Light/dark switching provides application flexibility
- All necessary mounting and operating accessories are included in delivery, enabling quick and easy setup: since mounting bracket (stainless steel 1.4301) is included in delivery scope
- DC devices and AC/DC devices available in the same housing, allowing electrical flexibility
- Less contamination due to high operating reserves, reducing downtime

Ordering information

Other models and accessories → www.sick.com/W280-2

- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Energetic
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

| Sensing range max. | Switching output | Adjustment | Connection type | Type | Part no. |
|--------------------|------------------|---------------|----------------------------------|---------------|----------|
| 10 mm ... 2,000 mm | NPN | Potentiometer | Cable gland | WTE280-2N4331 | 6044725 |
| | | | Cable, 3-wire, 2 m ¹⁾ | WTE280-2N1131 | 6044727 |
| | | | Male connector M12, 4-pin | WTE280-2N2431 | 6044729 |
| | PNP | Potentiometer | Cable gland | WTE280-2P4331 | 6044724 |
| | | | Cable, 3-wire, 2 m ¹⁾ | WTE280-2P1131 | 6044726 |
| | | | Male connector M12, 4-pin | WTE280-2P2431 | 6044728 |

¹⁾ Do not bend below 0 °C.

- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Energetic
- **Light source:** LED
- **Voltage type:** AC/DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

| Sensing range max. | Switching output | Adjustment | Connection type | Type | Part no. |
|--------------------|------------------|---------------|----------------------------------|---------------|----------|
| 10 mm ... 2,000 mm | Relay | Potentiometer | Cable gland | WTE280-2H4331 | 6044730 |
| | | | | WTE280-2R4331 | 6044758 |
| | | | Cable, 5-wire, 2 m ¹⁾ | WTE280-2H1531 | 6044731 |
| | | | | WTE280-2R1531 | 6044759 |

¹⁾ Do not bend below 0 °C.

- **Functional principle:** Photoelectric retro-reflective sensor
- **Functional principle detail:** Dual lens
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

| Sensing range max. | Switching output | Adjustment | Connection type | Type | Part no. |
|------------------------------------|------------------|---------------|----------------------------------|--------------|----------|
| 0.01 m ... 15 m 0.01 m ... 12 m | NPN | Potentiometer | Cable gland | WL280-2N4331 | 6044733 |
| | | | Cable, 3-wire, 2 m ¹⁾ | WL280-2N1131 | 6044735 |
| | | | Male connector M12, 4-pin | WL280-2N2431 | 6044737 |
| | PNP | Potentiometer | Cable gland | WL280-2P4331 | 6044732 |
| | | | Cable, 3-wire, 2 m ¹⁾ | WL280-2P1131 | 6044734 |
| | | | Male connector M12, 4-pin | WL280-2P2431 | 6044736 |

¹⁾ Do not bend below 0 °C.

- **Functional principle:** Photoelectric retro-reflective sensor
- **Functional principle detail:** Dual lens
- **Light source:** LED
- **Voltage type:** AC/DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

| Sensing range max. | Switching output | Adjustment | Connection type | Type | Part no. |
|------------------------------------|------------------|---------------|----------------------------------|----------------------------------|--------------|
| 0.01 m ... 15 m 0.01 m ... 12 m | Relay | Potentiometer | Cable gland | WL280-2H4331 | 6044738 |
| | | | | WL280-2R4331 | 6044760 |
| | | | Cable, 5-wire, 2 m ¹⁾ | WL280-2H1531 | 6044739 |
| | | | | WL280-2R1531 | 6044761 |
| | | | | Cable, 5-wire, 5 m ¹⁾ | WL280-2H1631 |
| | | | WL280-2R1631 | | 6048859 |
| | | | WL280-2R1631P04 | 1064457 | |

¹⁾ Do not bend below 0 °C.

- **Functional principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

| Sensing range max. | Switching output | Adjustment | Connection type | Type | Part no. |
|--------------------|------------------|---------------|----------------------------------|---------------|----------|
| 0 m ... 60 m | NPN | Potentiometer | Cable gland | WSE280-2N4331 | 6044742 |
| | | | Cable, 3-wire, 2 m ¹⁾ | WSE280-2N1131 | 6044744 |
| | | | Male connector M12, 4-pin | WSE280-2N2431 | 6044746 |
| | PNP | Potentiometer | Cable gland | WSE280-2P4331 | 6044741 |
| | | | Cable, 3-wire, 2 m ¹⁾ | WSE280-2P1131 | 6044743 |
| | | | Male connector M12, 4-pin | WSE280-2P2431 | 6044745 |

¹⁾ Do not bend below 0 °C.

- **Functional principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** AC/DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

| Sensing range max. | Switching output | Adjustment | Connection type | Type | Part no. |
|--------------------|------------------|---------------|----------------------------------|---------------|----------|
| 0 m ... 60 m | Relay | Potentiometer | Cable gland | WSE280-2H4331 | 6044747 |
| | | | | WSE280-2R4331 | 6044762 |
| | | | Cable, 5-wire, 2 m ¹⁾ | WSE280-2H1531 | 6044748 |
| | | | | WSE280-2R1531 | 6044763 |
| | | | Cable, 5-wire, 5 m ¹⁾ | WSE280-2H1631 | 6044749 |

¹⁾ Do not bend below 0 °C.

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com