



W280-2

Sensor kit with mounting bracket and reflector

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Technical data overview

Dimensions (W x H x D)	23.5 mm x 74.5 mm x 63 mm
Sensing range max.	10 mm ... 2,000 mm ¹⁾ 0.01 m ... 15 m ²⁾ 0.01 m ... 12 m ³⁾ 0 m ... 60 m
Light source	LED
Type of light	Visible red light
Enclosure rating	IP66 IP67
Housing material	Plastic ABS
Adjustment	Potentiometer

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

²⁾ Reflector PL80A.

³⁾ Reflector P250.

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

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** 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.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** 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.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** 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.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** 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	6044740
				WL280-2R1631	6048859
				WL280-2R1631P04	1064457

¹⁾ Do not bend below 0 °C.

- **Sensor 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.

- **Sensor 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:

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