



## W27-3 Ex

Ready-to-install sensors compliant with ATEX category 3G/3D

PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



### Technical data overview

<b>Dimensions (W x H x D)</b>	31.4 mm x 112.3 mm x 70.4 mm
<b>Light source</b>	LED / PinPoint LED (depending on type)
<b>Type of light</b>	Infrared light / visible red light (depending on type)
<b>Enclosure rating</b>	IP67
<b>Housing material</b>	Plastic / stainless steel / plastic (depending on type)
<b>Adjustment</b>	Potentiometer / none (depending on type)



### Product description

The W27 family is designed for harsh industrial environments where it copes easily with heavy vibrations, shocks and extreme temperature fluctuations. The W27-3 Ex photoelectric sensor meets category 3G/3D (ATEX) requirements for use in explosive environments. These sensors are enclosed in a rugged metal housing that provides users with a ready-to-install solution that complies with all its aspects. For, besides limit values for temperature, performance or UV resistance, the standard also prescribes a specific mechanical stability that conventional sensors do not meet.

### At a glance

- Label: EX II 3 G EX nA op is IIB T4 Gc X, EX II 3 D EX tc IIIB T135 °C Dc IP67 X in accordance with directive 2014/34 / EU (ATEX)
- Complies with category 3 D / 3 G
- Standard compliant and ready to be installed: Sensor and additional protective housing (stainless steel 1.4301)
- Long sensing distances with infrared LED
- Long sensing ranges and high operating reserves
- Operational safety in industrial environments, in ambient light, with optical reflections and when devices are mounted opposite one another

### Your benefits

- Ready-to-install sensors including rugged metal housing conform with the 3G/3D category for explosive zones (ATEX)
- Resistant to ambient light, optical reflections, and immune to crosstalk from other photoelectric devices, reducing false detection
- Long sensing range with high operating reserve
- Resistant to vibrations, reducing downtime
- Withstands harsh environments with temperatures between -20 °C - +50 °C

## Ordering information

Other models and accessories → [www.sick.com/W27-3\\_Ex](http://www.sick.com/W27-3_Ex)

- **Sensing range max.:** 30 mm ... 1,600 mm
- **Info:** EX II 3G EX nA op is IIB T4 Gc X, EX II 3D EX tc IIIB T135 °C Dc X In the framework of directive 2014/34 / EU (ATEX) and DIN EN ISO/IEC 80079-34, we would like to point out that the traceability of the ordered device to your customer is your responsibility (documentation of your customer and associated product data, such as part number, datcode, serial number)
- **Functional principle:** Photoelectric proximity sensor
- **Switching mode:** Light/dark switching
- **Functional principle detail:** Background suppression
- **Light source:** LED
- **Switching output:** PNP
- **Type of light:** Infrared light
- **Adjustment:** Potentiometer

Connection type	Type	Part no.
Cable with M12 male connector, 4-pin	WTB27X-3P3411	1089183
Cable, 4-wire	WTB27X-3P1811	1027988

- **Sensing range max.:** 10 mm ... 300 mm
- **Info:** EX II 3G EX nA op is IIB T4 Gc X, EX II 3D EX tc IIIB T135 °C Dc X In the framework of directive 2014/34 / EU (ATEX) and DIN EN ISO/IEC 80079-34, we would like to point out that the traceability of the ordered device to your customer is your responsibility (documentation of your customer and associated product data, such as part number, datcode, serial number)
- **Functional principle:** Photoelectric proximity sensor
- **Switching mode:** Light/dark switching
- **Functional principle detail:** Energetic
- **Light source:** PinPoint LED

Switching output	Type of light	Connection type	Adjustment	Type	Part no.
PNP	Visible red light	Cable, 4-wire	Potentiometer	WTE27X-3P1861	1066386

- **Sensing range max.:** 0.1 m ... 15 m
- **Info:** EX II 3G EX nA op is IIB T4 Gc X, EX II 3D EX tc IIIB T135 °C Dc X In the framework of directive 2014/34 / EU (ATEX) and DIN EN ISO/IEC 80079-34, we would like to point out that the traceability of the ordered device to your customer is your responsibility (documentation of your customer and associated product data, such as part number, datcode, serial number)
- **Functional principle:** Photoelectric retro-reflective sensor
- **Switching mode:** Light/dark switching
- **Light source:** LED
- **Switching output:** PNP
- **Type of light:** visible red light
- **Adjustment:** Potentiometer

Connection type	Type	Part no.
Cable with M12 male connector, 4-pin	WL27X-3P3431	1029955
Cable, 4-wire	WL27X-3P1831	1027989

- **Sensing range max.:** 0 m ... 35 m
- **Info:** EX II 3G EX nA op is IIB T4 Gc X, EX II 3D EX tc IIIB T135 °C Dc X In the framework of directive 2014/34 / EU (ATEX) and DIN EN ISO/IEC 80079-34, we would like to point out that the traceability of the ordered device to your customer is your responsibility (documentation of your customer and associated product data, such as part number, datcode, serial number)
- **Functional principle:** Through-beam photoelectric sensor
- **Switching mode:** Light/dark switching

Light source	Switching output	Type of light	Connection type	Adjustment	Type	Part no.
LED	PNP	Visible red light	Cable, 4-wire	None	WSE27X-3P1830	1027991

## 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](http://www.sick.com)