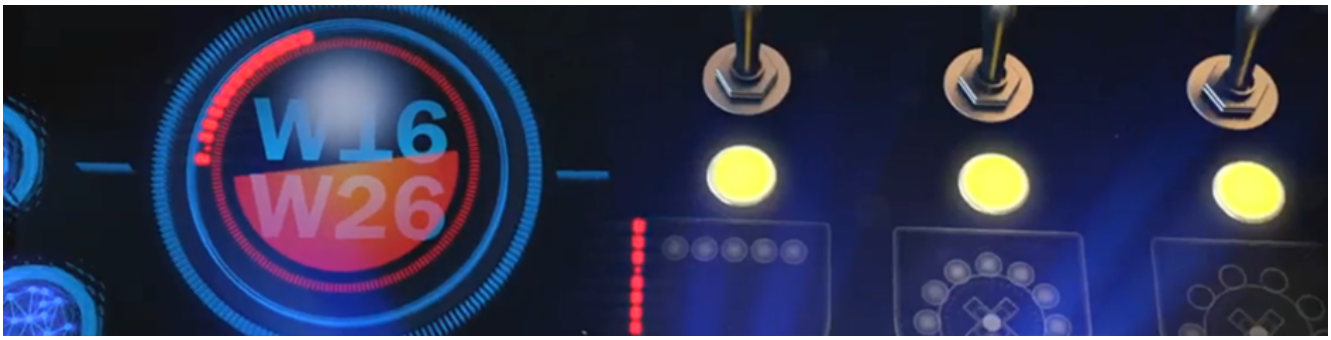
Product family overview

W26

Stars in object detection

SICK
Sensor Intelligence.

Advantages



Easy and quick sensor alignment using BluePilot

Using the innovative BluePilot alignment aid, the sensors in the W16 and W26 product family can be commissioned in seconds. The blue LED display provides direct feedback to assist you with optimally aligning the sensors and reflectors as well as senders and receivers. In the case of the photoelectric proximity sensors, a push-and-turn mechanism enables the sensor to be adjusted quickly and precisely, thereby eliminating the customary time-consuming fine adjustment using rotary controls.

BluePilot also reports any change in detection quality, e.g., due to contamination or vibrations, which ensures faults are detected in a timely manner, long before a production downtime occurs.

Faster, convenient start-up

Photoelectric retro-reflective and through-beam photoelectric sensors

- The blue LED alignment aid speeds up the process of optimally aligning the sensors and reflectors or senders and receivers
- Any changes in the operational safety due to contamination or vibrations can be recognized at a glance

Photoelectric proximity switch

- Select the right mode for the object type in question by simply rotating the control element

Photoelectric retro-reflective sensor for detecting transparent objects

- Select the right mode for the object type in question by simply rotating the control element

With the new BluePilot operating concept, you will save valuable time commissioning the sensor, and avoid production downtimes thanks to the timely reporting of faults.

Rugged and reliable

The sensors from the W26 product family are particularly rugged and reliable.

With the OptoFilter, the sensors see what they have to see: they are immune to LED lights, reflections from safety vests and the influence of depolarizing objects.

The sensors can also withstand many chemical, thermal and mechanical environmental influences thanks to the ultra-rugged VISTAL housing.

Everything reliably detected

Thanks to the OptoFilter, the sensors feature high ambient light immunity.

If there is contamination, the W26 sensors automatically adjust their switching thresholds.

Thanks to the VISTAL housing, the sensors can also withstand extreme loads.

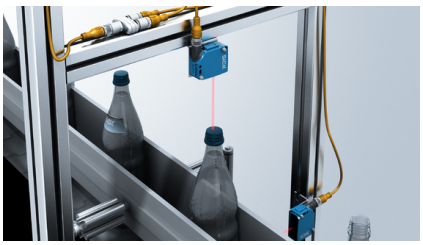
The rugged design ensures high system availability and reduces downtimes.

Smart sensors for efficient machine communication

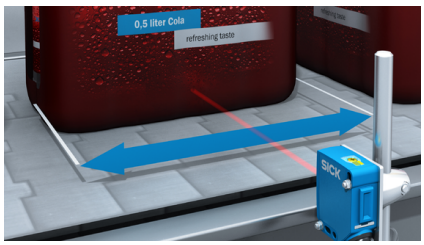
Smart Sensors provide indispensable input for every process chain. They support dynamic, real-time-optimized, and self-organized industry processes. The Smart Sensors W16 and W26 capture real-life situations, and generate and receive data and information beyond traditional switching signals or measured process parameters.

<a href=https://www.sick.de/smart-sensors target="_self">Find out more

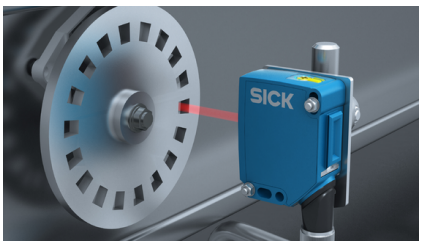
From raw signals to customized information



Base logic: User-definable logic functions with trigger sensors and switching signal delays



Time measurement and debouncing with the aid of the Time Measurement and Debouncing Smart Task



W26 with the Counter and Debouncing Smart Task counts and evaluates detection signals

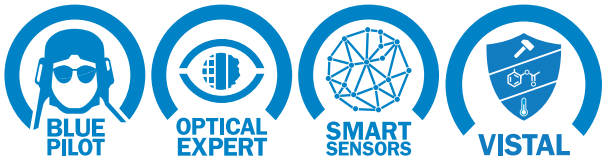
Interconnectivity and efficient processing of data ensure leaner structures and cost benefits for your process.

Technical data overview

Dimensions (W x H x D)	24.6 mm x 82.5 mm x 53.3 mm 20 mm x 55.7 mm x 42 mm
Functional principle detail	Background suppression NarrowBeam Foreground suppression TwinEye technology Without reflector minimum distance (autocollimation/coaxial optics) With minimum distance to reflector (dual lens system) (depending on type)
Light source	PinPoint LED / LED (depending on type)
Type of light	Visible red light / Infrared light (depending on type)
Enclosure rating	IP66 / IP67 / IP69 / IP65 (depending on type)
Housing material	Plastic
Adjustment	Teach-in button Cable Potentiometer Teach-Turn adjustment None (depending on type)

Product description

The W26 is equipped with new technologies such as TwinEye and OptoFilter for reliable object detection. It can be quickly and conveniently adjusted via the BluePilot operating and display concept. Since every W26 is designed as a Smart Sensor, it can be configured to fit the application via IO-Link and offers additional diagnostic functions and Smart Tasks. It is therefore a trailblazer on the path to Industry 4.0. The highly-visible PinPoint LED and the infrared LED are available as the light source. The durable laser inscription ensures device identification in the long run. Thanks to the very rugged VISTAL® housing and the predictive maintenance, the W26 offers very high reliability and prevents unplanned machine downtimes.



At a glance

- Technologies: TwinEye with OptoFilter
- BluePilot: Optical alignment aid, adjustment of the sensing range via Teach-Turn adjustment with optical sensing range indicator or via IO-Link
- PinPoint LED: Light-intensive red sender LED
- Smart Sensor: Enhanced Sensing, IO-Link, Diagnostics, Smart Tasks

Your benefits

- Usability and uniform operation thanks to optical quality display on the housing or conveniently via IO-Link
- Simplification when aligning the light beam to the reflector, the receiver or to an object thanks to the highly-visible light spot of the PinPoint LED combined with the optical LED display
- Very high reliability thanks to new detection technologies as well as high optical ruggedness
- The Smart Sensor makes machine processes quicker, more efficient and transparent, enables predictive maintenance and is thereby a trailblazer for Industry 4.0 applications

Fields of application

- Consumer goods
- Automotive and parts suppliers
- Wood
- Storage and conveyor
- Handling and assembly
- Metal and steel
- Stone, ceramic, glass
- Textile

Ordering information

Other models and accessories ➜ www.sick.com/W26

- **Sensing range min. / max.:** 30 mm / 1,600 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression
- **Switching mode:** Light/dark switching
- **Light source:** PinPoint LED
- **Type of light:** visible red light
- **Housing:** rectangular

Switching output	Connection type	Type	Part no.
PNP	Male connector M12, 4-pin	WTB26P-24861120A00	1115766
Push-pull: PNP/NPN	Cable with M12 male connector, 4-pin, 318 mm	WTB26P-34161120A00	1218806
	Cable with Q6 male connector, 6-pin, DC-coded, 298 mm	WTB26P-39422122ZZZ	1222809
		WTB26P-39721122ZZZ	1222804
	Cable with Q7 male connector, 7-pin, DC-coded, 298 mm	WTB26P-3B111120ZZZ	1222816
	Cable, 4-wire, 2 m	WTB26P-1H161120A00	1218824
		WTB26P-1H162120A00	1222744
	Male connector M12, 4-pin	WTB26P-24161120A00	1218666

- **Sensing range min. / max.:** 30 mm / 1,600 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression, NarrowBeam
- **Switching output:** push-pull: PNP/NPN
- **Light source:** PinPoint LED
- **Type of light:** visible red light
- **Connection type:** male connector M12, 4-pin
- **Housing:** rectangular

Switching mode	Type	Part no.
Light switching	WTB26P-24113520ZZZ	1222813
Light/dark switching	WTB26P-24161520A00	1222705

- **Sensing range min. / max.:** 30 mm / 3,000 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression
- **Housing:** rectangular

Switching mode	Switching output	Light source	Type of light	Connection type	Type	Part no.
Light switching	Push-pull: PNP/NPN	PinPoint LED	Visible red light	Male connector M12, 4-pin	WTB26P-24113420ZZZ	1140316

Switching mode	Switching output	Light source	Type of light	Connection type	Type	Part no.
Light/dark switching	NPN	LED	Infrared light	Male connector M12, 4-pin	WTB26I-24G11420ZZZ	1124859
						1133143
	PNP	LED	Infrared light	Male connector M12, 4-pin	WTB26I-24861420A00	1123835
					WTB26I-24861421A00	1126768
	Push-pull: PNP/NPN	LED	Infrared light	Cable, 4-wire, 2 m	WTB26I-1H161420A00	1222713
					WTB26I-1H162420A00	1222712
				Male connector M12, 4-pin	WTB26I-24161420A00	1222711
					WTB26I-24161422A00	1109760
					WTB26I-24162420A00	1222675
		PinPoint LED	Visible red light	Cable with M12 male connector, 4-pin, 318 mm	WTB26P-34161420A00	1125296
				Male connector M12, 4-pin	WTB26P-24161420A00	1222709

- **Sensing range min. / max.:** 30 mm / 2,000 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression
- **Switching output:** push-pull: PNP/NPN
- **Light source:** LED
- **Type of light:** Infrared light
- **Housing:** rectangular

Switching mode	Connection type	Type	Part no.
Dark switching	Male connector M12, 4-pin	WTB26I-24115120ZZZ	1222815
		WTB26I-24116120ZZZ	1222814
Light/dark switching	Cable with M12 male connector, 4-pin, 318 mm	WTB26I-34161120A00	1218827
	Cable with Q6 male connector, 6-pin, DC-coded, 298 mm	WTB26I-39422122ZZZ	1222810
		WTB26I-39721122ZZZ	1222808
	Cable with Q7 male connector, 7-pin, DC-coded, 298 mm	WTB26I-3B111120ZZZ	1222817
	Cable, 4-wire, 2 m	WTB26I-1H161120A00	1218825
	Male connector M12, 4-pin	WTB26I-24161120A00	1218667
		WTB26I-24161122A00	1222797
		WTB26I-24162120A00	1221726
		WTB26I-24162122A00	1222796

- **Sensing range min. / max.:** 0 mm / 800 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Foreground suppression
- **Switching mode:** Light/dark switching
- **Switching output:** push-pull: PNP/NPN

Light source	Type of light	Connection type	Housing	Type	Part no.
PinPoint LED	Visible red light	Male connector M12, 4-pin	Rectangular	WTF26P-24161420A00	1113470

- **Sensing range min. / max.:** 10 mm / 1,000 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression, TwinEye technology
- **Switching output:** push-pull: PNP/NPN
- **Housing:** rectangular

Switching mode	Light source	Type of light	Connection type	Type	Part no.
–	PinPoint LED	Visible red light	Male connector M12, 4-pin	WTS26P-24161120A70	1219799
				WTS26P-2416H120A71	1219800
Light/dark switching	LED	Infrared light	Male connector M12, 4-pin	WTS26I-24161120A00	1137249
	PinPoint LED	Visible red light	Cable with M12 male connector, 4-pin, 318 mm	WTS26P-34161120A00	1218949
			Cable, 4-wire, 2 m	WTS26P-1H161120A00	1218950
			Male connector M12, 4-pin	WTS26P-24161120A00	1218668
				WTS26P-24162120A00	1221727

- **Sensing range min. / max.:** 10 mm / 500 mm
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression, TwinEye technology
- **Switching mode:** Light/dark switching
- **Switching output:** push-pull: PNP/NPN

Light source	Type of light	Connection type	Housing	Type	Part no.
LED	Visible red light	Male connector M12, 4-pin	Rectangular	WTS26G-24161920A00	1128822

- **Sensing range min. / max.:** 0 m / 18 m
- **Functional principle:** Photoelectric retro-reflective sensor
- **Functional principle detail:** Without reflector minimum distance (autocollimation/coaxial optics)
- **Light source:** PinPoint LED
- **Type of light:** visible red light
- **Housing:** rectangular

Switching mode	Switching output	Connection type	Type	Part no.
Dark switching	Push-pull: PNP/NPN	Male connector M12, 4-pin	WLA26P-24114100ZZZ	1222793
			WLA26P-2416A100A00	1222697
Light switching	Push-pull: PNP/NPN	Male connector M12, 4-pin	WLA26P-24116100ZZZ	1222792

Switching mode	Switching output	Connection type	Type	Part no.
Light/dark switching	PNP	Male connector M12, 4-pin	WLA26P-24862130A00	1115760
	Push-pull: PNP/NPN	Cable with M12 male connector, 4-pin, 318 mm	WLA26P-34162100A00	1218823
		Cable with Q6 male connector, 6-pin, DC-coded, 298 mm	WLA26P-39421102ZZZ	1222790
			WLA26P-39722102ZZZ	1222819
		Cable with Q7 male connector, 7-pin, DC-coded, 298 mm	WLA26P-3B112100ZZZ	1222791
		Cable, 4-wire, 2 m	WLA26P-1H162100A00	1218822
		Male connector M12, 4-pin	WLA26P-24161100A00	1221732
			WLA26P-24162100A00	1218664
			WLA26P-24162130A00	1111236
				1111293

- **Sensing range min. / max.:** 0.25 m / 19 m
- **Functional principle:** Photoelectric retro-reflective sensor
- **Functional principle detail:** With minimum distance to reflector (dual lens system)
- **Switching mode:** Light/dark switching
- **Switching output:** push-pull: PNP/NPN
- **Light source:** PinPoint LED
- **Type of light:** visible red light
- **Housing:** rectangular

Connection type	Type	Part no.
Cable with M12 male connector, 4-pin, 318 mm	WLD26P-341121A0ZZZ	1221733
Cable, 4-wire, 2 m	WLD26P-1H1121A0ZZZ	1218805
Male connector M12, 4-pin	WLD26P-241121A0ZZZ	1218699

- **Sensing range min. / max.:** 0.25 m / 3 m
- **Functional principle:** Photoelectric retro-reflective sensor
- **Functional principle detail:** With minimum distance to reflector (dual lens system)
- **Switching mode:** Light/dark switching
- **Switching output:** push-pull: PNP/NPN

Light source	Type of light	Connection type	Housing	Type	Part no.
PinPoint LED	Visible red light	Male connector M12, 4-pin	Rectangular	WLD26P-241122A0ZZZ	1113466

- **Sensing range min. / max.:** 0 m / 60 m
- **Functional principle:** Through-beam photoelectric sensor
- **Switching output:** push-pull: PNP/NPN
- **Housing:** rectangular

Switching mode	Light source	Type of light	Connection type	Type	Part no.
Light switching	PinPoint LED	Visible red light	Male connector M12, 4-pin	WSE26P-24165100A00	1118267

Switching mode	Light source	Type of light	Connection type	Type	Part no.
Light/dark switching	LED	Infrared light	Cable with M12 male connector, 4-pin, 318 mm	WSE26I-34162100A00	1088333
			Cable, 4-wire, 2 m	WSE26I-1H162100A00	1088334
			Male connec-tor M12, 4-pin	WSE26I-24162100A00	1088332
	PinPoint LED	Visible red light	Cable with M12 male connector, 4-pin, 318 mm	WSE26P-34162100A00	1088336
			Cable with Q6 male connector, 6-pin, DC-coded, 298 mm	WSE26P-39112102ZZZ	1102912
			Cable with Q7 male connector, 7-pin, DC-coded, 298 mm	WSE26P-3B112100ZZZ	1102913
			Cable, 4-wire, 2 m	WSE26P-1H162100A00	1088337
			Male connec-tor M12, 4-pin	WSE26P-24162100A00	1088335
					1102909

- **Sensing range min. / max.:** 5 m / 120 m
- **Functional principle:** Through-beam photoelectric sensor
- **Switching mode:** Light/dark switching
- **Switching output:** push-pull: PNP/NPN

Light source	Type of light	Connection type	Housing	Type	Part no.
LED	Visible red light	Male connec-tor M12, 4-pin	Rectangular	WSE26G-24162400A00	1127145

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

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