



WLL170-2

Versatility for standard applications

FIBER-OPTIC SENSORS

SICK
Sensor Intelligence.



Technical data overview

Dimensions (W x H x D)	10.5 mm x 35.5 mm x 83.7 mm
Sensing range max.	0 mm ... 4,000 mm, Through-beam system ¹⁾
Light source	LED
Type of light	Visible red light / visible green light (depending on type)
Enclosure rating	IP66 ²⁾
Housing material	Plastic ABS/PC Plastic ABS
Adjustment	Potentiometer, 10 turns Single teach-in button Cable

¹⁾ LL3-TB02 and tip adapter LL3-TA01.

²⁾ With correctly attached fibre-optic cable LL3 and closed protection hood.

Product description

The WLL170-2 fiber-optic photoelectric sensor family features a standard operating system that is especially suitable for basic applications, but can be used when rapid response times are crucial. There are several variants. The WLL170(T) version is optimized for a number of key applications, such as detection of very small objects, colored marks, or transparent objects. The WLL170T-2 is a teach-in version where the switching threshold can be set either automatically by pressing a button or via a cable. In contrast, the WLL170-2 has a manual switching threshold adjustment via a potentiometer. Both models are available in a high-speed version with a switching frequency of 10 kHz for extremely fast response times. For optimum detection of color contrasts, you can choose between devices with a red or green LED emitter. Detection tasks are handled securely and reliably using the LL3 series of fiber-optic cables.

At a glance

- Rapid response time (50 µs)
- Switching threshold adjustment via potentiometer, or teach-in via button or cable
- Four different teach-in modes
- Simple installation
- Red or green LED emitter

Your benefits

- Reliable, rapid process detection
- Low installation costs due to short commissioning time
- Flexible teach-in modes allow the sensor to be customized according to the specific application
- Emitted light ideal for color or contrast detection
- Easy programming via simple potentiometer and switch adjustment

Ordering information

Other models and accessories → www.sick.com/WLL170-2

- **Sensing range max.:** 2 ... 4 m
- **Number of switching outputs:** 1
- **Switching mode:** Light/dark switching
- **Enclosure rating:** IP66

Input	Connection type	Adjustment	Type	Part no.
-	Cable with connector, JST, 3-pin	Potentiometer	WLL170-2N330S02	6052884
			WLL170-2N132	6029515
	Cable, 3-wire	Potentiometer	WLL170-2P132	6029511
	Cable, 4-wire	Teach-in button	WLL170T-2P135	6036328
	Connector M8, 3-pin	Potentiometer	WLL170-2N330	6029517
			WLL170-2P330	6029513
		Teach-in button	WLL170T-2N330	6033952
			WLL170T-2P330	6033949
	Male connector M8, 4-pin	Potentiometer	WLL170-2N430	6029518
			WLL170-2P430	6029514
Teach-in input	Cable, 4-wire	Teach-in button, cable	WLL170T-2N132	6033951
			WLL170T-2P132	6033948
	Male connector M8, 4-pin	Teach-in button, cable	WLL170T-2N430	6033953
			WLL170T-2P430	6033950

- **Sensing range max.:** 1 ... 2 m
- **Number of switching outputs:** 1
- **Switching mode:** Light/dark switching
- **Enclosure rating:** IP66

Input	Connection type	Adjustment	Type	Part no.
-	Cable, 3-wire	Potentiometer	WLL170-2N162	6029531
			WLL170-2N192	6029523
			WLL170-2P162	6029527
			WLL170-2P192	6029519
	Connector M8, 3-pin	Potentiometer	WLL170-2N360	6029533
			WLL170-2N390	6029525
			WLL170-2P360	6029529
			WLL170-2P390	6029521
		Teach-in button	WLL170T-2N360	6033961
			WLL170T-2N390	6033958
			WLL170T-2P360	6033964
			WLL170T-2P390	6033955
	Male connector M8, 4-pin	Potentiometer	WLL170-2N460	6029534
			WLL170-2N490	6029526
			WLL170-2P460	6029530
			WLL170-2P490	6029522

Input	Connection type	Adjustment	Type	Part no.
Teach-in input	Cable, 4-wire	Teach-in button, cable	WLL170T-2N162	6033960
			WLL170T-2N192	6033957
			WLL170T-2P162	6033963
			WLL170T-2P192	6033954
	Male connector M8, 4-pin	Teach-in button, cable	WLL170T-2N460	6033962
			WLL170T-2N490	6033959
			WLL170T-2P460	6033965
			WLL170T-2P490	6033956

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