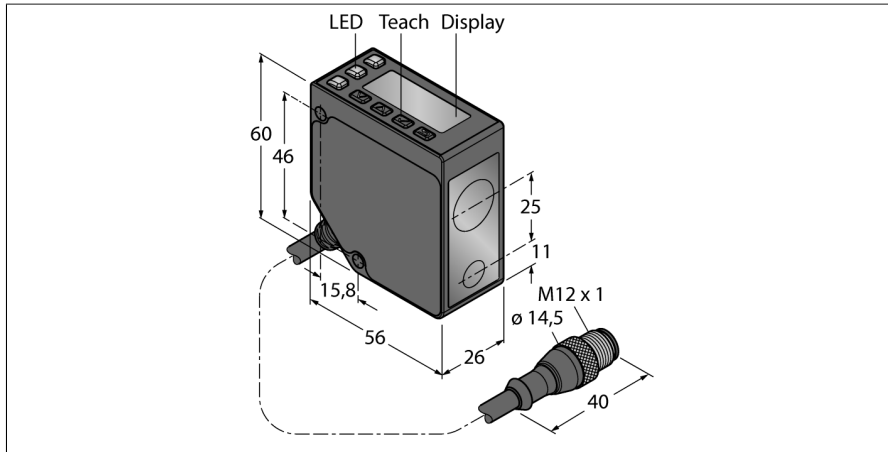


Photoelectric Sensor Diffuse-Mode Laser Sensor (Triangulation) With Switching Output and IO-Link LE550KC1QP



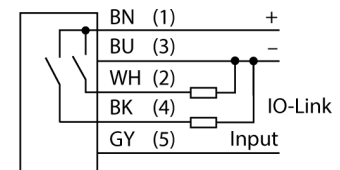
- 2-line 8-segment display
- Cable with male end M12 × 1, 5-pin, PVC, 150 mm
- Range: 100...1000 mm
- Laser class 1, red, 650 nm, acc. to IEC 60825-1:2007
- Resolution at 100 mm - 600 mm distance: < 0.5 mm
- Resolution at 600 mm - 1000 mm distance: < 1 mm
- Operating voltage: 12...30 VDC
- 1 × PNP switching output with IO-Link communication
- Transmission of process value and parametrization via IO-link

Type	LE550KC1QP
ID	3097766

Optical data	
Function	Proximity switch
Operating mode	Triangulation
Light type	Red
Wavelength	650 nm
Laser class	▲ 1
Optical resolution	1 mm
Repeatability	0.5 mm
Range	100...1000 mm
Ambient light immunity	5000 lux

Electrical data	
Operating voltage U_s	12...30 VDC
DC rated operating current I_s	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Communication protocol	IO-Link
Output function	NO/NC, PNP
Switching frequency	≤ 250 Hz
Readiness delay	≤ 2 s
Readiness delay	≤ 3000 ms
Response time typical	< 2 ms

Wiring Diagram

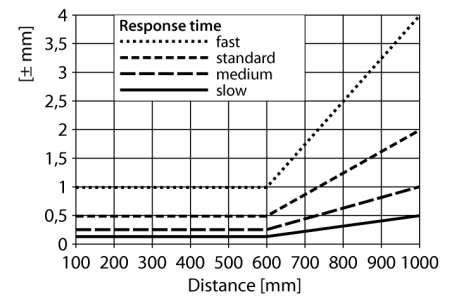


Functional principle

The LE550 laser sensors measure the distance to an object up to a range of 1 m. The settings are made via buttons at the housing. The built-in display assists with the menu navigation and is used to display the measured distance. The switching output is reprogrammable and the analog output is, depending on the type, either laid out as current or voltage output. The integrated connector is rotatable by 90° degrees which makes it easy to mount. The transmitter LED can be turned off via the menu or the grey wire (PIN 5). The same wire can be used to operate two devices in the synch mode, which prevents mutual influence. The measurement achieves an accuracy of 0.5 mm at a distance of max. 600 mm.

Excess Gain Curve

IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 2 (38.4 kBaud)
Process data width	16 bit
Frame type	Type_2_2
Minimum cycle time	2 ms
Function pin 4	IO-Link
Function Pin 2	DI
Maximum cable length	20 m
Profile support	Smart Sensor Profile
Included in the SIDI GSDML	Yes

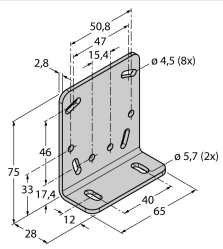
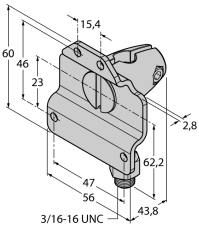
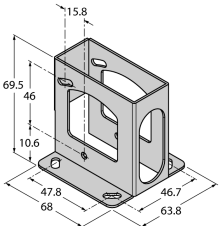


Mechanical data	
Design	Rectangular, LE550
Housing material	Metal, Zinc Alloy Die-Cast, Black
Lens	plastic, Polycarbonate
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC
Number of cores	5
Ambient temperature	-20...+55 °C
Storage temperature	-30...+65 °C
Protection class	IP67

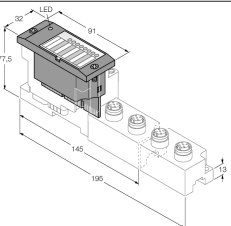
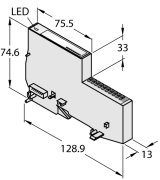
Special features	keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow

Tests/approvals	
Approvals	CE, cULus listed

Accessories

Type code	Ident no.		Dimension drawing
SMBLEL	3086754	Mounting bracket, rectangular, stainless steel, for side mounting of LE250/550 sensors	
SMBLEFA	3088226	Mounting bracket, rotatable, stainless steel, for sensors of the LE250/550 series	
SMBLEU	3086755	Protective housing, stainless steel, for sensors of the LE250/550 series	

Function accessories

Type code	Ident no.		Dimension drawing
BL67-4IOL	6827386	4-channel IO-Link Master module for the modular BL67 I/O-system	
BL20-E-4IOL	6827385	IO-Link master module for the modular BL20 I/O system, 4-channel	

Function accessories

Type code	Ident no.		Dimension drawing
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port	
TBIL-M1-16DXP	6814102	16-channel I/O-hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)	
TBEN-S2-4IOL	6814024	Compact multiprotocol I/O module, 4 IO-Link Master 1.1 Class A, 4 universal PNP digital channels 0.5 A	
50153501 MD 742-11-82X5-12 Leuze	100051716	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)	