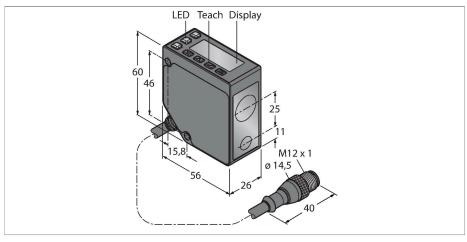


LE550UQP Photoelectric Sensor – Laser Scanning System



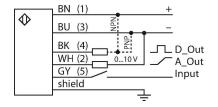
Technical data

Туре	LE550UQP		
ID	3086751		
Optical data			
Function	Proximity switch		
Operating mode	Triangulation		
Light type	Red		
Wavelength	650 nm		
Laser class	<u>^</u> 2		
Optical resolution	1 mm		
Repeatability	0.5 mm		
Range	1001000 mm		
Ambient light immunity	10000 lux		
Electrical data			
Operating voltage	1230 VDC		
DC rated operational current	≤ 70 mA		
Short-circuit protection	yes		
Reverse polarity protection	yes		
Output function	NO contact, PNP/NPN		
Output 2	Analog output		
Type of analog output	010 V		
Voltage output	010 V		
Switching frequency	≤ 250 Hz		
Readiness delay	≤ 2 s		
Readiness delay	≤ 2000 ms		
Response time typical	< 2 ms		
Mechanical data			
Design	Rectangular, LE550		

Features

- ■2-line 8-segment display
- Cable with male end M12 × 1, 5-pin, PVC, 150 mm
- Range: 100...1000 mm
- Laser class 2, 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
- ■PNP/NPN-switching output, switchable
- ■Analog output: 0...10 V

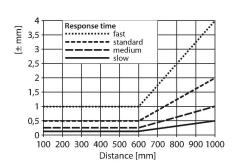
Wiring diagram



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

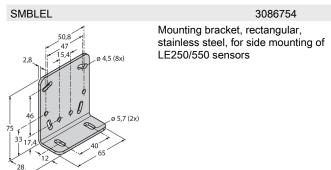


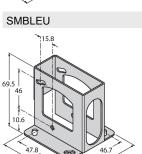


Technical data

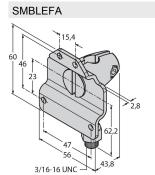
Dimensions	56 x 26 x 60 mm	
Housing material	Metal, Zinc Alloy Die-Cast, Black	
Lens	plastic, Polycarbonate	
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC	
Number of cores	5	
Ambient temperature	-20+55 °C	
Storage temperature	-30+65 °C	
Relative humidity	90 %	
Protection class	IP67	
Special features	keep/defer	
Power-on indication	LED, Green	
Switching state	LED, Yellow	
Tests/approvals		
Approvals	CE, cULus listed	

Accessories





3086755 Protective housing, stainless steel, for sensors of the LE250/550 series



Mounting bracket, rotatable, stainless steel, for sensors of the LE250/550 series

3088226



Accessories

Dimension drawing	Туре	ID	
M12x1 e 15 20 14	RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
8 15 26.5 14 32	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
M12 x 1	RKS4.5T-2/TEL	6626361	Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; shielded; cULus approval; other cable lengths and qualities available, see www.turck.com
0 15 M12 11 28.5 14	WKS4.5T-2/TEL	6626364	Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; shielded; cULus approval; other cable lengths and qualities available, see www.turck.com