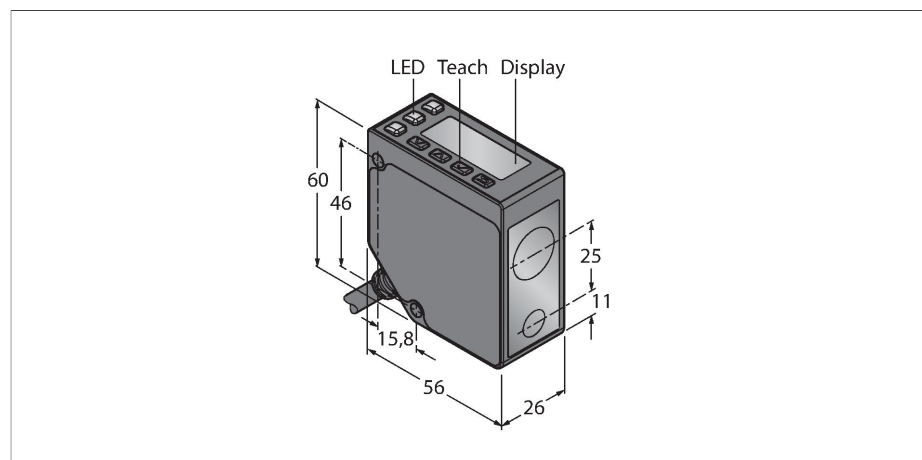


LE550U

Photoelectric Sensor – Laser Scanning System



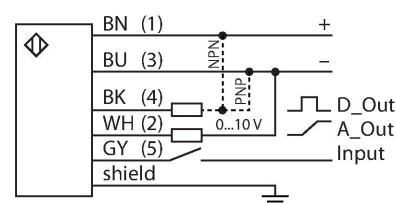
Technical data

Type	LE550U
ID	3086752
Optical data	
Function	Proximity switch
Operating mode	Triangulation
Light type	Red
Wavelength	650 nm
Laser class	▲ 2
Optical resolution	1 mm
Repeatability	0.5 mm
Range	100...1000 mm
Ambient light immunity	10000 lux
Electrical data	
Operating voltage	12...30 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	0...10 V
Voltage output	0...10 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-digit 8-segment display
- Cable, PVC, 2 m
- 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

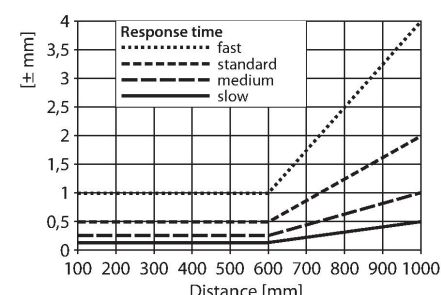
Wiring diagram



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

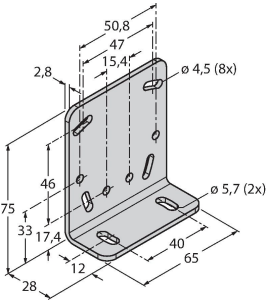
Dimensions	56 x 26 x 60 mm
Housing material	Metal, Zinc Alloy Die-Cast, Black
Lens	plastic, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Ambient temperature	-20...+55 °C
Storage temperature	-30...+65 °C
Relative humidity	90 %
Protection class	IP67
Special features	keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
Tests/approvals	
Approvals	CE, cULus listed

Accessories

SMBLEL

3086754

Mounting bracket, rectangular, stainless steel, for side mounting of LE250/550 sensors

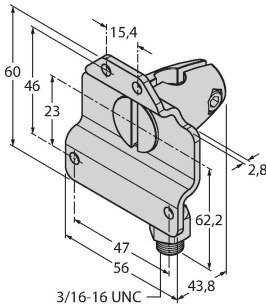


Technical drawing of the SMBLEL mounting bracket. It is a rectangular stainless steel bracket for side mounting. Dimensions include: overall width 50.8, mounting hole spacing 47, hole diameter 4.5 (8x), overall height 75, mounting hole offset 15.4, base width 40, base height 12, and base hole diameter 5.7 (2x).

SMBLEFA

3088226

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

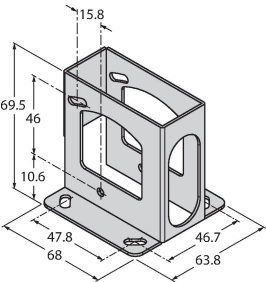


Technical drawing of the SMBLEFA mounting bracket. It is a rotatable stainless steel bracket for sensors. Dimensions include: overall width 60, mounting hole spacing 46, hole diameter 4.5 (8x), overall height 62.2, mounting hole offset 15.4, base width 47, base height 12, and base hole diameter 5.7 (2x). The base is threaded 3/16-16 UNC.

SMBLEU

3086755

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



Technical drawing of the SMBLEU protective housing. It is a stainless steel protective housing for sensors. Dimensions include: overall width 69.5, mounting hole spacing 46, hole diameter 4.5 (8x), overall height 10.6, mounting hole offset 15.8, base width 47.8, base height 12, and base hole diameter 5.7 (2x).