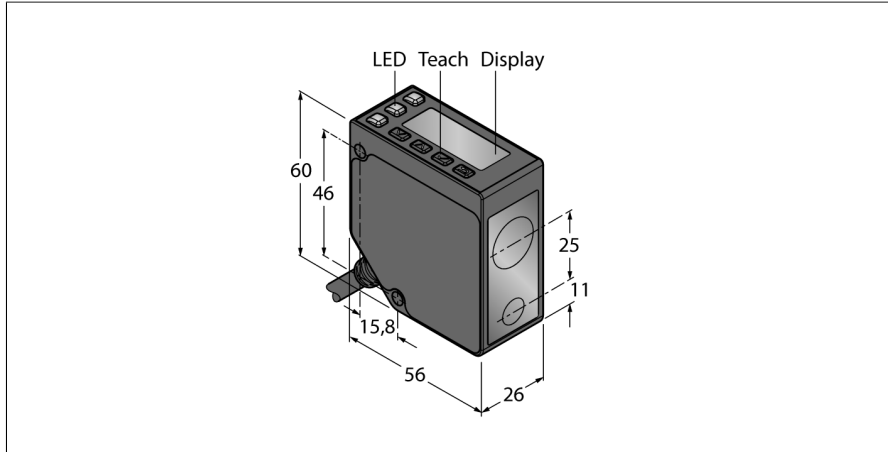
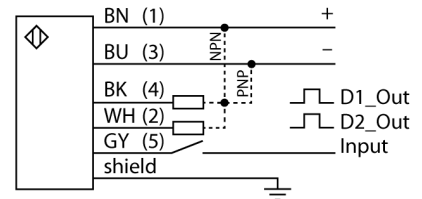


# Photoelectric Sensor Diffuse-Mode Laser Sensor (Triangulation) With Switching Outputs LE250D



- 2-line, 8-segment display
- Cable, PVC, 2 m
- Range: 100...400 mm
- Laser class 2, red, 650 nm, acc. to IEC 60825-1:2007
- Resolution at 100 mm - 250 mm distance: < 0.02 mm
- Resolution at 250 mm - 400 mm distance: < 0.2 mm
- Operating voltage: 12...30 VDC
- Two switching outputs PNP/NPN configurable

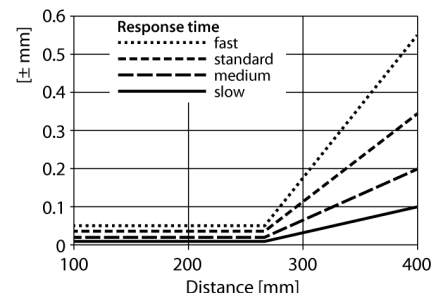
### Wiring Diagram



### Functional principle

The laser distance sensors of the LE250 Series measure the distance to the object to 400 mm. The devices are set with buttons on the housing. The built-in display assists with the menu navigation and serves 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 measuring accuracy is 0.02 mm at a distance of 250 mm and 0.2 mm at a distance of 400 mm.

### Excess Gain Curve



Type	LE250D
ID	3094202
<b>Optical data</b>	
Function	Proximity switch
Operating mode	Triangulation
Light type	Red
Wavelength	650 nm
Laser class	▲ 2
Optical resolution	0.2 mm
Repeatability	0.1 mm
Range	100...400 mm
Ambient light immunity	10,000 lux
<b>Electrical data</b>	
Operating voltage $U_s$	12...30 VDC
DC rated operating current $I_s$	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output 2	Switching output
Switching frequency	≤ 250 Hz
Readiness delay	≤ 2 s
Readiness delay	≤ 1000 ms
Response time typical	< 2 ms
<b>Mechanical data</b>	
Design	Rectangular, LE250
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
Protection class	IP67

Special features	keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
<b>Tests/approvals</b>	
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	