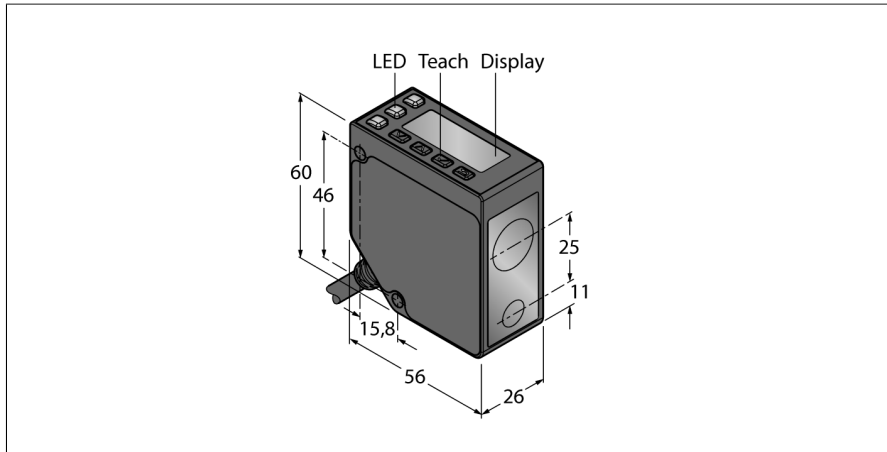
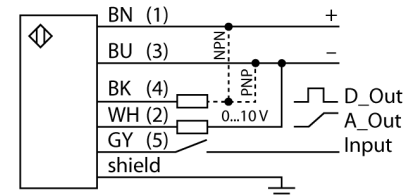


# Photoelectric Sensor Diffuse-Mode Laser Sensor (Triangulation) With Analog Output LE550UC1 W/30



- 2-digit 8-segment display
- Cable, PVC, 9 m
- 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
- PNP/NPN-switching output, switchable
- Analog output: 0...10 V

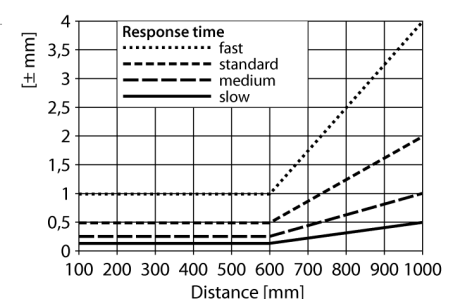
## Wiring Diagram



## 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



|                                  |                     |
|----------------------------------|---------------------|
| Type                             | LE550UC1 W/30       |
| ID                               | 3095380             |
| <b>Optical data</b>              |                     |
| 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            |
| <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 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                |
| Housing material      | Metal, Zinc Alloy Die-Cast, Black |
| Lens                  | plastic, Polycarbonate            |
| Electrical connection | Cable, 9 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               |                   |