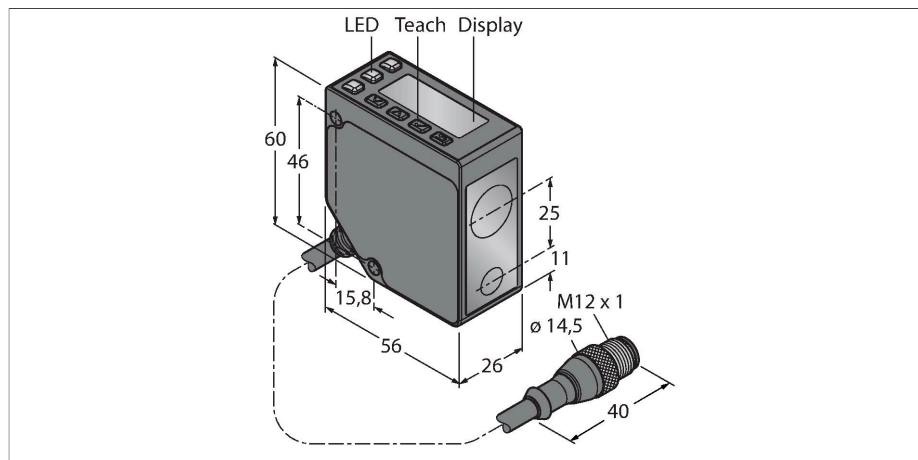


# LE550DQP

## Photoelectric Sensor – Laser Scanning System



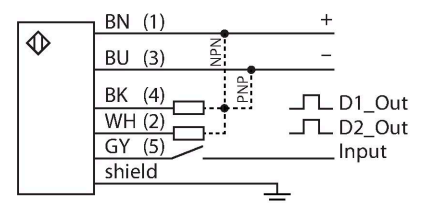
### Features

- 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
- Two switching outputs PNP/NPN configurable

### Technical data

|                              |                                   |
|------------------------------|-----------------------------------|
| Type                         | LE550DQP                          |
| ID                           | 3094197                           |
| <b>Optical data</b>          |                                   |
| 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                         |
| <b>Electrical data</b>       |                                   |
| Operating voltage            | 12...30 VDC                       |
| DC rated operational current | ≤ 70 mA                           |
| Short-circuit protection     | yes                               |
| Reverse polarity protection  | yes                               |
| Output function              | PNP/NPN                           |
| Output 2                     | Switching output                  |
| Switching frequency          | ≤ 250 Hz                          |
| Readiness delay              | ≤ 2 s                             |
| Readiness delay              | ≤ 2000 ms                         |
| Response time typical        | < 2 ms                            |
| <b>Mechanical data</b>       |                                   |
| Design                       | Rectangular, LE550                |
| Dimensions                   | 56 x 26 x 60 mm                   |
| Housing material             | Metal, Zinc Alloy Die-Cast, Black |

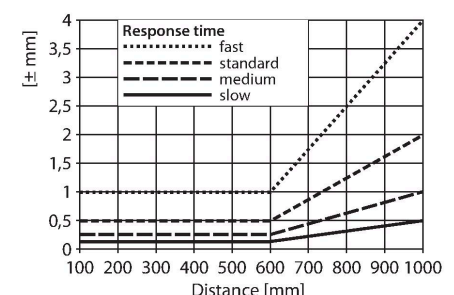
### Wiring diagram



### 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

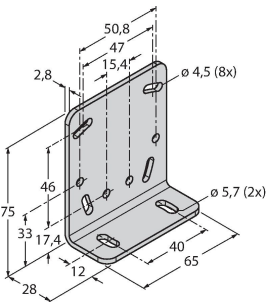


Technical data

|                       |                                            |
|-----------------------|--------------------------------------------|
| 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                           |

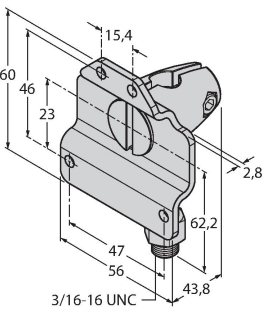
Accessories

SMBLEL 3086754



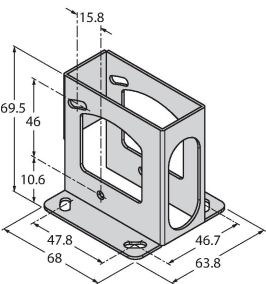
Mounting bracket, rectangular, stainless steel, for side mounting of LE250/550 sensors

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

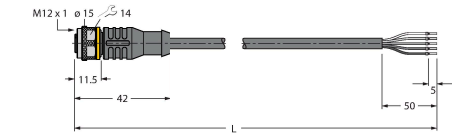
Accessories

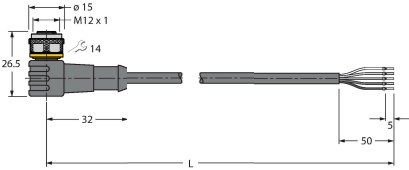
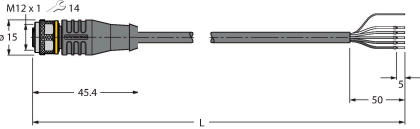
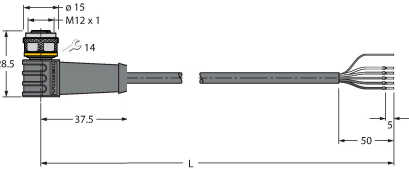
Dimension drawing Type ID

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](http://www.turck.com)



| Dimension drawing                                                                 | Type          | ID      |                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 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 <a href="http://www.turck.com">www.turck.com</a>                       |
|  | 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 <a href="http://www.turck.com">www.turck.com</a> |
|  | 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 <a href="http://www.turck.com">www.turck.com</a>   |