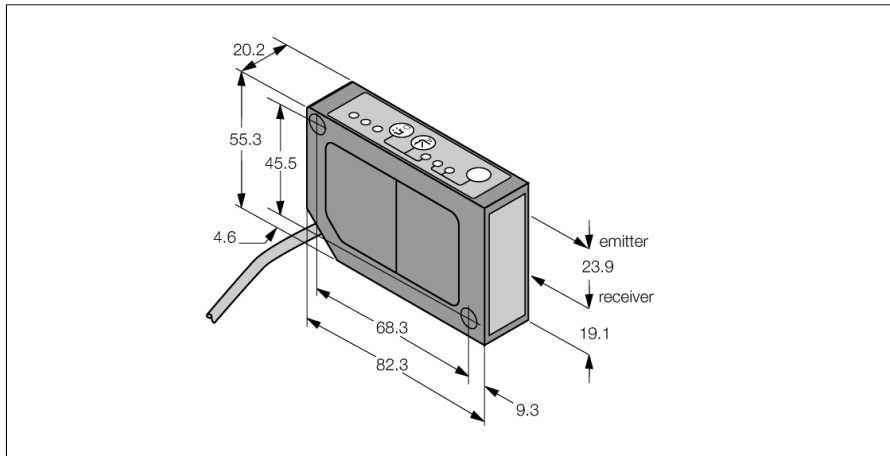
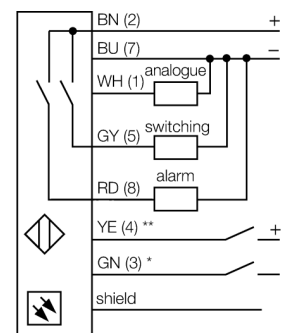


**Photoelectric sensor  
laser measuring system  
LG10A65PUQ**



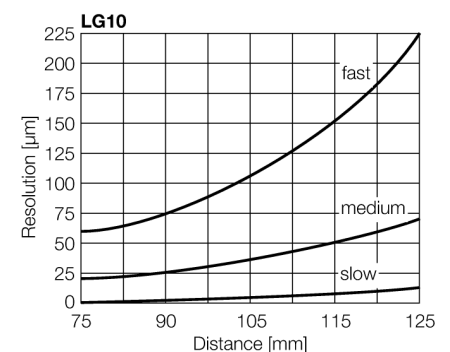
- Cable with male end M12 x 1, 8-pin, 0.15 m
- Measuring range 75...125 mm
- Focal point at 180 mm
- Operating voltage 12...30 VDC
- Analog output 0...10 V
- Indication of signal intensity
- Alarm output
- slow, medium and fast operation mode adjustable

**Wiring diagram**



**Functional principle**

The function principle of the L-GAGE is based on optical triangulation. The emitter and the optics create a light source that is directed towards a target. The target reflects the laser beam back to the receiver lens of the sensor, from where it then falls onto the position sensitive device (PSD) as the receiving element. The target's distance from the receiver determines the angle at which the light meets the receiver element. The integrated microprocessor uses this angle to analyse the target position and to create a corresponding output signal.



|                                |   |
|--------------------------------|---|
| <b>Type code</b>               | LG10A65PUQ                                |
| <b>Ident no.</b>               | 3057581                                   |
| <b>Operating mode</b>          | Diffuse mode laser sensor (triangulation) |
| Light type                     | red                                       |
| Wavelength                     | 670 nm                                    |
| Focal distance                 | 180 mm                                    |
| Laser class                    | △ 2                                       |
| Repeatability                  | 0.01 mm                                   |
| Range                          | 75...125 mm                               |
| Ambient temperature            | -10...+50 °C                              |
| <b>Operating voltage</b>       | 12...30VDC                                |
| Residual ripple                | < 10 % U <sub>s</sub>                     |
| DC rated operational current   | ≤ 100 mA                                  |
| No-load current I <sub>0</sub> | ≤ 50 mA                                   |
| Short-circuit protection       | yes                                       |
| Reverse polarity protection    | yes                                       |
| Output function                | NO contact, PNP/analog output             |
| Voltage output                 | 0...10V                                   |
| Load resistance                | ≥ 2500 Ω                                  |
| Switching frequency            | ≤ 500 Hz                                  |
| Readiness delay                | ≤ 1.25 s                                  |
| <b>Design</b>                  | rectangular, LG10                         |
| Dimensions                     | 82.3 x 20.2 x 55.3 mm                     |
| Housing material               | metal, ZN, black lacquer                  |
| Lens                           | plastic, acrylic                          |
| Connection                     | cable with connector, PVC, M12 x 1        |
| Cable length                   | 0.15 m                                    |
| Cable cross section            | 8 x 0.34 mm <sup>2</sup>                  |
| Protection class               | IP67                                      |
| <b>Power-on indication</b>     | LED green                                 |
| Switching state                | LED yellow                                |

**Photoelectric sensor  
laser measuring system  
LG10A65PUQ**

**Accessories**

| Type code | Ident no. | Description  | Dimension drawing |
|-----------|-----------|--|-------------------|
| SMBLG     | 3055815   | Montagewinkel, Edelstahl 304, für Sensoren der Reihe LG5 und LG10  |                   |
| SMBLGA    | 3055906   | Montagewinkel, Edelstahl 304, für Sensoren der Reihe LG5 und LG10, mit Verstellerschrauben für präzisere Montage |                   |

**Wiring accessories**

| Type code   | Ident no. | Description  | Dimension drawing |
|-------------|-----------|--|-------------------|
| RKC8T-2/TEL | 6625130   | Connection cable, female M12, straight, 8-pin, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67 |                   |
| WKC8T-2/TEL | 6625133   | Connection cable, female M12, angled, 8-pin, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67   |                   |