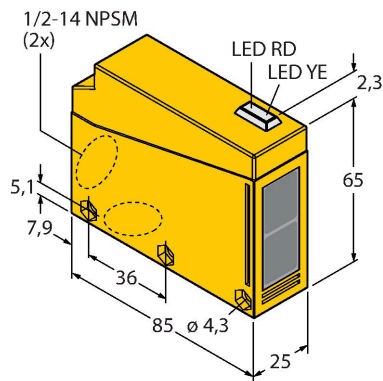


# Q85BB62DL-T9-B

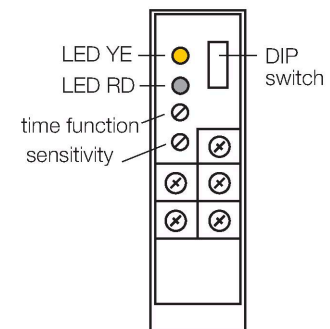
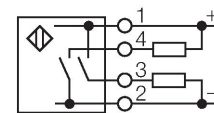
## Photoelectric Sensor – Diffuse Mode Sensor



### Features

- Integrated terminal chamber
- Cable glands, offset installation by 90° in two places
- Protection class IP67
- AID alignment aid
- Operating voltage: 10...48 VDC
- Outputs: 1 × PNP, 1 × NPN
- Light and dark operation
- Sensitivity adjusted via potentiometer
- Different time functions available, (0.1...5 s)

### Wiring diagram



### Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects a sufficient amount of light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).

Excess gain curve  
Excess gain in relation to the distance

### Technical data

|                              |                                         |
|------------------------------|-----------------------------------------|
| Type                         | Q85BB62DL-T9-B                          |
| ID                           | 3034260                                 |
| <b>Optical data</b>          |                                         |
| Function                     | Proximity switch                        |
| Operating mode               | Diffuse                                 |
| Light type                   | IR                                      |
| Wavelength                   | 880 nm                                  |
| Range                        | 10...1000 mm                            |
| <b>Electrical data</b>       |                                         |
| Operating voltage            | 10...48 VDC                             |
| DC rated operational current | ≤ 120 mA                                |
| No-load current              | ≤ 50 mA                                 |
| Short-circuit protection     | yes / Cyclic                            |
| Reverse polarity protection  | yes                                     |
| Output function              | NO contact, PNP/NPN                     |
| Switching frequency          | 0.06 kHz                                |
| Switching frequency          | ≤ 60 Hz                                 |
| Readiness delay              | ≤ 0 ms                                  |
| Response time typical        | < 8 ms                                  |
| Overcurrent release          | > 270 mA                                |
| Setting option               | Potentiometer                           |
| <b>Mechanical data</b>       |                                         |
| Design                       | Rectangular, Q85                        |
| Dimensions                   | 85 x 65 x 25 mm                         |
| Housing material             | Plastic, Thermoplastic material, Yellow |
| Lens                         | acrylic, Acrylic                        |
| Electrical connection        | Terminal block                          |

Technical data

|                        |                    |
|------------------------|--------------------|
| Number of cores        | 4                  |
| Ambient temperature    | -25...+55 °C       |
| Protection class       | IP67               |
| Special features       | keep/defer         |
| Switching state        | LED, Yellow        |
| Excess gain indication | LED, red, flashing |
| Tests/approvals        |                    |

