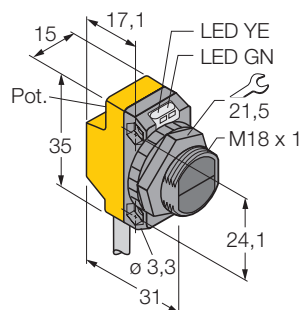


# photoelectric sensor emitter QS186E

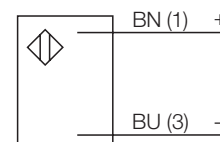
**TURCK**

Industrial  
Automation



- Operating voltage 10...30 VDC
- LED visible from all sides
- cable, 2m

## Wiring diagram

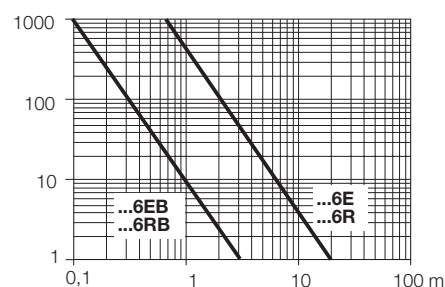


## Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

## Excess gain curve

Excess gain in relation to the distance (type 6EB/RB)



|                                  |                               |
|----------------------------------|-------------------------------|
| <b>Type</b>                      | QS186E                        |
| Ident-No.                        | 3061618                       |
| <b>Operating mode</b>            | opposed mode sensor (emitter) |
| Light type                       | IR                            |
| Wavelength                       | 940 nm                        |
| Max. sensing range [mm]          | 0... 20000 mm                 |
| Ambient temperature              | -20...+ 70 °C                 |
| <b>Operating voltage</b>         | 10... 30VDC                   |
| DC rated operational current     | ≤ 100 mA                      |
| No-load current $I_0$            | ≤ 32 mA                       |
| Short-circuit protection         | yes / cyclic                  |
| Reverse polarity protection      | yes                           |
| <b>Housing</b>                   | rectangular, QS18             |
| Dimensions                       | 31 x 15 x 35 mm               |
| Housing material                 | plastic, ABS                  |
| Lens                             | plastic, acrylic              |
| Connection                       | cables                        |
| Cable length                     | 2 m                           |
| Cable cross section:             | 2 x 0.35mm <sup>2</sup>       |
| Degree of protection             | IP67                          |
| <b>Operating voltage display</b> | LED green                     |