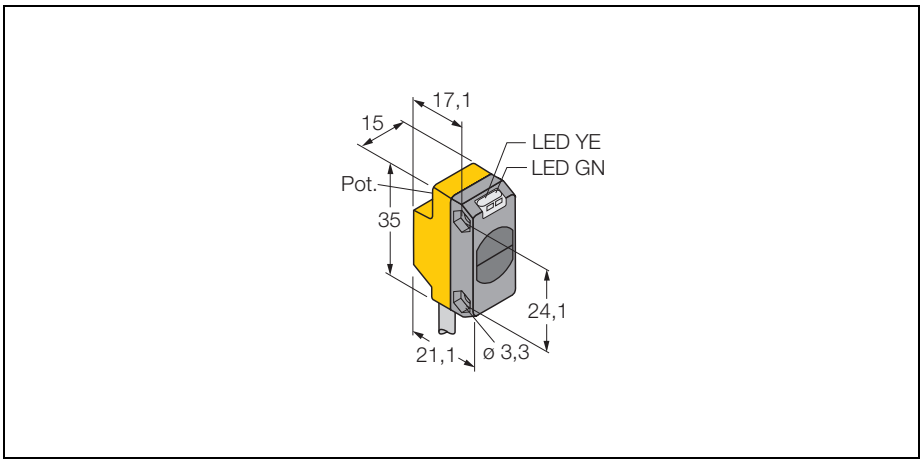
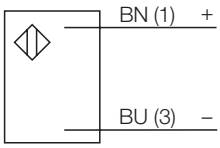
photoelectric sensor
emitter
QS186EB



Type	QS186EB
Ident-No.	3061675
Operating mode	opposed mode sensor (emitter)
Light type	IR
Wavelength	940 nm
Max. sensing range [mm]	0… 3000 mm
Ambient temperature	-20…+ 70 °C
Operating voltage	10… 30VDC
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 32 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Housing	rectangular, QS18
Dimensions	27.7 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^2
Degree of protection	IP67
Operating voltage display	LED green

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

Wiring diagram

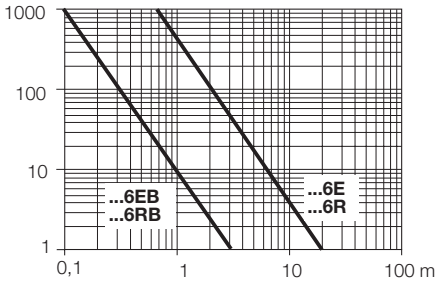


Functional principle

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 extremly 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)



• Edition: • 07.02.2009