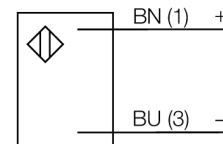


**Photoelectric sensor
opposed mode sensor (emitter)
Q456E**

- Cable, PVC, 2 m
- Protection class IP67
- Operating voltage: 10...30 VDC

Wiring diagram

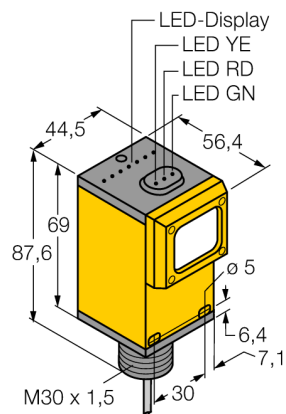
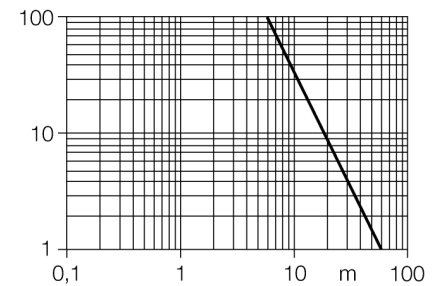


Functional principle

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 code	Q456E
Ident no.	3036563
Operating mode	opposed mode sensor (emitter)
Light type	IR
Wavelength	880 nm
Range	0...60000 mm
Operating voltage	10...30VDC
No-load current I ₀	≤ 50 mA
Readiness delay	≤ 100 ms
Design	rectangular, Q45
Dimensions	56.4 x 44.5 x 87.6 mm
Housing material	plastic, PBT
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	2 x 0.5 mm ²
Protection class	IP67
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green

