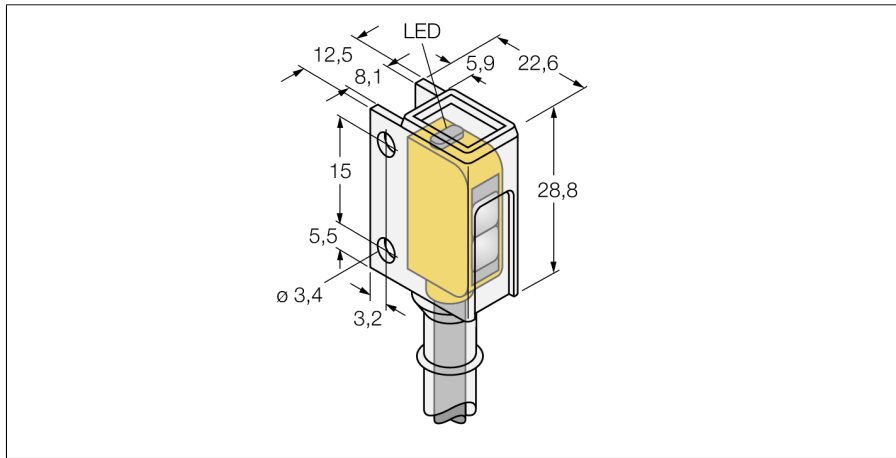
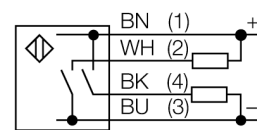


**Photoelectric sensor
opposed mode sensor (emitter/receiver)
miniature sensor
Q12RB6RCR**



- Cable, PVC, 2 m
- Protection class IP67
- Chemical-proof PFA sheath
- LED all-round visible
- Indication of insufficient excess gain
- Operating voltage: 10...30 VDC
- Switching output, bipolar, dark operation

Wiring diagram



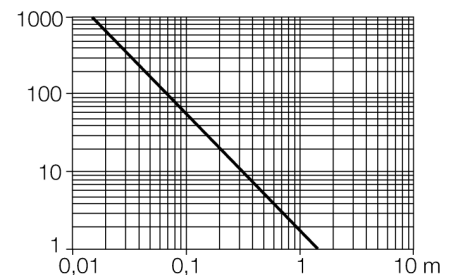
Type code	Q12RB6RCR
Ident no.	3076487
Operating mode	
Range	opposed mode sensor (receiver) 0...1500 mm
Ambient temperature	-20...+55 °C
Operating voltage	
Residual ripple	10...30VDC < 10 % U _s
DC rated operational current	≤ 50 mA
No-load current I ₀	≤ 20 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO, dark operation, PNP/NPN
Switching frequency	≤ 450 Hz
Readiness delay	≤ 120 ms
Design	
Dimensions	rectangular, Q12 22.6 x 12.5 x 28.8 mm
Housing material	plastic, PFA, yellow
Lens	plastic, polycarbonate
Connection	cable, PVC
Cable length	2 m
Cable cross section	4 x 0.34 mm ²
Protection class	IP67
Power-on indication	
Switching state	LED green
Error indication	LED yellow
Excess gain indication	LED green LED yellow flashing

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



**Photoelectric sensor
opposed mode sensor (emitter/receiver)
miniature sensor
Q12RB6RCR**

Accessories

Type code	Ident no.	Description	Dimension drawing
SMBQ12A	3074341	Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series	
SMBQ12T	3073722	Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series	