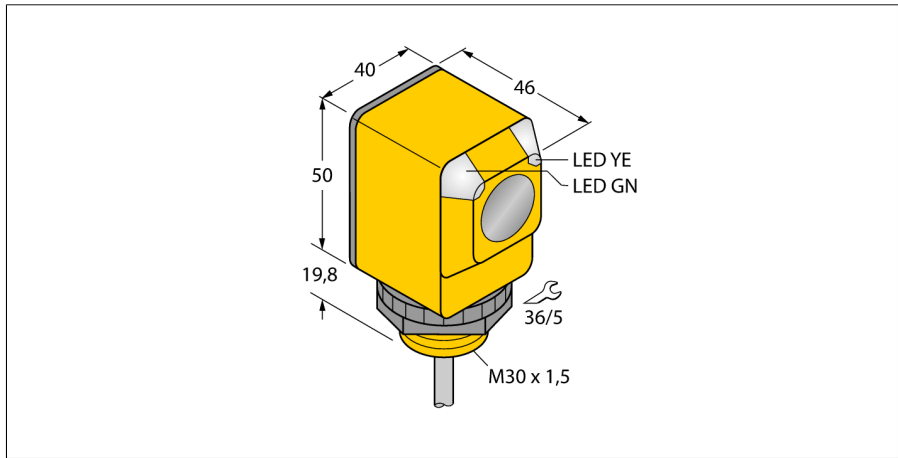
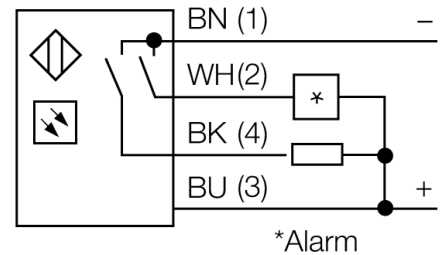
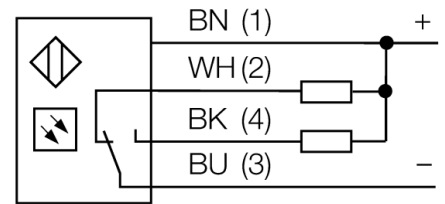


**photoelectric sensor
opposed mode sensor (receiver)
Q40SN6R**



- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

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.

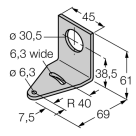
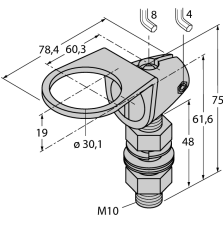
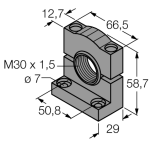
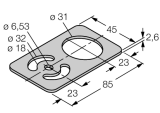
Excess gain curve

Excess gain in relation to the distance

Type code	Q40SN6R
Ident no.	3032372
Operating mode	opposed mode sensor (receiver)
Range	0...60000 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 25 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Design	rectangular, Q40
Dimensions	46 x 40.1 x 40 mm
Housing material	plastic, PBT
Lens	plastic, Lexan
Connection	cable
Cable length	2 m
Cable cross section	4 x 0.5 mm ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

photoelectric sensor
 opposed mode sensor (receiver)
 Q40SN6R

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB30A	3032723	Mounting bracket, stainless steel, for sensors with 30 mm thread	 <p>Technical drawing of the SMB30A mounting bracket. Dimensions include: outer diameter 30.5, inner diameter 6.3, width 6.3, height 45, mounting hole diameter 6.3, distance from hole to edge 38.5, total height 61, bottom width 7.5, and a radius of R 40.</p>
SMB30FAM10	3011185	Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm	 <p>Technical drawing of the SMB30FAM10 mounting bracket. Dimensions include: top width 78.4, top hole diameter 60.3, hole offset 19, hole diameter 30.1, total height 75, mounting hole diameter 48, and thread specification M10.</p>
SMB30SC	3052521	Mounting bracket, PBT black; for 30 mm thread; with 4 screws M5 x 0.8	 <p>Technical drawing of the SMB30SC mounting bracket. Dimensions include: top width 12.7, top hole diameter 66.5, hole offset 7, hole diameter 30, total height 58.7, and bottom width 29.</p>
SMBAMS30P	3073135	Mounting bracket, stainless steel, for sensors with 30 mm thread	 <p>Technical drawing of the SMBAMS30P mounting bracket. Dimensions include: hole diameter 31, hole offset 45, hole diameter 6.53, hole diameter 32, hole diameter 18, hole offset 2.6, total width 85, and bottom width 23.</p>