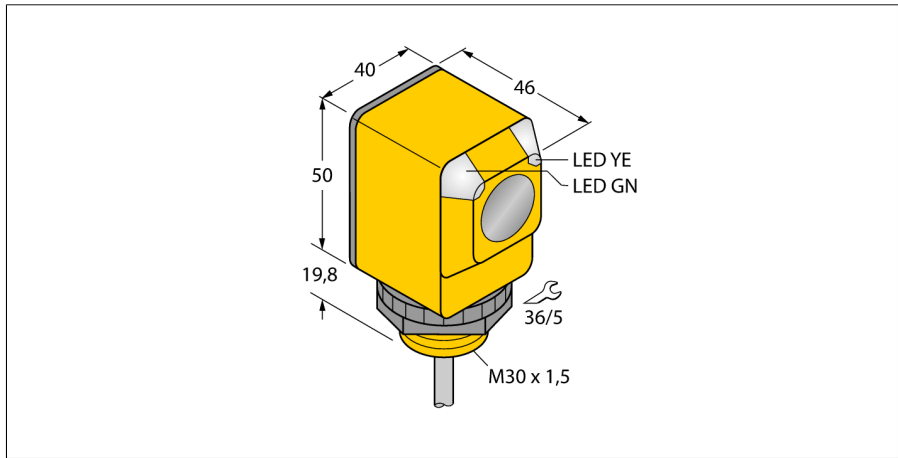


**Photoelectric sensor  
opposed mode sensor (receiver)  
Q40SP6R**



- 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
- PNP 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

<b>Type code</b>	Q40SP6R
Ident no.	3032373
<b>Operating mode</b>	opposed mode sensor (receiver)
Range	0...60000 mm
Ambient temperature	-40...+70 °C
<b>Operating voltage</b>	10...30VDC
No-load current I <sub>0</sub>	≤ 25 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	connection programmable, PNP
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
<b>Design</b>	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 <sup>2</sup>
Protection class	IP67
<b>Power-on indication</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

**Photoelectric sensor  
opposed mode sensor (receiver)  
Q40SP6R**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB30A	3032723	Mounting bracket, stainless steel, for sensors with 30 mm thread	
SMB30FAM10	3011185	Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm	
SMB30SC	3052521	Mounting bracket, PBT black; for 30 mm thread; with 4 screws M5 x 0.8	
SMBAMS30P	3073135	Mounting bracket, stainless steel, for sensors with 30 mm thread	