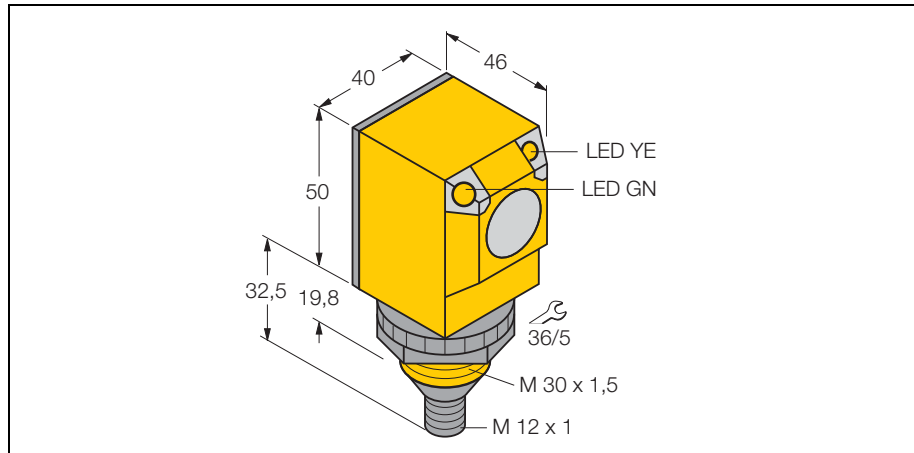


**photoelectric sensor
receiver
Q40SN6RQ**

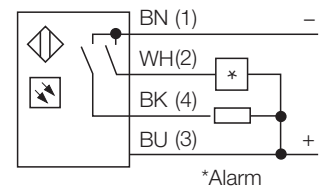
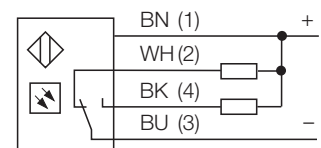
TURCK

Industrial
Automation



- selectable light or dark operation or light operation with alarm function
- M12 x 1 connector
- degree of protection IP68 - IP69K
- Operating voltage 10...0 VDC
- npn switching output
- degree of protection IP69K

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	Q40SN6RQ
Ident-No.	3033399
Operating mode	opposed mode sensor (receiver)
Range	0... 60000 mm
Ambient temperature	-40...+ 70°C
Operating voltage	10... 30 VDC
DC rated operational current	≤ 150 mA
No-load current I_0	≤ 25 mA
Output function	connection programmable, NPN
Switching frequency	≤ 160Hz
Readiness delay	≤ 100 ms
Overcurrent release	>220 mA
Housing	rectangular, Q40
Dimensions	46x 40x 40mm
Housing material	Plastic, PBT
Lens	plastic, Lexan
Electrical connection	Connectors, M12 x 1
Protection class	IP68 / IP69K
Operating voltage	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing