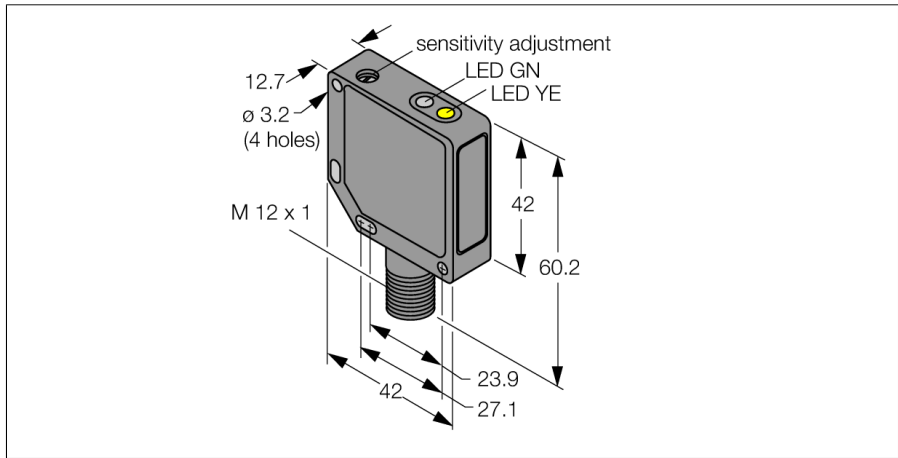
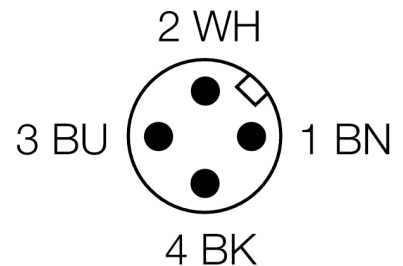
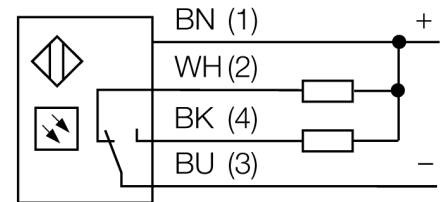


**Photoelectric sensor
retroreflective sensor with polarizing filter
QM42VN6LPQ**



- Male M12 x 1, 4-pin
- Metal housing, ZN, black
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage 10...30 VDC
- NPN switching output
- Light/dark operation

Wiring diagram



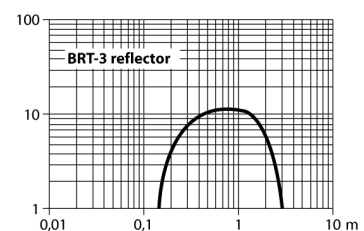
Type code	QM42VN6LPQ
Ident no.	3044904
Operating mode	retro-reflective sensor with polarisation filter
Light type	red
Wavelength	660 nm
Range	150...3000 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
DC rated operational current	≤ 100 mA
No-load current I ₀	≤ 30 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC , NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 150 mA
Design	rectangular, QM42
Dimensions	42 x 12.7 x 60.2 mm
Housing material	metal, ZN, black lacquer
Lens	plastic, acrylic
Connection	male, M12 x 1
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

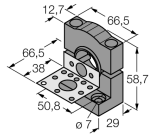
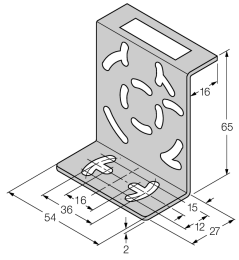
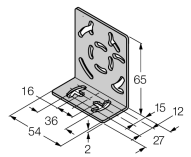
Excess gain curve

Excess gain in relation to the distance

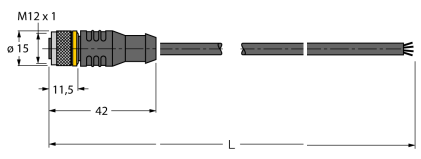
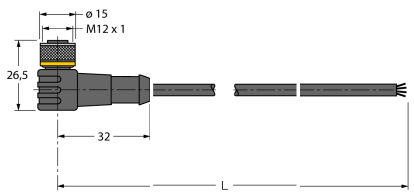


**Photoelectric sensor
retroreflective sensor with polarizing filter
QM42VN6LPQ**

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB30SK	3052523	Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/QMT42	
SMB46S	3048748	Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42	
SMB46L	3048747	Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	

**Photoelectric sensor
retroreflective sensor with polarizing filter
QM42VN6LPQ**

TURCK

Industrial
Automation

Function accessories

Type code	Ident no.	Description	Dimension drawing
BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20 ... +60 °C	