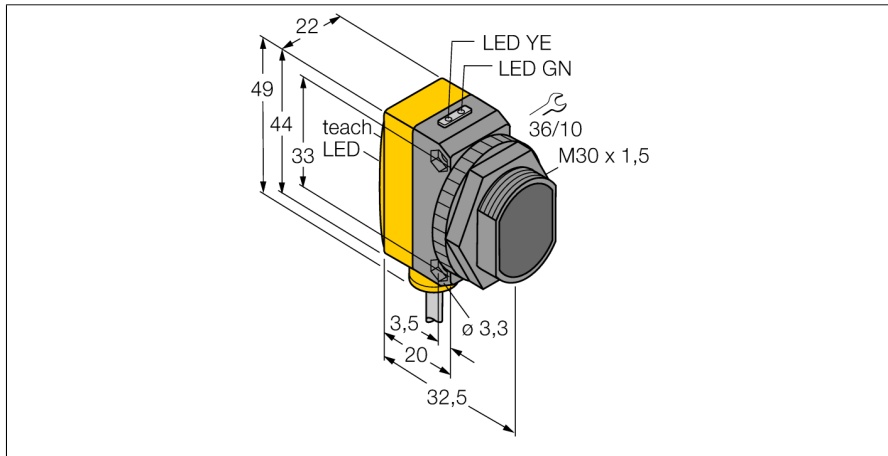
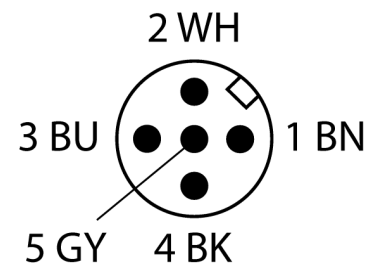
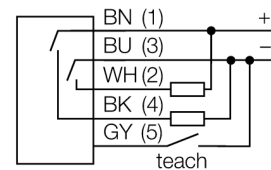


**Photoelectric sensor
diffuse mode sensor
QS30EDVQMA8**



- Cable with male end M12 x 1, 5-pin, PUR, 150 mm
- Protection class IP67
- LED all-round visible
- Teach button
- 8-segment bargraph
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

Wiring Diagram



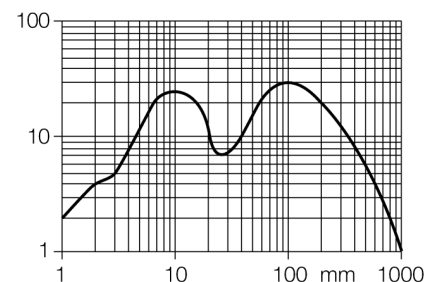
Type designation	QS30EDVQMA8
Ident no.	3076093
Operating mode	Diffuse Mode Sensor
Light type	IR
Wavelength	940 nm
Range	2...1400 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _s
DC rated operational current	≤ 150 mA
No-load current I ₀	≤ 35 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Readiness delay	≤ 100 ms
Approvals	CE
Design	Rectangular, QS30
Dimensions	35 mm x 22 mm x 49 mm
Housing material	Plastic, ABS, Yellow
Lens	plastic, acrylic
Electrical connection	Cable with connector, M12 ← 1, PUR
Cable length	0.15 m
Protection class	IP67
MTTF	280 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED red flashing

Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target.

Excess gain curve

Excess gain in relation to the distance

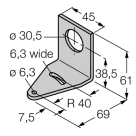
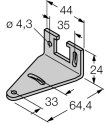
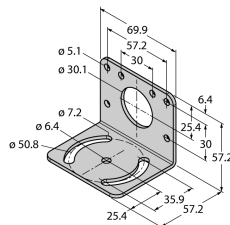
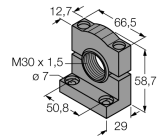


Photoelectric sensor
diffuse mode sensor
QS30EDVQPMA8

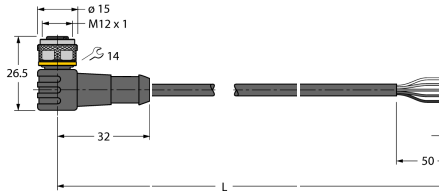
TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	
SMB30A	3032723	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	
SMBQS30L	3002809	Mounting bracket, stainless steel, for QS30 series	
SMB30MM	3027162	Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment	
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	

Wiring accessories

Type code	Ident no.	Description	
WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	

Photoelectric sensor
diffuse mode sensor
QS30EDVQPMA8

Wiring accessories

Type code	Ident no.	Description	
RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	