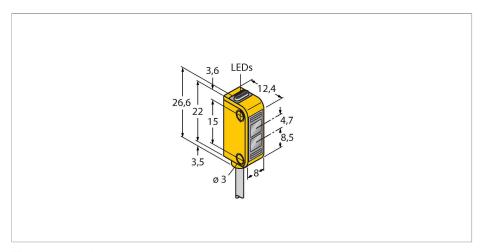


Q12AB6LV W/30 Photoelectric Sensor – Retroreflective Sensor Miniature Sensor





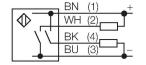
Technical data

Туре	Q12AB6LV W/30		
ID no.	3072124		
Optical data			
Function	Retroreflective Sensor		
Operating mode	Unpolarized		
Reflector included in delivery	no		
Light type	Red		
Wavelength	640 nm		
Range	401500 mm		
Electrical data			
Operating voltage	1030 VDC		
Residual ripple	< 10 % U _{ss}		
DC rated operational current	≤ 50 mA		
No-load current	≤ 20 mA		
Short-circuit protection	yes		
Reverse polarity protection	yes		
Output function	NO contact, PNP/NPN		
Switching frequency	≤ 700 Hz		
Readiness delay	≤ 120 ms		
Response time typical	< 0.7 ms		
Mechanical data			
Design	Rectangular, Q12		
Dimensions	12.4 x 8 x 26.6 mm		
Housing material	Plastic, Thermoplastic material, Yellow		
Lens	plastic, Polycarbonate		
Electrical connection	Cable, 9 m, PVC		

Features

- Cable, PVC, 9 m
- ■Protection class IP67
- ■LED all-round visible
- ■Indication of insufficient excess gain
- Operating voltage: 10...30 VDC
- ■Switching output, bipolar, light operation

Wiring diagram



Functional principle

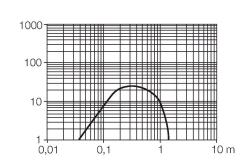
Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages 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



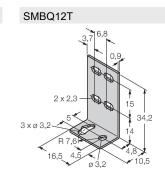
Technical data

Number of cores	3		
Core cross-section	0.34 mm²		
Ambient temperature	-20+55 °C		
Protection class	IP67		
Power-on indication	LED, Green		
Switching state	LED, Yellow		
Error indication	LED, green		
Excess gain indication	LED, yellow, flashing		
Tests/approvals			
MTTF	135 years acc. to SN 29500 (Ed. 99) 40 °C		
Approvals	CE, cURus		



Accessories

SMBQ12A	3074341
20° R15	Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series



3073722 Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series

Accessories

Dimension drawing	Туре	ID no.	
	BRT-60X40C	3044997	Rectangular reflector, reflection coefficient 1.48, material: acrylic, ambient temperature -20+60 °C

