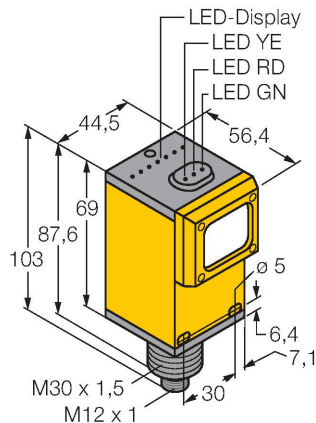


Q45BW13DXQ1

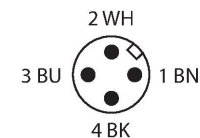
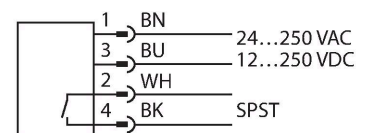
Photoelectric Sensor – Diffuse Mode Sensor



Features

- M12 × 1 male connector
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage: 12...250 VDC or 24...250 VAC
- Relay output, NO (SPST)
- Light or dark operation, adjusted via selector switch

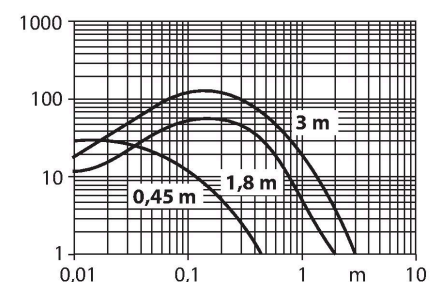
Wiring diagram



Functional principle

Like retroreflective sensors, diffuse mode sensors also contain emitter and receiver circuitry in the same housing. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the object. An object is detected if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the object's reflectivity. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).

Excess gain curve
Excess gain in relation to distance



Technical data

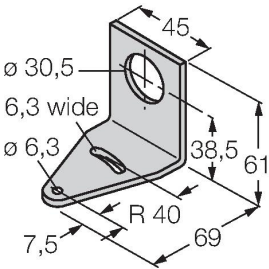
Type	Q45BW13DXQ1
ID	3060461
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	0...3000 mm
Electrical data	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
Output function	NO contact, Relay output
Switching frequency	≤ 33 Hz
Readiness delay	≤ 100 ms
Mechanical data	
Design	Rectangular, Q45
Dimensions	56.4 x 44.5 x 102.6 mm
Housing material	Plastic, PBT
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1
Ambient temperature	-25...+55 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green
Excess gain indication	LED, red

Technical data

Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus, CSA

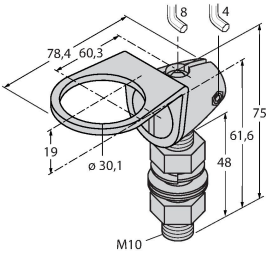
Accessories

SMB30A 3032723



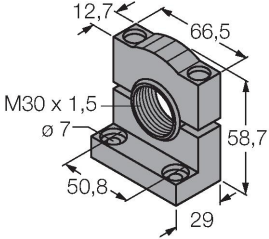
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10 3011185



Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC 3052521



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable