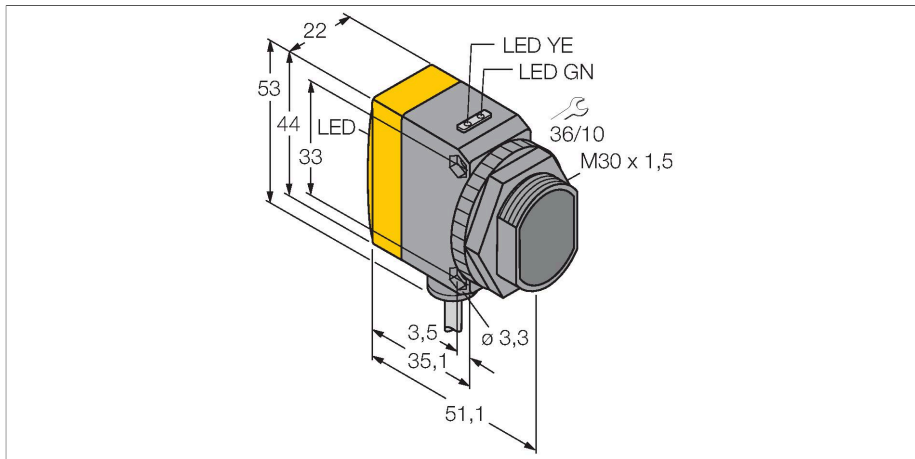


# QS30VR3FF400QPMA16

## Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



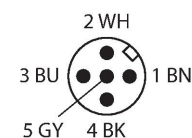
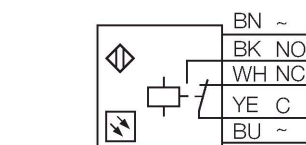
### Technical data

Type	QS30VR3FF400QPMA16
ID no.	3073075
<b>Optical data</b>	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	Red
Wavelength	680 nm
Range	0...400 mm
<b>Electrical data</b>	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
No-load current	≤ 35 mA
Output function	NO/NC, Relay output
Switching frequency	≤ 250 Hz
Readiness delay	≤ 100 ms
Response time typical	< 15 ms
<b>Mechanical data</b>	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 51.5 x 22 x 44 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable with connector, 1/2", 0.15 m, PUR
Number of cores	5
Ambient temperature	-20...+70 °C
Protection class	IP67
Power-on indication	LED, Green

### Features

- Cable with male end M12 × 1, 5-pin, PUR, 150 mm
- Protection class IP67
- LED all-round visible
- Operating voltage: 12...250 VDC or 24...250 VAC
- Relay output, changeover

### Wiring diagram



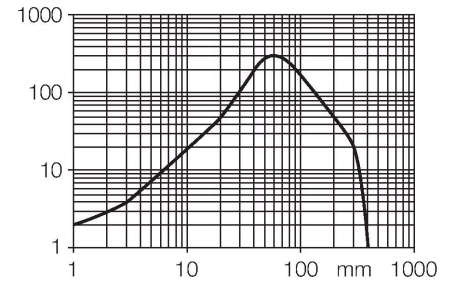
### Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object is within or outside the measuring range. These sensors come with a fixed cut-off point.

Excess gain curve  
Excess gain in relation to the distance

## Technical data

Switching state	LED, Yellow
Excess gain indication	LED, yellow, flashing
<b>Tests/approvals</b>	
MTTF	177 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE



## Accessories

