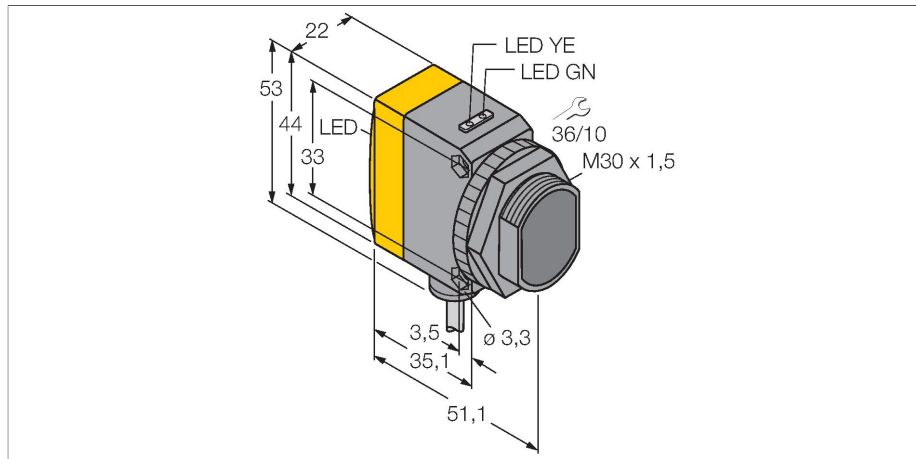


QS30VR3FF400

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



Technical data

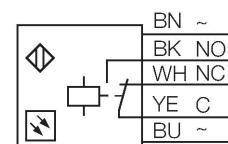
Type	QS30VR3FF400
ID no.	3073074
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	Red
Wavelength	680 nm
Range	0...400 mm
Electrical data	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
No-load current	≤ 35 mA
Output function	NO/NC, Relay output
Switching frequency	≤ 33 Hz
Readiness delay	≤ 100 ms
Response time typical	< 15 ms
Mechanical data	
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, 2 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP67



Features

- Cable, PVC, 2 m
- 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

