

Q60VR3LAF1400 W/30 Photoelectric Sensor – Laser Sensor, Diffuse Mode, with Adjustable Background Suppression



Technical data

Туре	Q60VR3LAF1400 W/30
ID no.	3071891
Optical data	
Function	Proximity switch
Operating mode	Background suppression, adjustable
Light type	Red
Wavelength	650 nm
Laser class	<u>A</u> 1
Range	2001400 mm
Electrical data	
Operating voltage	12250 VDC
Operating voltage	24250 VAC
DC rated operational current	≤ 200 mA
No-load current	≤ 50 mA
Output function	Complementary contact, Relay output
Switching frequency	≤ 33 Hz
Readiness delay	≤ 1000 ms
Response time typical	< 15 ms
Setting option	Screw Adjustment
Mechanical data	
Design	Rectangular, Q60
Dimensions	60 x 25 x 75 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	4

Features

Cable, PVC, 9 m

Protection class IP67

5-segement LED display

- Signal indication
- Keylock
- Switch ON/OFF delay, adjustable between 8...16 ms
- Operating voltage: 12...250 VDC or 24... 250 VAC

Relay output

Wiring diagram

BN ~ BK NO WH NC YE C BU ~

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. The sensors come with an adjustable or fixed cutoff point.

Deviation curve

Deviation of the cut-off point of a 18 % grey or 6 % black target relative to the cut-off point of a white target





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Core cross-section	0.5 mm ²
Ambient temperature	-10+45 °C
Protection class	IP67
Special features	keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED
Excess gain indication	LED, green, flashing
Tests/approvals	
MTTF	19 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus

Accessories



3073441 Protective housing with safety glas panel, stainless steel, for Q60



3073133 Backplane, stainless steel, for Q60 series



3067592 Mounting bracket, stainless steel, for Q60 series