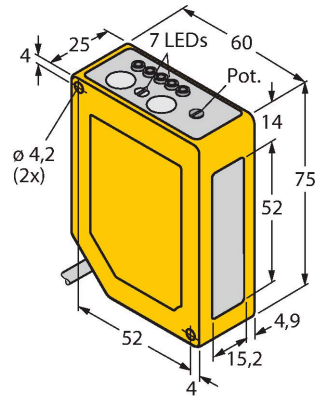


# Q60VR3AF2000

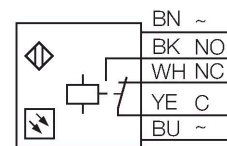
## Photoelectric Sensor – Diffuse Mode Sensor with Adjustable Background Suppression



### Features

- Cable, PVC, 2 m
- Protection class IP67
- 5-segment 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



### Technical data

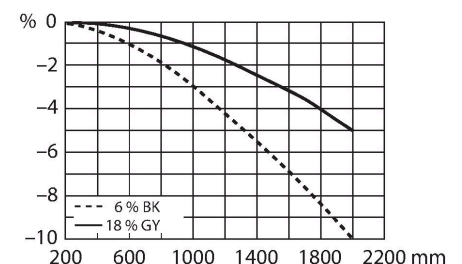
Type	Q60VR3AF2000
ID no.	3063004
<b>Optical data</b>	
Function	Proximity switch
Operating mode	Background suppression, adjustable
Light type	IR
Wavelength	880 nm
Range	200...2000 mm
<b>Electrical data</b>	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
DC rated operational current	≤ 200 mA
No-load current	≤ 50 mA
Output function	Complementary contact, Relay output
Switching frequency	≤ 33 Hz
Readiness delay	≤ 150 ms
Response time typical	< 15 ms
Setting option	Screw Adjustment
<b>Mechanical data</b>	
Design	Rectangular, Q60
Dimensions	60 x 25 x 75 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm <sup>2</sup>

### 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 cut-off 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



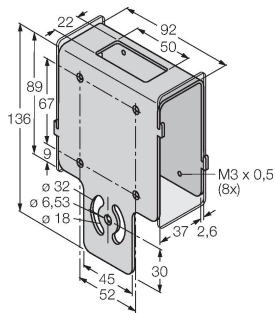
## Technical data

Ambient temperature	-20...+55 °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
<b>Tests/approvals</b>	
MTTF	64 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus

## Accessories

SMBAMSQ60IP

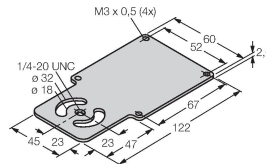
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Protective housing with safety glass panel, stainless steel, for Q60

SMBAMSQ60P

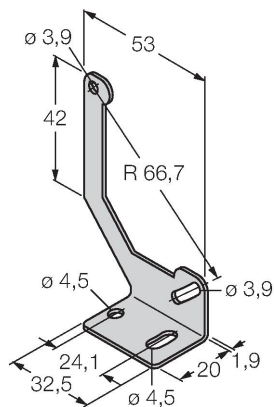
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Backplane, stainless steel, for Q60 series

SMBQ60

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Mounting bracket, stainless steel, for  
Q60 series