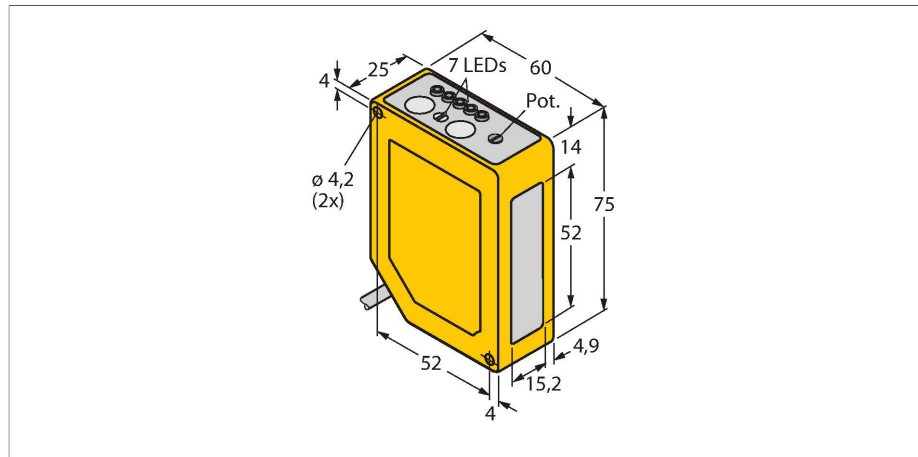


# Q60VR3LAF1400QPMA3

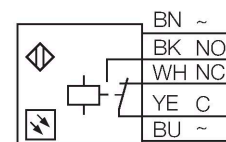
## Photoelectric Sensor – Laser Sensor, Diffuse Mode, with Adjustable Background Suppression



### Features

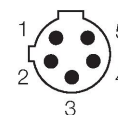
- Cable with male end 1/2", 4-pin, PUR, 150 mm
- Protection class IP67
- 5-segment LED display
- Signal indication
- Keylock
- Switch ON/OFF delay, adjustable between 8...16 ms
- Operating voltage: 12...250 VDC or 24...250 VAC
- Relay output

### Wiring diagram



### Technical data

Type	Q60VR3LAF1400QPMA3
ID no.	3072073
<b>Optical data</b>	
Function	Laser-Reflexionslichttaster (Triangulation)
Light type	Red
Wavelength	650 nm
Laser class	▲ 1
Range	200...1400 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	≤ 1000 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, ABS, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable with connector, 1/2", 0.15 m, PUR
Ambient temperature	-10...+45 °C
Protection class	IP67



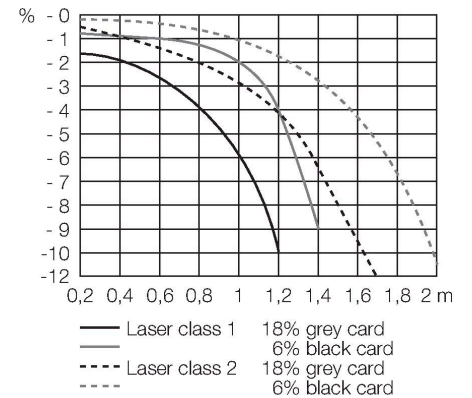
### Functional principle

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

Special features	Laser
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED
Excess gain indication	LED, green, flashing
<b>Tests/approvals</b>	
MTTF	19 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus



## Accessories

**SMBAMSQ60IP** 3073441

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

Technical drawing of the SMBAMSQ60IP protective housing. Dimensions include: top width 22, total width 92, depth 50, height 89, total height 136, mounting hole diameter 32, mounting hole offset 6.53, mounting hole diameter 18, mounting hole offset 37.26, bottom width 45, and bottom depth 52. It features M3 x 0.5 (6x) screws.

**SMBAMSQ60P** 3073133

Backplane, stainless steel, for Q60 series

Technical drawing of the SMBAMSQ60P backplane. Dimensions include: mounting hole diameter 32, mounting hole offset 18, mounting hole diameter 18, mounting hole offset 45, mounting hole diameter 25, mounting hole offset 47, total width 122, total height 67, and a 2.6mm thickness. It features M3 x 0.5 (4x) screws and a 1/4-20 UNC thread.

**SMBQ60** 3067592

Mounting bracket, stainless steel, for Q60 series

Technical drawing of the SMBQ60 mounting bracket. Dimensions include: top hole diameter 3.9, top hole offset 53, height 42, radius R 66.7, bottom hole diameter 4.5, bottom hole offset 3.9, bottom hole diameter 4.5, bottom hole offset 24.1, bottom hole diameter 20, and bottom hole offset 1.9. The total width is 32.5.