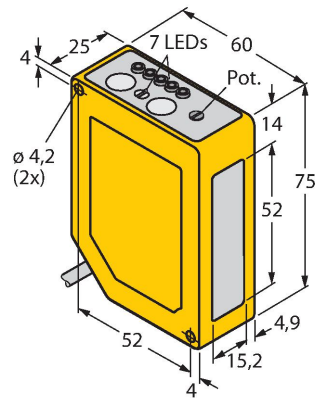


Q60VR3AF2000QPMA10

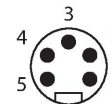
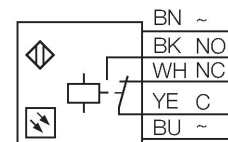
Photoelectric Sensor – Diffuse Mode Sensor with Adjustable Background Suppression



Features

- Cable with male end 7/8", 5-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	Q60VR3AF2000QPMA10
ID no.	3063003
Optical data	
Function	Proximity switch
Operating mode	Background suppression, adjustable
Light type	IR
Wavelength	880 nm
Range	200...2000 mm
Electrical data	
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
Mechanical data	
Design	Rectangular, Q60
Dimensions	60 x 25 x 75 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable with connector, 7/8", 0.15 m, PUR
Number of cores	5
Ambient temperature	-20...+55 °C

Functional principle

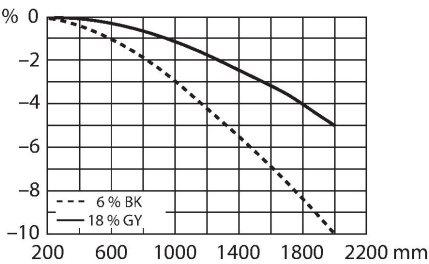
Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object 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

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	64 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. It shows a 3D perspective view with dimensions: top width 22, top depth 92, front width 50, front depth 67, side depth 89, total height 136, bottom width 45, bottom depth 52, and a small side flange of 37 x 2.6. Mounting holes are specified as M3 x 0.5 (8x) and Ø 32. A circular feature is labeled with Ø 6.53 and Ø 18.

SMBAMSQ60P

3073133

Backplane, stainless steel, for Q60 series

Technical drawing of the SMBAMSQ60P backplane. It shows a 3D perspective view with dimensions: top width 60, top depth 52, side depth 67, total width 122, and total depth 47. Mounting holes are specified as M3 x 0.5 (4x), 1/4-20 UNC, Ø 32, and Ø 18. A small side flange is labeled 2.6.

SMBQ60

3067592

Mounting bracket, stainless steel, for Q60 series

Technical drawing of the SMBQ60 mounting bracket. It shows a 3D perspective view with dimensions: top width 53, top depth 42, side depth 42, bottom width 24.1, bottom depth 32.5, and a small side flange of 20 x 1.9. Mounting holes are specified as Ø 3.9, Ø 4.5, and a curved section with R 66.7.