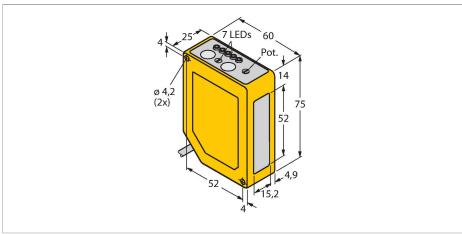


# Q60VR3AF2000QPMA10 Photoelectric Sensor – Diffuse Mode Sensor with Adjustable Background Suppression



# Technical data

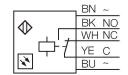
Ambient temperature

Туре	Q60VR3AF2000QPMA10
ID	3063003
Optical data	
Function	Proximity switch
Operating mode	Background suppression, adjustable
Light type	IR
Wavelength	880 nm
Range	2002000 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	≤ 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
	00 .55 00

#### **Features**

- Cable with male end 7/8", 5-pin, PUR, 150 mm
- 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





## 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

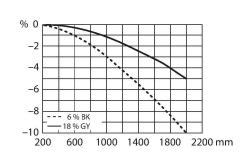
Deviation of the cut-off point of a 18 % grey or 6 % black target relative to the cut-off point of a white target

-20...+55 °C



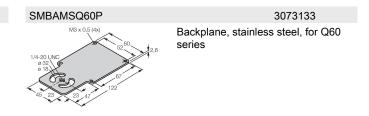
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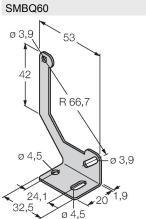
Protection class	IP67
Special features	keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED
Excess gain indication	LED, green, flashing
Tests/approvals	
MTTF	64 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus



### Accessories

SMBAMSQ60IP	3073441
92 50	Protective housing with safety glas panel, stainless steel, for Q60





Mounting bracket, stainless steel, for Q60 series

3067592