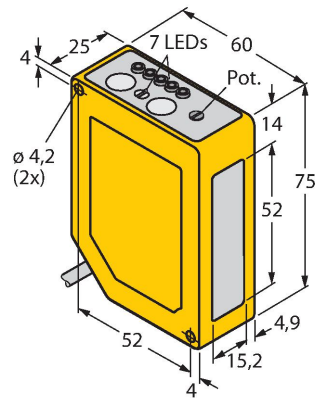


Q60BB6AF2000QPMA

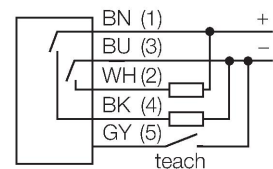
Photoelectric Sensor – Diffuse Mode Sensor with Adjustable Background Suppression



Features

- Cable with male end M12 × 1, 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: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

Wiring diagram



Technical data

Type	Q60BB6AF2000QPMA
ID	3072293
Optical data	
Function	Proximity switch
Operating mode	Background suppression, adjustable
Light type	IR
Wavelength	880 nm
Range	200...2000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U_{ss}
No-load current	≤ 50 mA
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	≤ 250 Hz
Readiness delay	≤ 150 ms
Response time typical	< 2 ms
Setting option	Screw Adjustment Remote Teach
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, M12 × 1, 0.15 m, PUR

Functional principle

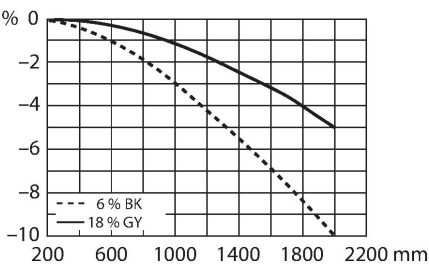
Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object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

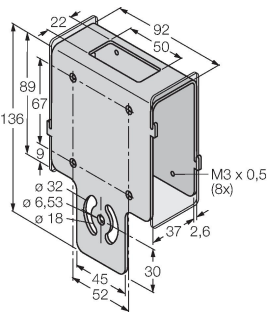
Technical data

Number of cores	5
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
Tests/approvals	
MTTF	64 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus



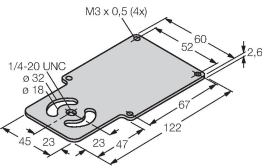
Accessories

SMBAMSQ60IP 3073441



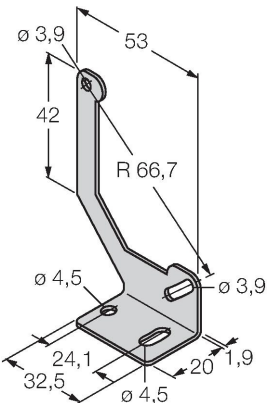
Protective housing with safety glass panel, stainless steel, for Q60

SMBAMSQ60P 3073133



Backplane, stainless steel, for Q60 series

SMBQ60 3067592



Mounting bracket, stainless steel, for Q60 series