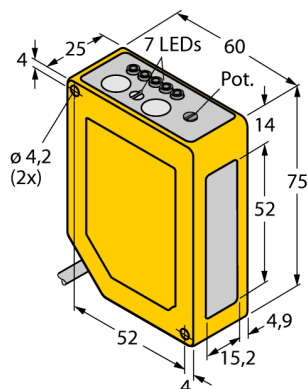


Photoelectric Sensor

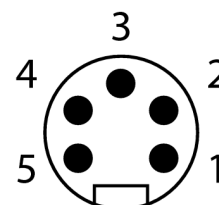
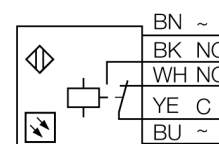
Diffuse Mode Sensor with Adjustable Background Suppression

Q60VR3AFV1000QPMA10



- 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



Type	Q60VR3AFV1000QPMA10
ID	3073445
Optical data	
Function	Proximity switch
Operating mode	Background suppression, adjustable
Light type	Red
Wavelength	665 nm
Range	200...1000 mm
Electrical data	
Operating voltage U_s	12...250 VDC
Operating voltage U_a	24...250VAC
DC rated operating current I_s	≤ 200 mA
No-load current I_o	≤ 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
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
Protection class	IP67
Special features	
Power-on indication	keep/defer
Switching state	LED, Green
Error indication	LED, Yellow
Excess gain indication	LED, green, flashing

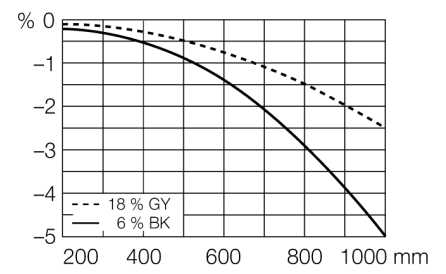
Functional principle

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

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



Accessories

Type code	Ident no.		Dimension drawing
SMBAMSQ60IP	3073441	Protective housing with safety glas panel, stainless steel, for Q60	
SMBAMSQ60P	3073133	Backplane, stainless steel, for Q60 series	
SMBQ60	3067592	Mounting bracket, stainless steel, for Q60 series	