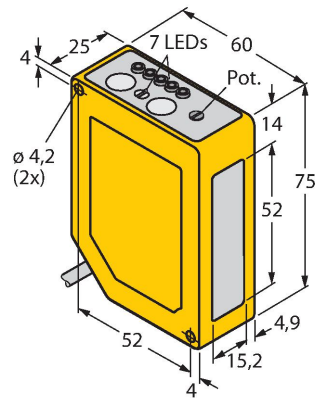


# Q60VR3AF2000 W/30

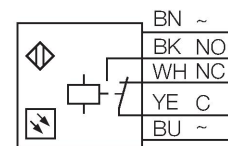
## Photoelectric Sensor – Diffuse Mode Sensor with Adjustable Background Suppression



### Features

- Cable, PVC, 9 m
- 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

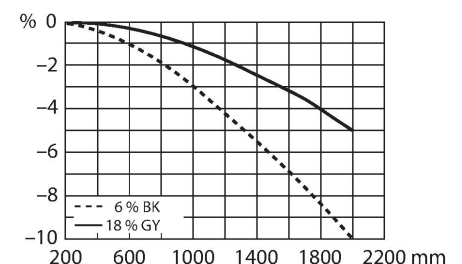
|                              |                                         |
|------------------------------|-----------------------------------------|
| Type                         | Q60VR3AF2000 W/30                       |
| ID                           | 3069624                                 |
| <b>Optical data</b>          |                                         |
| Function                     | Proximity switch                        |
| Operating mode               | Background suppression, adjustable      |
| Light type                   | IR                                      |
| Wavelength                   | 880 nm                                  |
| Range                        | 200...2000 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              | ≤ 150 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, Thermoplastic material, Yellow |
| Lens                         | plastic, Acrylic                        |
| Electrical connection        | Cable, 9 m, PVC                         |
| Number of cores              | 4                                       |
| Core cross-section           | 0.5 mm <sup>2</sup>                     |

### 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

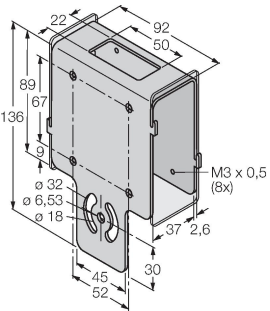


Technical data

|                        |                                          |
|------------------------|------------------------------------------|
| 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                                |

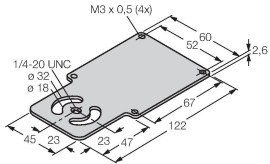
Accessories

SMBAMSQ60IP3073441



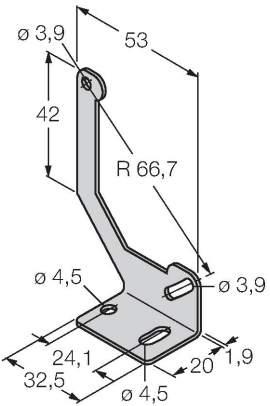
Protective housing with safety glass panel, stainless steel, for Q60

SMBAMSQ60P3073133



Backplane, stainless steel, for Q60 series

SMBQ603067592



Mounting bracket, stainless steel, for Q60 series