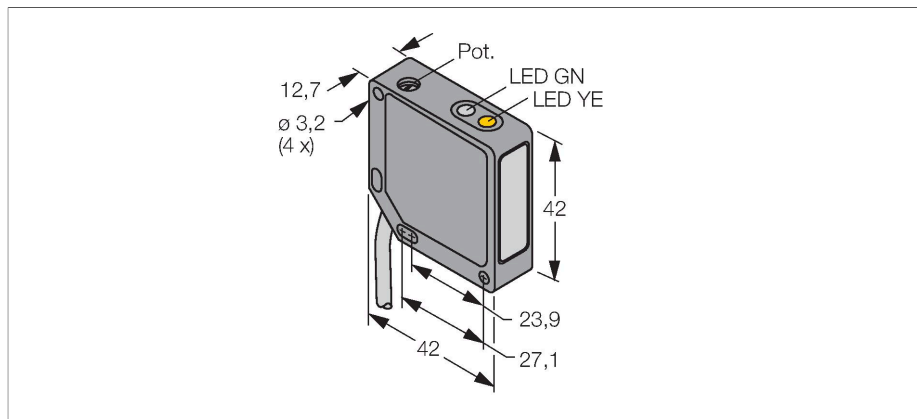


# QM42VP6AF150

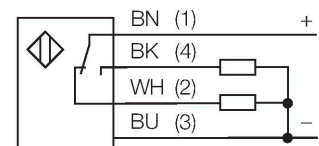
## Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



### Features

- Cable, PVC, 2 m, 4-wire
- Metal housing, ZN, black
- Protection class IP67
- Scanning width adjusted via potentiometer
- Operating voltage 10...30 VDC
- PNP switching output
- Light/dark operation

### Wiring diagram



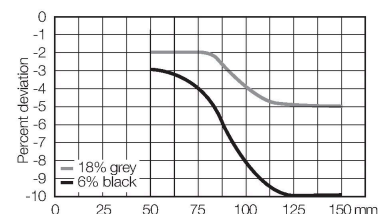
### Technical data

|                              |  |
|------------------------------|--|
| Type                         | QM42VP6AF150                               |
| ID no.                       | 3045688                                    |
| <b>Optical data</b>          |  |
| Function                     | Proximity switch                           |
| Operating mode               | Background suppression, adjustable         |
| Light type                   | IR   |
| Wavelength                   | 880 nm                                     |
| Range                        | 50...150 mm                                |
| <b>Electrical data</b>       |  |
| Operating voltage            | 10...30 VDC                                |
| Residual ripple              | < 10 % U <sub>ss</sub>                     |
| DC rated operational current | ≤ 100 mA                                   |
| No-load current              | ≤ 30 mA                                    |
| Short-circuit protection     | yes  |
| Reverse polarity protection  | yes  |
| Output function              | NO/NC, PNP                                 |
| Switching frequency          | ≤ 500 Hz                                   |
| Readiness delay              | ≤ 100 ms                                   |
| Response time typical        | < 1 ms                                     |
| Overcurrent release          | > 150 mA                                   |
| Setting option               | Potentiometer                              |
| <b>Mechanical data</b>       |  |
| Design                       | Rectangular, QM42                          |
| Dimensions                   | 42 x 12.7 x 42 mm                          |
| Housing material             | Metal, Die-cast zinc alloy, Black-finished |
| Lens                         | plastic, Acrylic                           |
| Electrical connection        | Cable, 2 m, PVC                            |

### 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. These sensors come with an adjustable cut-off point.

Deviation curve  
Sensing range deviation curve



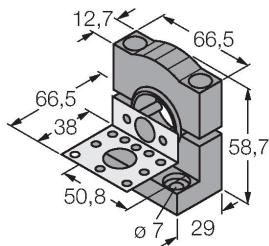
## Technical data

|                        |                      |
|------------------------|----------------------|
| Number of cores        | 4                    |
| Core cross-section     | 0.5 mm <sup>2</sup>  |
| Ambient temperature    | -20...+55 °C         |
| Protection class       | IP67                 |
| Power-on indication    | LED, Green           |
| Switching state        | LED, Yellow          |
| Error indication       | LED, green, Flashing |
| Excess gain indication | LED                  |
| Alarm display          | LED yellow Flashing  |
| <b>Tests/approvals</b> |                      |
| Approvals              | CE, cURus            |

## Accessories

SMB30SK

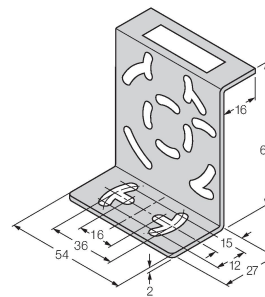
3052523



Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/ QMT42

SMB46S

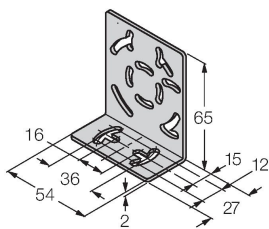
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Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/ QMT42

SMB46L

3048747



Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/ QMT42