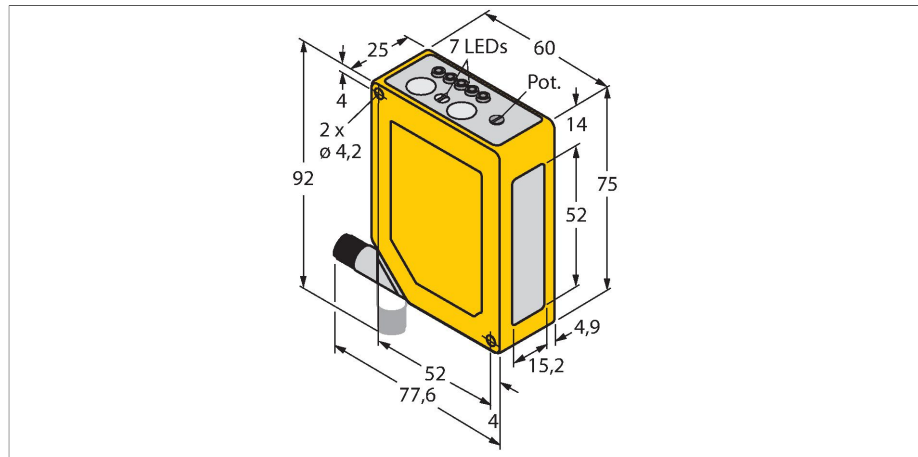


# Q60BB6LAF1400Q

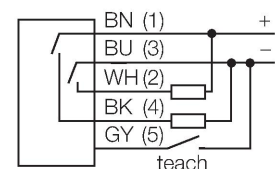
## Photoelectric Sensor – Laser Sensor, Diffuse Mode, with Adjustable Background Suppression



### Features

- Male M12 × 1, 5-pole, rotatable by 90°
- 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



### 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

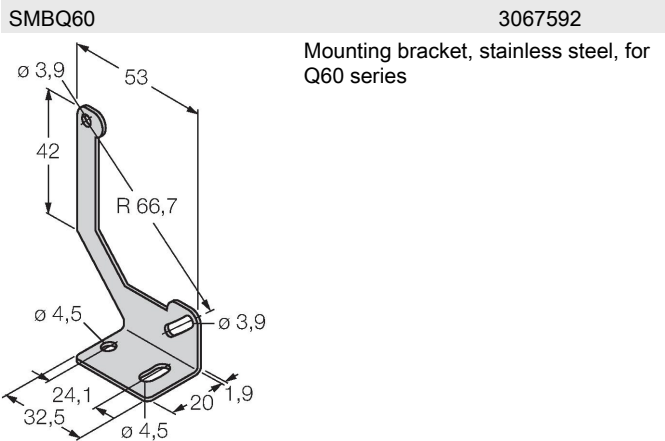
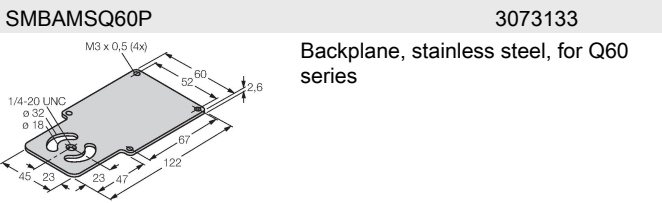
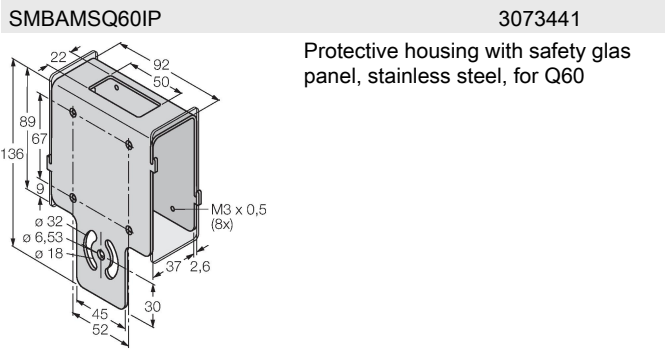
|                             |                                         |
|-----------------------------|-----------------------------------------|
| Type                        | Q60BB6LAF1400Q                          |
| ID                          | 3071742                                 |
| <b>Optical data</b>         |                                         |
| Function                    | Proximity switch                        |
| Operating mode              | Background suppression, adjustable      |
| Light type                  | Red                                     |
| Wavelength                  | 650 nm                                  |
| Laser class                 | ▲ 1                                     |
| Range                       | 200...1400 mm                           |
| <b>Electrical data</b>      |                                         |
| Operating voltage           | 10...30 VDC                             |
| Residual ripple             | < 10 % U <sub>ss</sub>                  |
| No-load current             | ≤ 50 mA                                 |
| Reverse polarity protection | yes                                     |
| Output function             | NO contact, PNP/NPN                     |
| Switching frequency         | ≤ 250 Hz                                |
| Readiness delay             | ≤ 1000 ms                               |
| Response time typical       | < 2 ms                                  |
| Setting option              | Screw Adjustment<br>Remote Teach        |
| <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       | Connector, M12 × 1, PVC                 |

Technical data

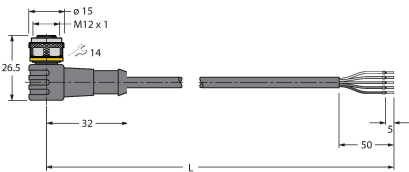
|                        |                                          |
|------------------------|------------------------------------------|
| Number of cores        | 5                                        |
| Ambient temperature    | -10...+50 °C                             |
| Protection class       | 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                   | 19 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals              | CE, cURus                                |

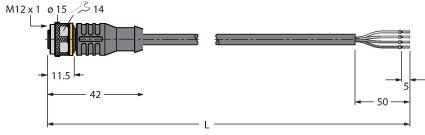
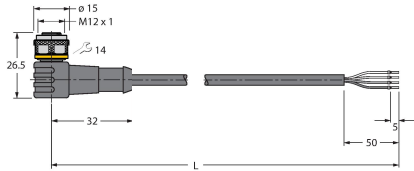


Accessories



Accessories

| Dimension drawing                                                                   | Type          | ID      |                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | WKC4.5T-2/TEL | 6625028 | Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |

| Dimension drawing                                                                 | Type          | ID      |                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | RKC4.5T-2/TEL | 6625016 | Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |
|  | RKC4.4T-2/TEL | 6625013 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |
|  | WKC4.4T-2/TEL | 6625025 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>   |