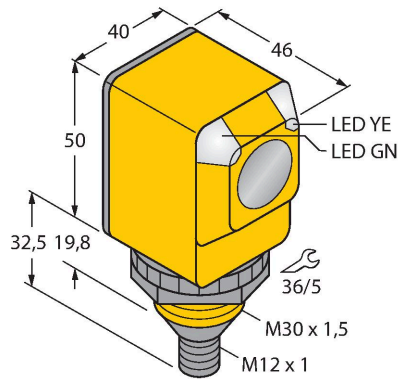


# Q40AW3LPQ1

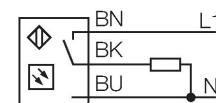
## Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



### Features

- M12 × 1 Micro male connector (AC), 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C

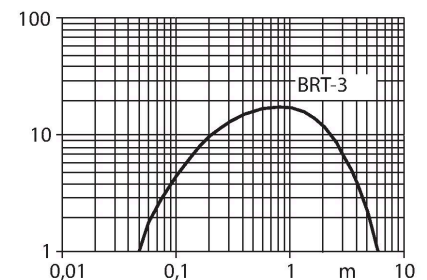
### Wiring diagram



### Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors have a high function gain and good contrast performance. Further it is merely required to install and wire a single device.

Excess gain curve  
Excess gain in relation to the distance



### Technical data

|                                |                                 |
|--------------------------------|---------------------------------|
| Type                           | Q40AW3LPQ1                      |
| ID                             | 3033396                         |
| <b>Optical data</b>            |                                 |
| Function                       | Retroreflective Sensor          |
| Operating mode                 | Polarized                       |
| Reflector included in delivery | no                              |
| Light type                     | Red polarized                   |
| Wavelength                     | 680 nm                          |
| Range                          | 50...6000 mm                    |
| <b>Electrical data</b>         |                                 |
| Operating voltage              | 20...250 VAC                    |
| AC rated operational current   | ≤ 200 mA                        |
| Output function                | Light operation, Relay output   |
| Switching frequency            | ≤ 40 Hz                         |
| Readiness delay                | ≤ 100 ms                        |
| Response time typical          | < 16 ms                         |
| <b>Mechanical data</b>         |                                 |
| Design                         | Rectangular, Q40                |
| Dimensions                     | Ø 30 x 46 x 40.1 x 82.5 mm      |
| Housing material               | Plastic, Thermoplastic material |
| Lens                           | plastic, Polycarbonate          |
| Electrical connection          | Connector, 1/2", PVC            |
| Number of cores                | 4                               |
| Ambient temperature            | -40...+70 °C                    |
| Protection class               | IP69                            |
| Special features               | Encapsulated                    |

Technical data

|                        |             |
|------------------------|-------------|
|                        | Wash down   |
| Power-on indication    | LED, Green  |
| Switching state        | LED, Yellow |
| Excess gain indication | LED         |
| Tests/approvals        |             |
| Approvals              | CE, UL, CSA |

Accessories

SMB30A

3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10

3011185

Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC

3052521

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

SMBAMS30P

3073135

Mounting bracket, stainless steel, for sensors with 30 mm thread

Accessories

| Dimension drawing | Type  | ID      |                                                                                                 |
|-------------------|-------|---------|-------------------------------------------------------------------------------------------------|
|                   | BRT-3 | 3016164 | Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C |