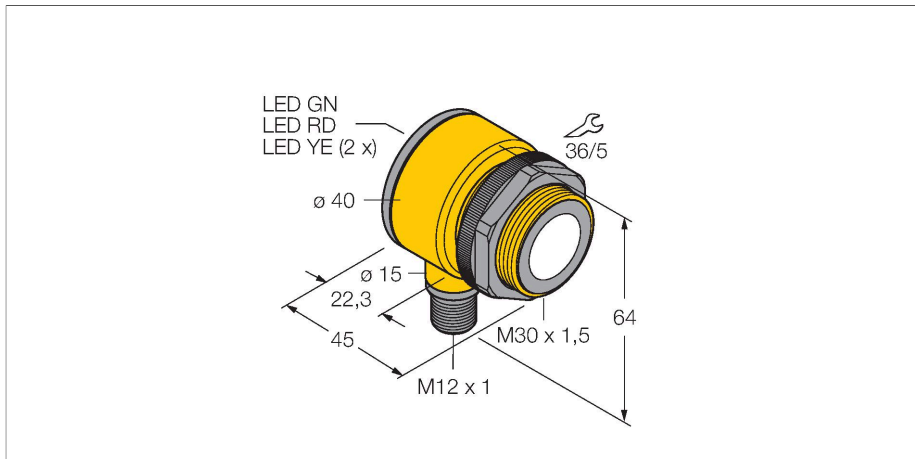


# T30UUPBQ

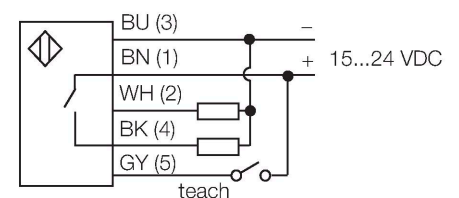
## Ultrasonic Sensor – diffuse mode sensor With Analog Output



### Features

- Compact design
- Connection via male M12 x 1
- Operating voltage 15...24 VDC
- PNP transistor output and analog output for voltage
- Measuring range adjustable via teach-in
- Blind zone: 30 cm
- Range: 200 cm

### Wiring diagram



### Functional principle

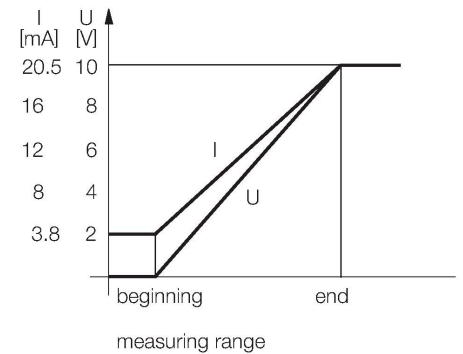
Ultrasonic sensors detect a multitude of objects contactless and wear-free with ultrasonic waves. Regardless of whether the object is transparent or opaque, metallic or non-metallic, liquid, solid or powdery. Even environmental conditions such as spray, dust or rain hardly affect their function.

### Technical data

|                                |                           |
|--------------------------------|---------------------------|
| Type                           | T30UUPBQ                  |
| ID                             | 3055993                   |
| <b>Ultrasonic data</b>         |                           |
| Function                       | Proximity switch          |
| Range                          | 300...2000 mm             |
| Ultrasound frequency           | 128 kHz                   |
| Repeatability                  | ≤ ± 0.75 mm               |
| Temperature drift              | ≤ 0.2 % of full scale/K   |
| <b>Electrical data</b>         |                           |
| Operating voltage              | 15...24 VDC               |
| DC rated operational current   | ≤ 150 mA                  |
| No-load current                | ≤ 50 mA                   |
| Response time typical          | < 96 ms                   |
| Output function                | NO contact, Analog output |
| Voltage output                 | 0...10 V                  |
| Switching frequency            | ≤ 20 Hz                   |
| Hysteresis                     | ≤ 2.5 mm                  |
| Voltage drop at I <sub>o</sub> | ≤ 1.5 V                   |
| Short-circuit protection       | yes / Cyclic              |
| Reverse polarity protection    | Complete                  |
| Wire breakage protection       | yes                       |
| <b>Mechanical data</b>         |                           |
| Design                         | Tube, T30U                |
| Radiation direction            | straight                  |
| Dimensions                     | Ø 40 x 45 mm              |

## Technical data

|                        |   |
|------------------------|---|
| Housing material       | Plastic, PBT                              |
| Transducer material    | Plastic, Epoxyd resin and PU foam         |
| Electrical connection  | Connector, M12 × 1, PVC                   |
| Ambient temperature    | -20...+70 °C                              |
| Relative humidity      | 100 %                                     |
| Protection class       | IP67                                      |
| Power-on indication    | LED                                       |
| Switching state        | LED, Yellow                               |
| Object detected        | LED, Red                                  |
| <b>Tests/approvals</b> |   |
| MTTF                   | 246 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals              | CE  |

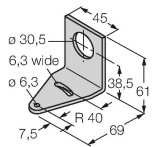


## Accessories

SMB30A

3032723

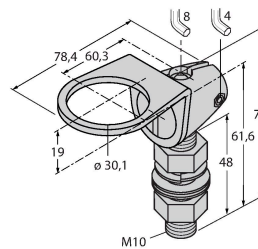
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



SMB30FAM10

3011185

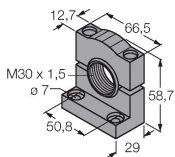
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm



SMB30SC

3052521

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



## Accessories

| Dimension drawing | Type          | ID      |   |
|-------------------|---------------|---------|---|
|                   | RKC4.5T-2/TEL | 6625016 | Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |



| Dimension drawing | Type          | ID      |   |
|-------------------|---------------|---------|---|
|                   | WKC4.5T-2/TEL | 6625028 | Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval             |
|                   | RKS4.5T-2/TEL | 6626361 | Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; shielded; cULus approval |
|                   | WKS4.5T-2/TEL | 6626364 | Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, jacket material: PVC, black; shielded; cULus approval   |