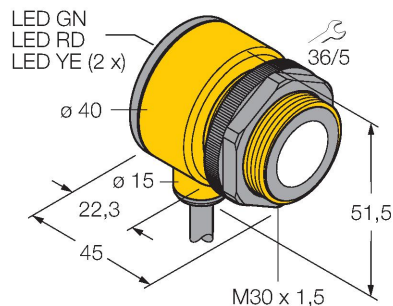


# T30UDPB

## Ultrasonic Sensor – diffuse mode sensor With Switching Outputs



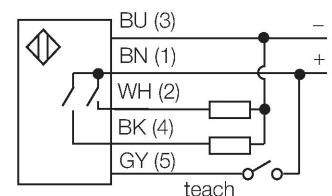
### Technical data

|                                  |                               |
|----------------------------------|-------------------------------|
| Type                             | T30UDPB                       |
| ID                               | 3055550                       |
| <b>Ultrasonic data</b>           |                               |
| Function                         | Proximity switch              |
| Range                            | 300...2000 mm                 |
| Ultrasound frequency             | 128 kHz                       |
| Repeatability                    | $\leq \pm 0.75$ mm            |
| Temperature drift                | $\leq 0.17$ % of full scale/K |
| <b>Electrical data</b>           |                               |
| Operating voltage $U_B$          | 12...24 VDC                   |
| DC rated operating current $I_o$ | $\leq 100$ mA                 |
| No-load current                  | $\leq 50$ mA                  |
| Response time typical            | $< 96$ ms                     |
| Output function                  | 2 x NO contact, PNP           |
| Switching frequency              | $\leq 10$ Hz                  |
| Hysteresis                       | $\leq 2.5$ mm                 |
| Voltage drop at $I_o$            | $\leq 1.5$ 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                       | $\varnothing 40 \times 45$ mm |
| Housing material                 | Plastic, PBT                  |

### Features

- Compact design
- Cable, 2 m
- Operating voltage 12...24 VDC
- Two PNP transistor outputs
- Two independent switching ranges adjustable via button or control line
- 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.

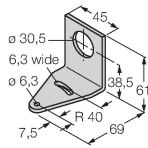
Technical data

|                       |                                           |
|-----------------------|-------------------------------------------|
| Transducer material   | Plastic, Epoxyd resin and PU foam         |
| Electrical connection | Cable, 2 m, PVC                           |
| Ambient temperature   | -20...+70 °C                              |
| Relative humidity     | 100 %                                     |
| Protection class      | IP67                                      |
| Power-on indication   | LED                                       |
| Switching state       | LED, Yellow                               |
| Object detected       | LED                                       |
| Tests/approvals       |                                           |
| MTTF                  | 246 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals             | CE                                        |

Accessories

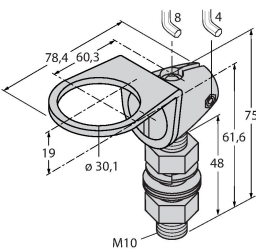
SMB30A 3032723

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

