

# T30UXDBQPMA

## Ultrasonic Sensor – diffuse mode sensor

### With Switching Outputs

#### Technical data

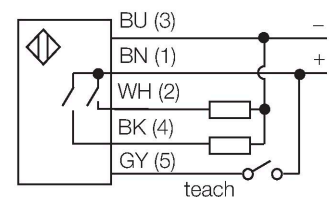
|                                      |                                            |
|--------------------------------------|--------------------------------------------|
| Type                                 | T30UXDBQPMA                                |
| ID                                   | 3080062                                    |
| Ultrasonic data                      |                                            |
| Function                             | Proximity switch                           |
| Range                                | 200...2000 mm                              |
| Ultrasound frequency                 | 174 kHz                                    |
| Repeatability                        | $\leq \pm 1$ mm                            |
| Temperature drift                    | $\leq 0.02$ % of full scale/K              |
| Edge lengths of the nominal actuator | 100 mm                                     |
| Electrical data                      |                                            |
| Operating voltage $U_B$              | 10...30 VDC                                |
| Response time typical                | < 92 ms                                    |
| Readiness delay                      | $\leq 500$ ms                              |
| Output function                      | 2 x NO contact, PNP                        |
| Switching frequency                  | $\leq 10$ Hz                               |
| Hysteresis                           | $\leq 3$ mm                                |
| Short-circuit protection             | yes/Cyclic                                 |
| Reverse polarity protection          | Complete                                   |
| Wire breakage protection             | yes                                        |
| Mechanical data                      |                                            |
| Design                               | Tube, T30U                                 |
| Radiation direction                  | straight                                   |
| Dimensions                           | $\varnothing 40 \times 45$ mm              |
| Housing material                     | Plastic, PBT                               |
| Transducer material                  | Plastic, Epoxyd resin and PU foam          |
| Electrical connection                | Cable with connector, M12 x 1, 0.15 m, PVC |
| Ambient temperature                  | -40...+70 °C                               |
| Relative humidity                    | 95 %                                       |
| Protection class                     | IP67                                       |
| Power-on indication                  | LED                                        |
| Switching state                      | LED, Yellow                                |
| Object detected                      | LED, Red                                   |
| Tests/approvals                      |                                            |
| Approvals                            | CE, cULus listed                           |



#### Features

- Compact design
- Connection via male M12 x 1, 4-pin with 150 mm cable
- Operating voltage 12...24 VDC
- Two PNP transistor outputs
- Two independent switching ranges adjustable via button or control line
- Blind zone: 20 cm
- Range: 200 cm

#### Wiring diagram



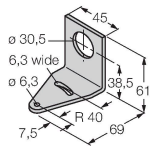
#### Functional principle

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.

Accessories

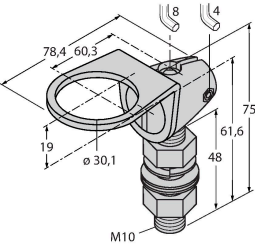
SMB30A 3032723

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

