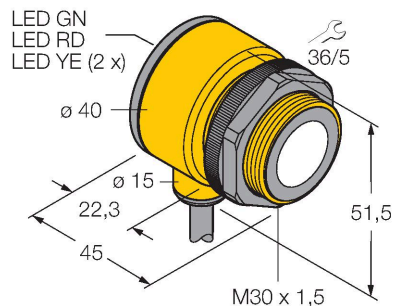


# T30UXDA

## Ultrasonic Sensor – diffuse mode sensor With Switching Output



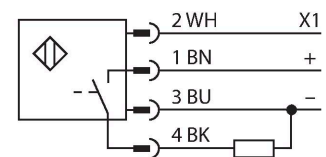
### Technical data

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Type                                 | T30UXDA                           |
| ID                                   | 3079993                           |
| <b>Ultrasonic data</b>               |                                   |
| Function                             | Proximity switch                  |
| Range                                | 100...1000 mm                     |
| Ultrasound frequency                 | 224 kHz                           |
| Repeatability                        | ≤ ± 0.5 mm                        |
| Temperature drift                    | ≤ 0.02 % of full scale/K          |
| Edge lengths of the nominal actuator | 100 mm                            |
| <b>Electrical data</b>               |                                   |
| Operating voltage                    | 10...30 VDC                       |
| Response time typical                | < 45 ms                           |
| Readiness delay                      | ≤ 500 ms                          |
| Output function                      | NO contact, PNP                   |
| Switching frequency                  | ≤ 10 Hz                           |
| Hysteresis                           | ≤ 2 mm                            |
| 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                      |
| Housing material                     | Plastic, PBT                      |
| Transducer material                  | Plastic, Epoxyd resin and PU foam |

### Features

- Compact design
- Cable, 4-pin, 2 m
- Switching output, PNP/NPN adjustable
- NO/NC adjustable
- Integrated temperature compensation
- Switching range adjustable via button or control line
- Blind zone: 10 cm
- Range: 100 cm

### Wiring diagram



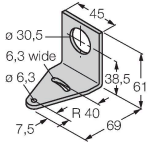
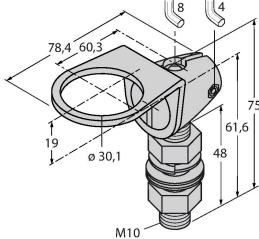
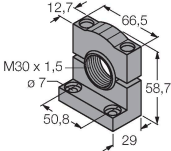
### Functional principle

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

|                       |                  |
|-----------------------|------------------|
| Electrical connection | Cable, 2 m, PVC  |
| Ambient temperature   | -40...+70 °C     |
| Relative humidity     | 95 %             |
| Protection class      | IP67             |
| Power-on indication   | LED              |
| Object detected       | LED, Red         |
| Tests/approvals       |                  |
| Approvals             | CE, cULus listed |

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        |                                                                                     |         |                                                                              |
|  |         |                                                                              |                                                                                     |         |                                                                              |