

# T30UXIAQPMA

## Ultrasonic Sensor – diffuse mode sensor

### With Analog Output

#### Technical data

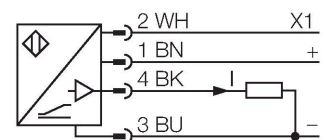
|                                      |                                                   |
|--------------------------------------|---------------------------------------------------|
| Type                                 | T30UXIAQPMA                                       |
| ID                                   | 3080483                                           |
| <b>Ultrasonic data</b>               |                                                   |
| Function                             | Proximity switch                                  |
| Range                                | 100...1000 mm                                     |
| Ultrasound frequency                 | 224 kHz                                           |
| Repeatability                        | $\leq \pm 0.5$ mm                                 |
| Temperature drift                    | $\leq 0.02$ % of full scale/K                     |
| Edge lengths of the nominal actuator | 100 mm                                            |
| <b>Electrical data</b>               |                                                   |
| Operating voltage                    | 10...30 VDC                                       |
| Load resistance                      | $\leq 1000 \Omega$                                |
| Response time typical                | $< 45$ ms                                         |
| Readiness delay                      | $\leq 500$ ms                                     |
| Output function                      | Analog output                                     |
| Current output                       | 4...20 mA                                         |
| Hysteresis                           | $\leq 2$ 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                           | $\varnothing 40 \times 45$ mm                     |
| Housing material                     | Plastic, PBT                                      |
| Transducer material                  | Plastic, Epoxyd resin and PU foam                 |
| Electrical connection                | Cable with connector, M12 $\times$ 1, 0.15 m, PVC |
| Ambient temperature                  | -40...+70 °C                                      |
| Relative humidity                    | 95 %                                              |
| Protection class                     | IP67                                              |
| Power-on indication                  | LED                                               |
| Object detected                      | LED, Red                                          |
| <b>Tests/approvals</b>               |                                                   |
| Approvals                            | CE, cULus listed                                  |



#### Features

- Compact design
- Connection via male M12 x 1, 4-pin with 150 mm cable
- Analog output 4...20 mA
- Response time adjustable
- Integrated temperature compensation
- Measuring range adjustable via teach-in
- 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.

