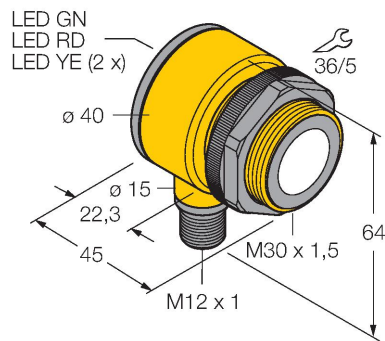


# T30UINBQ-CRFV

## Ultrasonic Sensor – diffuse mode sensor With Analog Output



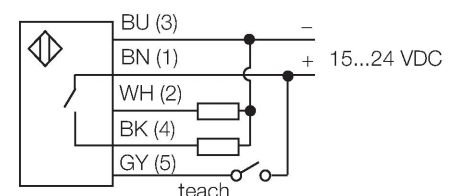
### Technical data

|                        |                                   |
|------------------------|-----------------------------------|
| Type                   | T30UINBQ-CRFV                     |
| ID                     | 3074839                           |
| <b>Ultrasonic data</b> |                                   |
| Function               | Proximity switch                  |
| Range                  | 300...1000 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                       |
| Response time typical  | < 96 ms                           |
| Output function        | NO contact, PNP/Analog output     |
| Current output         | 4...20 mA                         |
| Switching frequency    | ≤ 10 Hz                           |
| Hysteresis             | ≤ 2.5 mm                          |
| <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 |
| Electrical connection  | Connector, M12 × 1, PVC           |
| Ambient temperature    | -20...+70 °C                      |
| Relative humidity      | 100 %                             |
| Protection class       | IP67                              |

### Features

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

### Wiring diagram

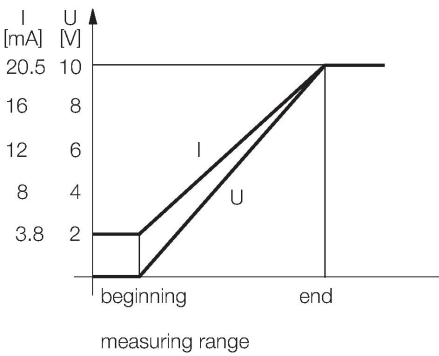


### Functional principle

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

|                     |                                           |
|---------------------|-------------------------------------------|
| Power-on indication | LED                                       |
| Switching state     | LED, Yellow                               |
| Object detected     | LED, Red                                  |
| Tests/approvals     |                                           |
| MTTF                | 246 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals           | CE                                        |



Accessories

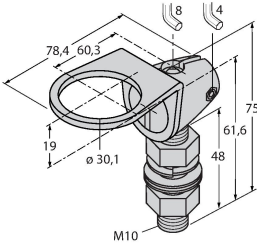
SMB30A 3032723

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



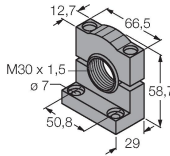
SMB30FAM10 3011185

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



Accessories

| Dimension drawing                                                                                                                                                                                                                    | Type          | ID      |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------|
| <p>Technical drawing of the WKC4.5T-2/TEL connection cable. It shows an angled M12 female connector with a 5-pin configuration. Dimensions include: connector width 14mm, cable length 32mm, and a total length <math>L</math>.</p>  | WKC4.5T-2/TEL | 6625028 | Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval   |
| <p>Technical drawing of the RKC4.5T-2/TEL connection cable. It shows a straight M12 female connector with a 5-pin configuration. Dimensions include: connector width 14mm, cable length 42mm, and a total length <math>L</math>.</p> | RKC4.5T-2/TEL | 6625016 | Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |