

## UT36002F

### Ultrasonic sensors • Distance measurement

Ultrasonic sensor, diffuse reflection sensor, 36x32x101 mm, Ser. No.: 80-1600, 15–30 V DC, 4–20 mA, 5-pin M12 connector, IP65, plastic, teach-in, lateral sound cone, synchronization possible



Ultrasonic sensors are contactless, wear-free position switches that can be used even under harsh environmental conditions. A key advantage of these devices is that the material and surface properties of the objects to be detected can be virtually any type. They perform recognition of solid, liquid, granular, and powdered materials. The shape and color of the objects have no effect on the recognition result. The ability to recognize transparent materials such as films or liquids is also a feature. Ultrasonic sensors are used for distance measurement (e.g., diameter detection, loop control), level or fill-level monitoring (e.g., silo detection), and for positioning and presence detection (e.g., glass pane positioning, film tear detection, glass bottle detection).

#### Electrical features

|                               |                                                        |
|-------------------------------|--------------------------------------------------------|
| Response/decay time           | 140 ms                                                 |
| Type of analog output         | 4 - 20mA                                               |
| Type of electrical connection | Connector M12                                          |
| Setting procedure             | Teach-In                                               |
| No-load current               | 40 mA                                                  |
| Number of pins                | 5                                                      |
| Relative repeat accuracy      | 0.2 %                                                  |
| Sound outlet                  | Lateral                                                |
| Protection class              | III                                                    |
| Temperature compensation      | 70 °C                                                  |
| Operating voltage (DC)        | 15 - 30 V                                              |
| Measuring range               | 80 - 1600 mm                                           |
| Input function                | Synchronization                                        |
| protection functions          | short circuit protection   reverse polarity protection |

#### Mechanical features

|                           |             |
|---------------------------|-------------|
| Design                    | Cuboid      |
| Width                     | 101 mm      |
| Height                    | 36 mm       |
| Length                    | 32.5 mm     |
| Degree of protection (IP) | IP65        |
| Housing material          | plastic     |
| Ambient temperature       | -20 - 70 °C |

## Optical features

|                      |     |
|----------------------|-----|
| Angle of beam spread | 8 ° |
|----------------------|-----|

## Other features

|              |               |
|--------------|---------------|
| Applications | Level sensing |
|--------------|---------------|

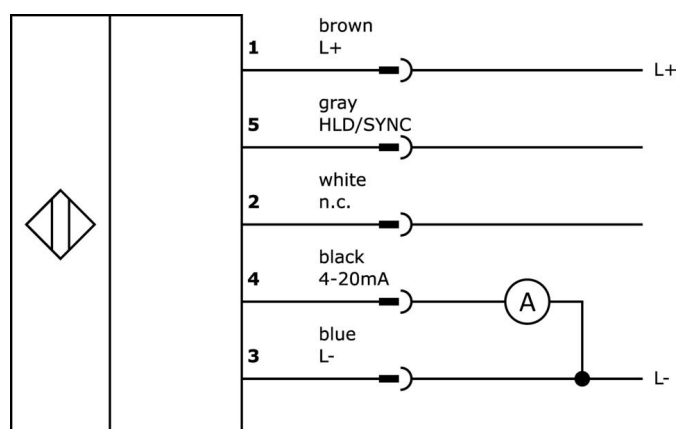
## Classification

|        |
|--------|
| ETIM 8 |
|--------|

## More

|                       |                                 |
|-----------------------|---------------------------------|
| IPF Product Group     | 259 ultrasonic sensors (analog) |
| packaging dimensions  | 165 x 105 x 55 mm               |
| gross weight          | 148 g                           |
| customs tariff number | 85365019                        |
| WEEE number           | 40951076                        |
| OzDS-compliant        | Yes                             |
| POP-compliant         | Yes                             |
| Reach-compliant       | Yes                             |
| RoHS-compliant        | Yes                             |

## Connection



## Extract accessories program

### VK003021



Cable socket, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

### VK003025



Cable socket, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

### NG530002



DC power supply, single-phase, 99x114x22mm, 24V, 0.1A, Number of relay outputs 2, 100-264V AC 50Hz, 100-264V AC 60Hz, Screw connection, IP20, Plastic, Stabilized, Output voltage, pulsed

### VK205621



Connection cable, 2m, M12 socket 5-pin angular, free cable end, 5x0.34mm<sup>2</sup>, PUR (polyurethane), Ø6mm, 60V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

### VK205625



Connection cable, 2m, M12 socket 5-pin straight, free cable end, 5x0.34mm<sup>2</sup>, PUR (polyurethane), Ø6mm, 60V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

You can find further accessories on our homepage



#### Installation

Mounting / installation may only be carried out by a qualified electrician!



#### Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

## Safety warnings

- / Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
- / Never use these devices in applications where the safety of a person depends on their functionality.