

## UT30E278

### Ultrasonic sensors • Distance measurement

sensor ultrasonic, diffuse-reflection sensor, M30x1.5 104long, Sn: 150-1500, 19-29V DC, 4-20mA, Connector M12 5pin, IP67, V4A, ultrasonic cone Axial



Ultrasonic sensors are non-contact and wear-free position switches which can also be used under rough environmental conditions. A key advantage of these devices lies in the fact that the material and the surface characteristics of the objects to be detected can be almost anything. Solids, liquids, grainy materials and powdery materials can be identified without the shape or the color of the object having any influence to the measured result. In addition, the ability to detect transparent materials such as films and fluids is of particular importance. The shape and color of the objects do not influence the result of the detection. The capability to detect transparent films or liquids is also of special importance. Ultrasonic sensors are used for distance measurement (e.g. detection of diameters, loop control), for fill level detection (e.g. silo detection), for positioning and presence detection (e.g. glass pane positioning, film tear check, glass bottle detection)

#### Electrical features

|                                               |               |
|-----------------------------------------------|---------------|
| Response/decay time                           | 120ms         |
| Resolution                                    | 0.5mm         |
| Type of analog output                         | 4 - 20mA      |
| Type of electrical connection                 | Connector M12 |
| Short-circuit protection                      | Yes           |
| Load resistance (current output)              | 0.5kOhm       |
| No-load current                               | 25mA          |
| Number of pins                                | 5             |
| Relative linearity deviation                  | 0.5%          |
| Relative repeat accuracy                      | 0.2%          |
| Sound outlet                                  | axial         |
| Protection class                              | III           |
| Temperature drift over entire measuring range | 0.02%         |
| Carrier frequency                             | 120kHz        |
| Reverse polarity protection                   | Yes           |
| Operating voltage (DC)                        | 19,2 - 28,8V  |
| Measuring range                               | 150 - 1500mm  |

### Mechanical features

|                           |                        |
|---------------------------|------------------------|
| Design                    | Cylinder, screw-thread |
| Thread length             | 52.5mm                 |
| Thread pitch              | 1.5mm                  |
| Length                    | 104mm                  |
| Degree of protection (IP) | IP67                   |
| Housing material          | Stainless steel 1.4404 |
| Diameter detection        | Yes                    |
| Thread dimension          | M30                    |
| Ambient temperature       | -20 - 70°C             |

### Optical features

|                      |     |
|----------------------|-----|
| Angle of beam spread | 40° |
|----------------------|-----|

### Other features

|                     |            |
|---------------------|------------|
| Operating frequency | 120kHz     |
| Level detection     | Yes        |
| Ambient temperature | -20 - 70°C |

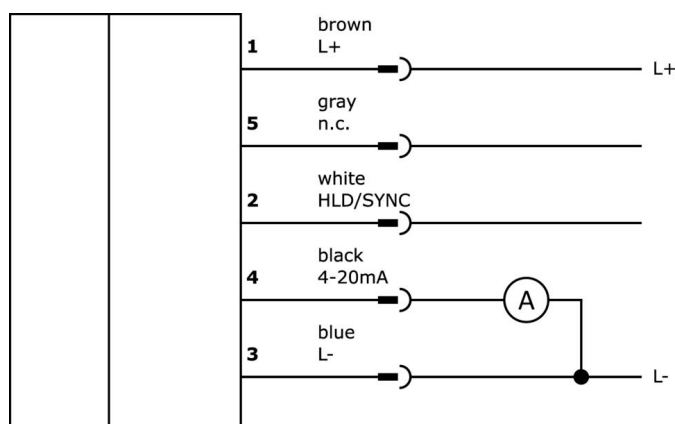
### Classification

|        |                                     |
|--------|-------------------------------------|
| ETIM 8 | EC001846 Ultrasonic distance sensor |
|--------|-------------------------------------|

### More

|                       |                                 |
|-----------------------|---------------------------------|
| IPF Product Group     | 259 ultrasonic sensors (analog) |
| packaging dimensions  | 275 x 90 x 90 mm                |
| gross weight          | 263 g                           |
| Customs tariff number | 85365019                        |
| WEEE number           | 40951076                        |
| OzDS-compliant        | Yes                             |
| POP-compliant         | Yes                             |
| Reach-compliant       | Yes                             |
| RoHS-compliant        | Yes                             |

### Connection



### Installation



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

### Disposal



### 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.

For suitable connection and mounting accessories, please refer to our website [www.ipf-electronic.com](http://www.ipf-electronic.com).

### Dimensional drawing

