Ultrasonic sensor

Surround sensor for the calculation of distances to obstacles and to monitor space when parking and maneuvering

For comfortable and automated parking as well as for emergency braking functions at low speeds

Benchmark in robustness against dirt, ice, environmental conditions and other ultrasonic systems

Most sensitive ultrasonic system in the market (e.g. detection of low reflecting objects)

Faster reaction time (first-time detection), therefore fast reaction on suddenly appearing obstacles (e.g. pedestrians, changing scenes)

**optimum support**

Basis for parking and maneuvering systems as well as automated parking

**state-of-the-art**

in terms of robustness, reaction time and object detection

**most sensitive**

ultrasonic system in the market due to very reliable object detection

**TECHNICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. range</td>
<td>15 cm (Ø 7.5 cm standard pole)</td>
</tr>
<tr>
<td>Max. range</td>
<td>5.5 m (Ø 7.5 cm standard pole)</td>
</tr>
<tr>
<td>Object presence detection</td>
<td>3 – 15 cm</td>
</tr>
<tr>
<td>Detection zone</td>
<td>± 70° @ 35 dB horizontal field of view</td>
</tr>
<tr>
<td>Opening angles</td>
<td>± 35° @ 35 dB vertical field of view</td>
</tr>
<tr>
<td>Safety level</td>
<td>up to ASIL-B</td>
</tr>
<tr>
<td>Frequency</td>
<td>Frequency modulation</td>
</tr>
<tr>
<td>Membrane diameter</td>
<td>15.5 mm</td>
</tr>
<tr>
<td>Housing diameter</td>
<td>23 mm</td>
</tr>
<tr>
<td>Dimensions</td>
<td>44 mm (length) x 26 mm (width)</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 14 g</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>- 40° to + 85° C</td>
</tr>
<tr>
<td>Current consumption</td>
<td>≤ 500 mA (transmit mode) 7 mA (receive mode)</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP64K</td>
</tr>
</tbody>
</table>