## wireSENSOR MT Series

Miniature draw-wire sensors for test applications

- Measuring ranges from 40 to 130 mm
- Extremely high accelerations
- Miniature sensor size
- Easy, fast and flexible mounting

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>WDS-40-MT19-P</th>
<th>WDS-80-MT33-P</th>
<th>WDS-130-MT56-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog output</td>
<td>potentiometer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring range</td>
<td>40 mm</td>
<td>80 mm</td>
<td>130 mm</td>
</tr>
<tr>
<td>Resolution</td>
<td></td>
<td>towards infinity</td>
<td></td>
</tr>
<tr>
<td>Linearity</td>
<td>≤ ± 1 %</td>
<td>≤ ± 0.4 %</td>
<td>≤ ± 0.4 %</td>
</tr>
<tr>
<td>Sensor element</td>
<td>conductive plastic potentiometer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wire extension force (max)</td>
<td>2.0 N</td>
<td>1.5 N</td>
<td>1.0 N</td>
</tr>
<tr>
<td>Wire retraction force (min)</td>
<td>0.7 N</td>
<td>0.5 N</td>
<td>0.3 N</td>
</tr>
<tr>
<td>Wire acceleration (max)</td>
<td>60 g</td>
<td>60 g</td>
<td>15 g</td>
</tr>
<tr>
<td>Material</td>
<td>Housing</td>
<td>Measuring wire</td>
<td></td>
</tr>
<tr>
<td></td>
<td>aluminum</td>
<td>stainless steel</td>
<td></td>
</tr>
<tr>
<td>Wire mounting</td>
<td>eyelet (ø 4.5 mm)</td>
<td>through bores ø 3.2 mm</td>
<td>through bores ø 4.2 mm</td>
</tr>
<tr>
<td>Mounting</td>
<td>through bores ø 2.1 mm</td>
<td>through bores ø 3.2 mm</td>
<td>through bores ø 4.2 mm</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-40 ... +85 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock (DIN-EN 60068-2-29)</td>
<td>50 g, 10 ms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibration (DIN-EN 60068-2-26)</td>
<td>20 g, 20 Hz - 2 kHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection class (DIN-EN 60529)</td>
<td>IP50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typ. service life</td>
<td>1 million cycles</td>
<td></td>
<td>1 million cycles</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 8 g</td>
<td>approx. 22 g</td>
<td>approx. 82 g</td>
</tr>
</tbody>
</table>

### Diagrams

- Dimensions and mounting options for WDS-40-MT19-P, WDS-80-MT33-P, WDS-130-MT56-P

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