SPECIFICATIONS

Preliminary data

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>TYPICAL VALUE</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor type</td>
<td>Eddy Current Sensor</td>
<td></td>
</tr>
<tr>
<td>Range of excitation frequency</td>
<td>&gt;500 kHz</td>
<td>kHz</td>
</tr>
</tbody>
</table>

- **Mechanical characteristics**
  - Shielded: Yes
  - Probe diameter: 8.0 mm
  - Probe height: 7.0 mm

- **Measurement Range**
  - Nominal range: 500 µm
  - Extended range: 1000 µm
  - Minimal airgap: 50 µm

- **Typical accuracy achieved after conditioning**
  - Resolution (BW = 20 kHz)\(^{(1)}\): 0.010 % FS\(^{(2)}\)
  - Resolution (BW = 1 kHz): 0.003 % FS
  - Resolution (BW = 20 kHz), extended range (1000 µm): 0.015 % FS
  - Resolution (BW = 1 kHz), extended range (1000 µm): 0.005 % FS

**APPLICATIONS**

- High accuracy motion sensing
- High accuracy closed loop control

**KEY FEATURES**

- Contactless
- Compact
- Very high accuracy
- No wear, unaffected by dirt or dust
- Fully compatible with CTEC ECP Conditioner board

**RELATED PRODUCT**

- CTEC ECP Conditioner
- CTEC ECP option for APA® actuators
- CTEC Mechanisms

**ANNOTATIONS**

\(^{(1)}\) BW : Bandwidth  
\(^{(2)}\) FS : Full Scale
ECP500

OPERATING ENVIRONMENT

<table>
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<tr>
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<tbody>
<tr>
<td>Operating temperature range</td>
<td>-25 ... +70</td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>-35 ... +100</td>
<td>°C</td>
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</tbody>
</table>

INTERFACES

- Sensor connector: LEMO FGG.00.304.CLAD22
- ECP cable: Dia 2.6 mm Shielded 1.5 m

OPTIONS

- Straight / Right Angle cable
- Integration on CTEC APA® actuators or mechanisms