ECP1000
Eddy Current Probe

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

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>
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</tbody>
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> **Mechanical characteristics**

- Shielded: Yes
- Probe diameter: 15.0 mm
- Probe height: 7.0 mm

> **Measurement Range**

- Nominal range: 1000 µm
- Extended range: 2000 µm
- Minimal airgap: 100 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 (2000 µm) | 0.015 | % FS     |
| Resolution (BW =1 kHz), extended range (2000 µm)   | 0.005 | % FS     |

ANNOTATIONS

(1) BW : Bandwidth
(2) FS : Full Scale
### OPERATING ENVIRONMENT

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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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### 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