Measuring Roll MEZ

Scope of Supply
Measuring roll with two force sensors ZAK, with 5 m cable (PVC) and cable connection T: cable gland, straight

Additional Option
F: For use in explosive areas, incl. J-Box

Additional Accessories
ZAK- Mounting flange
ZAK- Clamp device

Connection
Variant T

Special Features
- Complete measuring roll with measuring sensors
- Simple installation
- Separate or joint measurement of bearing forces
- Sensors made of stainless steel
- Cost effective compact design

The measuring roll MEZ is used to measure web tension forces, e.g. in moving webs of paper, textile, plastic, metal.

The compact design enables quick and cost effective integration into OEM machines or retrofitting into existing machines.

The MEZ is made up of the hull, the bearings, and the two force sensors, which are directly integrated in the roll. The measuring roll comes ready assembled for electrical connection and immediate use.

The measuring sensors can be fixed with the mounting flange directly to the machine frame or mounted with clamping blocks (available as accessories).

The length of the roll is custom designed. The hull of the measuring roll is made of aluminium as a standard. Other materials are available on request.

Ordering Example

<table>
<thead>
<tr>
<th>Type</th>
<th>Roll diameter</th>
<th>Roll length (BL)</th>
<th>Nominal force</th>
<th>Variants / Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEZ129-567-100-T</td>
<td></td>
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</tbody>
</table>
**Technical Data**

<table>
<thead>
<tr>
<th></th>
<th>Values (%) based on nominal force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal force (measuring range)</td>
<td>20, 40, 100, 200, 400, 1000, 2000, 4000 N</td>
</tr>
<tr>
<td>Max. operating force</td>
<td>160 %</td>
</tr>
<tr>
<td>Overload protection</td>
<td>1000 %, max. 6400 N at symmetrical load of both sensors</td>
</tr>
<tr>
<td>Nominal rating</td>
<td>Roll 20 and 40 N: 1 mV / V Roll &gt; 100 N: 1,5 mV / V</td>
</tr>
<tr>
<td>Combined error</td>
<td>0,5 %</td>
</tr>
<tr>
<td>Nominal ambient temperature</td>
<td>+10...+60° C (+50...+140° F)</td>
</tr>
<tr>
<td>Operational temperature range</td>
<td>- 10...+70° C (+14...+158° F)</td>
</tr>
<tr>
<td>Nominal resistance of the strain gauge bridge</td>
<td>700 Ω</td>
</tr>
<tr>
<td>Max. bridge supply voltage</td>
<td>10 VDC</td>
</tr>
<tr>
<td>Enclosure protection</td>
<td>IP54</td>
</tr>
<tr>
<td>Roll diameter</td>
<td>from 40 mm</td>
</tr>
<tr>
<td>Standard material</td>
<td>aluminium</td>
</tr>
<tr>
<td>Standard surface</td>
<td>hard anodised</td>
</tr>
<tr>
<td>Standard roughness</td>
<td>Rz 8 μm</td>
</tr>
<tr>
<td>Balance quality</td>
<td>Q 6,3; Q 2,5; Q1 (as VDI 2060)</td>
</tr>
</tbody>
</table>

**Overall Length (GL)**

**Roll Length (BL)**

GL = BL + 180 mm

axial movement (floating bearing) 174 - 183 mm