9QGPS5190
Trough hole (annular) heavy capacity load cell
Measurement made easy
Annular compression load cell.

Low profile for high capacity load cells

Material

• Stainless steel (model 9QGPS5190)
• Nickel plated steel (model 9QGPS5195)

IP rating IP 65

Sturdy design

Available options (non exhaustive list)

• ATEX intrinsic safety
• High service temperature −50 to 180 °C (−58 to 356 °F)
• Dual Wheatstone bridge
• Amplified output (V or mA) and digital output signal (RS-232C, RS-485, USB)
Applications
The load cell 9QGPS5190-9QGPS5195 is perfectly designed to the following applications:

- Pre-stressed rods measurement (concrete, snow, grounds, rocks, ...)
- Industrial force measurement in confined spaces

Explosion protection (Option)
ATEX intrinsic safety
- Ex II 1GD Ex ia IIC T6 or T4 Ga Ex ia IIIC T80°C Da

Specifications

<table>
<thead>
<tr>
<th>SL</th>
<th>Repeatability error</th>
<th>&lt; ± 0.25 % F.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Creep error over 30 min.</td>
<td>&lt; ± 0.3 % F.S.</td>
</tr>
<tr>
<td></td>
<td>Zero shift after loading</td>
<td>&lt; ± 0.5 % F.S.</td>
</tr>
<tr>
<td></td>
<td>Temperature coefficient of the sensitivity</td>
<td>&lt; ± 0.2 % F.S./10 °C</td>
</tr>
<tr>
<td></td>
<td>Temperature coefficient of zero signal</td>
<td>&lt; ± 0.2 % F.S./10 °C</td>
</tr>
<tr>
<td></td>
<td>Reference temperature</td>
<td>23 °C (73.4 °F)</td>
</tr>
<tr>
<td>Temperature data</td>
<td>Nominal temperature range</td>
<td>-10 to 45 °C (14 to 113 °F)</td>
</tr>
<tr>
<td></td>
<td>Service temperature range</td>
<td>-25 to 70 °C (-13 to 158 °F)</td>
</tr>
<tr>
<td></td>
<td>Storage temperature range</td>
<td>-50 to 85 °C (-58 to 185 °F)</td>
</tr>
<tr>
<td>Electrical data</td>
<td>Input resistance</td>
<td>702 Ω ± 2 Ω</td>
</tr>
<tr>
<td></td>
<td>Output resistance</td>
<td>702 Ω ± 2 Ω</td>
</tr>
<tr>
<td></td>
<td>Insulation resistance (50V)</td>
<td>&gt; 5000 MΩ</td>
</tr>
<tr>
<td></td>
<td>Reference excitation voltage</td>
<td>10 V</td>
</tr>
<tr>
<td></td>
<td>Nominal range of excitation voltage</td>
<td>3 to 12 V</td>
</tr>
<tr>
<td></td>
<td>Zero balance</td>
<td>± 0.02 mV/V</td>
</tr>
<tr>
<td></td>
<td>Nominal sensitivity</td>
<td>1.5 mV/V</td>
</tr>
<tr>
<td>Load limits</td>
<td>Safe load limit</td>
<td>150 % F.S.</td>
</tr>
<tr>
<td></td>
<td>Breaking load</td>
<td>&gt; 300 % F.S.</td>
</tr>
<tr>
<td></td>
<td>Static lateral force limit</td>
<td>25 % F.S.</td>
</tr>
<tr>
<td></td>
<td>Permissible dynamic loading</td>
<td>50 % F.S.</td>
</tr>
</tbody>
</table>

Table 1: (F.S.: full scale)
Specifications subject to change without notice
Dimensions

Load cell model 9QGPS5190 (stainless steel), model 9QGPS5195 (nickel plated steel)

All specified dimensions are in mm (in.)

Figure 1: Dimensions

Table 2: Other dimensions ØA, ØB and H on request
Accessories

Wiring code

1. Ext. - Yellow (Jaune)
2. Sig. - Green (Vert)
3. Sig. - White (Blanc) & DIN 43322 Connector
4. Ext. - Brown (Brun)
5. Sense Grey (Gris)
6. Sense Pink (Rose)

Standard: Cable screen not connected to transducer
Faradisation non connectée au capteur

Figure 2: Accessories
Notes
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