9QGPS5560S
Static line tensiometer
Measurement made easy
Load cell specially designed to measure the tension force applied to a cable or a rope.

Easy and fast mounting

Designed for static rope tension measurement

IP rating IP 67

Wide range of cables diameters: 3 to 90 mm (0.11 to 3.5 in.)

Stainless steel

Available options (non exhaustive list)
- ATEX intrinsic safety
- Amplified output (V or mA) and digital output signal (RS-232C, RS-485, USB)
- Dual Wheatstone bridge
- IP rating IP 68
- High service temperature −50 to 180 °C (−58 to 356 °F)
Applications
The load cell 9QGPS5560S is perfectly designed to the following applications:
- Hookload sensor for drilling, mud-loging
- Tension measurement of cables, ropes, shrouds and riggings of electric pylons, transmission antenna's, towers, flare masts, barge mooring lines
- Tension measurement for suspended bridges and foot-bridges, big tops

Capacities
5 to 75 t on cable

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

Specification

<table>
<thead>
<tr>
<th></th>
<th>2 to 5 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature coefficient of the sensitivity</td>
<td>&lt; ± 0.1 % F.S./10 °C</td>
</tr>
<tr>
<td>Temperature coefficient of zero signal</td>
<td>&lt; ± 0.1 % F.S./10 °C</td>
</tr>
<tr>
<td>Reference temperature</td>
<td>23 °C (73.4 °F)</td>
</tr>
</tbody>
</table>

**Temperature data**
- Nominal temperature range: -10 to 45 °C (14 to 113 °F)
- Service temperature range: -25 to 70 °C (-13 to 158 °F)
- Storage temperature range: -50 to 85 °C (-58 to 185 °F)

**Electrical data**
- Input resistance: 352 Ω ± 2 Ω
- Output resistance: 352 Ω ± 2 Ω
- Insulation resistance (50 V): > 5000 MΩ
- Reference excitation voltage: 10 V
- Nominal range of excitation voltage: 3 to 12 V
- Nominal sensitivity: ± 1 mV/V*

**Load limits**
- Safe load limit: 200 % F.S.
- Breaking load: > 300 % F.S.
- Permissible dynamic loading: 70 % F.S.

Table 1: (F.S.: full scale)
* Can be different (according to the wire rope)
Combined error depends on rope material and on site calibration
Specifications subject to change without notice
**Dimensions**

Load cell model 9QGPS5560S (stainless steel)

All specified dimensions are in mm (in.)

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**Figure 1: Dimensions**

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<table>
<thead>
<tr>
<th>Ref. Item</th>
<th>Capacities</th>
<th>ØRope / Line</th>
<th>ØA</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H (min)</th>
<th>H (max)</th>
<th>Weight kg (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5560S-A</td>
<td>5 to 6</td>
<td>(0.47)</td>
<td>64</td>
<td>295</td>
<td>315</td>
<td>367</td>
<td>72</td>
<td>100</td>
<td>120</td>
<td>217</td>
<td>224</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td>5560S-B</td>
<td>5 to 6</td>
<td>(0.71)</td>
<td>64</td>
<td>295</td>
<td>315</td>
<td>367</td>
<td>72</td>
<td>100</td>
<td>120</td>
<td>217</td>
<td>224</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td>5560S-C</td>
<td>10</td>
<td>(0.32)</td>
<td>64</td>
<td>295</td>
<td>315</td>
<td>367</td>
<td>72</td>
<td>100</td>
<td>120</td>
<td>217</td>
<td>224</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td>5560S-D</td>
<td>15 to 20</td>
<td>(0.87)</td>
<td>64</td>
<td>295</td>
<td>315</td>
<td>367</td>
<td>72</td>
<td>100</td>
<td>120</td>
<td>217</td>
<td>224</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td>5560S-E</td>
<td>30</td>
<td>(0.87)</td>
<td>64</td>
<td>295</td>
<td>315</td>
<td>367</td>
<td>72</td>
<td>100</td>
<td>120</td>
<td>217</td>
<td>224</td>
<td>284</td>
<td></td>
</tr>
<tr>
<td>5560S-F</td>
<td>45</td>
<td>(0.87)</td>
<td>64</td>
<td>295</td>
<td>315</td>
<td>367</td>
<td>72</td>
<td>100</td>
<td>120</td>
<td>217</td>
<td>224</td>
<td>284</td>
<td></td>
</tr>
<tr>
<td>5560S-G</td>
<td>75</td>
<td>(1.50)</td>
<td>74</td>
<td>405</td>
<td>415</td>
<td>472</td>
<td>89</td>
<td>150</td>
<td>147</td>
<td>324.5</td>
<td>296</td>
<td>365</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2: Other capacities and dimensions available on request**
Wiring code

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

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

Load direction

Figure 2: Other views
Notes
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