The GS-5050 and GS-5100 series are long stroke type linear gauge sensors designed to be shock/vibration resistant structures. They are suitable for measuring displacement of large structure, such as load-strength of construction or automobile outer frame. Since the resolution of either 1 µm or 10 µm can be selected in accordance with the measurement application, the GS-5050 and GS-5100 series are available for wide range of applications in production line. All models are compatible with our the DG-4000 series of digital gauge counters which have comparator, offset, peak hold, multiplying, and other functions depending on the model.
Long stroke and shock/vibration resistant structure greatly contribute to measuring displacement of a large structure!

Features

• High cost performance
• More than 15 million sliding times
• Protection class IP 5X
• Ball bearing is used
• The pitch of mounting hole and the distance from tip of spindle* after installation are same as those of the GS-5011.
• New model of measurement range at 100mm and resolution at 1µm is added to line up.

Outer Dimensions

<table>
<thead>
<tr>
<th>GS-5050/5051</th>
<th>GS-5100/5101</th>
</tr>
</thead>
<tbody>
<tr>
<td>50mm</td>
<td>100mm</td>
</tr>
<tr>
<td>50mm</td>
<td>100mm</td>
</tr>
<tr>
<td>10µm</td>
<td>1µm</td>
</tr>
<tr>
<td>10µm</td>
<td>12µm</td>
</tr>
<tr>
<td>14(1m/s)</td>
<td>0.3(1.2m/s)</td>
</tr>
<tr>
<td>3N or less</td>
<td>5.5N less</td>
</tr>
<tr>
<td>15 million times</td>
<td></td>
</tr>
</tbody>
</table>

Protection class (excluding connector section) IP5X

Power consumption (when 5VDC) 120mA or less

Vibration resistance (when the power is on) 147 m²/s² in each of the three axial directions (75 minutes per each, 10 cycles of 10Hz to 150Hz sweeping)

Shock resistance (when the power is on) 1470 m²/s² in each of each direction for each of three axes, three times for each of X, Y and Z directions, sine half-wave, pulse duration 6ms

Operating temperature range 0 to +40°C

Storage temperature range -10 to +55°C (with no condensation)

Cable length Approx. 4.8m

Weight (including cable, connector) Approx. 570g Approx. 655g Approx. 570g Approx. 655g

Options (sold separately) AA-969: Finger lifter AA-8560: Mounting fixture

ST-0230: Gauge stand AA-8803 (20m) / AA-8804 (30m)

AA-5860: Extension cable

Compatible digital counters

<table>
<thead>
<tr>
<th>DG-4140</th>
<th>DG-4190</th>
<th>DG-4120</th>
<th>DG-4240</th>
<th>DG-4280</th>
<th>DG-2310</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparator output (BCD, Color backlight)</td>
<td>Comparator output (Analog, Color backlight)</td>
<td>BCD output</td>
<td>Comparator output (Upper &amp; Lower)</td>
<td>Comparator output (4-preset)</td>
<td>2ch with multi function</td>
</tr>
</tbody>
</table>

ONOSOKKI

U.S.A
Ono Sokki Technology Inc.
2171 Executive Drive, Suite 400
Addison, IL 60101, U.S.A
Phone: +1-630-627-9700
Fax: +1-630-627-0004
E-mail: info@onosokki.net
http://www.onosokki.net

THAILAND
Ono Sokki (Thailand) Co., Ltd.
29/67 Moo 5 Tivion Road, Pakkred, Nonthaburi 11120, Thailand
Phone: +66-2-964-3887
Fax: +66-2-964-3888
E-mail: eost_sales@onosokki.co.jp

P.R.CHINA
Ono Sokki Beijing Office
Beijing Jing Guang Center 3510 Hu Jia Lou, Chao Yang Qu Beijing 10020, P.R.China
Phone: +86-10-6697-3113
Fax: +86-10-6697-3114
E-mail: onosokki@bbn.cn

WORLDWIDE
Ono Sokki Co., Ltd.
3-9-3 Shio-Yokohama, Kohoku-ku, Yokohama 222-8507, Japan
Phone: +81-45-476-9712
Fax: +81-45-470-7244
E-mail: overseas@onosokki.co.jp

URL: http://www.onosokki.co.jp/English/english.htm

* Only for the GS-5050/5051

*1. When used with Ono Sokki’s Gauge Counter. The value within parentheses () is the maximum spindle velocity used with the DG-4140/DG-4190/DG-5100.

*2. An attachment may not return completely if it is facing upwards.

*3. Shock/vibration resistance values described in above are not guaranteed during measurement operation.

• We also offer several other accessories not listed in this catalogue. For details, please contact your nearest distributor or send an e-mail to us; overseas@onosokki.co.jp

*Disconnected or modified signal cable is not applicable to CE marking.

* Outer appearance and specifications are subject to change without prior notice.