KG Series Optical Force Transducers

Force Transducers for Muscle Research

KG-series force transducers measure a large range of detectable forces. The transducer with the highest sensitivity has a resolution of 0.2 mN, sufficient to measure the force of a single heart cell. All transducers are extraordinarily rugged, withstanding even overload forces.

- Different models to accommodate a wide range of forces and sensitivities
- Nearly insensitive to changes in temperature and ambient light
- Extremely high level of linearity
- Virtually indestructible with normal use
- 3-year warranty
- Simple calibration
- KG transducers are required for use with SI-BAM21-type amplifiers

**TRANSDUCER SPECIFICATIONS**

*Unloaded transducer without tissue mounting support*

<table>
<thead>
<tr>
<th>Transducer</th>
<th>Force Range</th>
<th>Range (g)</th>
<th>Noise (µN)</th>
<th>Compliance (nm/mN)</th>
<th>Resonance Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI-KG2</td>
<td>0-2 N</td>
<td>0-200</td>
<td>250 µN</td>
<td>150</td>
<td>1.3 kHz</td>
</tr>
<tr>
<td>SI-KG2B</td>
<td>0-0.2 N</td>
<td>0-20</td>
<td>80 µN</td>
<td>0.5</td>
<td>590 Hz</td>
</tr>
<tr>
<td>SI-KG4</td>
<td>0-50 mN</td>
<td>0-5</td>
<td>15 µN</td>
<td>1</td>
<td>1.2 kHz</td>
</tr>
<tr>
<td>SI-KG4A</td>
<td>0-20 mN</td>
<td>0-2</td>
<td>4 µN</td>
<td>1</td>
<td>1.2 kHz</td>
</tr>
<tr>
<td>SI-KGxx</td>
<td></td>
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</tr>
</tbody>
</table>

**Contact us for specialty transducers with different ranges.**

The KG Force Transducers are designed for use solely with the SI-BAM21-LC optical force transducer amplifier.

www.wpiinc.com
Tissue Mounting Hooks

Mounting hooks can be used in a variety of combinations, depending on the type of tissue to be examined.

Mounting hooks are sold in kits. Currently, there are 11 kit configurations, each available in four different sizes. The mounting hook size that is required depends on the force transducer used.

Vascular hooks are available for mounting blood vessels (rings). They are normally used with a pair of blunt hooks (SI-TM8).

For larger muscles, screw clamps (SI-TM11) and spring clips (SI-TM9, SI-TM10) are available.

The micrometer and motor receive a large (SI-KG4) size tissue mount. If a smaller tissue mount is used, an adapter is required. This adapter is included with every SI-MKB or SI-HTB system.

Ordering

When ordering tissue mounts, specify the tissue mount configuration and force transducer to be used.