Force Sensor
HSFPAR004A

Industry’s smallest, high resolution, high linearity sensor with superior impact resistance
※According to Alps Alpine Research, March 2019

Features
- High linearity with over 2%FS
- Long operating life of more than 1 million cycles
- High impact resistance due to rounded peripheral edge of knob
- Detects stress as low as zero stroke (0.01 N)
- Structure avoiding external magnetic fields and electric fields

Applications
- Stylus pens and various other input devices
- Load balance on grip force detection for robot arms
- Various industrial equipment

Typical Specifications

<table>
<thead>
<tr>
<th>Items</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W × D × H)</td>
<td>2.00mm × 1.60mm × 0.66mm</td>
</tr>
<tr>
<td>Operating load range</td>
<td>8 N</td>
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<tr>
<td>Supply voltage</td>
<td>1.5 to 3.6 V</td>
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<tr>
<td>Sensitivity</td>
<td>2.3 mV/V/N</td>
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<tr>
<td>Linearity</td>
<td>&lt;2 %FS; FS = Full Span</td>
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<tr>
<td>Operating life</td>
<td>1,000,000 cycles</td>
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<tr>
<td>Breaking load</td>
<td>55 N</td>
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</table>

Dimensions

Unit: mm

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