CUSTOM LOAD CELLS AND SOLUTIONS

Vishay BLH • Vishay Nobel
At Vishay Nobel and Vishay BLH, we have unique know-how in measurement and control technology. Since the late seventies, we have specialized in designing and building digital process control systems using strain gage sensors, and Vishay Nobel and Vishay BLH are leading names in this technology. We design and build our own load cells, measurement blocks, and electronic systems. Our thorough understanding of load cell systems, combined with intimate knowledge of their applications, enable us to offer solutions that are tailor-made for the unique requirements of our customers.

Key benefits of Vishay Nobel and Vishay BLH systems include immunity to vibration, horizontal shock, and thermal expansion of the object being weighed or the force being measured. Our load cells provide high accuracy, repeatability, and correct measurements even under severe operational conditions.

Vishay Nobel and Vishay BLH have long histories as suppliers of special load cells for specialized force, tension, and weighing applications to suit a diverse measurement challenges.

Vishay load cell engineers design products that offer the best combinations of robustness, reliability, and accuracy to fit specific requirements of forces or weights, space, accuracy, and environmental conditions. Whether your requirements involve a crane application or an under-the-sea application, we have the expertise needed to provide a solution. We offer customers the benefits of our experience in solving complicated application problems (as well as standard ones) using the principles of KIS, KISD, KOSD, KIMD, shear beam, and many other types of load cells.

All our load cells can be delivered with built-in transmitters with an output signal of 4 to 20 mA; or digital communication bus (RS485, LIN-bus, CAN-bus, and others). Our KIMD and KOSD load cells are available with ATEX approvals.
<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Operation Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KIMD</strong></td>
<td>Double-ended shear beam with I-beam cross section</td>
<td>High-accuracy load cell for weighing and force measurement, e.g., cranes, wheels, ladles, ovens</td>
</tr>
<tr>
<td></td>
<td>• Capacity from 0.5 kN</td>
<td>• Combined error: 0.2 to 0.5% of R.O.</td>
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<tr>
<td></td>
<td>• Cable or connector</td>
<td>• ATEX-approved</td>
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<tr>
<td><strong>KOSD</strong></td>
<td>Double-ended shear beam with circular cross section.</td>
<td>Rough construction with high ingress protection for force measurement, e.g., offshore applications, cranes, etc.</td>
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<tr>
<td></td>
<td>• Capacity from 0.5 kN</td>
<td>• Combined error: 0.5 to ~2.0% of R.O.</td>
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<tr>
<td></td>
<td>• Cable or connector</td>
<td>• ATEX approved</td>
</tr>
<tr>
<td><strong>KISD</strong></td>
<td>Double-ended, double-cantilever shear beam with I-beam cross section.</td>
<td>High accuracy load cell for weighing and force measurement, e.g., cranes, wheels, etc.</td>
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<tr>
<td></td>
<td>• Capacity from 0.5 kN</td>
<td>• Combined error: 0.1 to ~0.3% of R.O.</td>
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<td>• Cable or connector</td>
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<tr>
<td><strong>KIS</strong></td>
<td>Single-ended, single- or double-cantilever shear beam with I-beam cross-section</td>
<td>High-accuracy load cell for weighing and force measurement, e.g., paper machines, cranes, tanks, etc.</td>
</tr>
<tr>
<td></td>
<td>• Capacity from 0.5 kN</td>
<td>• Combined error: 0.1 to ~1.0% of R.O.</td>
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<td>• Cable or connector</td>
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</tr>
<tr>
<td><strong>Others</strong></td>
<td>Tailor-made load cells of all designs, principles and capacities, such as shear beam, through-hole, bending beam, etc.</td>
<td>Application-dependent</td>
</tr>
<tr>
<td></td>
<td>Special cables, connectors, internal and external amplifiers, digital interfaces, radio signal transmitters, etc.</td>
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</tr>
</tbody>
</table>

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