SWA-1 Double Shear Beam Silo Weighing Assembly

Features

- **Ranges:** 0.5 to 100 tonnes
- Stainless steel fully welded construction
- Environmentally sealed to IP68
- Painted alloy steel mounting assembly (stainless steel option also available)
- High accuracy
- Low height
- Anti-lift off mechanism
- Integral earth strap
- High resistance to off-axis loading

Typical Applications

- Vessel weighing
- Silo weighing
- Process weighing & control
- Tank weighing

Description

The SWA-1 series of products uses a stainless steel double ended shear beam design, sealed to IP68, and is supplied as a complete assembly with mounting brackets. The mounting bracket assembly enables simple mounting for the engineer on site. It incorporates a number of key features that allows the best installed accuracy to be realised. These include an anti-lift off mechanism, compensation for thermal expansion and for off-axis loading.

The SWA-1 is available in 5 different sizes (full details are shown on the reverse of this data sheet). The standard mounting assembly is of a painted alloy steel construction, with a stainless steel option available for food, hygienic or corrosive applications.

The SWA-1 series can be supplied on its own or combined with our extensive range of instrumentation to provide a complete load monitoring or control system.

Specification

<table>
<thead>
<tr>
<th>Description</th>
<th>0.5, 1, 2, 5, 7.5, 10, 15, 20, 30, 50, 75, 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated load (tonnes)</td>
<td></td>
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<tr>
<td>Proof load</td>
<td>150% of rated load</td>
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<tr>
<td>Ultimate breaking load</td>
<td>&lt;300% of rated load</td>
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<tr>
<td>Output</td>
<td>2mV/V (=0.25%)</td>
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<tr>
<td>Accuracy</td>
<td>&lt;±0.05% of rated load</td>
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<tr>
<td>Non-repeatability</td>
<td>&lt;±0.01% of rated load</td>
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<tr>
<td>Excitation voltage</td>
<td>10vdc recommended, 15vdc maximum</td>
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<tr>
<td>Bridge resistance</td>
<td>7500 input, 7000 output</td>
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<tr>
<td>Insulation resistance</td>
<td>&gt;500MΩ @ 100vdc</td>
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<tr>
<td>Operating temperature range</td>
<td>-20 to +60°C</td>
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<tr>
<td>Compensated temperature range</td>
<td>-10 to +40°C</td>
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<tr>
<td>Zero temperature coefficient</td>
<td>&lt;±0.005% of rated load/°C</td>
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<tr>
<td>Span temperature coefficient</td>
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<tr>
<td>Environmental protection level</td>
<td>IP68</td>
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<tr>
<td>Connection type</td>
<td>10 metres PUR screened cable, via gland cable</td>
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<tr>
<td>Wiring connections</td>
<td>+supply: Red -supply: Blue</td>
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<td></td>
<td>+signal: Green -signal: Yellow</td>
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Available Options

- Stainless steel mounting assembly
- TEDS option (when used with TR150 handheld display)

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sales@lcmsystems.com
www.lcmsystems.com
SWA-1 Double Shear Beam Silo Weighing Assembly

Dimensions

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<th>Size</th>
<th>Rating (tonnes)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>ØF</th>
<th>G</th>
<th>Weight (kg)</th>
<th>Resolution (tonne)</th>
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All dimensions are in mm