**ALF 238**

**Description**
- Measurement range 0 ... 50 N to 0 ... 300 N
- Tension / compression
- Non-linearity 0.05 % RL
- Output 2.2 mV/V or rationalised 2.0 mV/V ±0.1 %
- Supply voltage 10 VDC

The ALF238 load cell is a compact binocular bending beam load cell for force measurements. This type of binocular beam is often referred to as a single point load cell. The binocular bending beam construction has good moment immunity resulting in very small errors for change in the force application point.

**Features**
- Tension / compression / bi-directional calibration
- Easy installation
- Small size single point loadcell
- All aluminium construction
- Traceable calibration with certificate

**Dimensions**

Dimensions in „mm“, approx. values
These drawings are for information only and not intended for construction purpose.
Please contact us for detailed drawings
Specifications

<table>
<thead>
<tr>
<th>Rated load</th>
<th>Struct. stiffness, nom.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 N</td>
<td>4.3 x 10^4 N/m</td>
</tr>
<tr>
<td>100 N</td>
<td>8.6 x 10^4 N/m</td>
</tr>
<tr>
<td>300 N</td>
<td>1.3 x 10^5 N/m</td>
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</tbody>
</table>

Notes:
1. RL = rated load
2. AL = applied load
3. Temperature coefficients apply over the compensated range.

Electrical Connections

The load cell is fitted with 2 m of PVC insulated 4 core screened cable type 7-2-4C.

The screen is not connected to the load cell body.
Reverse the signal connections to obtain a positive signal in tension mode.

Ordering Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALF238CF00H0</td>
<td>Compression</td>
</tr>
<tr>
<td>ALF238CF00H0</td>
<td>Tension</td>
</tr>
<tr>
<td>ALF238UF00H0</td>
<td>bi-directional</td>
</tr>
</tbody>
</table>

Safety note:
When using the load cell in tension mode it is essential to provide additional safety precautions like safety chains etc. for catching the load in a breakage, which cannot be excluded completely.

Due to continuous product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.