Series RSL0811
Precision Miniature Tension/Compression Load Cell

**Standard Features**
- Tension / Compression
- Welded Stainless Steel
- 0.15% Accuracy
- -50°C to 120°C Operation
- mV/V Output

**Performance**

<table>
<thead>
<tr>
<th>Capacities</th>
<th>100, 250, 500, 1000 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>2mV/V nominal.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>0.15% BFSL.</td>
</tr>
<tr>
<td>Compensated Temperature Range</td>
<td>20°C to 76°C.</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-50°C to 120°C.</td>
</tr>
<tr>
<td>Temperature Effect on Zero</td>
<td>0.006% FSO/°C.</td>
</tr>
<tr>
<td>Temperature Effect on Span</td>
<td>0.006% Reading/°C.</td>
</tr>
<tr>
<td>Zero Balance</td>
<td>1% FSO.</td>
</tr>
<tr>
<td>Bridge Resistance</td>
<td>350 Ohms nominal.</td>
</tr>
</tbody>
</table>

**Mechanical Characteristics**

<table>
<thead>
<tr>
<th>Calibration</th>
<th>5 Points (0, 50%, 100%, 50%, 0) Tension.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Overload Capacity</td>
<td>150% FSO.</td>
</tr>
<tr>
<td>Construction</td>
<td>Welded stainless steel.</td>
</tr>
</tbody>
</table>

**Electrical Characteristics**

<table>
<thead>
<tr>
<th>Excitation</th>
<th>10 Vdc or Vac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation Resistance</td>
<td>Greater than 5000 megaohms at 50 Vdc at 20°C.</td>
</tr>
<tr>
<td>Electrical Termination</td>
<td>10', 4 Conductor Shielded Teflon Cable</td>
</tr>
<tr>
<td>Output</td>
<td>RED +EXE BLACK - EXE GREEN - SIG WHITE +SIG</td>
</tr>
</tbody>
</table>
## Dimensions (mm)

- **FEMALE BASE**
  - Ø1.00
  - Ø0.45
  - 0.77
  - 0.36
  - 1.625

- **FLANGED BASE**
  - Ø1.28
  - 0.73
  - 0.13

## Available Options

### Base
- Male thread.
- Female thread.
- Flange.

### Threads
- Metric.

### Compensated Temperature Ranges
- From -50°C up to 200°C.

### Operating Temperature Ranges
- From -50°C up to 200°C.

### Calibration
- Additional calibration points (in addition to standard 5 points) available (Consult Factory).
- Special and custom calibration available (Consult Factory).

### Calibration Type
- Compression Only.
- Tension/Compression.

### Amplifiers
- Integral or In-Line (Consult Factory).
  - Analog (4-20 mA; ±5 Vdc; ±10 Vdc).
  - Digital (RS-232; RS-485; CANbus; MODbus).

### Calibration Range
- Special full scale range (Example: 75 lb).

### Cable Length
- Cable length specified.

### Cable Connector
- Add a connector to the end of the cable.
- Consult factory for available connectors.

### Custom Options
- Other unlisted customer requested options welcome.

## Modifications and Warranty

**Modifications:** We realize load cell applications vary greatly and as such our designs are flexible. Choice of electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.

**Warranty:** RDP warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that RDP's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by RDP. This warranty is in lieu of all other warranties expressed or implied. Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.