

## Single-Ended Load Beam

### FEATURES

- Capacities: 0.5T, 1T, 2T, 5T, 10T, 1k lbs, 2k lbs, 5k lbs, and 10k lbs
- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d and NTEP 10000d
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- Digital version available (model SBC)
- **Optional**
  - ATEX- EEx ib IIC T6 hazardous area approval
  - FM approval available



### APPLICATIONS

- Platform scales
- Belt scales
- Pallet scales
- Overhead track scales
- On-board weighing
- Silo hopper weighing

### DESCRIPTION

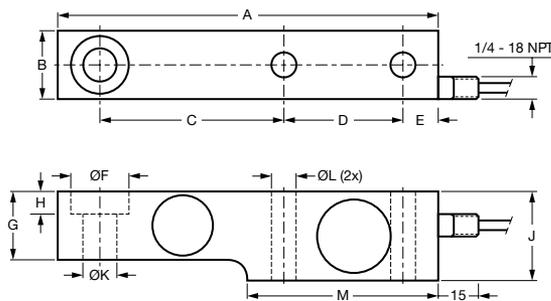
The SSB is a stainless steel single-ended shear beam type load cell.

This robust product is suitable for a wide range of platform scales, pallet scales, overhead track scales, and process weighing applications.

The fully welded construction and water block cable entry ensure that this product can be used successfully in harsh environments found in the food, chemical, and allied process industries.

This product meets the stringent Weights and Measures requirements throughout Europe and the USA.

### OUTLINE DIMENSIONS in millimeters [inches]



**Cable specifications:**

Cable length: 5m

- + Excitation Green
- Excitation Black
- + Output White
- Output Red
- Shield Transparent

| CAPACITY (kg) | 500-2000                |                           | 5000                    |                           |
|---------------|-------------------------|---------------------------|-------------------------|---------------------------|
|               | mm                      | inch                      | mm                      | inch                      |
| A             | 203.2                   | 8.00                      | 235.0                   | 9.25                      |
| B             | 36.5                    | 1.44                      | 47.5                    | 1.87                      |
| C             | 98.4                    | 3.87                      | 123.8                   | 0.50                      |
| D             | 63.5                    | 2.50                      | 66.7                    | 2.63                      |
| E             | 19.1                    | 0.75                      | 20.6                    | 0.81                      |
| F             | 30.2 <sup>+0.2/-0</sup> | 1.19 <sup>+0.008/-0</sup> | 41.3 <sup>+0.2/-0</sup> | 1.63 <sup>+0.008/-0</sup> |
| G             | 36.5                    | 1.44                      | 47.6                    | 1.87                      |
| H             | 11.9                    | 0.47                      | 15.8                    | 0.62                      |
| J             | 47.6                    | 1.87                      | 69.9                    | 2.75                      |
| K             | 17.5 H11                | 0.69 H11                  | 25.5 H11                | 1 H11                     |
| L             | 14.0                    | 0.55                      | 22.0                    | 0.87                      |
| M             | 101.6                   | 4.00                      | 111.2                   | 4.38                      |

For 10 tonne capacity, please consult factory

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| SPECIFICATIONS                                                     |                             |              |                         |                          |                         |                         |
|--------------------------------------------------------------------|-----------------------------|--------------|-------------------------|--------------------------|-------------------------|-------------------------|
| PARAMETER                                                          | VALUE                       |              |                         |                          |                         | UNIT                    |
| Standard capacities (E <sub>max</sub> )                            | 0.5, 1, 2, 5 <sup>(1)</sup> |              |                         | 2, 5 <sup>(1)</sup>      |                         | T                       |
| Accuracy class according to OIML R-60                              | NTEP III                    | Non-Approved | C3                      | C3MI8                    | C4                      |                         |
| Max. no. of verification intervals                                 | 10000                       |              | 3000                    | 3000                     | 4000                    |                         |
| Min. verification interval (V <sub>min</sub> =E <sub>max</sub> /Y) |                             |              | E <sub>max</sub> /10000 | E <sub>max</sub> /15,000 | E <sub>max</sub> /10000 |                         |
| MDLOR (Z=E <sub>max</sub> /2*DR)                                   |                             |              | -                       | 8000                     | -                       |                         |
| Min. verification interval, type MR                                |                             |              | E <sub>max</sub> /20000 |                          | E <sub>max</sub> /20000 |                         |
| Rated output (=S)                                                  | 2                           |              |                         |                          |                         | mV/V                    |
| Rated output tolerance                                             | 0.02                        |              |                         |                          |                         | ±mV/V                   |
| Zero balance                                                       | 1.0                         |              |                         |                          |                         | ±% FSO                  |
| Combined error                                                     | 0.0200                      | 0.0500       | 0.0200                  | 0.0200                   | 0.0170                  | ±% FSO                  |
| Non-repeatability                                                  | 0.0100                      | 0.0200       | 0.0100                  | 0.0100                   | 0.0090                  | ±% FSO                  |
| Minimum dead load output return                                    | 0.0250                      | 0.0500       | 0.0167                  | 0.0063                   | 0.0125                  | ±% applied load         |
| Creep error (30 minutes)                                           |                             | 0.0600       | 0.0245                  | 0.0245                   | 0.0184                  | ±% applied load         |
| Creep error (20 minutes)                                           | 0.030                       | 0.0200       | 0.0053                  | 0.0053                   | 0.0039                  | ±% applied load         |
| Temp. effect on min. dead load output                              | (0.001)                     | 0.0250       | 0.0070                  | 0.0050                   | 0.0070                  | ±% FSO/5°C (°F)         |
| Temp. effect on min. dead load output, type MR                     |                             |              | 0.0035                  |                          | 0.0035                  | ±% FSO/5°C              |
| Temperature effect on sensitivity                                  | (0.0008)                    | 0.0250       | 0.0050                  | 0.0050                   | 0.0045                  | ±% applied load/5°C(°F) |
| Minimum dead load                                                  | 0                           |              |                         |                          |                         | % E <sub>max</sub>      |
| Maximum safe over load                                             | 150                         |              |                         |                          |                         | % E <sub>max</sub>      |
| Ultimate over load                                                 | 300                         |              |                         |                          |                         | % E <sub>max</sub>      |
| Maximum safe side load                                             | 100                         |              |                         |                          |                         | % E <sub>max</sub>      |
| Deflection at E <sub>max</sub>                                     | 0.5 max.                    |              |                         |                          |                         | mm                      |
| Excitation voltage                                                 | 5 to 15                     |              |                         |                          |                         | V                       |
| Maximum excitation voltage                                         | 18                          |              |                         |                          |                         | V                       |
| Input resistance                                                   | 350±3.5                     |              |                         |                          |                         | Ω                       |
| Output resistance                                                  | 350±3                       |              |                         |                          |                         | Ω                       |
| Insulation resistance                                              | ≥5000                       |              |                         |                          |                         | MΩ                      |
| Compensated temperature range                                      | -10 to +40                  |              |                         |                          |                         | °C                      |
| Operating temperature range                                        | -40 to +80                  |              |                         |                          |                         | °C                      |
| Storage temperature range                                          | -40 to +90                  |              |                         |                          |                         | °C                      |
| Element material                                                   | Stainless steel 1.4542      |              |                         |                          |                         |                         |
| Sealing (DIN 40.050 / EN60.529)                                    | IP66 & IP68                 |              |                         |                          |                         |                         |
| SC-Version (current calibration)                                   | Standard                    |              |                         |                          |                         |                         |
| Recommended torque on fixation bolts                               | 0.5-2T: 110 / 5T: 540       |              |                         |                          |                         | N*m                     |

<sup>(1)</sup> For 10T capacity please consult factory

FSO—Full Scale Output

SC-version: The rated output and the output resistance are balanced in such a way that the output current is calibrated to within 0.05% of a reference value. This allows easy parallel connection of the load cells.

All specifications subject to change without notice.



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