

9/1/22, 11:22 AM



Beam Load Cell SBL

Compact digital beam load cell for dynamic weighing, web tension measurement, process weighing, force measurement and general industrial weighing. This load cell is a short version of the BL beam load cell and produced in stainless steel and laser welded (IP68)

Type: SBL

 Capacity (Emax):
 1, 2, 5, 10, 20, 30, 50kg

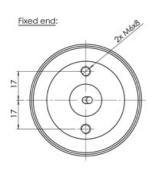
 Accuracy:
 High Precision 0.025%

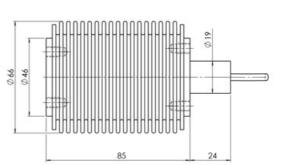
Overload Tolerance: 500% at 2kg, 200% at 100kg capacity

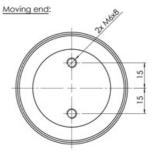
- · Short version of BL load cell
- Made in Denmark
- Electropolished stainless steel 1.4542 (17-4 PH)
- · Robust capacitive technology
- Patented high reliability capacitive sensor
- High tolerance of up to 500% overload
- Hermetically sealed to IP68
- High accuracy, High resolution
- · Small deflection at rated capacity

- Capacity (Emax): 1, 2, 5, 10, 20, 30, 50kg
- Accuracy: High Precision 0.025%
- High resonance frequency (spring rate) for rapid dynamic weighing
- · Digital filters
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- · Withstands welding voltages and ESD

- SBL Datasheet
- Digital Beam Load Cell Type SBL Dimensions PDF
- Digital Beam Load Cell Type SBL STEP (right click -> "Save Link As...")
- Guideline Correct Mounting of BNC Connector (UK) PDF
- VIDEO Correct Mounting of BNC Connector









-All dimensions in mm

| Parameter | Unit | 0.025%* |
|------------------------------------|-----------------------|--|
| Rated capacity (E _{max}) | kg | 1, 2, 5, 10, 20, 30, 50 |
| Safe overload limit | % of E _{max} | 200 to 500 |
| Safe sideload limit | % of E _{max} | 300 to 500 |
| Combined accuracy | % of E _{max} | 0.025 |
| Repeatability | % of E _{max} | 0.010 |
| Hysteresis | % of E _{max} | 0.017 |
| Creep 30 min. | % of E _{max} | 0.017 |
| Temperature effect on zero | % /10°C | 0.035 |
| Temperature effect on sensitivity | % /10°C | 0.035 |
| Compensated temperature range | °C | -10 to 50 |
| Operating temperature range | °C | -50 to 60 |
| Deflection at E _{max} | mm | max 0.10 |
| Measuring rate | Hz | 500 |
| Supply | Vdc | 24Vdc ±5% |
| Internal resolution | Bit | 24 |
| Material | | Stainless Steel 17-4PH and AISI316 |
| Protection | | IP68 |
| Cable | | 6meter standard coaxial RG-58 (Ø6mm) with BNC connector |
| Maximum cable length | m | 100 |
| Weight | kg | 2.5 |
| | | EtherNet/IP, PROFINET, EtherCAT, |

Output options

EtherNet/IP, PROFINET, EtherCAT, Profibus DP, Modbus TCP/IP, DeviceNet. RS485. 4-20mA. 0-10Vdc

- Web tension measurement
- Force measurement
- Dynamic weighing
- · Process weighing
- Small tanks and vessels
- Vibration sorters
- Filling and dosing

^{*} higher accuracies available on request

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- Load cell cable length 10, 20, 50 or 100meters
- Special PE load cell cable available for freezing low temperature (can be used down to -50 degrees Celsius)
- Special Teflon load cell cable available for very high temperature (can be used up to 100 degrees Celsius)