



Beam Load Cell SBL (SBL-Ex)

Compact digital beam load cell for single-use bag weighing, process weighing, force measurement, and general weighing in food, biopharmaceutical, and life science applications. This load cell is a shorter version of the BL beam load cell and is manufactured in stainless steel and laser welded (IP68).

Type:	SBL
Capacity (Emax):	1, 2, 5, 10, 20, 30, 50 kg
Accuracy:	High Precision 0.025%
Overload Tolerance:	500% at 1 kg, 200% at 50 kg capacity



Special Features

Short version of BL load cell

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

Made in Denmark

Accuracy: High Precision 0.025%

Electropolished stainless steel 1.4542 (17-4 PH)

High resonance frequency (spring rate) for rapid dynamic weighing

Robust capacitive technology

Digital filters

Patented high reliability capacitive sensor

Cable length up to 100 meters

High tolerance of up to 500% overload

Calibration independent of cable length

Hermetically sealed to IP68

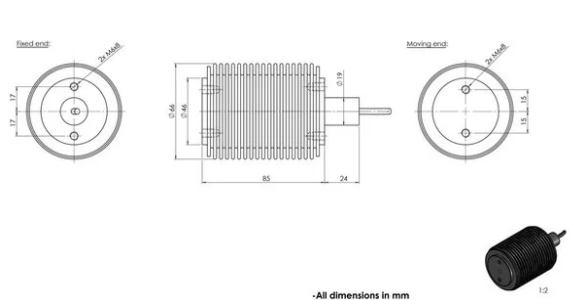
Replaceable load cell cable

High accuracy, High resolution

Easy mechanical and electrical installation

Small deflection at rated capacity

Dimensions (mm)



Specifications

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	% of E_{max}	0.035
Temperature effect on sensitivity	% / 10°C	0.035
Compensated temperature range	% / 10°C	-10 to 50
Operating temperature range	°C	-50 to 60
Deflection at E_{max}	°C	max 0.10
Measuring rate	mm	500
Supply	Hz	24Vdc ±5%
Internal resolution	Vdc	24
Material	Bit	Stainless Steel 17-4 PH and AISI 316
Protection		IP68
Cable		6 meter standard coaxial RG- 58 (Ø6mm) with BNC connector
Maximum Cable Length		100
Weight	kg	1.5
Output Options		EtherNet/IP, PROFINET, EtherCAT, Profibus DP, Modbus TCP/IP, DeviceNet, RS485/422, 4- 20mA, 0-10Vdc

* Higher accuracies on request



Applications

Web tension measurement

Force measurement

Dynamic weighing

Process weighing

Small tanks and vessels

Vibration sorters

Filling and dosing

Options

Load cell cable length 10, 20, 50 or 100 meters

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)

