

NEW Generation Load Cells

## Beam Load Cell BL (BL-Ex)



### Special Features

- Made in Denmark
- New hygienic (aseptic) design without gaps or edges for easy cleaning to minimize the risk of bacteria growth
- High tolerance of up to 1.000% overload
- Robust capacitive technology
- Hermetically sealed to IP68
- Electropolished stainless steel 1.4542 (17-4 PH)
- Laser welded with Stainless Steel 1.4541
- ATEX certified (Zone 1, 2, 21, 22)
- Cable length up to 100meters
- High accuracy, High resolution
- Capacity (Emax): 10, 20, 30, 50, 100, 150, 250, 500, 1000kg
- Accuracy: Industrial 0.10%, Precision 0.05%, High Precision 0.025%
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD
- Can be used in both ATEX and non-ATEX installations
- [Examples Digital Beam Load Cells](#)

### Applications

#### Applications

- Dynamic weighing
- Process weighing
- Tanks and vessels
- Vibration sorters
- Filling and dosing
- Platform scales
- Packaging machines
- Hopper scales
- Belt scales
- Conveyor scales
- Big-bag equipment
- On-board weighing

#### [Examples Digital Beam Load Cells](#)

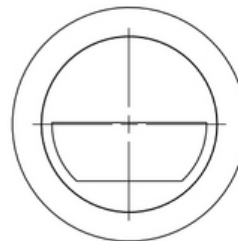
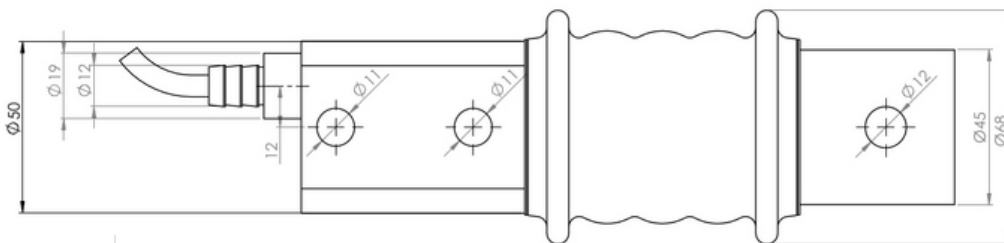
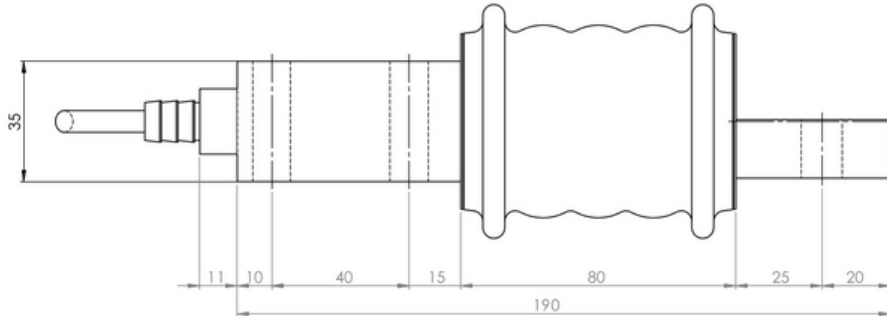


### Specifications

Parameter	Unit	0.10%	0.05%	0.025%*
Rated capacity ( $E_{max}$ )	kg	10, 20, 30, 50, 100, 150, 250, 500, 1000		
Safe overload limit	% of $E_{max}$	300 to 1000		
Safe sideload limit	% of $E_{max}$	500 to 2000		
Minimum dead load	% of $E_{max}$	0		
Accuracy	% of $E_{max}$	0.100	0.050	0.020
Repeatability	% of $E_{max}$	0.018	0.015	0.010
Hysteresis	% of $E_{max}$	0.033	0.020	0.017
Creep 30 min.	% of $E_{max}$	0.035	0.025	0.017
Temperature effect on zero	% /10°C	0.040	0.030	0.016
Temperature effect on sensitivity	% /10°C	0.040	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100**)		
Deflection at $E_{max}$	mm	max 0.10		
Measuring rate	Hz	Up to 1000		
Supply	Vdc	24Vdc $\pm$ 10%		
Internal resolution	Bit	24		
Material		Stainless Steel 17-4 PH and AISI 316		
Protection		IP68		
Cable		6meter standard coaxial RG-58 ( $\varnothing$ 6mm) with BNC connector		
Maximum cable length	m	100		
Weight	kg	2.3		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20 mA, 0-10Vdc		

\* higher accuracies available on request  
\*\* with Teflon cable

### Dimensions (mm)



### Options

- ATEX (Zone 1, 2, 21, 22) version type BL-Ex

- ATEX II 2G Ex ia IIC T6 Gb / ATEX II 2D Ex IIIC T85°C Db
- Mounting kits available
- Load cell cable length 10, 20, 50 or 100meters
- Mud resistant and Halogen free cables for offshore installation
- 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)

## Documentation

- [Digital Beam Load Cell Type BL BL-Ex Dimensions PDF](#)
- [BL BL-Ex Beam Load Cell STEP 3D CAD File \(right click -> "Save Link As..."\)](#)
- [Beam Load Cell with Mounting Kit 0-100kg PDF](#)
- [Beam Load Cell with Mounting Kit 0-100kg STEP \(right click -> "Save Link As..."\)](#)
- [Beam Load Cell with Mounting Kit 0-100kg 3D PDF](#)
- [Beam Load Cell with Mounting Kit 100-500kg PDF](#)
- [Beam Load Cell with Mounting Kit 100-500kg STEP \(right click -> "Save Link As..."\)](#)
- [Beam Load Cell with Mounting Kit 100-500kg 3D PDF](#)
- [ATEX Certificate SEV14 ATEX 0171 X \(GERMAN\) PDF](#)
- [ATEX Certificate SEV14 ATEX 0171 X \(ENGLISH\) PDF](#)
- [Examples Digital Beam Load Cells](#)
- [Guideline Correct Mounting of BNC Connector \(UK\) PDF](#)

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