

Web Tension Load Cell TL 101B

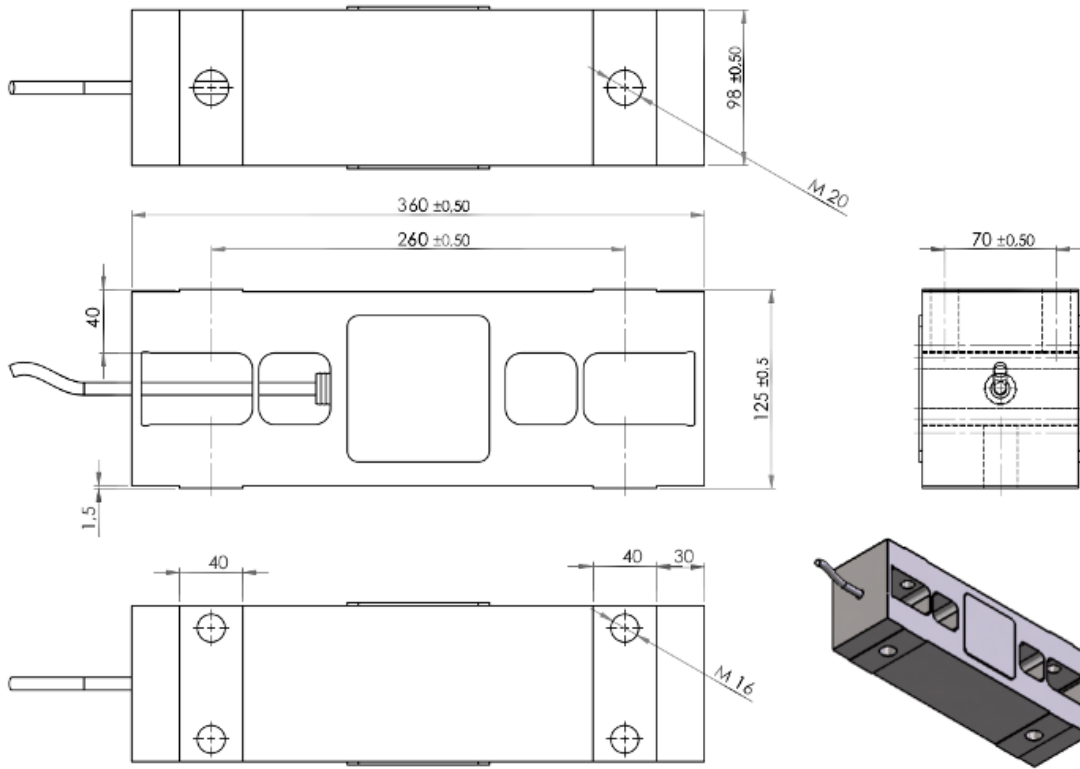
The robust digital TL 101B load cell is a heavy duty version designed primarily for measuring web tension. The TL 101B load cell has same dimensions as the ABB PFTL 101B load cell

Type:	TL 101B
Capacity (Emax):	2, 5, 10, 20kN
Accuracy:	Industrial 0.25%
Overload Tolerance:	Up to 1000% of rated capacity

- Made in Denmark
- Replaces web tension load cell type SLCAD 101B
- Robust capacitive technology
- Patented high reliability capacitive sensor
- High tolerance of up to 1.000% overload
- Sealed to IP67
- Withstands welding voltages and ESD

- Same dimensions as ABB PFTL 101B
- Capacity (Emax): 2, 5, 10, 20kN
- Accuracy: Industrial 0.25%
- Cable length up to 100meters
- Pre-calibrated with signal in kg or N
- Calibration independent of cable length
- Easy mechanical and electrical installation

- [TL 101B Load Cell STEP 3D CAD file \(right click -> Save Link As...\)](#)
- [Eilersen web tension sensor tests and comparison with ABB - PDF](#)
- [Guideline Correct Mounting of BNC Connector \(UK\) PDF](#)
- [VIDEO - Correct Mounting of BNC Connector](#)



Parameter	Unit	0.25%*
Rated capacity (E_{max})	N	2000, 5000, 10000, 20000
Safe overload limit	% of E_{max}	Up to 300
Safe sideload limit	% of E_{max}	Up to 300
Combined accuracy	% of E_{max}	0.25*
Repeatability	% of E_{max}	0.02
Hysteresis	% of E_{max}	0.04
Creep 30 min.	% of E_{max}	0.03
Compensated temperature range	°C	-10 to 50 (100**)
Operating temperature range	°C	-50 to 70 (100**)
Measuring rate	Hz	200
Supply	Vdc	24Vdc \pm 5%
Internal resolution	Bit	24
Material		Electroplated Steel
Protection		IP67
Cable		6meter standard coaxial RG-58 (\varnothing 6mm) with BNC connector
Maximum cable length	m	100
Weight	kg	25.5
Output options		EtherNet/IP, PROFINET, EtherCAT, Modbus TCP/IP, Profibus DP, DeviceNet, RS485, 4-20mA, 0-10Vdc

* higher accuracy available on request

** when equipped with Teflon cable

- Web tension control
- Tension measurement
- Offshore/Marine applications
- Force measurement

The TL 101 range of load cells are designed primarily for measuring the horizontal forces of web tension. The sensor is mounted in between the pillow block bearing and the machine frame.

Load cells for measuring horizontal forces such as the Eilersen TL 101 load cells, are ideal in applications with high tare loads and relatively small tensions in for example paper machines.

In applications where high overloads often occur, the high overload tolerance of the Eilersen load cell adds reliability and minimizes the need for maintenance.

If no or only a small horizontal resultant force is present, you can mount the load cell on a slant to give rise to one.

Eilersen provides software free of charge for calculating the forces in web tension applications:

- EEWT Calculator Software
- EEWT Calculator Software (ZIP)
- EEWT Calculator Documentation

The use of this software for calculation of web tension and calibration factors or selection of sensors are at the users OWN RISK.

Eilersen Electric AS assumes no responsibility for any loss or damage resulting from the use of this software.

In order to reduce the risk please send the input data and the results to Eilersen Electric A/S for review and confirmation.

- Free application software
- Customized versions available
- 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)