



Customized Digital Load Cells

Eilersen designs customized robust digital load cells for industrial applications like on-board truck weighing, crane scales, offshore installations, web tension measurement and heavy duty applications. Eilersen also develops and produces robust load cells for specific customer applications. OIML and ATEX certified versions are available.

Type:	Customized Digital Load Cells
Capacity (Emax):	Bending beam load cells up to 50 tons. Compression load cells up to 500 tons. Tension load cells up to 100 tons. Web tension measurement up to 100 kN
Accuracy:	Depends on load cell and application
Overload Tolerance:	Up to 1000% of rated capacity



Special Features

Made in Denmark

Robust capacitive technology

Patented high reliability capacitive sensor

High tolerance of up to 1000% overload

Stainless steel 1.4542 (17-4 PH)

Laser welded with Duplex 1.4462 stainless steel

Hermetically sealed to IP68

High accuracy, High resolution

Digital filters

Cable length up to 100 meters

Calibration independent of cable length

Replaceable load cell cable

Capacity (Emax):

Bending beam load cells up to 50 tons

Compression load cells up to 500 tons

Tension load cells up to 100 tons

Web tension measurement up to 100 kN

Accuracy: Depends on load cell and application

Easy mechanical and electrical installation

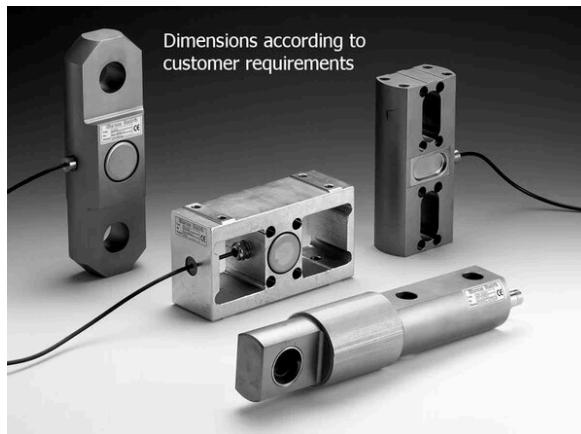
Withstands welding voltages and ESD

Optional special load cell cable

Optional accuracy according to OIML R60

Optional ATEX version (Zone 1, 2, 21, 22)

Dimensions (mm)



Specifications

Parameter	Unit	Up to 0.010%
Rated capacity (E_{max})	kg	From 1 kg to 500 ton
Safe overload limit	% of E_{max}	Up to 1000
Safe sideload limit	% of E_{max}	Up to 1000
Combined accuracy	% of E_{max}	Up to 0.010%
Repeatability	% of E_{max}	0.02
Hysteresis	% of E_{max}	0.04
Creep	% of E_{max}	0.03
Compensated temperature range	°C	-10 to 100
Operating temperature range	°C	-50 to 100
Measuring rate	Hz	Up to 500
Supply	Vdc	24VDC \pm 5%
Internal resolution	bit	24
Material		Stainless steel
Protection		IP68/IP69K
Cable		Standard coaxial RG-58 (\varnothing 6mm) with BNC connector
Maximum load cell cable length	m	100
Weight	kg	According to specifications
Output options		EtherNet/IP, PROFINET, EtherCAT, Profibus DP, Modbus TCP/IP, DeviceNet, RS485, 4-20mA, 0-10Vdc



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
Web tension control
Tension measurement
Offshore/Marine applications
Force measurement
Mobile weighing
Heavy duty applications

Options

Load cell capacity
Load cell dimensions
Load cell material
Epoxy or other coating
Load cell cable type and length
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)
Load cell accuracy according to OIML R60

Load cell ATEX version (Zone 1, 2, 21, 22)

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