EilersenThe Weighing Experts





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 50tons. Compression load cells up to 500tons. Tension load cells up to 100tons.

Web tension measurement up to 100kN

Accuracy: Depends on load cell and application

Overload Tolerance: Up to 1000% of rated capacity

- Made in Denmark
- · Robust capacitive technology
- · Patented high reliability capacitive sensor
- High tolerance of up to 1.000% 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 100meters
- · Calibration independent of cable length
- · Load cell cable replaceable
- Capacity (Emax):

Bending beam load cells up to 50tons Compression load cells up to 500tons Tension load cells up to 100tons

Web tension measurement up to 100kN

- 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)

- Guideline Correct Mounting of BNC Connector (UK) PDF
- VIDEO Correct Mounting of BNC Connector



| 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 30 min. | % 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 ±5% |
| Internal resolution | Bit | 24 |
| Material | | Stainless steel |
| Protection | | IP68/IP69K |
| Cable | | standard coaxial RG-58 (Ø6mm) with BNC connector |
| Maximum load cell cable length | m | 100 |
| Weight | kg | According to specifications |
| Output options | | EtherNet/IP, PROFINET, EtherCAT, Modbus TCP/IP, Profibus DP, DeviceNet, RS485, 4-20mA, 0-10Vdc |

- · 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
- · 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)