

## Digital Compression Load Cell – Type DH

0-500.000 kg



### Special Features

- Robust capacitive technology
- High tolerance of up to 400 % overload
- Stainless steel
- Hermetically sealed to IP69K
- ATEX certified
- Withstands welding voltages and ESD
- Cable length up to 100 meters
- Load cell cable replaceable
- Pre-calibrated with signal in kg or kN
- Calibration independent of cable length
- Easy mechanical and electrical installation
- 3 years warranty

### Technology

The shockproof digital load cell is based on a capacitive measurement principle where a non-contacting ceramic sensor is mounted inside the load cell body. As the load cell contains no moving parts and the sensor is not in contact with the load cell body, the load cell tolerates shocks, torsion, and very high overloads and sideloads. Therefore, the mechanical installation of the load cell can be done without expensive and complicated mounting kits and overload protection devices.

The electrical installation of the digital load cell is pure plug-and-play as the signal from the non-contacting sensor is directly converted, compensated and calibrated by a microprocessor to a digital load cell output in grams, kilograms or Newton. Measurements and status codes are transmitted as RS485 data on a single wire coaxial cable (RG-58) which may be up to 100 meters long. The load cell cable can be replaced on-site if necessary.

The technology and mechanical design of the Eilersen load cells is covered worldwide by a number of patents.



### Capacities (in kg)

- 200.000
- 300.000
- 400.000
- 500.000

### Options

- ATEX (Zone 1, 2, 21, 22) version type DHA
- ATEX II 2G Ex ia IIC T6
- ATEX II 2D Ex iaD 21 T85°C

### Applications

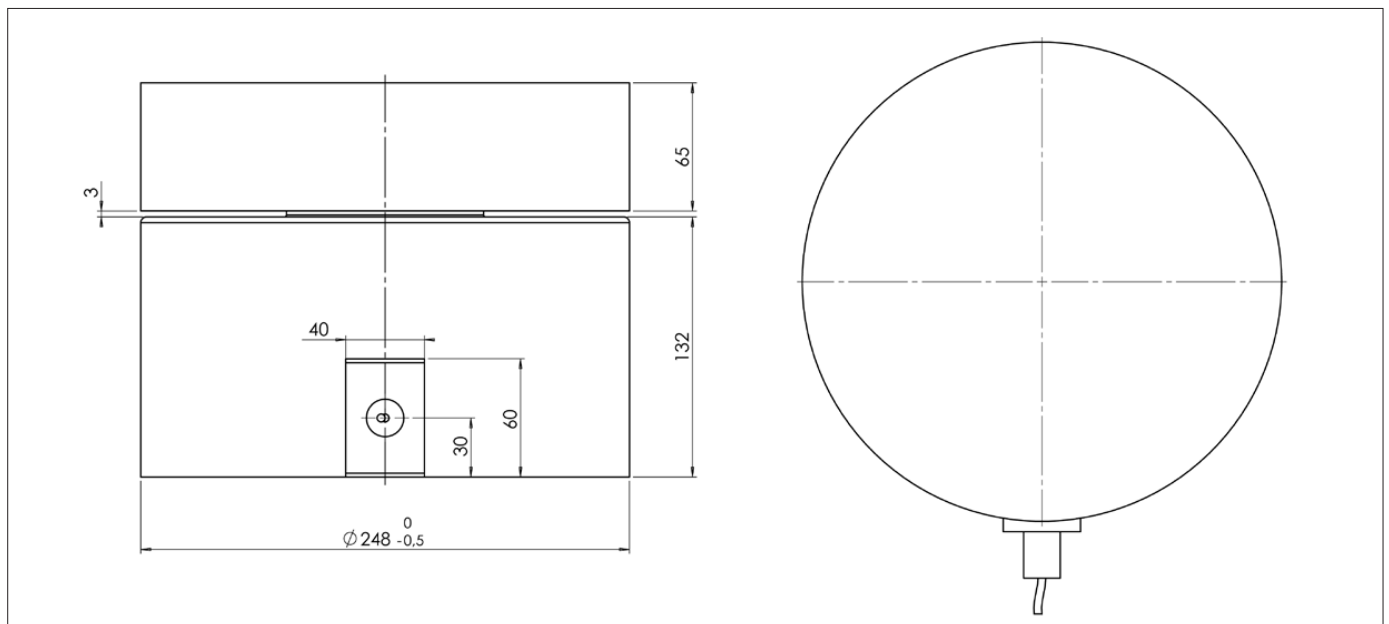
- Tank weighing
- Process weighing
- Level measurement
- Offshore/Marine applications
- Heavy duty applications

## Specifications

Parameter	Unit	0,25
Rated capacity (E <sub>max</sub> )	Kg	200.000, 300.000, 400.000, 500.000
Safe overload limit	% of E <sub>max</sub>	400
Safe sideload limit	% of E <sub>max</sub>	500
Minimum dead load	% of E <sub>max</sub>	0
Accuracy	% of E <sub>max</sub>	0,25
Repeatability	% of E <sub>max</sub>	0,06
Hysteresis	% of E <sub>max</sub>	0,08
Creep 30 min.	% of E <sub>max</sub>	0,06
Temperature effect on zero	% / 10 °C	0,08
Temperature effect on sensitivity	% / 10 °C	0,08
Compensated temperature range	°C	-10 to 50
Operating temperature range	°C	-50 to 80 (100*)
Deflection at E <sub>max</sub>	mm	Max 0,10
Measuring rate	Hz	Up to 1.000
Supply	Vdc	24 +/- 10%
Internal resolution	Bit	24
Material		Stainless Steel 17-4 PH and AISI 316
Protection		IP69K
Cable		6 meter standard coaxial RG-58 (ø 6 mm) with BNC connector
Maximum cable length	meters	100
Weight	grams	75.000
Standard output		RS485
Output options		Profibus DP, DeviceNet, EtherNet/IP, Modbus ASCII/RTU, 4-20 mA, 0-10 V
Warranty		3 years

\* with Teflon cable

## Dimensions (in mm)



Dealer/Distributor:

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### Order Information

Type

Capacity

Accuracy

### Example

DH

300.000 kg

0,25 %

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