

Digital Compression Load Cell – Type MD

0-5.000 kg



Special Features

- Robust capacitive technology
- Stainless steel
- High tolerance of up to 500% overload
- Hermetically sealed to IP68
- Laser welded
- Hygienic design and installation
- Withstands welding voltages and ESD
- Cable length up to 100 meters
- Load cell cable replaceable
- Calibration independent of cable length
- Easy mechanical and electrical installation

Technology

The robust 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 very high overloads, sideloads and torsion. 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 in the MCE2010 load cell module to a digital output in grams, kilograms, or Newton. Measurements and status codes are transmitted 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)

- 50
- 100
- 150
- 250
- 500
- 1.000
- 1.500
- 2.000
- 3.000
- 4.000
- 5.000

Options

- Base plate available
- Load cell cable length 10, 20, 50 or 100 meters

Applications

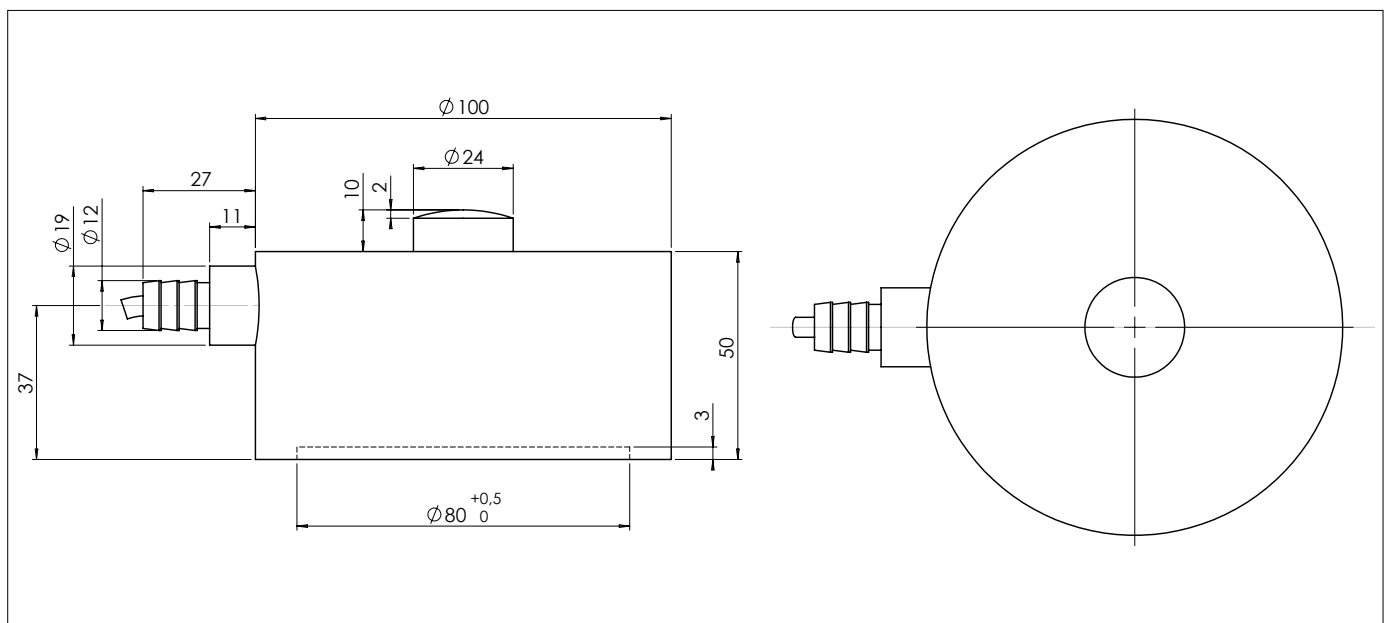
- Tank and Silo weighing
- Process weighing
- Filling, batching, sorting and dosing equipment
- Level measurement
- Platform scales
- Hopper scales
- Belt scales
- Big-bag equipment
- Offshore/Marine applications
- Heavy duty applications

Specifications

Parameter	Unit	0,10%	0,05%	0,025%
Rated capacity (E _{max})	Kg	50, 100, 150, 250, 500, 1.000 1.500, 2.000, 3.000, 4.000, 5.000		
Safe overload limit	% of E _{max}	200 to 500		
Safe sideload limit	% of E _{max}	300 to 1.000		
Minimum dead load	% of E _{max}	0		
Accuracy	% of E _{max}	0,100	0,050	0,025
Repeatability	% of E _{max}	0,030	0,020	0,012
Hysteresis	% of E _{max}	0,055	0,040	0,020
Creep 30 min.	% of E _{max}	0,060	0,040	0,025
Temperature effect on zero	% / 10 °C	0,060	0,045	0,030
Temperature effect on sensitivity	% / 10 °C	0,060	0,045	0,030
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 200		
Supply	Vdc	24 +/- 10%		
Internal resolution	Bit	24		
Material		Stainless Steel 17-4 PH and AISI 316		
Protection		IP68		
Cable		6 meter standard coaxial RG-58 (ø 6 mm) with BNC connector		
Maximum cable length	meters	100		
Weight	grams	2.100		
Output options		Profibus DP, DeviceNet, RS485 Modbus ASCII/RTU, RS232, RS485/422, 4-20 mA, 0-10 V		

* with Teflon cable

Dimensions (in mm)



Dealer/Distributor:

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Order Information

Type	Capacity	Accuracy
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Example

MD	2.000 kg	0,05%
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