Compression Load Cell CM (CM-Ex) 150

NEW hygienic (aseptic) compression load cell types CM and CM-Ex with 150mm diameter in EHEDG compliant design. These robust digital compression load cells are available in capacities up to 50 tons and produced in electropolished stainless steel and hermetically sealed to IP68 for hygienic weighing installations, installations in tough environments and general process weighing. The load cells can be supplied with a hygienic base plate in AISI316. The compression load cell type CM-Ex can be used in ATEX (Ex) and IECEx applications (Zone 1, 2, 21 and 22).

Type:	CM 150 (Non-ATEX) CM-EX 150 (ATEX)
Capacity (Emax):	25000, 30000, 40000, 50000 kg
Accuracy:	Industrial 0.10%
Overload Tolerance:	Up to 300% of rated capacity

Do you need help?
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Special Features

EHEDG compliant hygienic (aseptic) design without gaps or edges for easy cleaning to minimize the risk of bacteria growth

Developed and manufactured in Denmark

Low profile and hygienic design

High tolerance of up to 300% overload

Robust capacitive technology

Hermetically sealed to IP68

Electropolished stainless steel 1.4542 (17-4 PH)

Laser welded with Duplex 1.4462 stainless steel

ATEX and IECEx certified (Zone 1, 2, 21, 22)

Easy mechanical and electrical installation

High accuracy, High resolution

Capacity (Emax): 25000, 30000, 40000, 50000 kg

Accuracy: Industrial 0.10%

Load cell cable length up to 100 meters

Load cell calibration independent of cable length

Load cell cable replaceable on-site

Withstands welding voltages and ESD

Can be used in both ATEX / IECEx and non-ATEX installations

Dimensions (mm)

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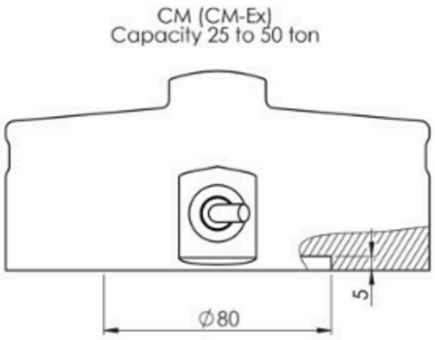
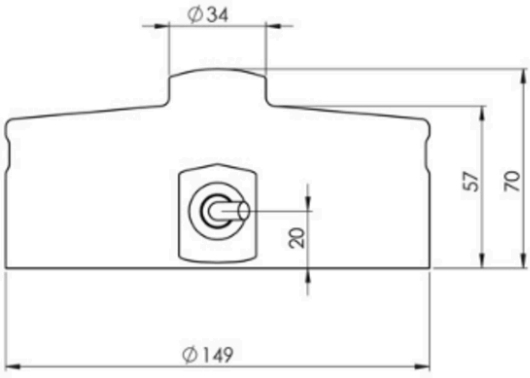
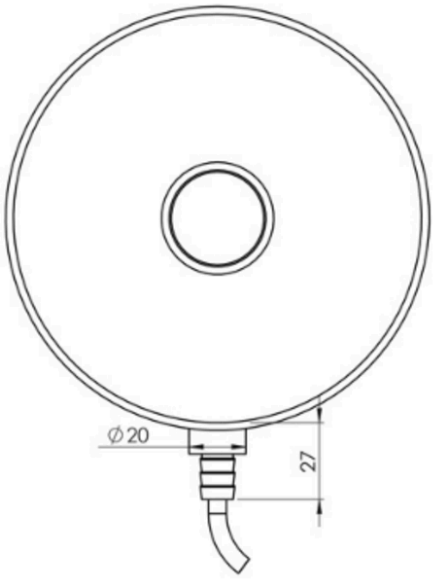
Specifications







Parameter	Unit	0.10%
Rated capacity (E_{max})	kg	25000, 30000, 40000, 50000
Safe overload limit	% of E_{max}	up to 300
Safe sideload limit	% of E_{max}	up to 300
Minimum dead load	% of E_{max}	0
Accuracy	% of E_{max}	0.100

Repeatability	% of E_{max}	0.030
Hysteresis	% of E_{max}	0.055
Creep 30 min.	% of E_{max}	0.060
Temperature effect on zero	% /10°C	0.060
Temperature effect on sensitivity	% /10°C	0.060
Compensated temperature range	°C	-10 to 50
Operating temperature range	°C	-40 to +70 (*100)
Deflection at E_{max}	mm	max 0.10
Measuring rate	Hz	500
Supply	Vdc	24Vdc ±5%
Internal resolution	Bit	24
Material		Stainless Steel 17-4 PH and AISI 316
Protection		IP68
Cable		6 meter standard coaxial RG-58 (Ø6mm) with BNC connector
Maximum load cell cable length	m	100
Weight	kg	6.5
Output options		EtherNet/IP, PROFINET, EtherCAT, Modbus TCP/IP, Profibus DP, DeviceNet, RS485, 4-20mA, 0-10Vdc

* Only for non-ATEX and with Teflon load cell cable

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Applications

Tank weighing

Process weighing

Level measurement

Filling and dosing

Large Vessels

Offshore applications

Heavy duty applications

Options

ATEX and IECEx (Zone 1, 2, 21, 22) version type CM-Ex

ATEX II 2G Ex ia IIC T6 Gb / ATEX II 2D Ex IIIC T85°C Db

Hygienic and Standard Base Plate available

Load cell cable length 10, 20, 50 or 100 meters

Mud resistant and Halogen free cables for offshore installation

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)

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