Compression Load Cell CH (CH-Ex) 100

Robust digital ATEX and IECEx certified heavy duty compression load cell produced in stainless steel and hermetically sealed to IP68 for installation under large silos, tanks, vessels and heavy duty applications. The CH-Ex load cell can be used in ATEX (Ex) IECEx and non-ATEX applications.

Type:	CH100 (Non-ATEX) CH-Ex100 (ATEX)
Capacity (Emax):	100 tons
Accuracy:	Industrial 0.25%
Overload Tolerance:	Up to 300% of rated capacity

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Do you need help?

Special Features

Made in Denmark

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

Robust capacitive technology

High tolerance of up to 300% overload

Stainless steel 1.4542 (17-4 PH)

Hermetically sealed to IP68

Laser welded with Duplex 1.4462 stainless steel

Can be supplied with Mud resistant and Halogen free cables for offshore installation

Withstands welding voltages and ESD

Capacity (Emax): 100 tons

Accuracy: Industrial 0.25%

Cable length up to 100 meters

Replaceable load cell cable

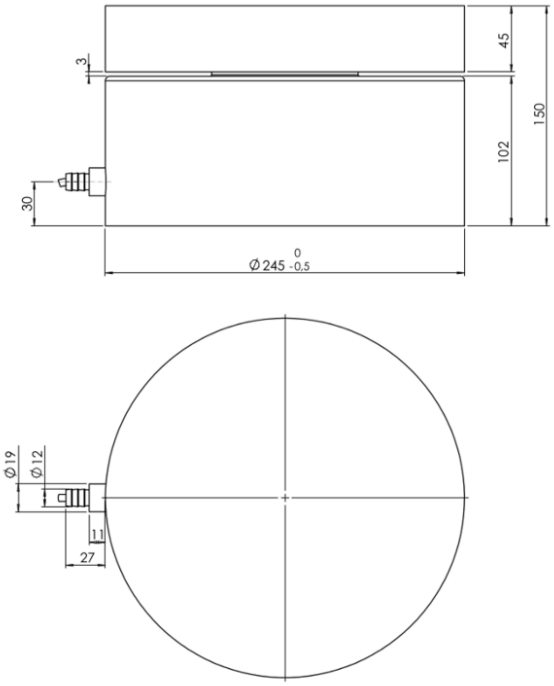
Pre-calibrated with signal in kg or kN

Calibration independent of cable length

Easy mechanical and electrical installation

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

Dimensions (mm)



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Specifications

Parameter	Unit	0.25%
Rated capacity (E_{max})	ton	100
Safe overload limit	% of E_{max}	300
Safe sideload limit	% of E_{max}	200
Combined Accuracy	% of E_{max}	0.250
Repeatability	% of E_{max}	0.080
Hysteresis	% of E_{max}	0.080
Creep 30 min.	% of E_{max}	0.080
Temperature effect on zero	% /10°C	0.100
Temperature effect on sensitivity	% /10°C	0.100
Compensated temperature range	°C	-10 to 50
Operating temperature range	°C	-40 to +70 (100*)
Deflection at E_{max}	mm	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	65
Output options		EtherNet/IP, PROFINET, EtherCAT, Profibus DP, Modbus TCP/IP, DeviceNet, RS485, 4-20mA, 0-10Vdc

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

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Applications

Silo weighing

Process weighing

Heavy duty applications

Level measurement

Offshore applications

Options

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

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

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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