



## Compression Load Cell CH (CH-Ex) 500

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:	CH500 (Non-ATEX) CH-Ex500 (ATEX)
Capacity (Emax):	200, 300, 400, 500 tons
Accuracy:	Industrial 0.25%
Overload Tolerance:	Up to 300% of rated capacity

Do you need help?

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# 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 (E<sub>max</sub>): 200, 300, 400, 500 tons

Accuracy: Industrial 0.25%

Cable length up to 100 meters

Replaceable load cell cable

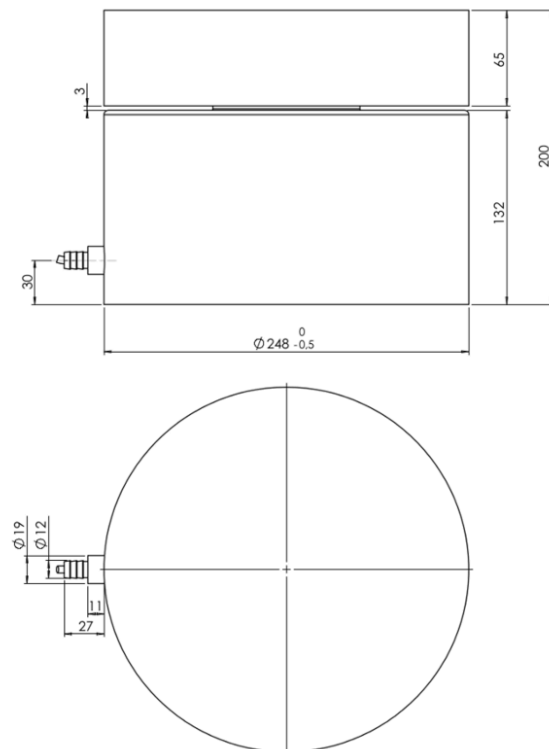
Pre-calibrated with signal in kg or kN

Calibration independent of cable length

Easy mechanical and electrical installation

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

# Dimensions (mm)



# Specifications

Parameter	Unit	0.25%
Rated capacity ( $E_{max}$ )	ton	200, 300, 400, 500
Safe overload limit	% of $E_{max}$	up to 300
Safe sideload limit	% of $E_{max}$	up to 300
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	0.150
Temperature effect on sensitivity	% / 10°C	0.120
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	75
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

# 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)