

## Compression Load Cell DMC (DMC-Ex) 150

Capacitive load cells with integrated lift-off protection (patented) designed for large capacities such as process weighing in areas with seismic activity and outdoor silos. The robust digital load cells are made of stainless steel and hermetically sealed (IP68) for hygienic installations as well as installations in harsh environments and general process weighing. The load cells are also made in hygienic (aseptic) design according to EHEDG guidelines. Load cell type DMC-Ex can be used in ATEX (Ex) and IECEx applications (zones 1, 2, 21 and 22).

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

Do you need help?

8





# Special Features

Compression load cell with integrated lift-off protection

(patented load cell design)

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): 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

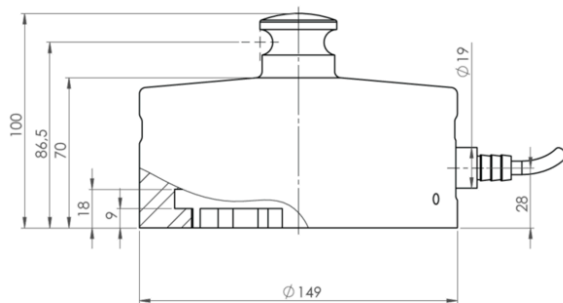
Withstands welding voltages and ESD

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

Can be supplied with Mud resistant and

Halogen free cables for offshore installation

## Dimensions (mm)



# Specifications

Parameter	Unit	0.10%
Rated capacity ( $E_{max}$ )	kg	30000, 40000, 50000
Safe overload limit	% of $E_{max}$	up to 300
Safe sideload limit	% of $E_{max}$	up to 300
Combined 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	15.5**
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

\*\* including special base plate with lock

# Applications

Outdoor silos  
Tank weighing  
Process weighing  
High shear mixers  
Big-bag equipment  
Filling and dosing  
Offshore  
Installations in seismic area  
Level measurement  
Platform scales  
Heavy duty applications

# Options

ATEX and IECEx (Zone 1, 2, 21, 22) version type DMC-Ex  
ATEX II 2G Ex ia IIC T6 Gb / ATEX II 2D Ex ia IIIC T85°C Db  
Standard base plate available  
Mounting top  
Customized top  
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)

