

Compression Load Cell DLC (DLC-Ex)

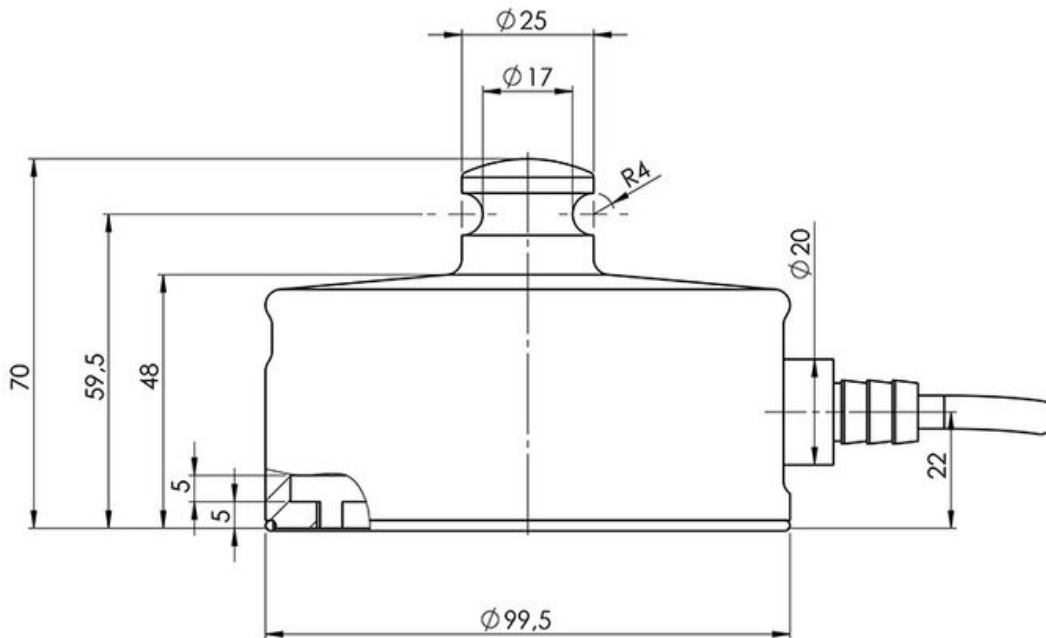
Capacitive load cells with integrated lift-off protection (Patent Pending) for installations e.g. in areas with seismic activity, outdoor silos and high shear mixers. These robust digital compression load cells in EHEDG compliant design are produced in electropolished stainless steel and hermetically sealed to IP68. The load cells type DLC-Ex can be used in ATEX (Ex) and IECEx applications (Zone 1, 2, 21 and 22)

Type:	DLC (Non-ATEX) DLC-Ex (ATEX)
Capacity (Emax):	50, 100, 150, 250, 500, 1000, 1500, 2000, 3000, 4000, 5000kg
Accuracy:	Industrial 0.10%, Precision 0.05%, High Precision 0.025%
Overload Tolerance:	Up to 300% of rated capacity

- Compression load cell with integrated lift-off protection (Patent Pending)
 - 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 1000% 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
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- High accuracy, High resolution
 - Capacity (Emax): 50, 100, 150, 250, 500, 1000, 1500, 2000, 3000, 4000, 5000kg
 - Accuracy: Industrial 0.10%, Precision 0.05%, High Precision 0.025%
 - Load cell cable length up to 100meters
 - 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

- [DLC \(DLC-Ex\) Datasheet](#)
- [Digital Compression Load Cell Type DLC DLC-Ex LOAD CELL ONLY Dimension PDF](#)
- [Digital Compression Load Cell Type DLC DLC-Ex LOAD CELL ONLY Dimension STEP](#) (Right click > Save link as)
- [ATEX Certificate SEV23 ATEX 0689 X \(ENG\) PDF](#)

- [IECEX Certificate SEV 23.0028 X \(ENG\) PDF](#)
- [Dimensions Digital Compression Load Cell Type DLC/DLC-Ex with Ø170 base plate PDF](#)
- [Dimensions Digital Compression Load Cell Type DLC/DLC-Ex with Ø170 base plate STEP](#) (Right click > Save link as)
- [Dimensions DLC DLCex Ø170 base plate PDF](#)
- [Dimensions DLC DLCex Ø170 base plate STEP](#) (Right click > Save link as)
- [DLC DLCex load cell with Ø170 base plate and M36 tank leg PDF](#)
- [DLC DLCex load cell with Ø170 base plate and M36 tank leg STEP](#) (Right click > Save link as)
- [Guideline Correct Mounting of BNC Connector \(UK\) PDF](#)
- [VIDEO - Correct Mounting of BNC Connector \(UK\)](#)



Parameter	Unit	0.10%	0.05%	0.025%
Rated capacity (E_{max})	kg	50, 100, 150, 250, 500, 1000, 1500, 2000, 3000, 4000, 5000		
Safe overload limit (compression)	% of E_{max}		300	
Safe overload limit (tension/lift-up)	% of E_{max}		300	
Safe sideload limit (tension or compression)	% of E_{max}		300	
Combined accuracy	% of E_{max}	0.100	0.050	0.025
Repeatability	% of E_{max}	0.030	0.025	0.020
Hysteresis	% of E_{max}	0.055	0.040	0.020
Creep 30 min.	% of E_{max}	0.060	0.040	0.040
Temperature effect on zero	% /10°C	0.060	0.055	0.055
Temperature effect on sensitivity	% /10°C	0.060	0.055	0.055
Compensated temperature range	°C		-10 to 50	
Operating temperature range	°C		-50 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		6meter standard coaxial RG-58 (Ø6mm) with BNC connector		
Maximum cable length	m		100	
Weight	kg		4.0 **	
Output options		EtherNet/IP, PROFINET, EtherCAT, Profibus DP, Modbus TCP/IP, DeviceNet, RS485/422, 4-20mA, 0-10Vdc		

* with Teflon cable

** including base plate

- Outdoor silos
 - Tank weighing
 - Process weighing
 - High shear mixers
 - Big-bag equipment
 - Filling and dosing
 - Offshore
 - Installations in seismic area
 - Level measurement
 - Platform scales
 - Hopper scales
 - Heavy duty applications
 - Belt scales
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- ATEX and IECEx (Zone 1, 2, 21, 22) version type DLC-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
 - Tank leg (different dimensions)
 - Load cell cable length 10, 20, 50 or 100meters
 - 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)