Beam Load Cell BM (BM-Ex) 80

Robust digital heavy duty ATEX certified beam load cell produced in stainless steel and hermetically sealed to IP68 for process weighing, industrial weighing and tough applications such as on-board truck weighing, offshore, steel industry etc. The BM-Ex 80 load cell can be used in ATEX (Ex) IECEx and non-ATEX applications.

Type:	BM 80 (Non-ATEX) BM-Ex 80 (ATEX)
Capacity (Emax):	5000, 6000, 7000 kg
Accuracy:	Industrial 0.10%, Precision 0.05%, High Precision 0.025%
Overload Tolerance:	Up to 500% of rated capacity

Do you need help?

Special Features

Made in Denmark

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

Stainless steel 1.4542 (17-4 PH)

Robust capacitive technology

High tolerance of up to 500% overload

Hermetically sealed to IP68

Laser welded with Duplex 1.4462 stainless steel

High accuracy, High resolution

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

Digital filters

Cable length up to 100 meters

Capacity (Emax): 5000, 6000, 7000 kg

Accuracy: Industrial 0.10%, Precision 0.05%, High Precision 0.025%

Calibration independent of cable length

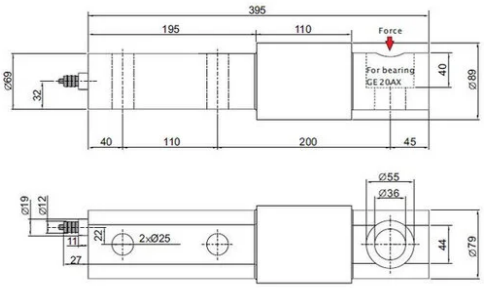
Replaceable load cell cable

Easy mechanical and electrical installation

Withstands welding voltages and ESD

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

Dimensions (mm)



Specifications

Parameter	Unit	0.10%	0.05%	0.025%
Rated capacity (E_{max})	kg		5000, 6000, 7000*	
Safe overload limit	% of E_{max}		300 to 500	
Safe sideload limit	% of E_{max}		500 to 1000	
Minimum dead load	% of E_{max}		0	
Combined accuracy	% of E_{max}	0.100	0.050	0.025
Repeatability	% of E_{max}	0.030	0.025	0.015
Hysteresis	% of E_{max}	0.050	0.030	0.018
Creep 30 min.	% of E_{max}	0.040	0.030	0.020
Temperature effect on zero	% /10°C	0.060	0.055	0.040
Temperature effect on sensitivity	% /10°C	0.060	0.055	0.040
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			6meter standard coaxial RG-58 (Ø6mm) with BNC connector	
Maximum load cell cable length	m		100	
Weight	kg		11.95	
Output options			EtherNet/IP, PROFINET, EtherCAT, Profibus DP, Modbus TCP/IP, DeviceNet, RS485, 4-20mA, 0-10Vdc	

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* 7000 kg capacity BM80 is only available in 0.10% and 0.05% accuracy

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

Applications

Dynamic weighing

Process weighing

Mobile weighing

Vibration feeder

Big-bag equipment

Hopper scales

Conveyor scales

Heavy duty platform scales

Heavy duty applications

Offshore applications

Options

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

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

Mounting kits available

Customized versions 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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