NEXT GENERATION

DIGITAL LOAD CELLS

EILERSEN – EXPERTS IN WEIGHING SINCE 1969

- Robust digital load cells
- Tolerate up to 1000% overload
- Accuracy up to OIML C6 (MI10)
- Easy installation
- Stainless steel (IP68)
- ATEX certified zone 1, 2, 21, 22
- Patented Worldwide

Experts in Weighing since 1969

Since the foundation in 1969, the Eilersen companies in Denmark and Switzerland have been dedicated to the development, manufacture and supply of high quality robust industrial sensors based on a capacitive measurement principle.

This extensive know-how is patented worldwide and invested in the current range of digital load cells. The capacitive technology developed by Eilersen features a number of advantages compared to other technologies used in sensors for measuring force and weight.

The Eilersen load cells feature excellent specifications, high reliability, simple installation and minimal maintenance for the use in tough and demanding industrial environments. Eilersen load cells are available with Profibus DP, DeviceNet, EtherNet/IP, EtherCAT, Modbus ASCII/RTU, RS485/422, RS232, 4-20mA and 0-10VDC interfaces, and can be supplied in OIML and ATEX certified versions.

The Eilersen customers are found among leading companies in more than 85 countries worldwide.

Certificates

OMIL R60

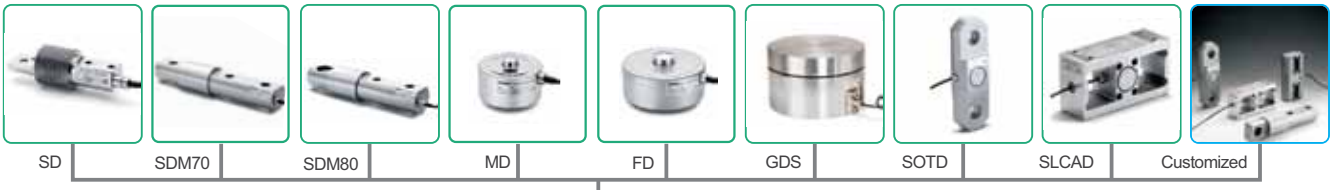
EC Type Approval

ATEX

Selected References

FedEx Express, Carlsberg, ALSTOM, Nike, Coca-Cola, DANISCO, Vestas, Nestlé, Tetra Pak, MÆRSK, Unilever, Alfa Laval, DHL, ABB, KRAFT, P&G, DONG energy, UPS, novo nordisk, Pfizer, Flügger 福乐图, Barilla, metso, BRIDGESTONE, COLGATE-PALMOLIVE, AkzoNobel, novozymes, Lonza

2000 Generation Load Cells



SD | SDM70 | SDM80 | MD | FD | GDS | SOTD | SLCAD | Customized

Load cell module
MCE2010

Terminal module
MCE9601

24Vdc

2000 Generation Modules

Terminal
(LED/LCD)
MCE9625

Profibus DP module
(Profibus DP)
MCE2035
(for 1~8 load cells)

DeviceNet module
(DeviceNet)
MCE9637
(for 1~8 load cells)

Serial module
(RS232/RS485/422)
MCE2040
(for 1~8 load cells)

Terminal
(LCD)
5024G

Analog module
(4-20mA, 0-10VDC)
MCE2029
(for 1~8 load cells)

EtherNet/IP module
(EtherNet/IP)
2050
(for 1~8 load cells)

4000 Generation Load Cells

SPSX | BBLA | DLA | DMA | BBMA70 | BBMA80 | DHA | Customized

4000 Generation Modules

24Vdc

24Vdc

ATEX

4X29
Analog module
(4-20mA,0-10VDC)
(for 1~4 load cells)

4X35A
Profibus DP module
(Profibus DP)
(for 1~4 load cells)

4X37A
DeviceNet module
(DeviceNet)
(for 1~4 load cells)

4X40A
Serial module
(RS485)
(for 1~4 load cells)

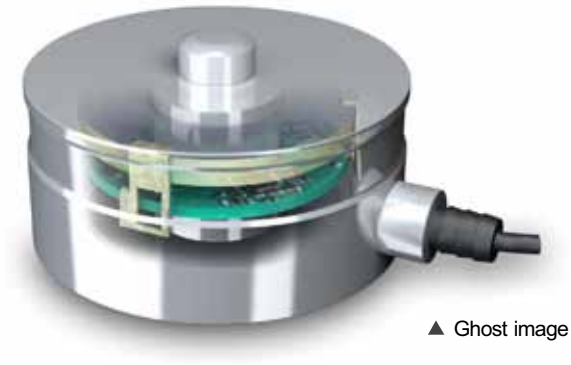
4X50A
EtherNet IP module
(EtherNet IP)
(for 1~4 load cells)

4051A
ATEX power supply

Weighing Terminals

Terminal (LCD)
5024G

Terminal (LED/LCD)
MCE9625



▲ Ghost image of digital compression load cell

DIGITAL CAPACITIVE TECHNOLOGY

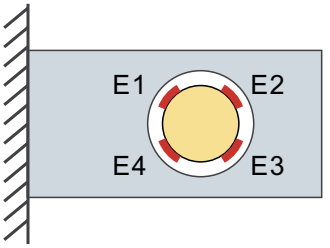
The Choice for Industrial Applications

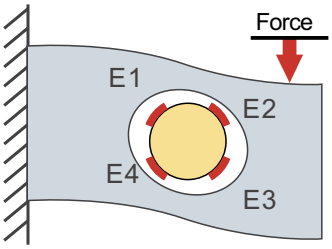
The Eilersen digital capacitive technology is based on a non-contacting ceramic sensor mounted inside the load cell body. As the load cell contains no moving parts and the ceramic sensor is not in contact with the load cell body, the load cell tolerates very high overloads, sideloads, torsion and welding voltages.

Therefore, the mechanical installation of the load cell can be done without expensive and complicated mounting kits and overload protection devices.

The capacitive measurement from the ceramic sensor is directly converted to a RS485 signal which is transmitted through the single wire RG-58 coaxial cable to a weighing module.

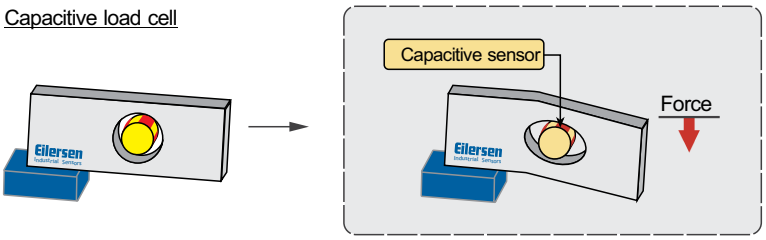
The technology and mechanical design of the Eilersen load cells is covered worldwide by a number of patents.



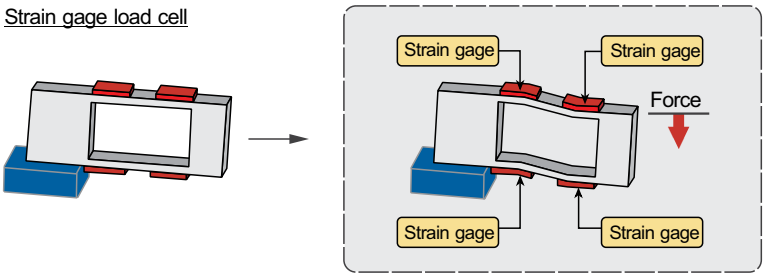


The Eilersen digital capacitive technology is based on an accurate and stable ceramic sensor, which is non-contacting and therefore unaffected by overloads, sideloads, torsion and welding voltages.

Capacitive load cell



Strain gage load cell



DIGITAL CAPACITIVE TECHNOLOGY (continued...)

The True Digital Weighing Solution

The electrical installation of the Eilersen digital load cell is pure plug-and-play as the signal from the non-contacting sensor is directly converted, compensated and calibrated by a microprocessor in the load cell to a digital output in grams, kilograms, or Newton. Measurements and status codes are transmitted on the single wire coaxial load cell cable (RG-58) which may be up to 100 meters long.

This setup results in unsurpassed flexibility, high data rates and allows for connection to a wide range of equipment and interfaces (PLCs, PCs, Weighing Terminals, Displays, Profibus DP, EtherNet/IP, EtherCAT, DeviceNet, Modbus ASCII/RTU, RS232, RS485/422, 4-20mA, and 0-10VDC).

High Accuracy and Easy Installation

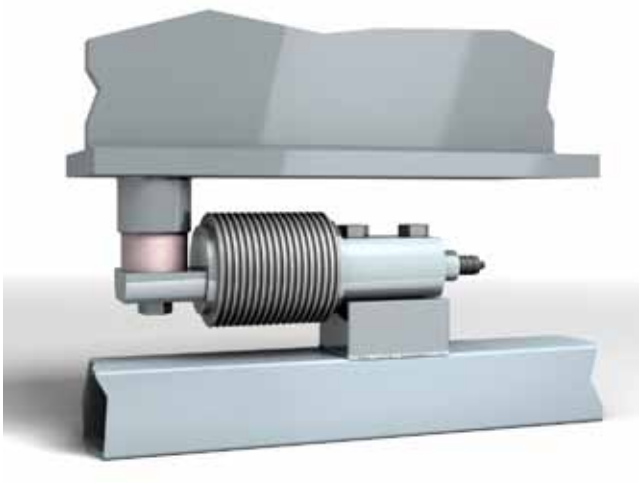
Eilersen load cells are factory calibrated and compensated to ensure the highest accuracy (up to OIML C6 MI10) and quality on the market.

The robustness of the Eilersen load cells allows a very simple and hygienic mechanical installation. The simple installation eliminates the need for maintenance and reduces the total cost of ownership.

The load cell cable can be mounted on-site if necessary and the cable length (up to 100 meters) has no influence on the calibration of the load cell.

It is possible to monitor the load and status of each individual load cell in a system which provides visibility, easy troubleshooting and saves time during commissioning.

▲ Hygienic tank weighing installation



▲ Simple installation of beam load cells

CHOOSE EILERSEN WEIGHING SOLUTIONS

TOP 10 REASONS

Part 1

No.1 Robust Load Cells for Industrial Applications

The Eilersen load cells tolerate very high overloads, sideloads and torsion. The load cells are hermetically sealed (IP68) to ensure superb waterproof protection for tough industrial applications. Furthermore, the load cells are available in capacities up to 500ton.

No.2 Simple Mechanical Installation

Mechanical protection devices are not necessary when installing Eilersen digital load cells. This is an important cost and maintenance saver.

No.3 Simple Electrical Installation

The Eilersen digital load cells feature true plug-and-play installation as the load cells are pre-calibrated to transmit the load directly in gram, kilogram, ton or Newton which eliminates the need for on-site calibration in many applications.

No.4 ATEX Certified Solutions

The Eilersen weighing solutions are ATEX certified for installation in ATEX Zone 1, 2, 21, and 22.

No.5 Excellent Specifications

The Eilersen digital load cells can be supplied in very high accuracy (up to OIML C6 MI10) while still maintaining a very high overload tolerance.

▲ Installations in more than 85 countries worldwide

No.6 Hygienic Installations

The simple mechanical installation without overload protection devices ensures hygienic installations with a minimal need for maintenance.

No.7 Dynamic Applications

The Eilersen digital load cells feature sampling rates of up to 1.000 measurements per second and a deflection of less than 100µm at Rated Capacity.

These characteristics result in a high frequency of resonance which together with a wide variety of digital filters makes it possible to achieve a very fast response for dynamic applications.

▲ Sanitary weighing solutions for food and pharma industries

CHOOSE EILERSEN WEIGHING SOLUTIONS

TOP 10 REASONS

Part 2

No.8 Intelligent Load Cells with Integrated Diagnostics

For solutions using the Eilersen digital load cells, it is possible to monitor the load and status of each individual load cell with the integrated diagnostics feature.

The Eilersen digital load cells will send an error code if maintenance should be required for fast and easy troubleshooting.

Furthermore, a damaged load cell can be exchanged without the need for re-calibration. This is an important feature in high capacity applications where it is difficult to find calibration weights.

▲ Robust and reliable weighing solutions

▲ Installations in more than 85 countries worldwide

No.9 Easy Integration

Electronic modules are available for converting the data output from the Eilersen digital loads cells to a host of standard industrial interfaces (Profibus DP, DeviceNet, EtherNet/IP, EtherCAT, Modbus, RS485/422, RS232, 4-20mA, 0-10Vdc).

The digital technology is optimal for equipment with more than one load cell as several load cells can be connected to a single digital com port and thereby avoiding cabling and analog input cards.

No.10 Quality

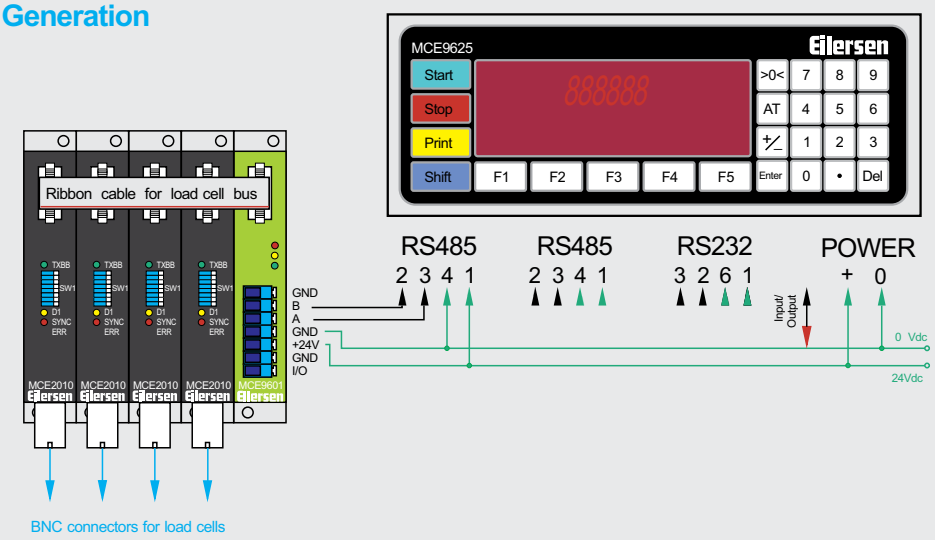
All Eilersen load cells are individually calibrated and compensated to ensure that all load cells meet the highest quality standard on the market.

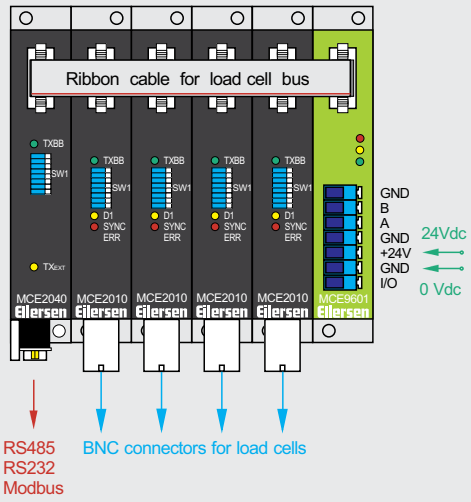
▲ Solutions for web tension measurement

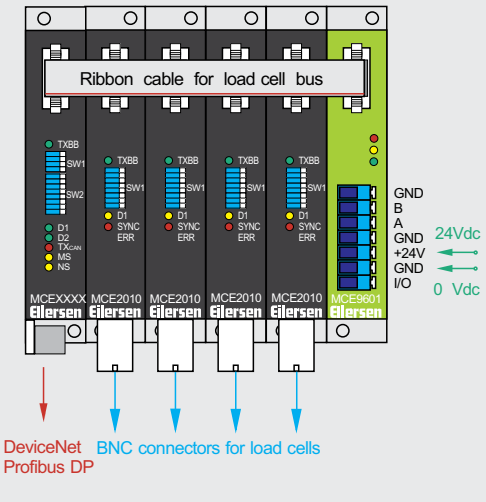
▲ Installations in food processing lines

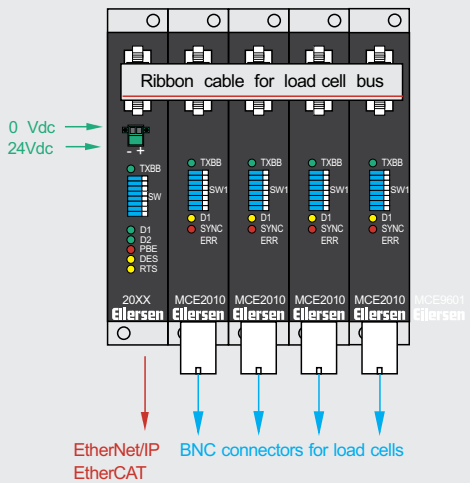
2000 Generation

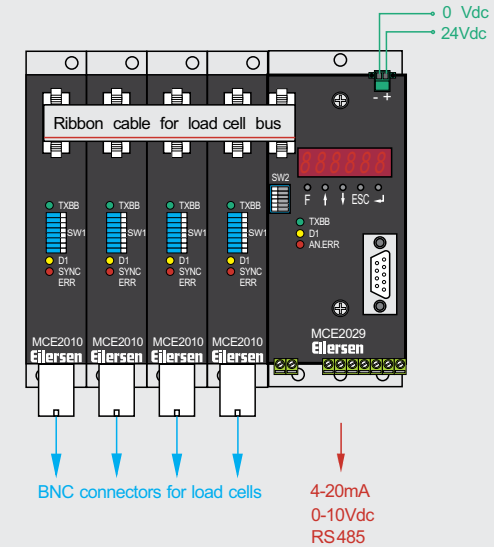
TYPICAL SYSTEM CONFIGURATION





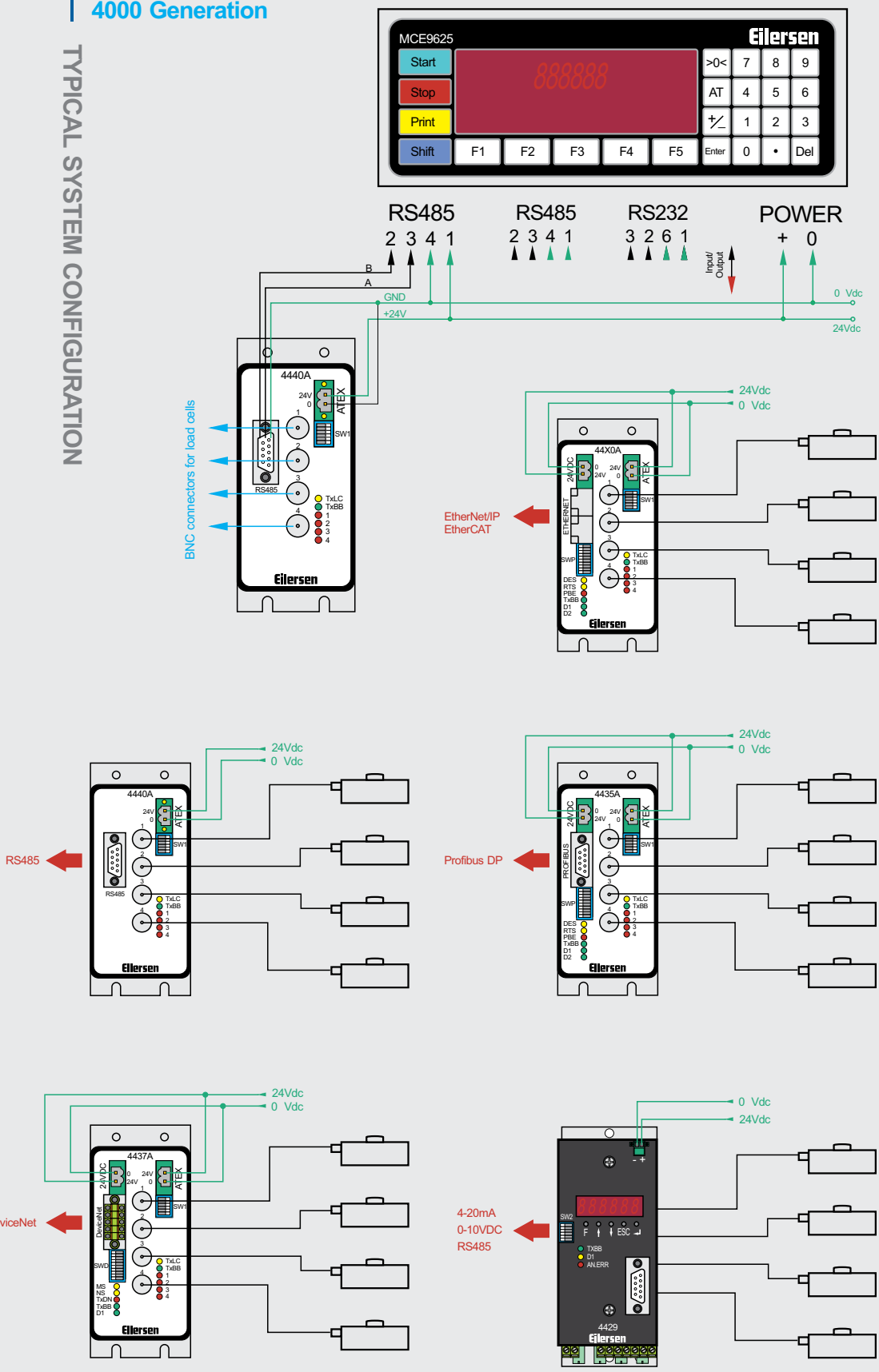


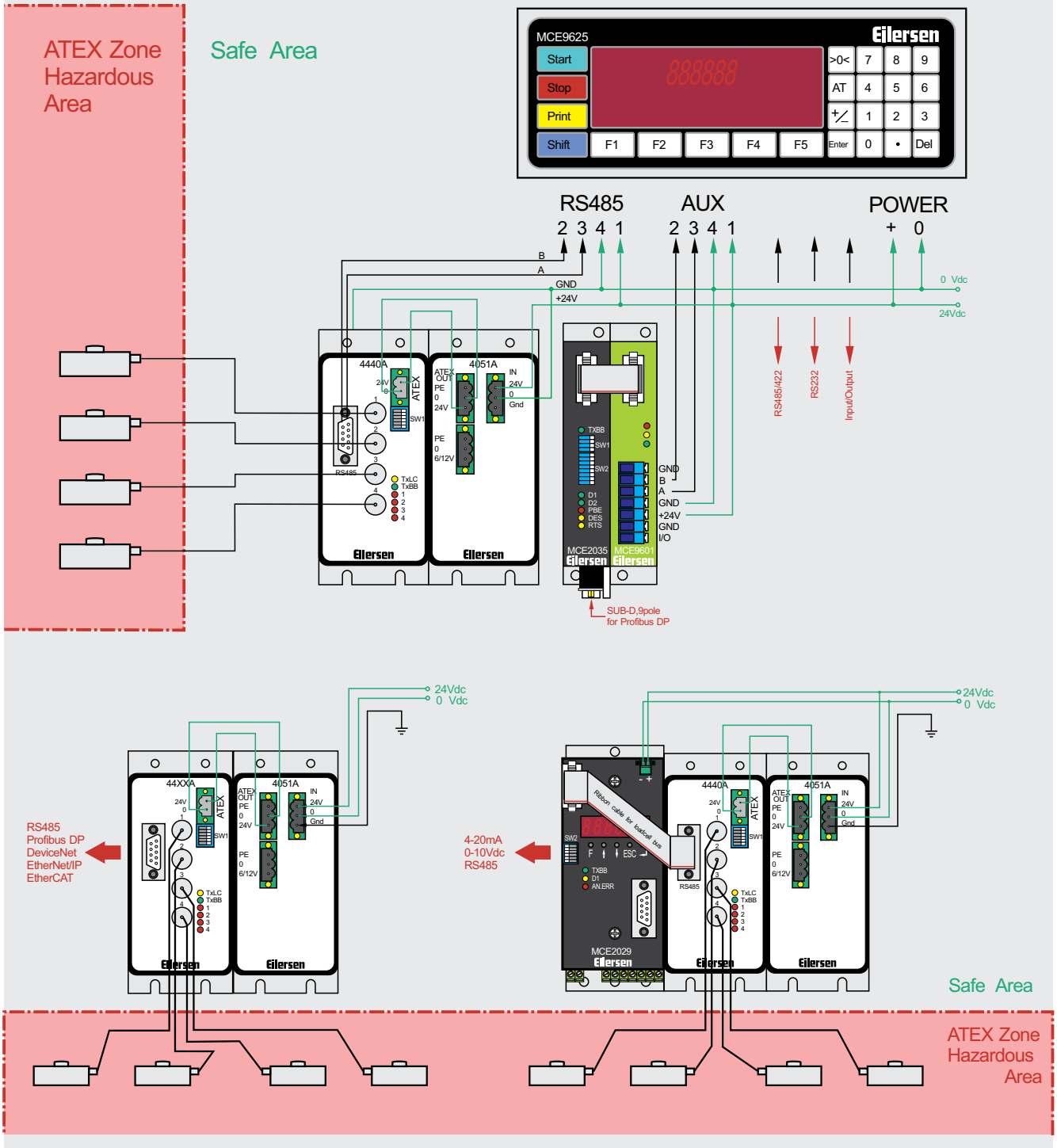




4000 Generation

TYPICAL SYSTEM CONFIGURATION

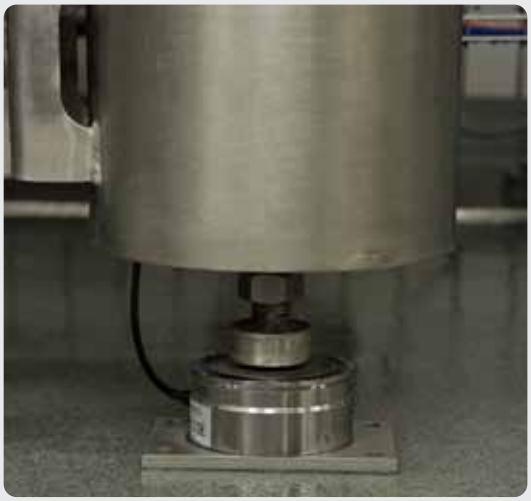




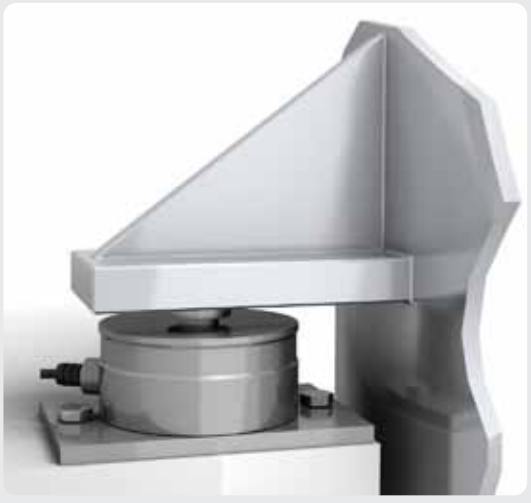
Important guidelines for installation in ATEX (Ex) rated area:

- ***Only*** *ATEX certified load cells can be installed in ATEX (Ex) rated area.*
- ***Only*** *ATEX certified modules can be used in ATEX (Ex) appplications.*
- *Load cell modules and instrumentation* ***must*** *be placed outside the ATEX (Ex) rated area.*
- *The instrumentation* ***must*** *be supplied by an ATEX power supply supplied by Eilersen.*

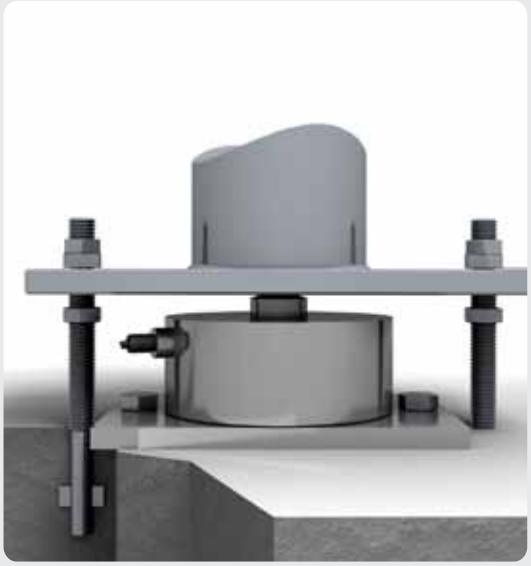
MECHANICAL INSTALLATION EXAMPLES



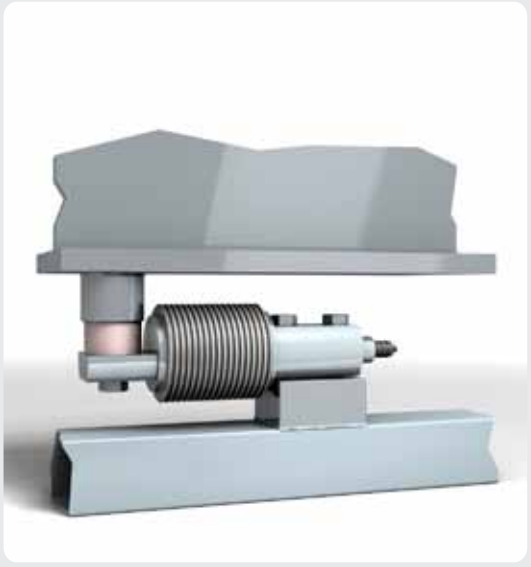
▲ Installation of compression load cells under tanks or vessels with legs



▲ Installation of compression load cells under vessels with brackets



▲ Installation of compression load cells requiring lift-off protection



▲ General installation of beam load cells

Eilersen
The Weighing Experts

2000 Generation Products

Eilersen - Experts in Weighing Since 1969
www.eilersen.com

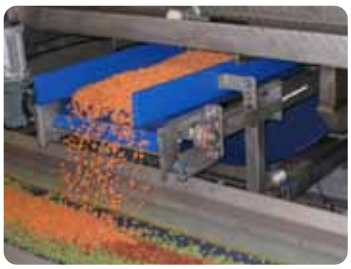
Eilersen
The Weighing Experts

Digital Beam Load Cell – Type SD

0-1.000kg

Special Features

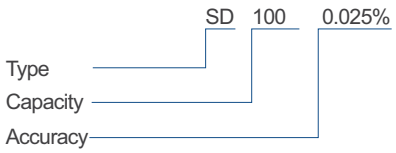
- Stainless steel
- Robust capacitive technology
- Patented high reliability capacitive sensor
- OIML R60 accuracy classes up to C6 (MI10)
- High tolerance of up to 1.000% overload
- Hermetically sealed to IP68
- Laser welded
- High accuracy, High resolution
- Digital filters
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD



Applications

- Dynamic weighing
- Process weighing
- Tanks and vessels
- Vibration sorters
- Filling and dosing
- Platform scales
- Packaging machines
- Hopper scales
- Belt scales
- Conveyor scales
- Big-bag equipment
- On-board weighing

Order information

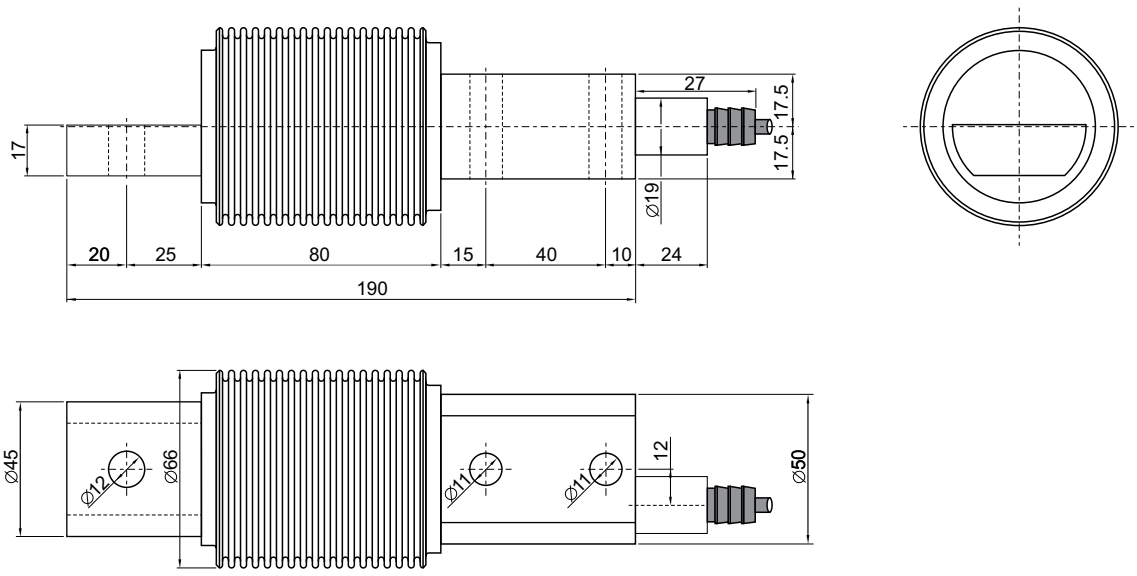


Options

- Mounting kits available
- Load cell cable length 10, 20, 50 or 100meters

Digital Beam Load Cell - Type SD

Dimensions (mm)



Parameter	Unit	0.10% C1	0.05% C2	0.025% C3**
Rated capacity (Emax)	kg	2, 5, 10, 20, 30, 50, 100, 150, 250, 500, 1.000		
Safe overload limit	% of Emax	200 to 1.000		
Safe sideload limit	% of Emax	300 to 1.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.020
Max. number of load cell intervals	Nmax	1.000	2.000	3.000
Repeatability	% of Emax	0.018	0.015	0.010
Hysteresis	% of Emax	0.033	0.020	0.017
Creep 30 min.	% of Emax	0.035	0.025	0.017
Temperature effect on zero	% /10°C	0.040	0.030	0.016
Temperature effect on sensitivity	% /10°C	0.040	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	200		
Supply	Vdc	24Vdc ±10%		
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	2.3		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU,EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

Digital Beam Load Cell – Type SDM70

0-3.000kg

Special Features

- Stainless steel
- Robust capacitive technology
- Patented high reliability capacitive sensor
- OIML R60 accuracy classes up to C5
- High tolerance of up to 1.000% overload
- Hermetically sealed to IP68
- Laser welded
- High accuracy, High resolution
- Digital filters
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD

Applications

- Dynamic weighing
- Process weighing
- Mobile weighing
- Vibration feeders
- Big-bag equipment
- Hopper scales
- Conveyor scales
- Heavy duty platform scales
- Heavy duty applications
- Offshore applications

Order information

SDM70 3.000 0.025%

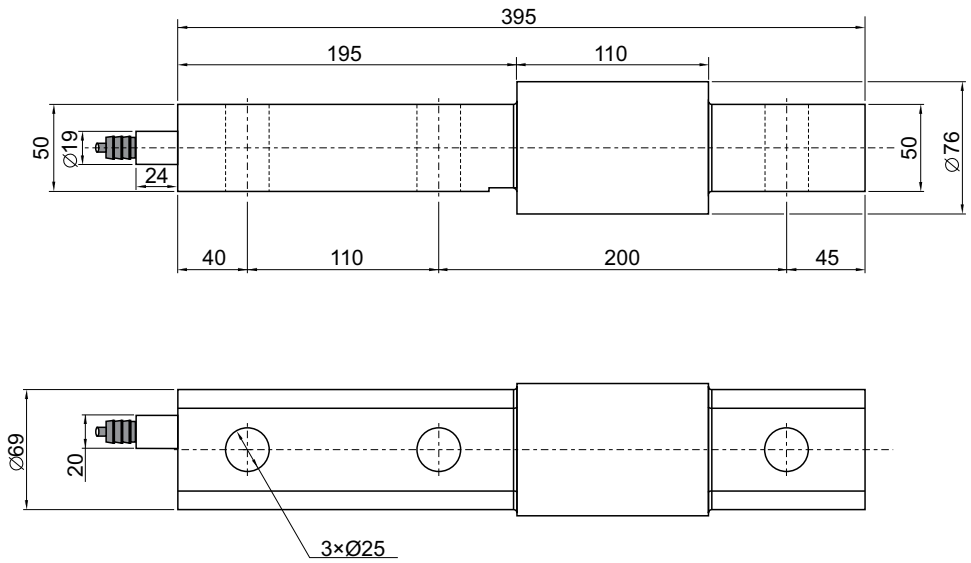
Type
Capacity
Accuracy

Options

- Mounting kits available
- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

Digital Beam Load Cell – Type SDM70

Dimensions (mm)



Parameter	Unit	0.10% C1	0.05% C2	0.025% C3**
Rated capacity (Emax)	kg	1.000, 2.000, 3.000		
Safe overload limit	% of Emax	300 to 1.000		
Safe sideload limit	% of Emax	500 to 1.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.025
Max. number of load cell intervals	Nmax	1.000	2.000	3.000
Repeatability	% of Emax	0.025	0.020	0.010
Hysteresis	% of Emax	0.033	0.020	0.016
Creep 30 min.	% of Emax	0.040	0.025	0.016
Temperature effect on zero	% /10°C	0.045	0.030	0.016
Temperature effect on sensitivity	% /10°C	0.045	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 80 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	200		
Supply	Vdc	24Vdc ±10%		
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	9.5		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

Eilersen
The Weighing Experts

Digital Beam Load Cell – Type SDM80

0-7.000kg

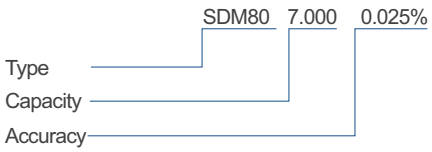
Special Features

- Stainless steel
- Robust capacitive technology
- Patented high reliability capacitive sensor
- OIML R60 accuracy classes up to C5
- High tolerance of up to 1.000% overload
- Hermetically sealed to IP68
- Laser welded
- High accuracy, High resolution
- Digital filters
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD

Applications

- Dynamic weighing
- Process weighing
- Mobile weighing
- Vibration feeders
- Big-bag equipment
- Hopper scales
- Conveyor scales
- Heavy duty platform scales
- Heavy duty applications
- Offshore applications

Order information

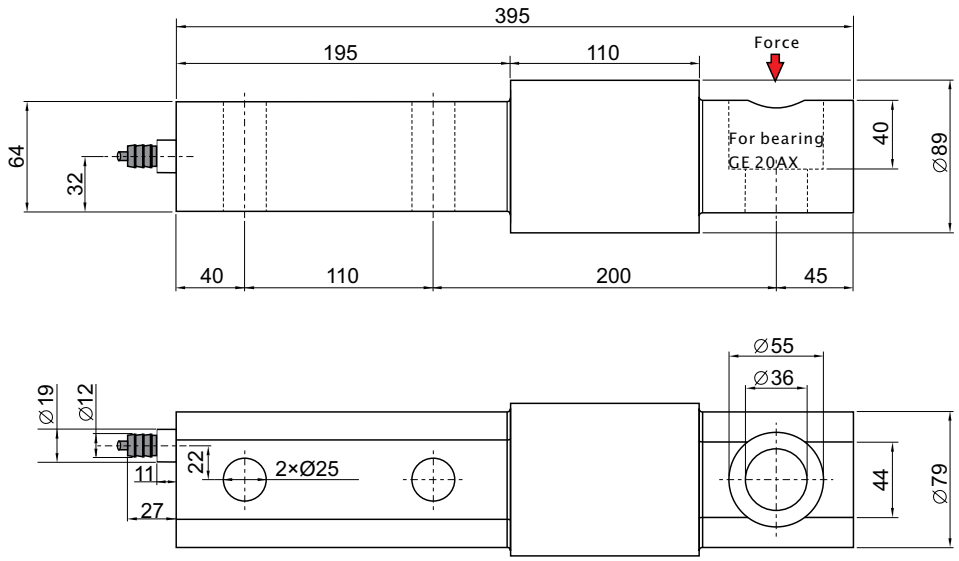


Options

- Mounting kits available
- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

Digital Beam Load Cell – Type SDM80

Dimensions (mm)



Parameter	Unit	0.10% C1	0.05% C2	0.025% C3**
Rated capacity (Emax)	kg	5.000, 6.000, 7.000		
Safe overload limit	% of Emax	300 to 1.000		
Safe sideload limit	% of Emax	500 to 1.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.025
Max. number of load cell intervals	Nmax	1.000	2.000	3.000
Repeatability	% of Emax	0.025	0.020	0.010
Hysteresis	% of Emax	0.033	0.020	0.016
Creep 30 min.	% of Emax	0.040	0.025	0.016
Temperature effect on zero	% /10°C	0.045	0.030	0.016
Temperature effect on sensitivity	% /10°C	0.045	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 80 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	200		
Supply	Vdc	24Vdc ±10%		
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	10.5		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

Eilersen
The Weighing Experts

Digital Compression Load Cell – Type MD

CE

0-5.000kg

Special Features

- Robust capacitive technology
- Stainless steel
- High tolerance of up to 500% overload
- High accuracy
- Hermetically sealed to IP68
- Laser welded
- Hygienic design and installation
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Calibration independent of cable length
- Easy mechanical and electrical installation

Applications

- Tank weighing
- Process weighing
- Big-bag equipment
- Filling and dosing
- Offshore
- Level measurement
- Platform scales
- Hopper scales
- Heavy duty applications
- Belt scales

Order information

MD 2.000 0.025%

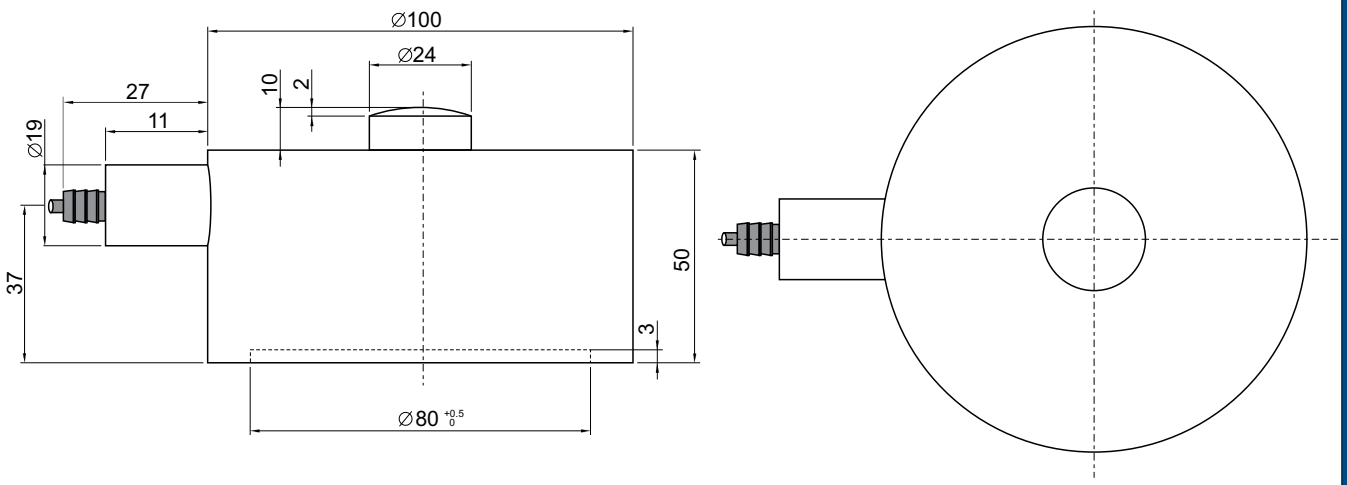
Type
Capacity
Accuracy

Options

- Base plate available
- Load cell cable length 10, 20, 50 or 100meters

Digital Compression Load Cell – Type MD

Dimensions (mm)



Parameter	Unit	0.10%	0.05%	0.025%
Rated capacity (Emax)	kg	50, 100, 150, 250, 500, 1.000 1.500, 2.000, 3.000, 4.000, 5.000		
Safe overload limit	% of Emax	200 to 500		
Safe sideload limit	% of Emax	300 to 1.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.025
Repeatability	% of Emax	0.030	0.020	0.012
Hysteresis	% of Emax	0.055	0.040	0.020
Creep 30 min.	% of Emax	0.060	0.040	0.025
Temperature effect on zero	% /10°C	0.060	0.045	0.030
Temperature effect on sensitivity	% /10°C	0.060	0.045	0.030
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	200		
Supply	Vdc	24Vdc ±10%		
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	2.1		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

Eilersen
The Weighing Experts

Digital Compression Load Cell – Type FD

CE

0-50.000kg

Special Features

- Robust capacitive technology
- Stainless steel
- High tolerance of up to 400% overload
- Hermetically sealed to IP68
- Laser welded
- Hygienic design and installation
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Calibration independent of cable length
- Easy mechanical and electrical installation

Applications

- Tank weighing
- Process weighing
- Level measurement
- Filling and dosing
- Large Vessels
- Offshore applications
- Heavy duty applications

Order information

FD 25.000 0.05%

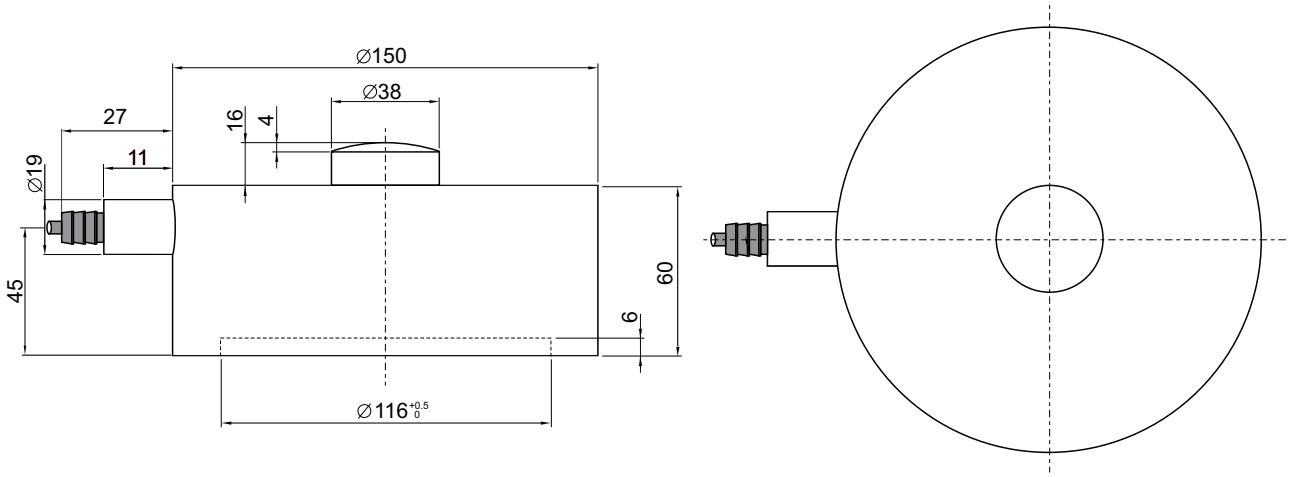
Type
Capacity
Accuracy

Options

- Base plate available
- Load cell cable length 10, 20, 50 or 100meters

Digital Compression Load Cell – Type FD

Dimensions (mm)



Parameter	Unit	0.10%	0.05%**
Rated capacity (Emax)	kg	6.000, 8.000, 10.000 15.000, 20.000, 25.000, 50.000	
Safe overload limit	% of Emax	200 to 400	
Safe sideload limit	% of Emax	200 to 500	
Minimum dead load	% of Emax	0	
Accuracy	% of Emax	0.100	0.050
Repeatability	% of Emax	0.030	0.020
Hysteresis	% of Emax	0.055	0.040
Creep 30 min.	% of Emax	0.060	0.040
Temperature effect on zero	% /10°C	0.060	0.045
Temperature effect on sensitivity	% /10°C	0.060	0.045
Compensated temperature range	°C	-10 to 50	
Operating temperature range	°C	-50 to 70 (100*)	
Deflection at Emax	mm	Max 0.10	
Measuring rate	Hz	200	
Supply	Vdc	24Vdc ±10%	
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	5.7	
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc	

* with Teflon cable

** higher accuracies available on request

Eilersen
The Weighing Experts

Digital Compression Load Cell – Type GDS

CE

0-500ton

Special Features

- Robust capacitive technology
- Patented high reliability capacitive sensor
- High tolerance of up to 400% overload
- Stainless steel
- Hermetically sealed to IP69K
- Laser welded
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Pre-calibrated with signal in kg or kN
- Calibration independent of cable length
- Easy mechanical and electrical installation

Applications

- Silo weighing
- Level measurement
- Process weighing
- Offshore applications
- Heavy duty applications

Order information

GDS 100 0.25%

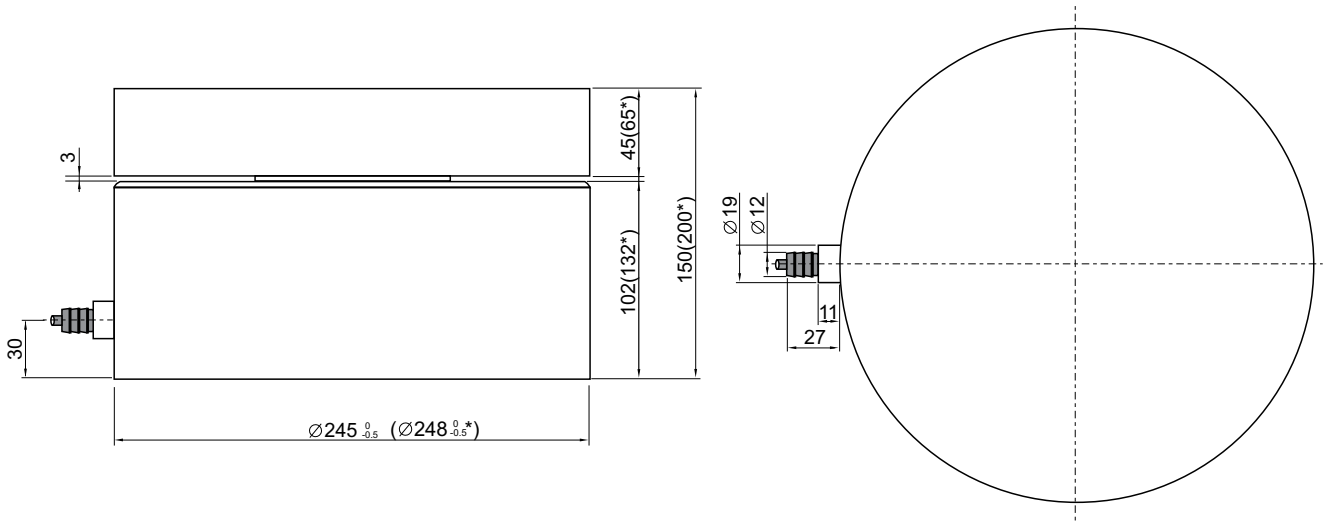
Price
Capacity
Accuracy

Options

- Load cell cable length 10, 20, 50 or 100meters
- Customized versions available

Digital Compression Load Cell – Type GDS

Dimensions (mm)



*200 to 500ton version

Parameter	Unit	0.25%
Rated capacity (Emax)	ton	100, 200, 300, 400, 500
Safe overload limit	% of Emax	up to 400
Safe sideload limit	% of Emax	up to 500
Minimum dead load	% of Emax	0
Accuracy	% of Emax	0.25
Repeatability	% of Emax	0.06
Hysteresis	% of Emax	0.08
Creep 30 min.	% of Emax	0.08
Temperature effect on zero	% /10°C	0.08
Temperature effect on sensitivity	% /10°C	0.08
Compensated temperature range	°C	-10 to 50
Operating temperature range	°C	-50 to 70 (100*)
Deflection at Emax	mm	Max 0.10
Measuring rate	Hz	200
Supply	Vdc	24Vdc ±10%
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	65 / 75**
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc

* with Teflon cable

** 100ton / 200-500ton

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Digital Tension Load Cell – Type SOTD

CE

0-20.000kg

Special Features

- Robust capacitive technology
- Patented high reliability capacitive sensor
- High tolerance of up to 1.000% overload
- Stainless steel
- Sealed to IP67
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Pre-calibrated with signal in kg or N
- Calibration independent of cable length
- Easy mechanical and electrical installation

Applications

- Suspended vessels
- Cranes
- Lifts
- Offshore/Marine applications
- Tension and force measurement
- Heavy duty applications

Order information

SOTD 20.000 0.1%

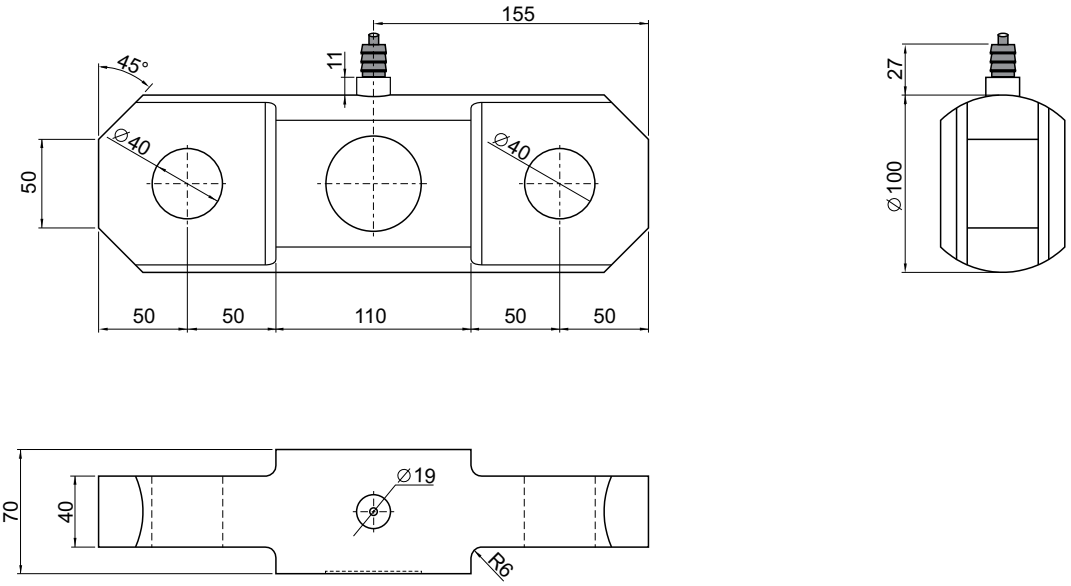
Type
Capacity
Accuracy

Options

- Load cell cable length 10, 20, 50 or 100meters
- Customized versions available

Digital Tension Load Cell – Type SOTD

Dimensions (mm)



Parameter	Unit	0.10%
Rated capacity (Emax)	kg	2.000, 5.000, 10.000, 20.000*
Safe overload limit	% of Emax	up to 1.000
Safe sideload limit	% of Emax	up to 500
Minimum dead load	% of Emax	0
Accuracy	% of Emax	0.10
Repeatability	% of Emax	0.02
Hysteresis	% of Emax	0.05
Creep 30 min.	% of Emax	0.03
Compensated temperature range	°C	-10 to 50
Operating temperature range	°C	-50 to 70 (100**)
Deflection at Emax	mm	Max 0.20
Measuring rate	Hz	200
Supply	Vdc	24Vdc ±10%
Internal resolution	Bit	24
Material		Stainless Steel 17-4 PH and AISI 316
Protection		IP67
Cable		6meter standard coaxial RG-58 (Ø6mm) with BNC connector
Maximum cable length	m	100
Weight	kg	10
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc

* higher capacity available on request

** with Teflon cable

Eilersen
The Weighing Experts

Digital Web Tension Load Cell – Type SLCAD

CE

0-5.000N

Special Features

- Robust capacitive technology
- Patented high reliability capacitive sensor
- High tolerance of up to 1.000% overload
- Sealed to IP67
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Pre-calibrated with signal in kg or N
- Calibration independent of cable length
- Easy mechanical and electrical installation

Applications

- Web tension control
- Tension measurement
- Offshore/Marine applications
- Force measurement

Order information

SLCAD 5.000 0.25%

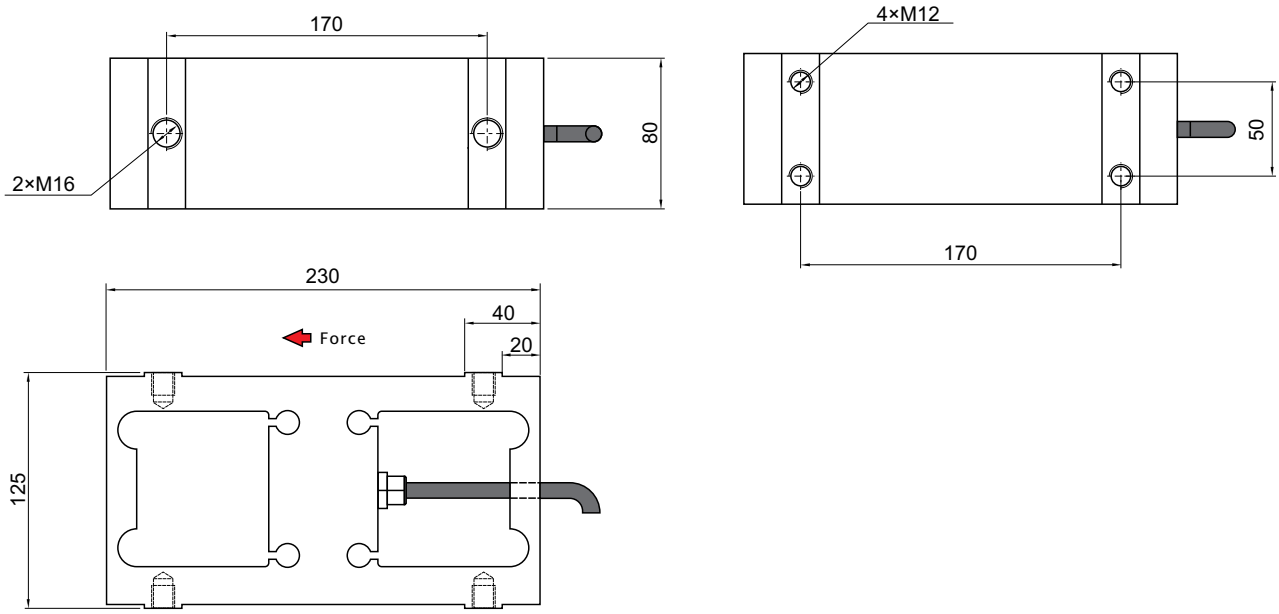
Type
Capacity
Accuracy

Options

- Free application software
- Type SLCAD-ST with extra safety and temperature range
- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

Digital Web Tension Load Cell - Type SLCAD

Dimensions (mm)



Parameter	Unit	0.25%
Rated capacity (Emax)	N	200, 500, 1.000, 2.000, 5.000*
Safe overload limit	% of Emax	up to 1.000
Safe sideload limit	% of Emax	up to 1.000
Minimum dead load	% of Emax	0
Accuracy	% of Emax	0.25**
Repeatability	% of Emax	0.02
Hysteresis	% of Emax	0.04
Creep 30 min.	% of Emax	0.03
Compensated temperature range	°C	-10 to 50 (100***)
Operating temperature range	°C	-50 to 70 (100***)
Measuring rate	Hz	200
Supply	Vdc	24Vdc ±10%
Internal resolution	Bit	24
Material		Electroplated steel
Protection		IP67
Cable		6meter standard coaxial RG-58 (Ø6mm) with BNC connector
Maximum cable length	m	100
Weight	kg	9
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS232, RS485/422, 4-20mA, 0-10Vdc

* higher capacity available on request

** higher accuracy available on request

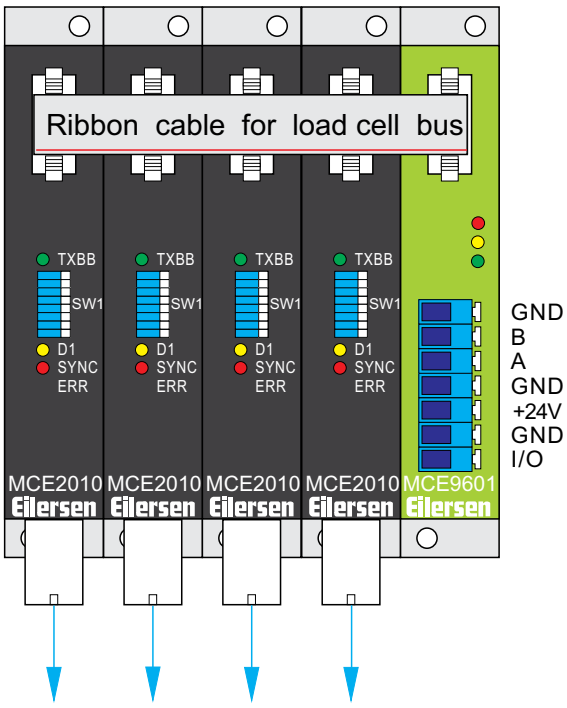
*** special version SLCAD-ST with Teflon cable

Load Cell Module - Type MCE2010

Load Cell Module

Special Features

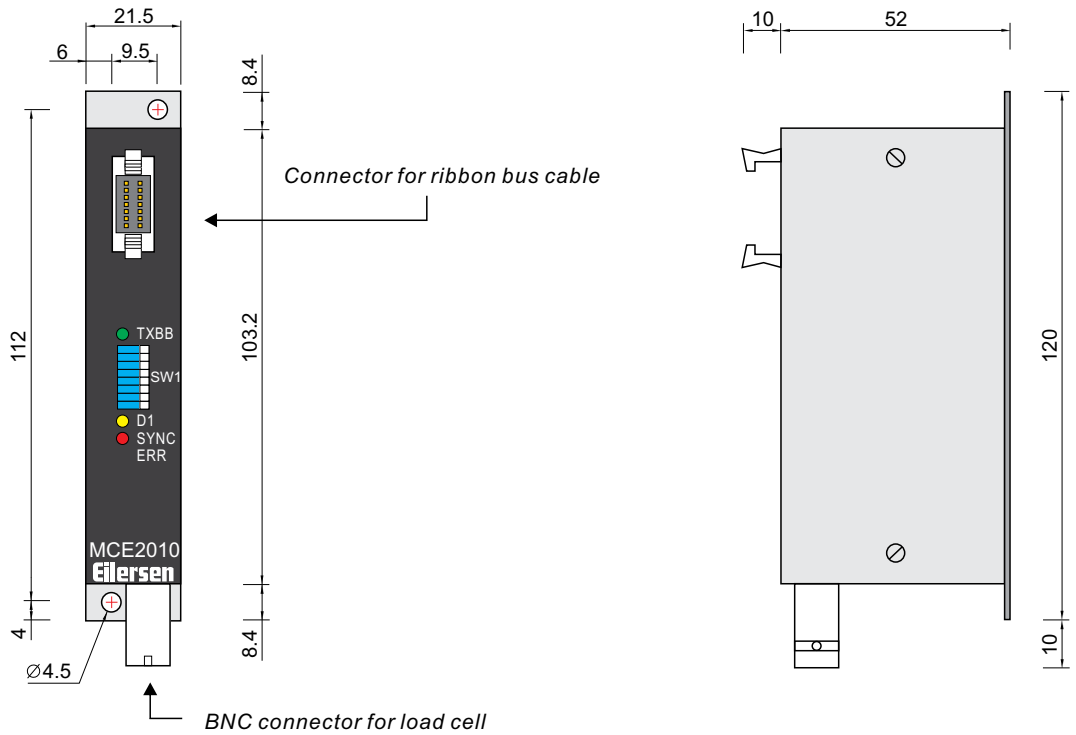
The Digital Load Cell Module MCE2010 interfaces the digital load cells to the Eilersen instrumentation, communication modules and other equipment with fast RS485 communication ports through the Eilersen load cell bus. The Eilersen proprietary RS485 protocol is available for OEM use. The connection between the digital load cell and the load cell module is a standard BNC connector. The load cell module is powered through the digital load cell bus ribbon cable which is terminated in the MCE9601 terminal module. Up to 16 load cells modules or other modules can be connected to the Eilersen digital RS485 load cell bus.



BNC connectors for load cells

Load Cell Module - Type MCE2010

Dimensions (mm)



Parameter	Unit	Data
Application		2000 generation load cells and modules
Max no. of load cells		16
Power	Vdc	24VDC +/- 20%
Temperature range	°C	-30 to +60
Humidity		90%RH
Dimensions	mm	130×62×21.5

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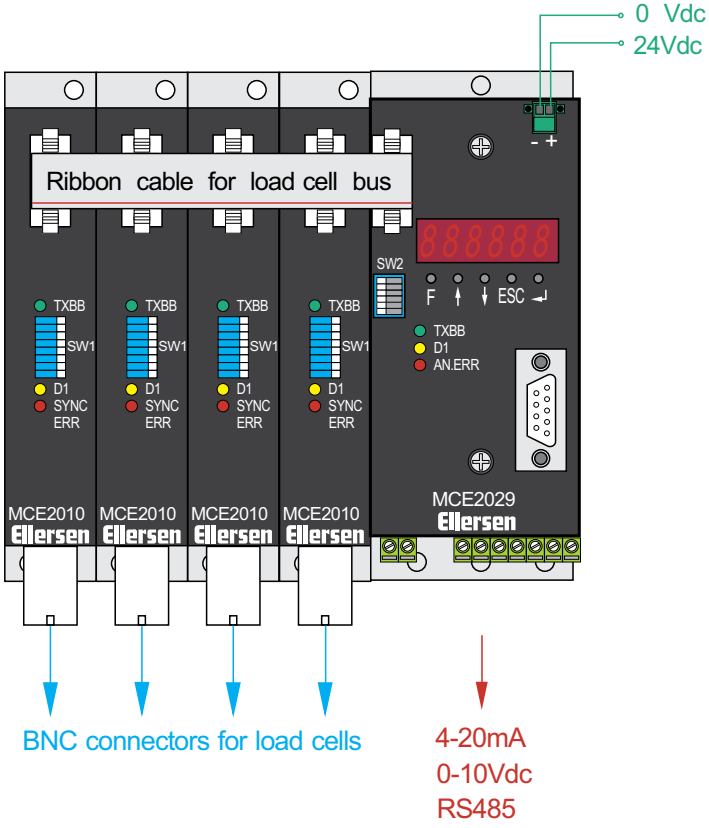
Analog Output Module - Type MCE2029

CE

4-20mA/0-10V module

Special Features

- Analog 4-20mA or 0-10Vdc output
- Digital RS485 serial communication
- Six character LED display
- 2 digital inputs + 2 digital outputs
- Can be used for up to 8 digital load cells
- Shows the weight on each of the load cells
- Shows the summed weight for all the load cells
- Configurable measuring time (40 ms -> 4 seconds)
- 3 different FIR filters selectable by dip switches
- Plug-and-play installation with pre-calibrated digital load cells
- Input for zero and tare
- Setup via keys and dip switches
- Application software can be made by request



Inputs

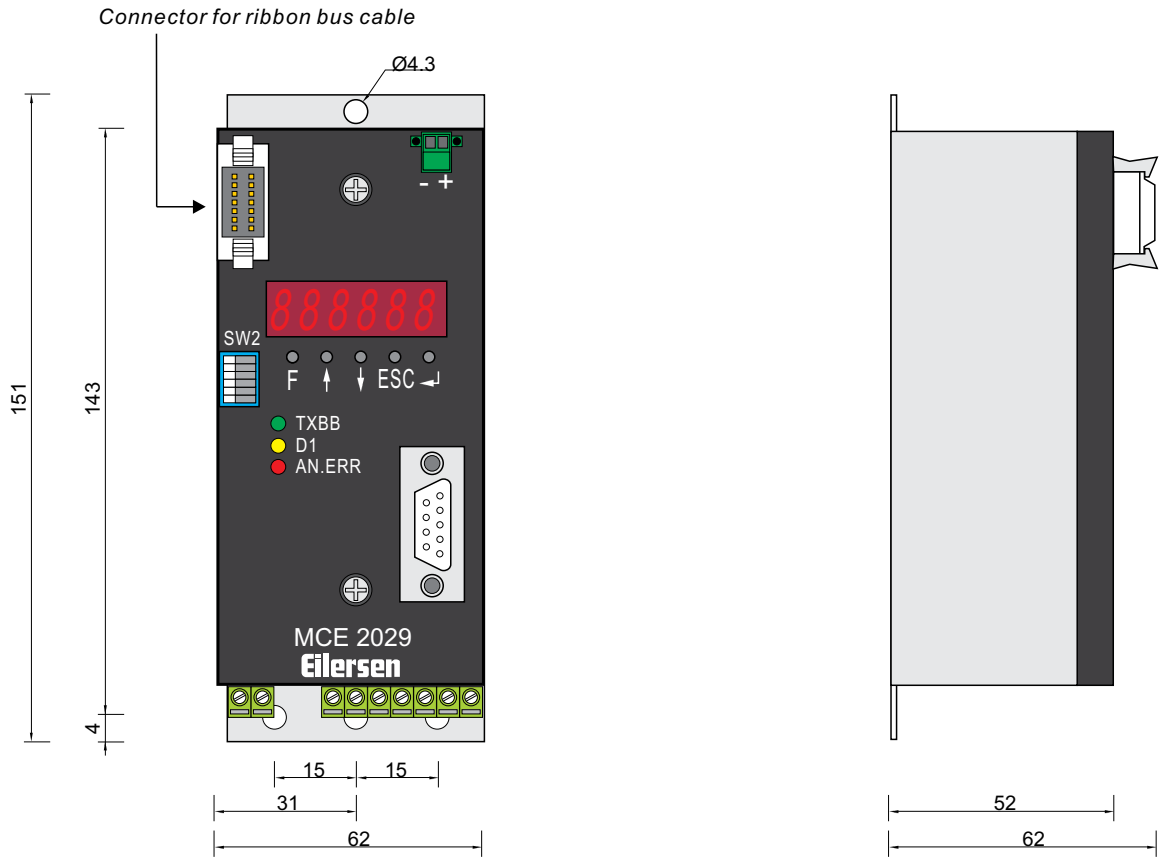
- Up to 8 Eilersen digital load cells
- Power supply 24 Vdc, 2A
- 2 digital inputs

Outputs

- Analog 4-20mA or 0-10Vdc output
- 2 digital outputs
- RS485 serial output

Analog Output Module - Type MCE2029

Dimensions (mm)



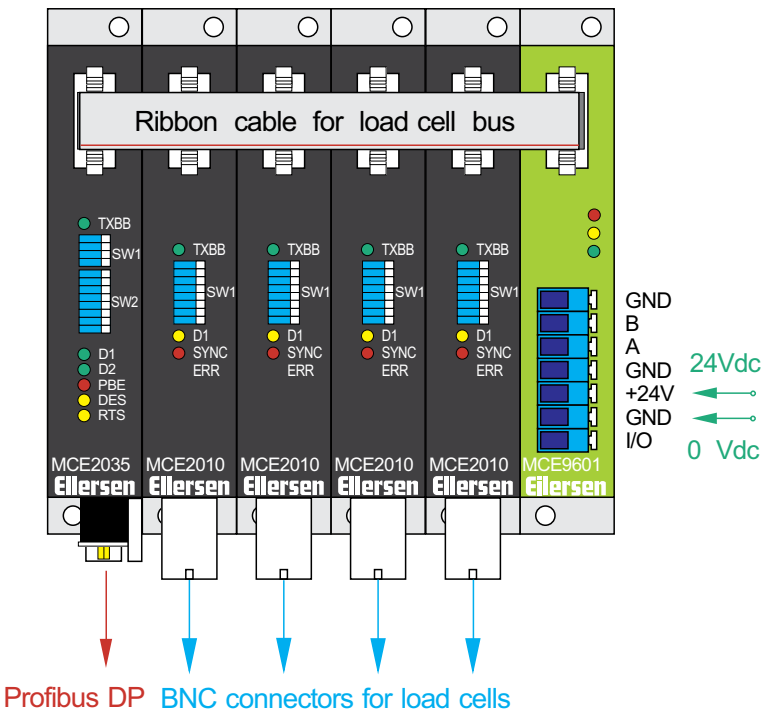
Parameter	Unit	Data
Input		2000 generation load cells and modules
Power Supply	Vdc	24 Vdc +/- 10%, 2A
Operating Temperature Range	°C	-20 to +50
Humidity	%RH	90%RH
Output		4-20mA or 0-10Vdc

Profibus DP Output Module - Type MCE2035

Profibus DP Output Module

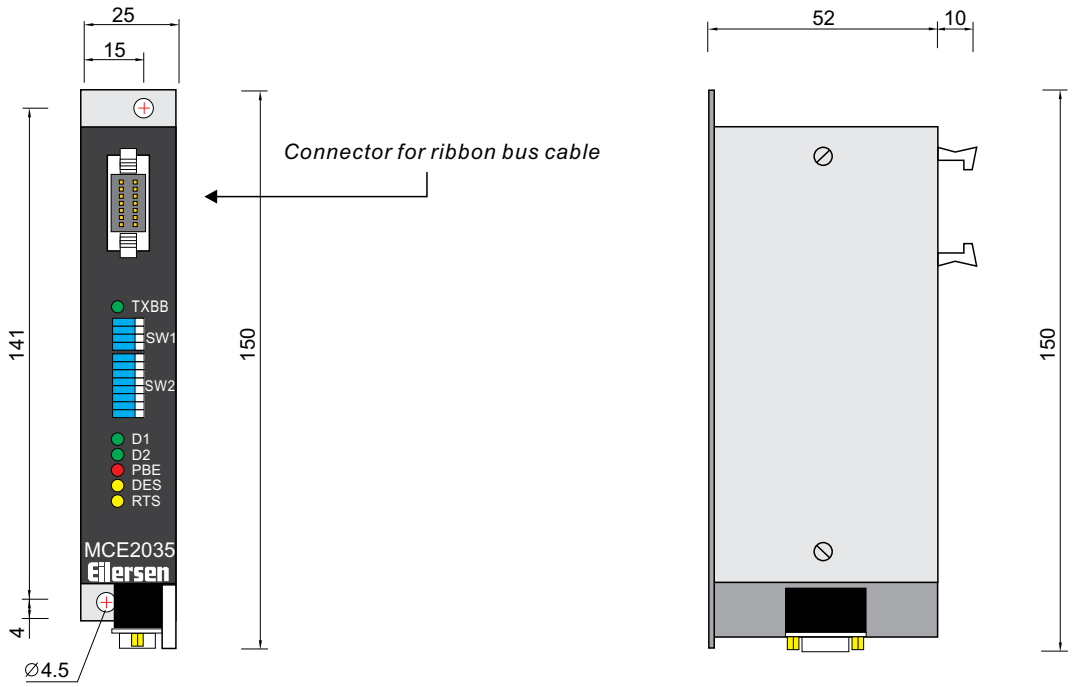
Special Features

Profibus DP communication module for interfacing Eilersen digital load cells to a Profibus DP Master device (PLC). The module can be used for up to 8 digital load cells and transmits the weight and status for each individual load cell. The module offers plug-and-play installation with Eilersen pre-calibrated digital load cells and the module is supplied with a GSD file for easy installation. Application software can be made by request.



Profibus DP Output Module - Type MCE2035

Dimensions (mm)



Parameter	Unit	Data
Application		2000 generation load cells and modules
Power	Vdc	24Vdc +/- 20%
Temperature range	°C	-30 to +60
Humidity	%RH	90%RH
Communication Protocol		Profibus DP
Slave address		Profibus DP slave address is set using DIP-switches (0-127)
Baudrates [kbit/s]		9.6, 19.2, 93.75, 187.5, 500, 1500, 3M, 6M, 12M
Address range		0-127(Sw2.2-Sw2.8)
Connection		9-pin sub-D female connector to Profibus DP Ribbon cable to MCE2010 load cell interface modules and MCE9601 for power connection

Standard Software Versions**

Version	Description	No. of Load cells	Measuring time	System weight calculation, Zeroing & Calibration
Conctr	Transmits individual weight and status of up to 8 load cells every 20 to 2.000msec. A no. of FIR filters can be activated.	1 ~ 8	20~2.000msec.	Performed in PLC (factors stored in PLC)
Weight	Transmits total load and system status for up to 8 load cells every 200msec.	1 ~ 8	200msec.	Performed in module* (factors stored in module)

* On request from PLC

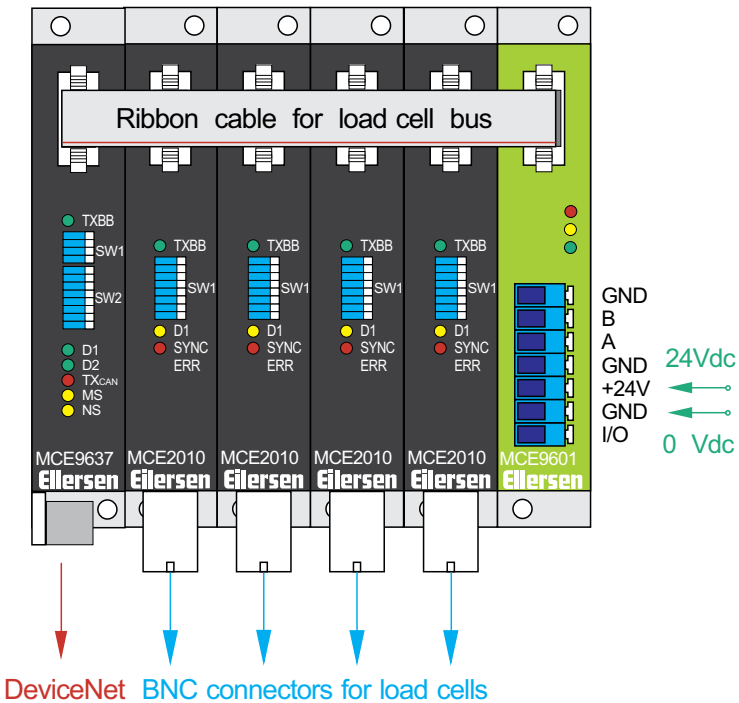
**Application software can be made by request

DeviceNet Output Module - Type MCE9637

DeviceNet Output Module

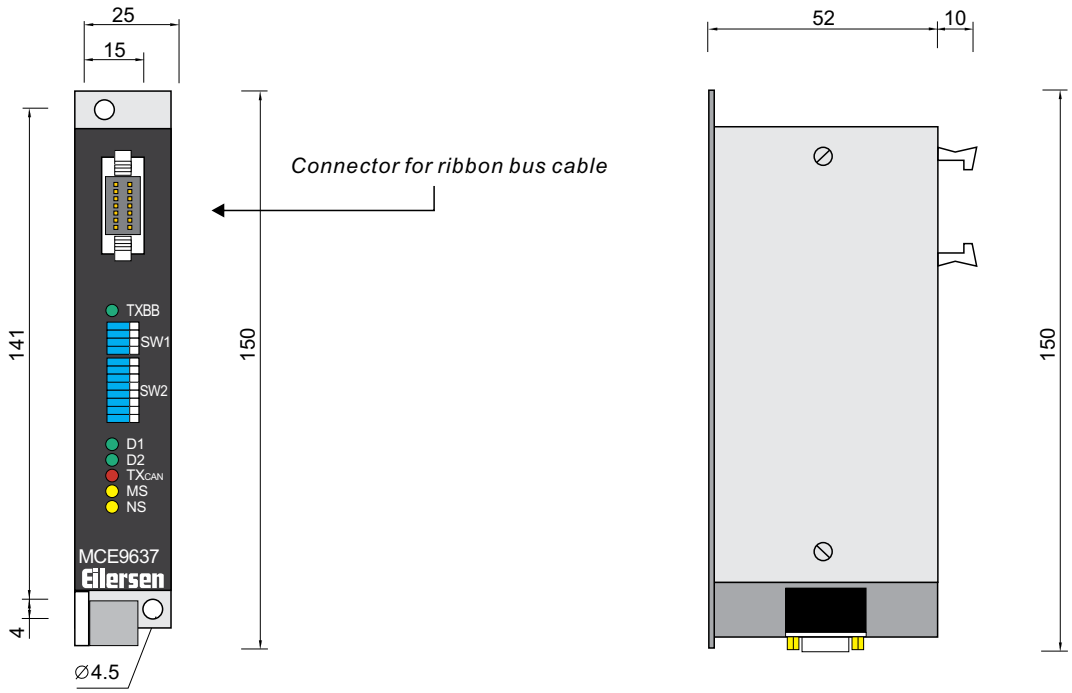
Special Features

DeviceNet communication module for interfacing Eilersen digital load cells to a DeviceNet Master device (PLC). The module can be used for up to 8 digital load cells and transmits the weight and status for each individual load cell. The module offers plug-and-play installation with Eilersen pre-calibrated digital load cells and the module is supplied with an EDS file for easy installation. Application software can be made by request.



DeviceNet Output Module - Type MCE9637

Dimensions (mm)



Parameter	Unit	Data
Application		2000 generation load cells and modules
Power	Vdc	24Vdc +/- 20%
Temperature range	°C	-30 to +60
Humidity	%RH	90%RH
Communication Protocol		DeviceNet
Slave address		DeviceNet slave address is set using DIP-switches (0-63)
Baudrates [kbit/s]		125, 250 or 500
Connection		5-pin open connector to DeviceNet (standard DeviceNet connect.) Ribbon cable to MCE2010 load cell interface modules and MCE9601 for power connection

Standard Software Versions**

Version	Description	No. of Load cells	Measuring time	System weight calculation, Zeroing & Calibration
Conctr	Transmits individual weight and status of up to 8 load cells every 20 to 2.000msec. A no. of FIR filters can be activated.	1 ~ 8	20~2.000msec.	Performed in PLC (factors stored in PLC)
Weight	Transmits total load and system status for up to 8 load cells every 200 msec.	1 ~ 8	200msec.	Performed in module* (factors stored in module)

* On request from PLC

**Application software can be made by request

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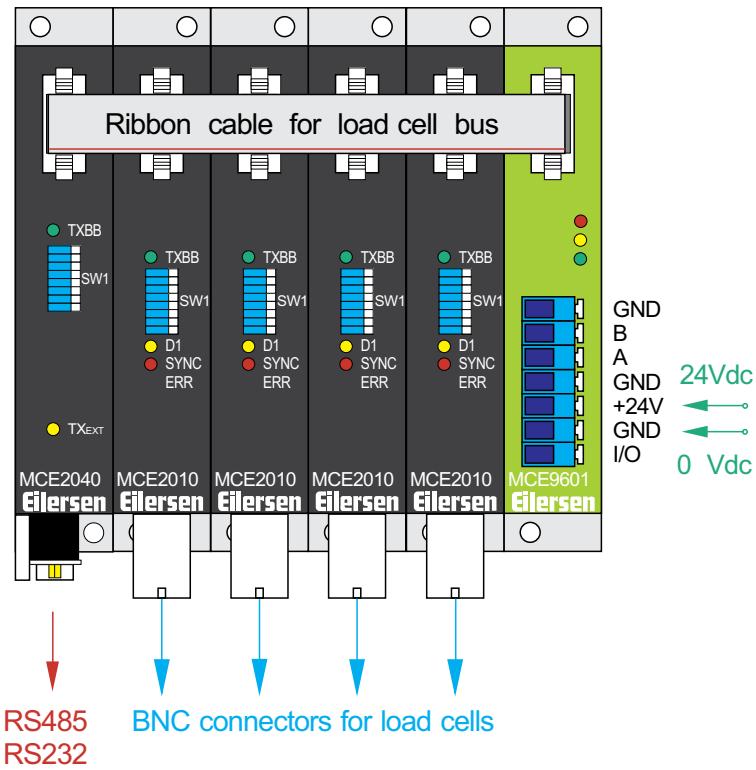
RS232, RS485 Serial Output Module - Type MCE2040

CE RS232, RS485/422 Module

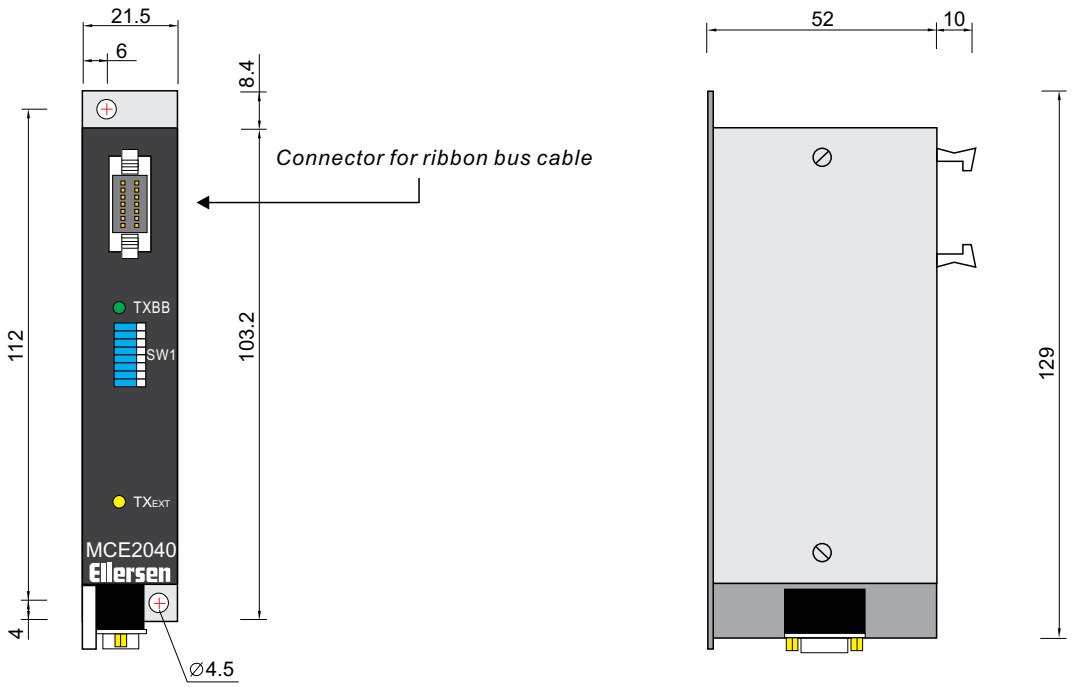
Special Features

Serial RS232/RS485/RS422 communication module for interfacing Eilersen digital load cells to PCs, PLCs and other equipment. The module can be used for up to 8 digital load cells and transmits the weight and status for each individual load cell. The module offers plug-and-play installation with Eilersen pre-calibrated digital load cells. Application software can be made by request.



RS232, RS485/422 Serial Module - Type MCE2040

Dimensions (mm)



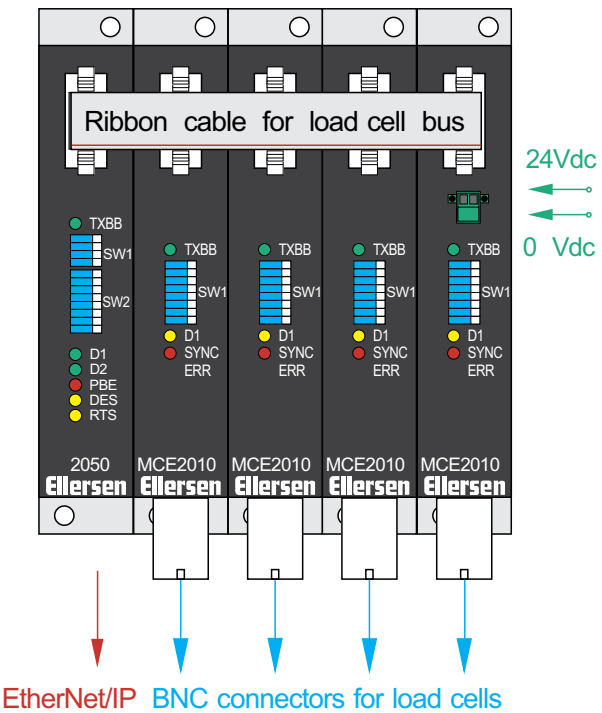
Parameter	Unit	Data
Application		2000 generation load cells and modules
Serial channels		One RS232 channel or one RS485/RS422 channel
Baud rates	kbit/s	1.2kbit/s ~ 460kbit/s
Connection		9-pin sub D connector (female) for connection of serial channels Eilersen load cell bus ribbon cable from MCE2010 load cell interface modules and MCE9601 module for power connection
LED-functions		TXBB: Communication with load cells/weighing equipment D1: Function depends on firmware
DIP-switch functions		Sw1 functions depend on firmware
Temperature range	°C	-30 C to +60
Jumper functions		Jumper functions depend on firmware

EtherNet/IP Output Module - Type 2050

EtherNet/IP Output Module

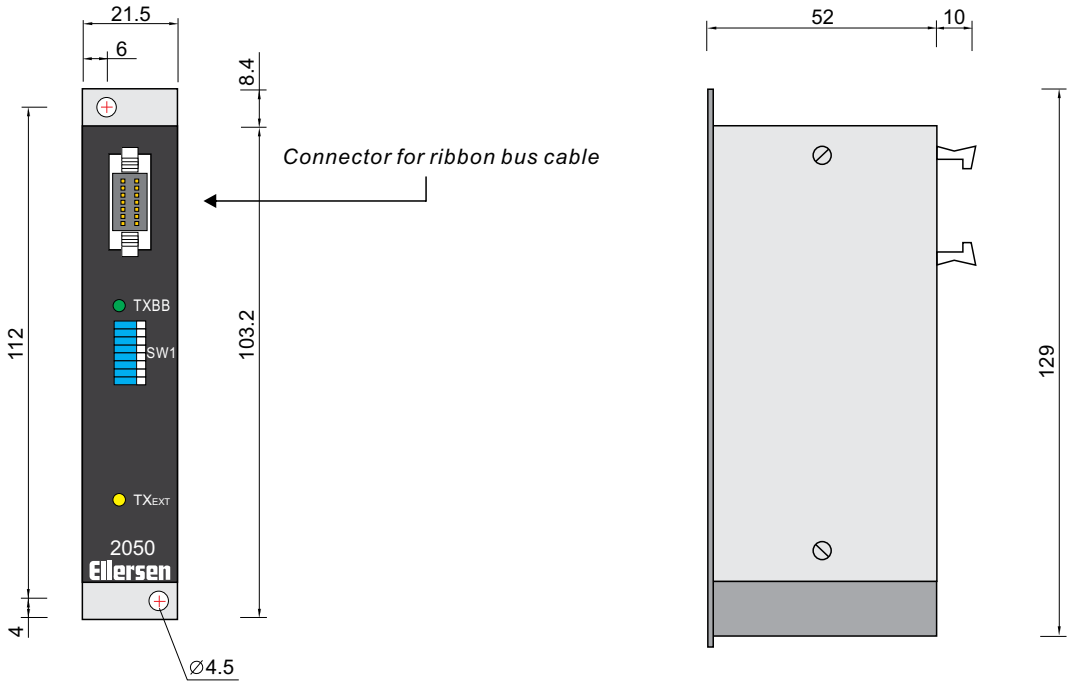
Special Features

EtherNet/IP communication module for interfacing Eilersen digital load cells to PCs, PLCs and other equipment. The module can be used for up to 8 digital load cells and transmits the weight and status for each individual load cell. The module offers plug-and-play installation with Eilersen pre-calibrated digital load cells. The module is supplied with an EDS file for easy installation. Application software can be made by request.



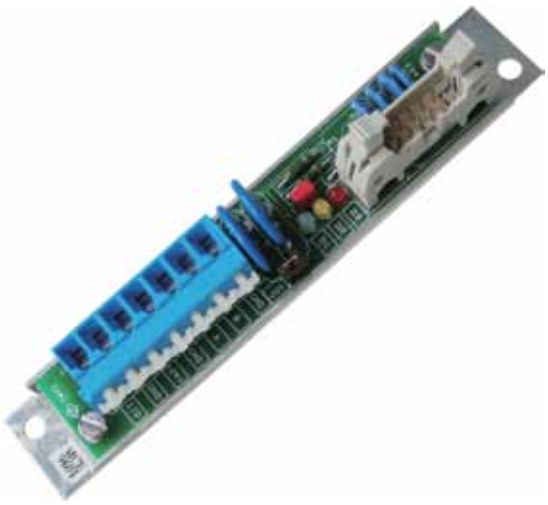
EtherNet/IP Output Module - Type 2050

Dimensions (mm)



Parameter	Unit	Data
Application		2000 generation load cells and modules
Power	Vdc	24Vdc +/- 20%, 2A
Temperature range	°C	-30 to +60
Humidity	%RH	90%RH
Communication Protocol		EtherNet/IP

Terminal Module - Type MCE9601

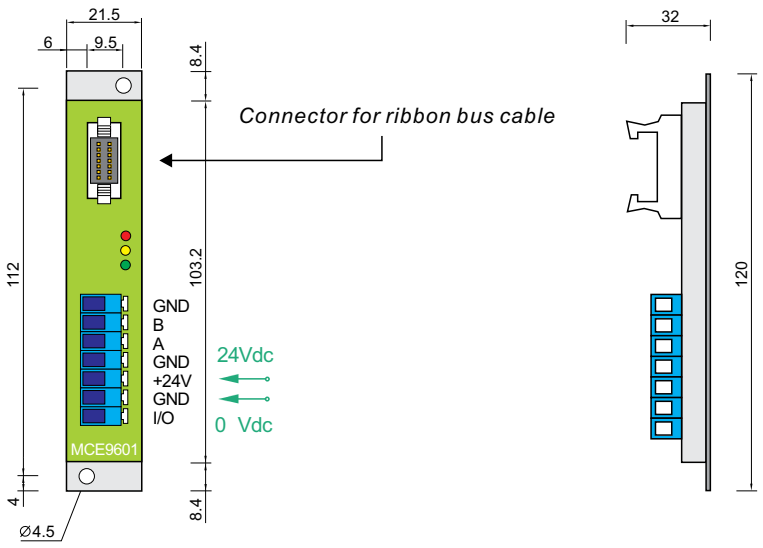


Terminal Module

Function

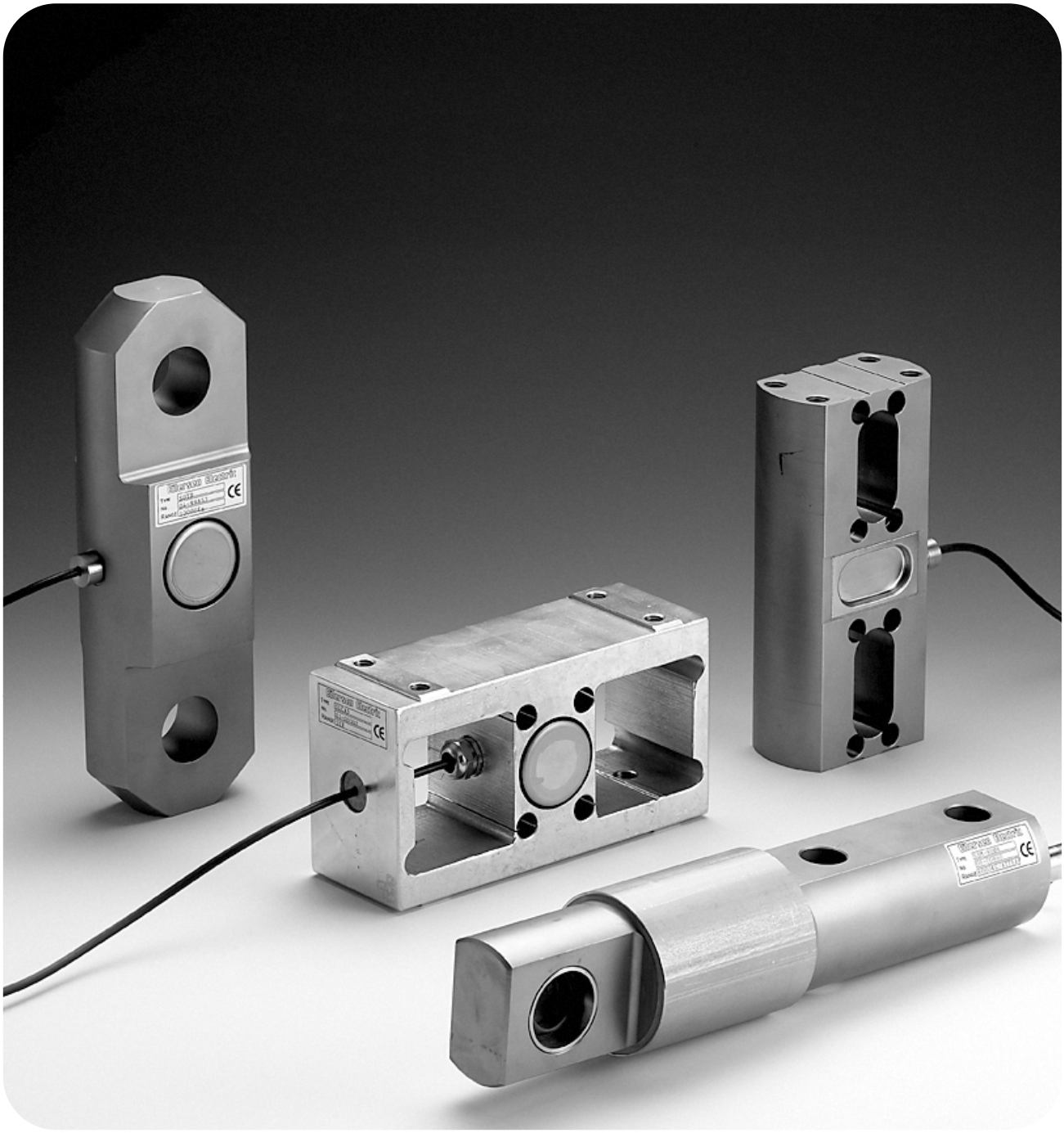
Connection between Eilersen digital load cell bus at one side and 24Vdc Power Supply and Eilersen digital weighing terminals on the other side.

Dimensions (mm)



Parameter	Unit	Data
Application		2000 generation load cells and modules
Maximum number of load cells		16
Power Supply		24Vdc +/- 20%, 2A
Temperature Range	°C	-10 to +60

Customized Load Cell Examples

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Digital Single Point Load Cell - Type SPSX

0-150kg

Special Features

- Stainless steel
- Robust capacitive technology
- High tolerance of up to 1.000% overload
- High accuracy, High resolution
- Platform size up to 400 x 400mm
- Hermetically sealed to IP68
- Laser welded
- Fast transient response
- Easy mechanical and electrical installation
- Digital filters
- Load cell cable replaceable
- ATEX version available (Zone 1, 2, 21, 22)

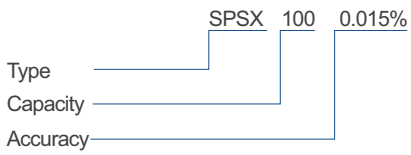
Applications

- Dynamic weighing
- Multihead weighers
- Factory Automation
- Packaging machines
- Filling and dosing
- Flow measurement
- Bench and platform scales
- Conveyor scales
- Process weighing
- Checkweighers

Options

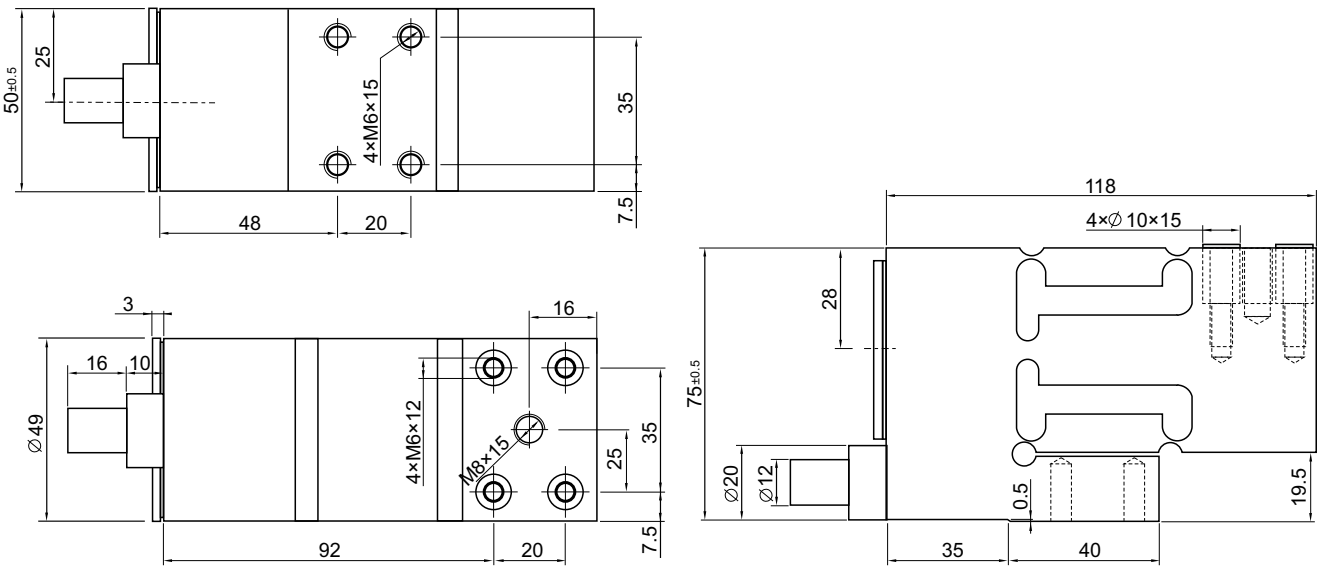
- ATEX (Zone 1, 2, 21, 22) version type SP5075A
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

Order information



Digital Single Point Load Cell – Type SPSX

Dimensions (mm)



Parameter	Unit	0.025%	0.015%
Rated capacity (Emax)	kg	5, 10, 20, 50, 100, 150	
Safe overload limit	% of Emax	300 to 1.000	
Safe sideload limit	% of Emax	500 to 2.000	
Minimum dead load	% of Emax	0	
Accuracy	% of Emax	0.025	0.015
Repeatability	% of Emax	0.008	0.005
Hysteresis	% of Emax	0.010	0.005
Creep 30min.	% of Emax	0.015	0.010
Temperature effect on zero	% /10 °C	0.030	0.020
Temperature effect on sensitivity	% /10 °C	0.030	0.020
Compensated temperature range	°C	-10 to 50	
Operating temperature range	°C	-50 to 70 (100*)	
Deflection at Emax	mm	Max 0.10	
Measuring rate	Hz	Up to 1.000	
Supply	Vdc	24Vdc ±10%	
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	2.5	
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc	

* with Teflon cable

Eilersen
The Weighing Experts

Digital Single Point Load Cell - Type SPSXL

CE

0-150kg

Special Features

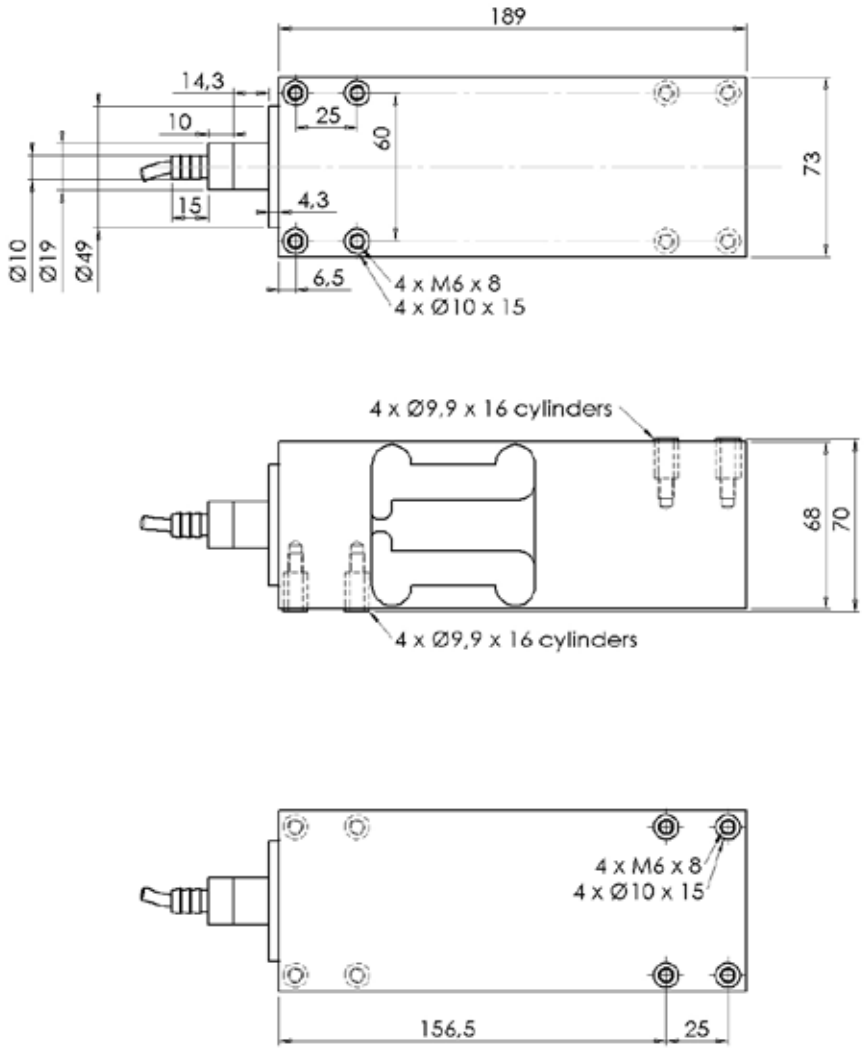
- Stainless steel
- Robust capacitive technology
- High tolerance of up to 1.000% overload
- High accuracy, High resolution
- Platform size up to 1200 x 600mm
- Hermetically sealed to IP68
- Laser welded
- Fast transient response
- Easy mechanical and electrical installation
- Digital filters
- Load cell cable replaceable

Parameter	Unit	0.025%	0.015%
Rated capacity (Emax)	kg	20, 50, 100, 150	
Safe overload limit	% of Emax	300 to 1.000	
Safe sideload limit	% of Emax	500 to 2.000	
Minimum dead load	% of Emax	0	
Accuracy	% of Emax	0.025	0.015
Repeatability	% of Emax	0.008	0.005
Hysteresis	% of Emax	0.010	0.005
Creep 30min.	% of Emax	0.015	0.010
Temperature effect on zero	% /10 °C	0.030	0.020
Temperature effect on sensitivity	% /10 °C	0.030	0.020
Compensated temperature range	°C	-10 to 50	
Operating temperature range	°C	-50 to 70 (100*)	
Deflection at Emax	mm	Max 0.10	
Measuring rate	Hz	Up to 1.000	
Supply	Vdc	24Vdc ±10%	
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	2.5	
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc	

* with Teflon cable

Digital Single Point Load Cell – Type SPSXL

Dimensions (mm)



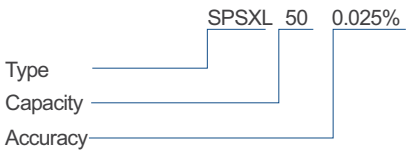
Applications

- Dynamic weighing
- Multihead weighers
- Factory Automation
- Packaging machines
- Filling and dosing
- Flow measurement
- Bench and platform scales
- Conveyor scales
- Process weighing
- Checkweighers

Options

- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

Order information



Digital Beam Load Cell - Type BBL

0-1.000kg

Special Features

- ATEX certified (Zone 1, 2, 21, 22)
- Stainless steel
- Robust capacitive technology
- High tolerance of up to 1.000% overload
- Hermetically sealed to IP68
- Laser welded
- High accuracy, High resolution
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD
- Can be used in both ATEX and non-ATEX installations

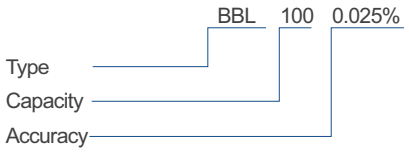
Applications

- Dynamic weighing
- Process weighing
- Tanks and vessels
- Vibration sorters
- Filling and dosing
- Platform scales
- Packaging machines
- Hopper scales
- Belt scales
- Conveyor scales
- Big-bag equipment
- On-board weighing

Options

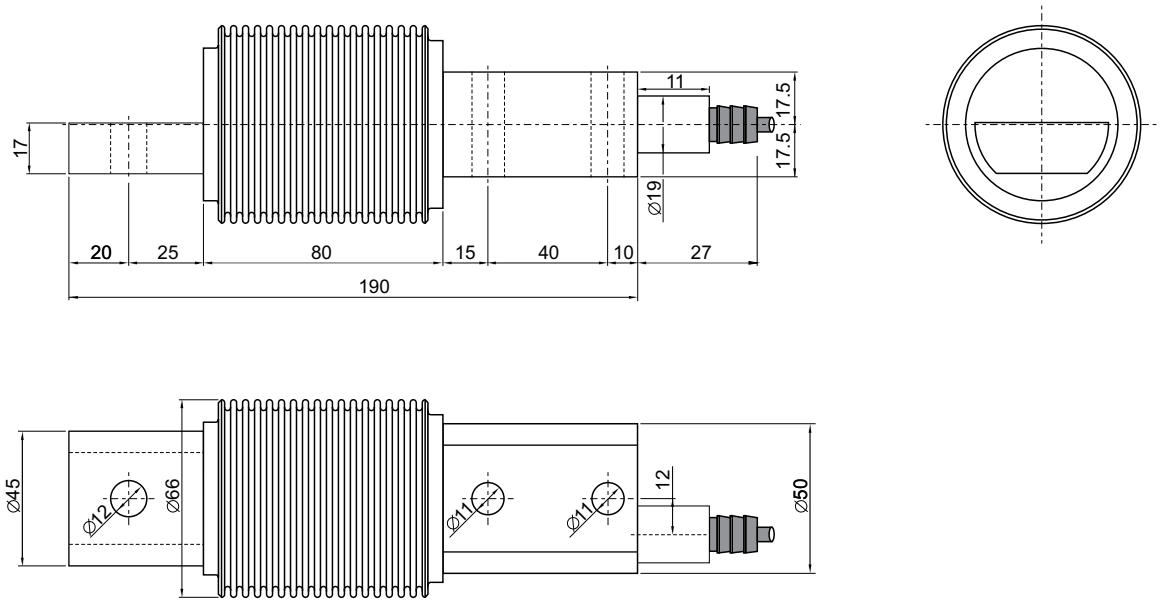
- ATEX (Zone 1, 2, 21, 22) version type BBLA
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Mounting kits available
- Load cell cable length 10, 20, 50 or 100meters

Order information



Digital Beam Load Cell – Type BBL

Dimensions (mm)



Parameter	Unit	0.10%	0.05%	0.025%**
Rated capacity (Emax)	kg	2, 5, 10, 20, 30, 50, 100, 150, 250, 500, 1.000		
Safe overload limit	% of Emax	300 to 1.000		
Safe sideload limit	% of Emax	500 to 2.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.020
Repeatability	% of Emax	0.018	0.015	0.010
Hysteresis	% of Emax	0.033	0.020	0.017
Creep 30min.	% of Emax	0.035	0.025	0.017
Temperature effect on zero	% /10 °C	0.040	0.030	0.016
Temperature effect on sensitivity	% /10 °C	0.040	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	Up to 1.000		
Supply	Vdc	24Vdc ±10%		
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	2.3		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

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Digital Beam Load Cell – Type BBM70

0-3.000kg

Special Features

- ATEX certified (Zone 1, 2, 21, 22)
- Stainless steel
- Robust capacitive technology
- High tolerance of up to 1.000% overload
- Hermetically sealed to IP68
- Laser welded
- High accuracy, High resolution
- Digital filters
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD
- Can be used in both ATEX and non-ATEX installations

Applications

- Dynamic weighing
- Process weighing
- Mobile weighing
- Vibration feeders
- Big-bag equipment
- Hopper scales
- Conveyor scales
- Heavy duty platform scales
- Heavy duty applications
- Offshore applications

Options

- ATEX (Zone 1, 2, 21, 22) version type BBMA
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Mounting kits available
- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

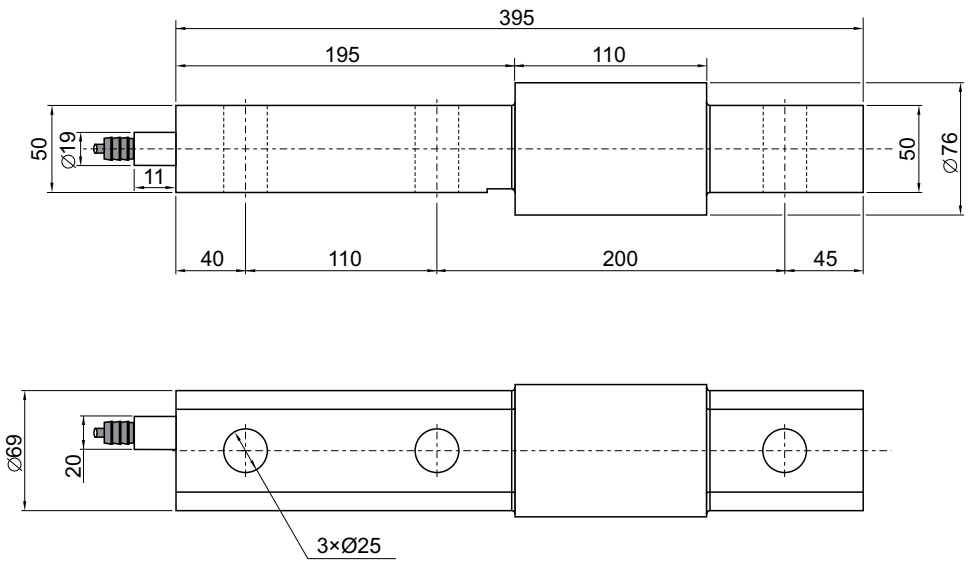
Order information

BBM70 3.000 0.025%

Type
Capacity
Accuracy

Digital Beam Load Cell – Type BBM70

Dimensions (mm)



Parameter	Unit	0.10%	0.05%	0.025%**
Rated capacity (Emax)	kg	1.000, 2.000, 3.000		
Safe overload limit	% of Emax	300 to 1.000		
Safe sideload limit	% of Emax	500 to 1.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.025
Repeatability	% of Emax	0.025	0.020	0.010
Hysteresis	% of Emax	0.033	0.020	0.016
Creep 30min.	% of Emax	0.040	0.025	0.016
Temperature effect on zero	% /10 °C	0.045	0.030	0.016
Temperature effect on sensitivity	% /10 °C	0.045	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	Up to 1.000		
Supply	Vdc	24Vdc ±10%		
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	9.5		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

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Digital Beam Load Cell – Type BBM80

0-7.000kg

Special Features

- ATEX certified (Zone 1, 2, 21, 22)
- Stainless steel
- Robust capacitive technology
- High tolerance of up to 1.000% overload
- Hermetically sealed to IP68
- Laser welded
- High accuracy, High resolution
- Digital filters
- Cable length up to 100meters
- Calibration independent of cable length
- Load cell cable replaceable
- Easy mechanical and electrical installation
- Withstands welding voltages and ESD
- Can be used in both ATEX and non-ATEX installations

Applications

- Dynamic weighing
- Process weighing
- Mobile weighing
- Vibration feeders
- Big-bag equipment
- Hopper scales
- Conveyor scales
- Heavy duty platform scales
- Heavy duty applications
- Offshore applications

Options

- ATEX (Zone 1, 2, 21, 22) version type BBMA
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Mounting kits available
- Customized versions available
- Load cell cable length 10, 20, 50 or 100meters

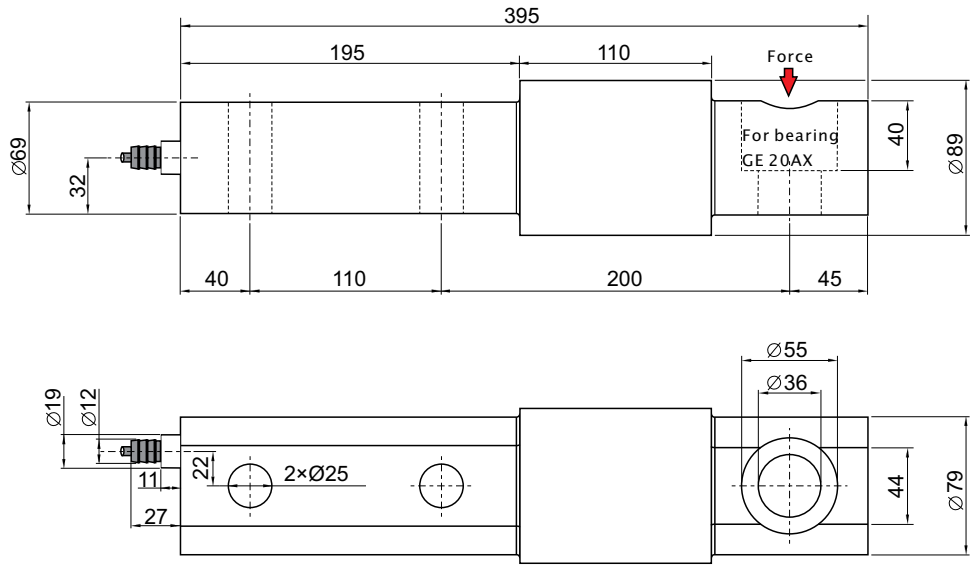
Order information

BBM80 7.000 0.025%

Type
Capacity
Accuracy

Digital Beam Load Cell – Type BBM80

Dimensions (mm)



Parameter	Unit	0.10%	0.05%	0.025%**
Rated capacity (Emax)	kg	5.000, 6.000, 7.000		
Safe overload limit	% of Emax	300 to 500		
Safe sideload limit	% of Emax	500 to 1.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.100	0.050	0.025
Repeatability	% of Emax	0.025	0.020	0.010
Hysteresis	% of Emax	0.033	0.020	0.016
Creep 30min.	% of Emax	0.040	0.025	0.016
Temperature effect on zero	% /10 °C	0.045	0.030	0.016
Temperature effect on sensitivity	% /10 °C	0.045	0.030	0.016
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	Up to 1.000		
Supply	Vdc	24Vdc ±10%		
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	10.5		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc		

* with Teflon cable

** higher accuracies available on request

Eilersen
The Weighing Experts

Digital Compression Load Cell - Type DL

CE Ex

0-5.000kg

Special Features

- Robust capacitive technology
- High tolerance of up to 1.000% overload
- Stainless steel
- Hermetically sealed to IP68
- Laser welded
- ATEX version available (Zone 1, 2, 21, 22)
- Low profile and hygienic design
- High Accuracy, High resolution
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Calibration independent of cable length
- Easy mechanical and electrical installation
- Can be used in both ATEX and non-ATEX installations

Applications

- Tank weighing
- Process weighing
- Big-bag equipment
- Filling and dosing
- Offshore
- Level measurement
- Platform scales
- Hopper scales
- Heavy duty applications
- Belt scales

Options

- ATEX (Zone 1, 2, 21, 22) version type DLA
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Base plate available
- Load cell cable length 10, 20, 50 or 100meters

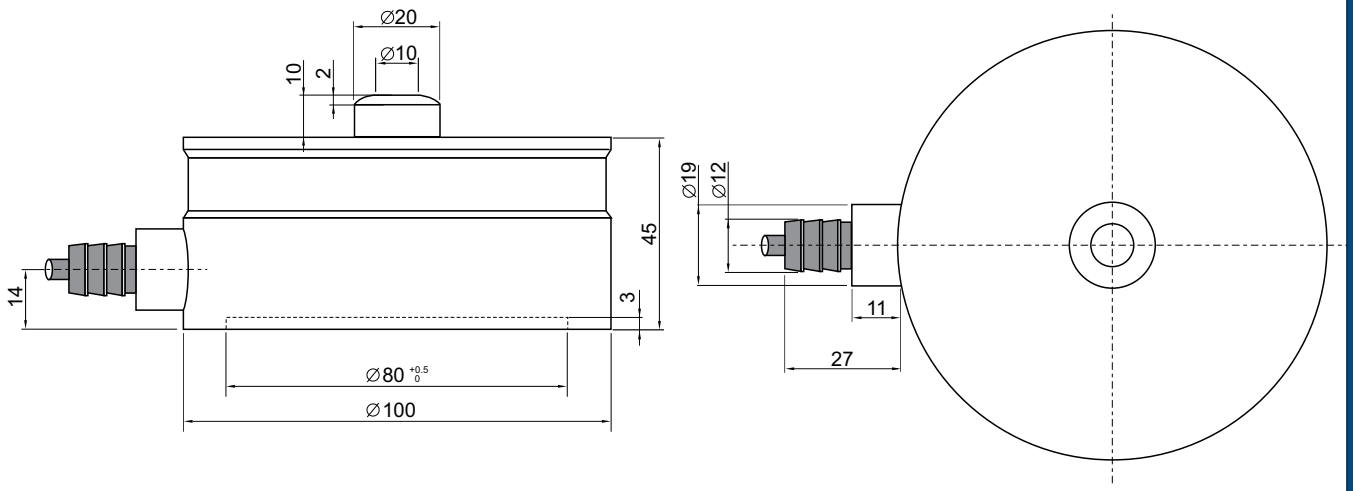
Order information

DL 2.000 0.025%

Type
Capacity
Accuracy

Digital Compression Load Cell – Type DL

Dimensions (mm)



Parameter	Unit	0.10%	0.05%	0.025%
Rated capacity (Emax)	kg	50, 100, 150, 250, 500, 1.000 1.500, 2.000, 3.000, 4.000, 5.000		
Safe overload limit	% of Emax	300 to 1.000		
Safe sideload limit	% of Emax	500 to 2.000		
Minimum dead load	% of Emax	0		
Accuracy	% of Emax	0.060	0.040	0.020
Repeatability	% of Emax	0.020	0.010	0.008
Hysteresis	% of Emax	0.060	0.040	0.020
Creep 30min.	% of Emax	0.060	0.040	0.020
Temperature effect on zero	% /10 °C	0.050	0.030	0.009
Temperature effect on sensitivity	% /10 °C	0.050	0.030	0.009
Compensated temperature range	°C	-10 to 50		
Operating temperature range	°C	-50 to 70 (100*)		
Deflection at Emax	mm	Max 0.10		
Measuring rate	Hz	Up to 1.000		
Supply	Vdc	24Vdc ±10%		
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	1.7		
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc		

* with Teflon cable

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Digital Compression Load Cell – Type DM

CE Ex

0-50.000kg

Special Features

- ATEX certified (Zone 1, 2, 21, 22)
- Robust capacitive technology
- High tolerance of up to 400% overload
- Stainless steel
- Hermetically sealed to IP68
- Laser welded
- Low profile and hygienic design
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Pre-calibrated with signal in kg or N
- Calibration independent of cable length
- Easy mechanical and electrical installation
- Can be used in both ATEX and non-ATEX installations

Applications

- Tank weighing
- Process weighing
- Level measurement
- Filling and dosing
- Large Vessels
- Offshore applications
- Heavy duty applications

Options

- ATEX (Zone 1, 2, 21, 22) version type DMA
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Base plate available
- Load cell cable length 10, 20, 50 or 100meters

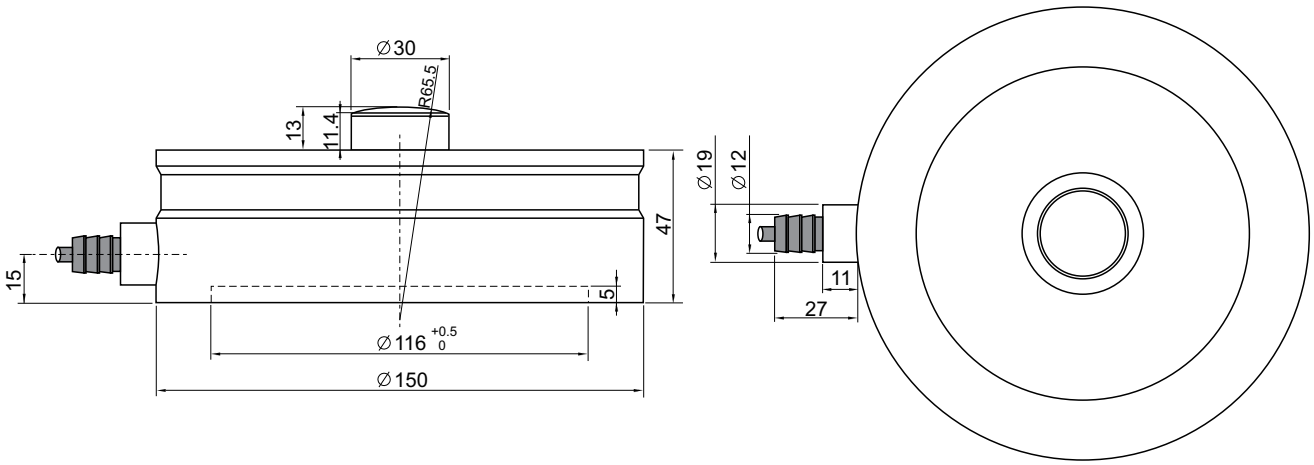
Order information

DM 15.000 0.10%

Type
Capacity
Accuracy

Digital Compression Load Cell – Type DM

Dimensions (mm)



Parameter	Unit	0.10%	0.05%
Rated capacity (Emax)	kg	6.000, 8.000, 10.000, 15.000, 25.000, 50.000	
Safe overload limit	% of Emax	200 to 400	
Safe sideload limit	% of Emax	400	
Minimum dead load	% of Emax	0	
Accuracy	% of Emax	0.080	0.040
Repeatability	% of Emax	0.020	0.010
Hysteresis	% of Emax	0.060	0.030
Creep 30min.	% of Emax	0.060	0.030
Temperature effect on zero	% /10 °C	0.025	0.010
Temperature effect on sensitivity	% /10 °C	0.025	0.015
Compensated temperature range	°C	-10 to 50	
Operating temperature range	°C	-50 to 70 (100*)	
Deflection at Emax	mm	Max 0.10	
Measuring rate	Hz	Up to 1.000	
Supply	Vdc	24Vdc ±10%	
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	8	
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc	

* with Teflon cable

Eilersen
The Weighing Experts

Digital Compression Load Cell – Type DH

0-500ton

Special Features

- ATEX certified (Zone 1, 2, 21, 22)
- Robust capacitive technology
- High tolerance of up to 400% overload
- Stainless steel
- Hermetically sealed to IP68
- Laser welded
- Withstands welding voltages and ESD
- Cable length up to 100meters
- Load cell cable replaceable
- Pre-calibrated with signal in kg or kN
- Calibration independent of cable length
- Easy mechanical and electrical installation
- Can be used in both ATEX and non-ATEX installations

Applications

- Silo weighing
- Level measurement
- Process weighing
- Offshore applications
- Heavy duty applications

Options

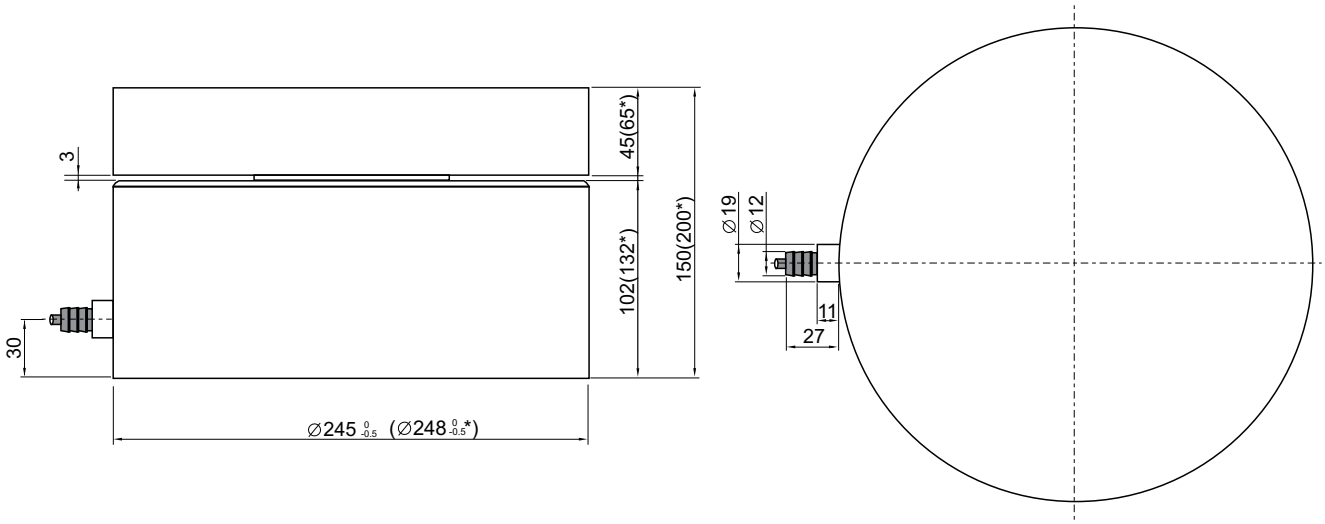
- ATEX (Zone 1, 2, 21, 22) version type DHA
- ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
- Load cell cable length 10, 20, 50 or 100meters

Order information

	DH100	100	0.025%
Type			
Capacity			
Accuracy			

Digital Compression Load Cell – Type DH

Dimensions (mm)



* 200 to 500 ton version

Parameter	Unit	0.25%
Rated capacity (Emax)	ton	100, 200, 300, 400, 500
Safe overload limit	% of Emax	400
Safe sideload limit	% of Emax	500
Minimum dead load	% of Emax	0
Accuracy	% of Emax	0.250
Repeatability	% of Emax	0.060
Hysteresis	% of Emax	0.080
Creep 30min.	% of Emax	0.060
Temperature effect on zero	% /10 °C	0.080
Temperature effect on sensitivity	% /10 °C	0.080
Compensated temperature range	°C	-10 to 50
Operating temperature range	°C	-50 to 70 (100*)
Deflection at Emax	mm	Max 0.10
Measuring rate	Hz	Up to 1.000
Supply	Vdc	24Vdc ±10%
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	65 / 75
Output options		Profibus DP, DeviceNet, Modbus ASCII/RTU, EtherCAT EtherNet/IP, RS485, 4-20mA, 0-10Vdc

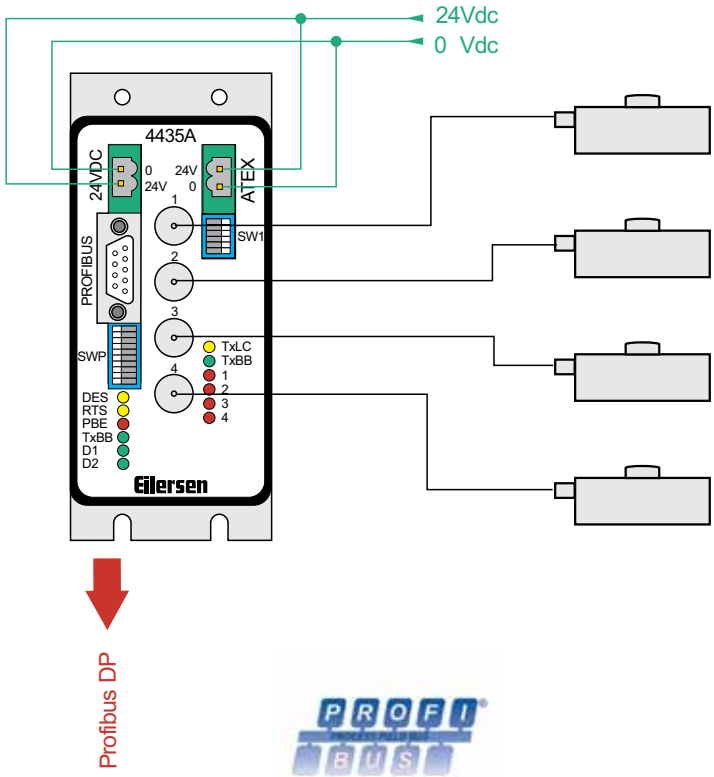
* with Teflon cable

Profibus DP Module - Type 4X35A

Profibus DP Module

Special Features

- Profibus DP output
- Weighing module for up to 4 digital load cells
- For ATEX and non-ATEX applications
- Plug-and-play installation with Eilersen digital load cells
- Advanced digital filters (configurable)
- A "Digital Junction Box" that can be mounted near the load cells or in a central panel
- Small Form Factor
- Setup via dip switches
- For ATEX when supplied by power supply type 4051A
- The power supply 4051A and module type 4X35A must be installed outside the hazardous zone
- Application software can be made by request



Intputs

- Up to 4 coaxial connectors for digital load cells
- Power supply 24Vdc, 1A for Profibus DP
- Non-ATEX applications: 24Vdc, 1A
- ATEX applications: Safe power supply 24Vdc, 0.2A from ATEX power supply type 4051A

Module output

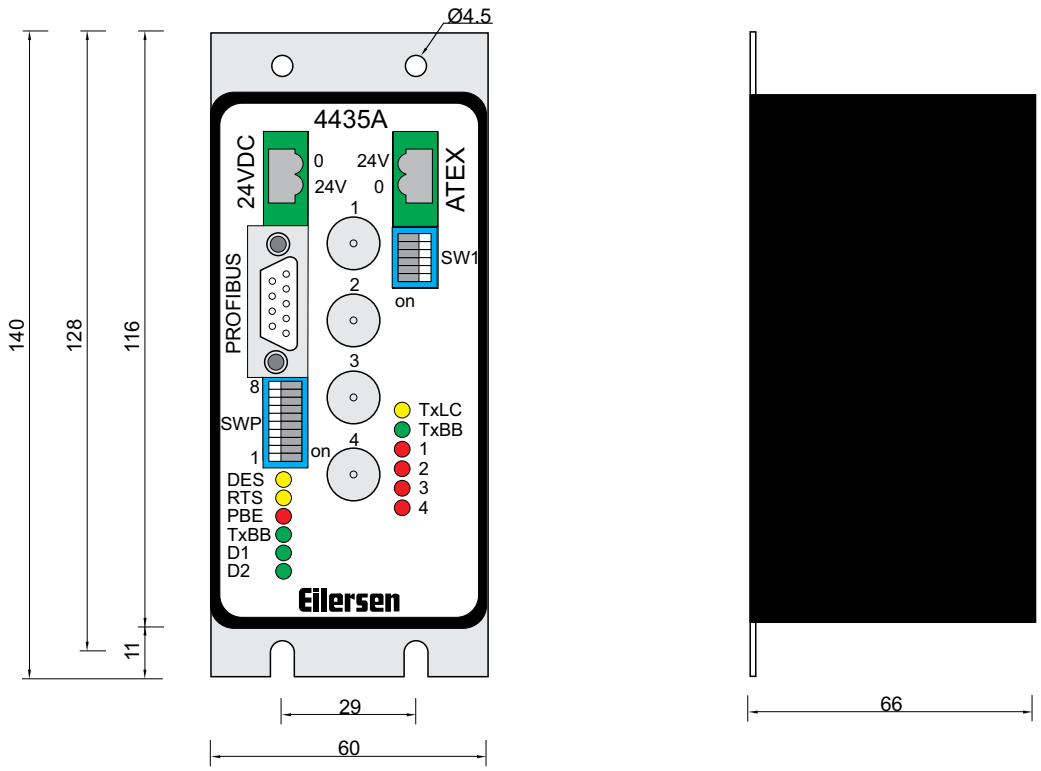
- Profibus DP

Order information

No of load cells	Type
1	4135A
2	4235A
3	4335A
4	4435A

Profibus DP Module - Type 4X35A

Dimensions (mm)



Parameter	Unit	Data
Application		4000 generation load cells and modules
Profibus DP Power Supply	Vdc	24Vdc +/- 10%, 1A
ATEX: Safe Power Supply		ATEX certified power supply type 4051A
Non-ATEX: Standard Power Supply	Vdc	24Vdc +/- 10%, 1A
Operating Temperature Range	°C	-20 to +50
Weight	g	500
Housing		Anodized Aluminum
Mounting		Mounting base or DIN rail

Standard Software Versions**

Version	Description	No. of Load cells	Measuring time	System weight calculation, Zeroing & Calibration
Conctr	Transmits individual weight and status of up to 8 load cells every 20 to 2.000msec. A no. of FIR filters can be activated.	1 ~ 8	20~2.000msec.	Performed in PLC (factors stored in PLC)
Weight	Transmits total load and system status for up to 8 load cells every 200msec.	1 ~ 8	200msec.	Performed in module* (factors stored in module)

* On request from PLC

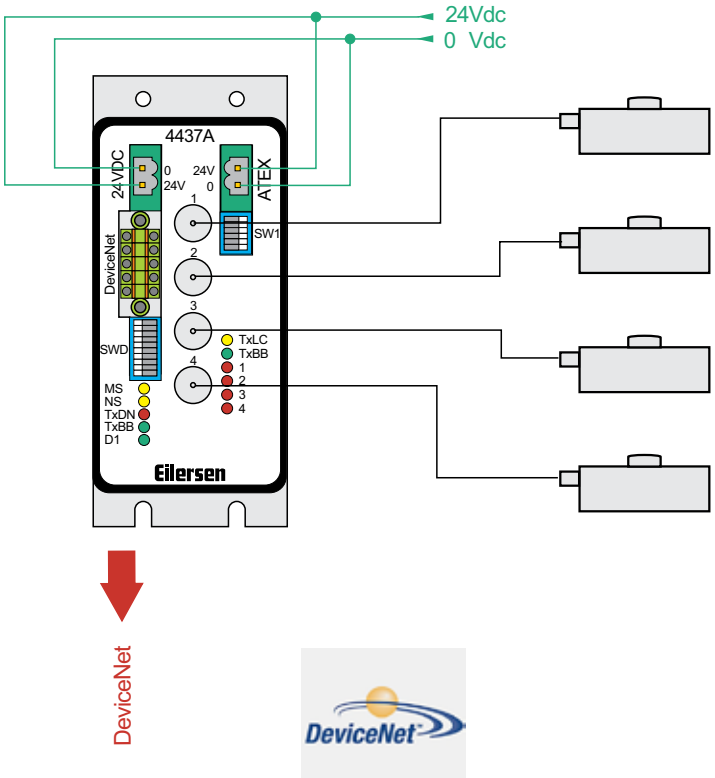
**Application software can be made by request

DeviceNet Module - Type 4X37A

DeviceNet Module

Special Features

- DeviceNet output
- Weighing module for up to 4 digital load cells
- For ATEX and non-ATEX applications
- Plug-and-play installation with Eilersen digital load cells
- Advanced digital filters (configurable)
- A "Digital Junction Box" that can be mounted near the load cells or in a central panel
- Small Form Factor
- Setup via dip switches
- For ATEX when supplied by power supply type 4051A
- The power supply 4051A and module type 4X37A must be installed outside the hazardous zone
- Application software can be made by request



Intputs

- Up to 4 coaxial connectors for digital load cells
- Power supply 24Vdc, 1A for DeviceNet
- Non-ATEX applications: 24Vdc, 1A
- ATEX applications: Safe power supply 24Vdc, 0.2A from ATEX power supply type 4051A

Module output

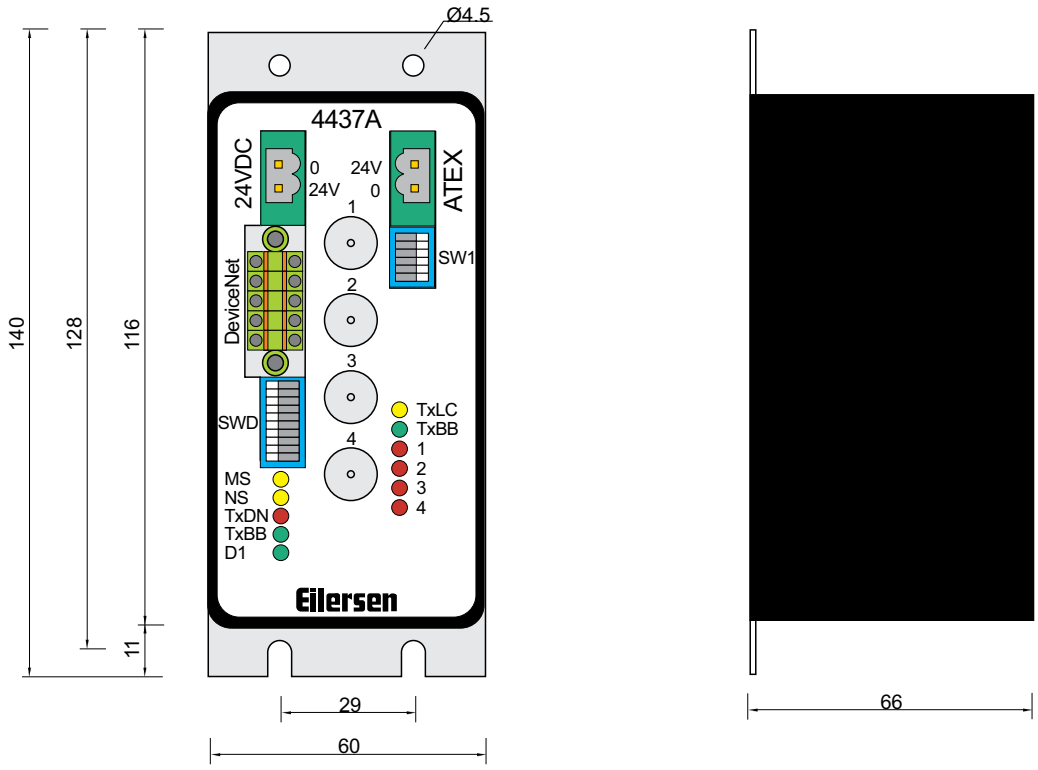
- DeviceNet

Order information

No of load cells	Type
1	4137A
2	4237A
3	4337A
4	4437A

DeviceNet Module - Type 4X37A

Dimensions (mm)



Parameter	Unit	Data
Application		4000 generation load cells and modules
DeviceNet Power Supply	Vdc	24Vdc +/- 10%, 1A
ATEX: Safe Power Supply		ATEX certified power supply type 4051A
Non-ATEX: Standard Power Supply	Vdc	24Vdc +/- 10%, 1A
Operating Temperature Range	°C	-20 to +50
Weight	g	500
Housing		Anodized Aluminum
Mounting		Mounting base or DIN rail

Standard Software Versions**

Version	Description	No. of Load cells	Measuring time	System weight calculation, Zeroing & Calibration
Conctr	Transmits individual weight and status of up to 8 load cells every 20 to 2.000msec. A no. of FIR filters can be activated.	1 ~ 8	20~2.000msec.	Performed in PLC (factors stored in PLC)
Weight	Transmits total load and system status for up to 8 load cells every 200 msec.	1 ~ 8	200msec.	Performed in module* (factors stored in module)

* On request from PLC

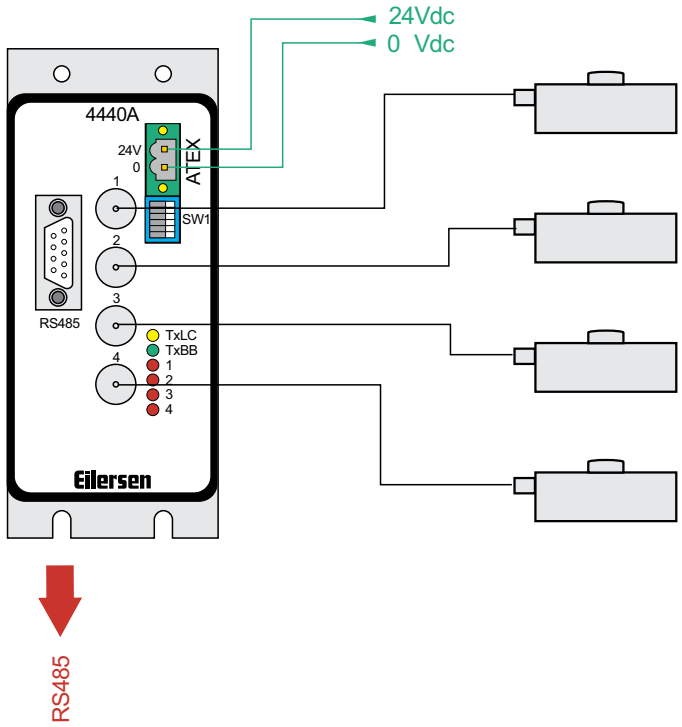
**Application software can be made by request

RS485 Module - Type 4X40A

RS485 Module

Special Features

- RS485 output
- Weighing module for up to 4 digital load cells
- For ATEX and non-ATEX applications
- Plug-and-play installation with Eilersen digital load cells
- Advanced digital filters (configurable)
- A "Digital Junction Box" that can be mounted near the load cells or in a central panel
- Small Form Factor
- Setup via dip switches
- For ATEX when supplied by power supply type 4051A
- The power supply 4051A and module type 4X40A must be installed outside the hazardous zone
- Application software can be made by request



Inputs

- Up to 4 coaxial connectors for digital load cells
- Non-ATEX applications: 24Vdc, 2A
- ATEX applications: Safe power supply 24Vdc, 0.2A from ATEX power supply type 4051A

Module output

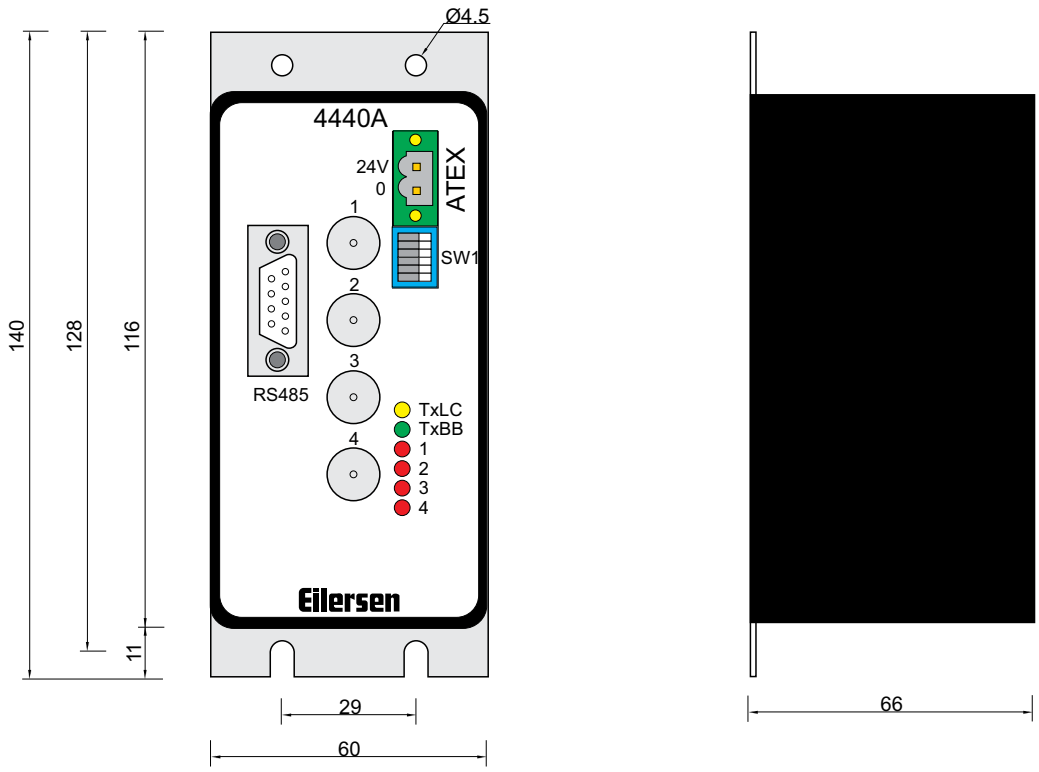
- RS485 sub-D connector

Order information

No of load cells	Type
1	4140A
2	4240A
3	4340A
4	4440A

RS485 Module - Type 4X40A

Dimensions (mm)



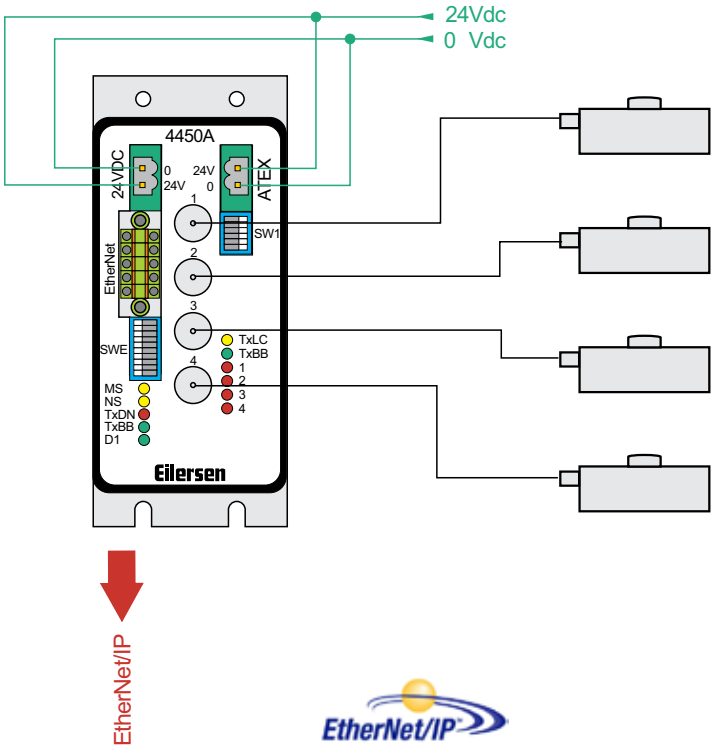
Parameter	Unit	Data
Application		4000 generation load cells and modules
ATEX: Safe Power Supply		ATEX certified power supply type 4051A
Non-ATEX: Standard Power Supply	Vdc	24Vdc +/- 10%, 2A
Operating Temperature Range	°C	-20 to +50
Weight	g	450
Housing		Anodized Aluminum
Mounting		Mounting base or DIN rail

EtherNet/IP Module - Type 4X50A

EtherNet/IP Module

Special Features

- EtherNet/IP output
- Weighing module for up to 4 digital load cells
- For ATEX and non-ATEX applications
- Plug-and-play installation with Eilersen digital load cells
- Advanced digital filters (configurable)
- A "Digital Junction Box" that can be mounted near the load cells or in a central panel
- Small Form Factor
- Setup via dip switches
- For ATEX when supplied by power supply type 4051A
- The power supply 4051A and module type 4X50A must be installed outside the hazardous zone
- Application software can be made by request



Intputs

- Up to 4 coaxial connectors for digital load cells
- Power supply 24Vdc, 1A for EtherNet/IP
- Non-ATEX applications: 24Vdc, 1A
- ATEX applications: Safe power supply 24Vdc, 0.2A from ATEX power supply type 4051A

Module output

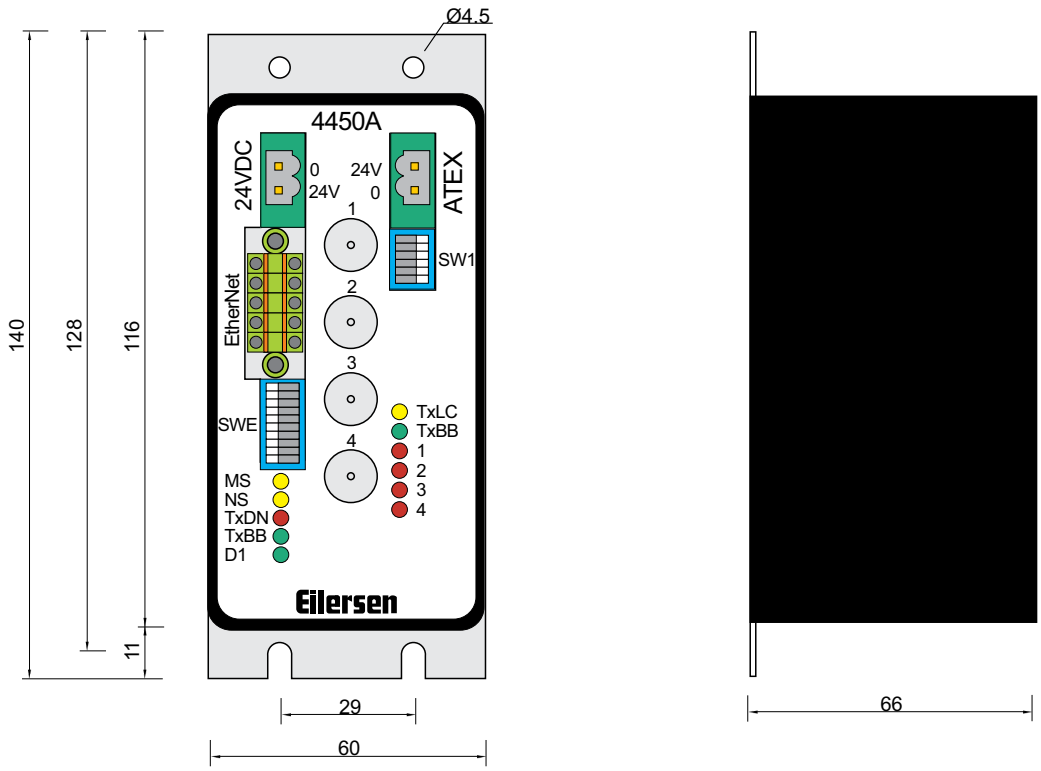
- EtherNet/IP

Order information

No of load cells	Type
1	4150A
2	4250A
3	4350A
4	4450A

EtherNet/IP Module - Type 4X50A

Dimensions (mm)



Parameter	Unit	Data
Application		4000 generation load cells and modules
EtherNet/IP Power Supply	Vdc	24Vdc +/- 10%, 1A
ATEX: Safe Power Supply		ATEX certified power supply type 4051A
Non-ATEX: Standard Power Supply	Vdc	24Vdc +/- 10%, 1A
Operating Temperature Range	°C	-20 to +50
Weight	g	500
Housing		Anodized Aluminum
Mounting		Mounting base or DIN rail

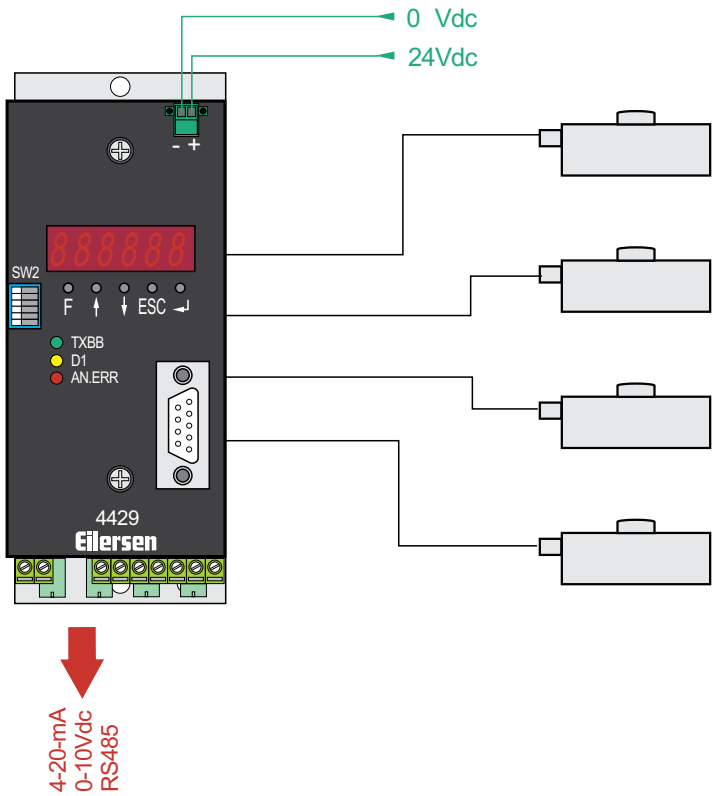
Eilersen
The Weighing Experts

Analog Weighing Module - Type 4X29

4-20mA/0-10Vdc Module

Special Features

- Analog 4-20mA or 0-10Vdc output
- Digital RS485 serial communication
- Six character LED display
- 2 digital inputs + 2 digital outputs
- Weighing module for up to 4 digital load cells
- Shows the weight on each of the connected load cells
- Shows the summed weight for the connected load cells
- Configurable measuring time (40ms -> 4sec)
- 3 different FIR filters selectable by dip switches
- Plug-and-play installation with Eilersen digital load cells
- Input for zero and tare
- A "Digital Junction Box" that can be mounted near the load cells or in a central panel
- Application specific software can be made by request



Inputs

- Up to 4 coaxial connectors for Eilersen digital load cells
- Power supply 24Vdc, 1A
- 2 digital inputs

Outputs

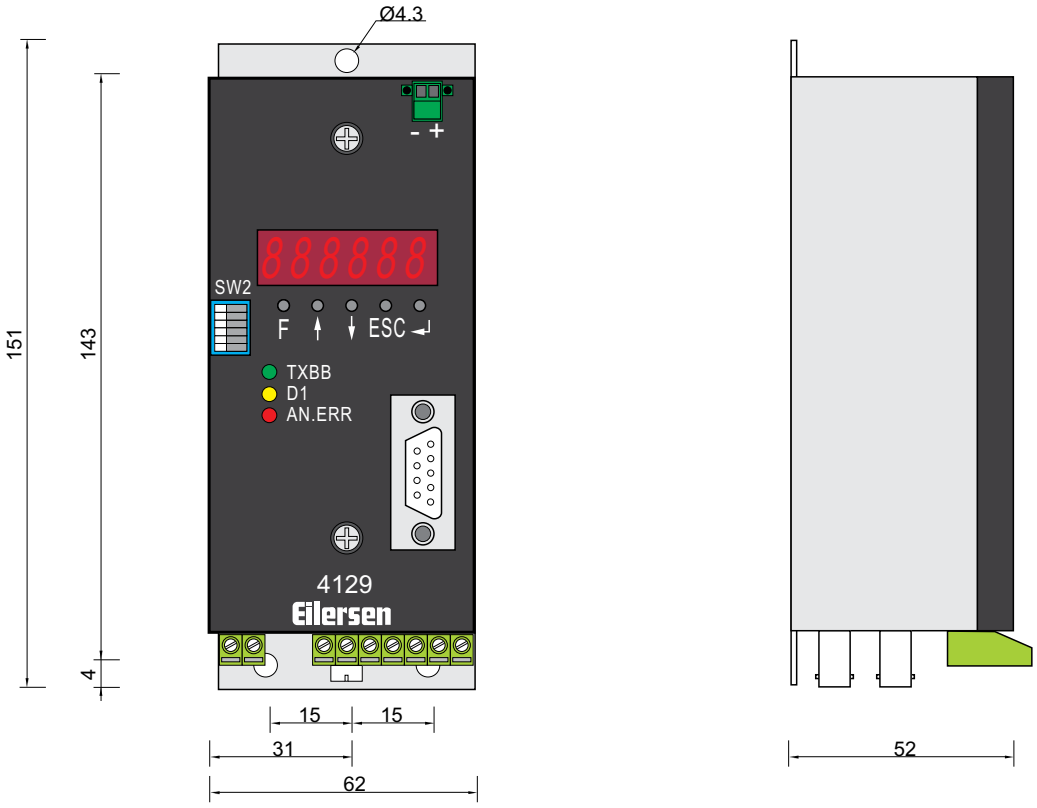
- Analog 4-20mA or 0-10Vdc output
- 2 digital outputs
- RS485 serial output

Order information

No of load cells	Type
1	4129
2	4229
3	4329
4	4429

Analog Weighing Module - Type 4X29

Dimensions (mm)



Parameter	Unit	Data
Application		4000 generation load cells and modules
Power Supply	Vdc	24Vdc +/- 10%, 1A
Operating Temperature Range	°C	-20 to +50
Weight	g	450
Housing		Anodized Aluminum
Mounting		Mounting base or DIN rail

ATEX Certified Power Supply - Type 4051A

ATEX Power Supply

Special Features

- ATEX certified power supply for Eilersen digital weighing modules type 4XXXA
- For hazardous applications in ATEX Zone 1, 2, 21 or 22
- The power supply type 4051A and module type 4XXA must be installed outside the hazardous zone
- Small Form Factor

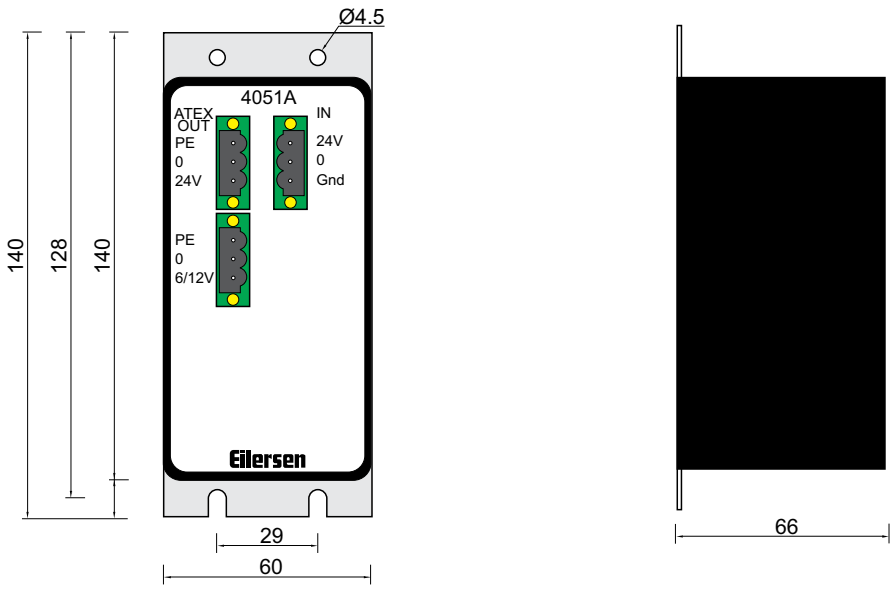
Inputs

- Standard power supply 24 Vdc, 1A

Outputs

- Safe 24 Vdc, 0.2A output

Dimensions (mm)



RS485 Module - Type 4140OEM

CE

RS485OEM Module

Special Features

- RS485 output
- Weighing module with connector for 1 digital load cell
- Plug-and-play installation with pre-calibrated digital load cell
- Advanced digital filters (configurable)
- Setup via dip switches
- Application software can be made by request

Inputs

- Coaxial connector for 1 digital load cell
- Power supply 24Vdc, 1A

Outputs

- RS485

Parameter	Unit	Data
Application		4000 generation load cells and modules
Power Supply	Vdc	24Vdc +/- 10%, 1A
Operating Temperature Range		24Vdc ±10%, 1A
Weight	g	90%RH
Mounting	°C	-20 to +50

▲ Weighing terminal type 5024G mounted in stainless steel box

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www.eilersen.com

Weighing Terminals

Digital LCD Weighing Terminal - Type 5024G

5024G

▲Weighing terminal type 5024G for panel mounting

Special Features

- 5,2" LCD for displaying data and parameters
- Touch keyboard with 7 keys for zeroing, tare function, entering parameters, set-points, etc.
- Alibi memory
- Ethernet, RS485, and 4-20mA output for communication with PCs, PLCs, central data processing systems, printers, bar code readers, etc.
- 4 configurable 24Vdc I/O
- Function keys for Start/Stop and Print for handling various processes
- Durable front with no keyboard to be worn out

Introduction

- Fully digital OIML certified Weighing terminal type 5024G with alibi memory and software for standard weighing applications
- The Eilersen weighing terminals feature a digital signal processor for displaying and processing the data from the Eilersen range of digital load cells and force transducers
- Special application software can also be developed to customer specifications

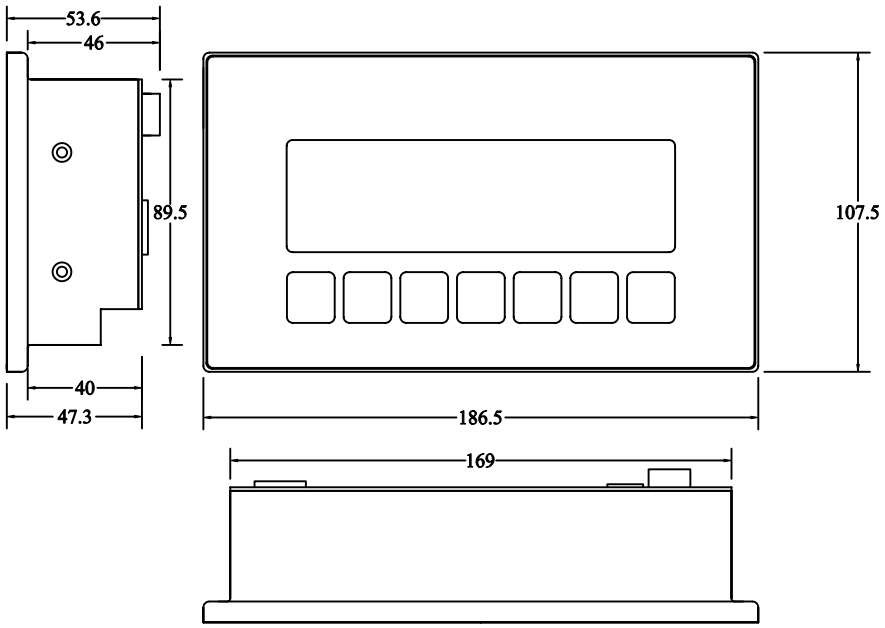
Applications

Application software is available for all standard applications:

- Scales
- Filling & Dosing
- Checkweighing
- Force measurement
- Vessel weighing
- Level-by-weight
- Customer specific application software

Digital LCD Weighing Terminal - Type 5024G

Dimensions (mm)



Parameter	Data
Housing	Stainless steel
Mounting	Desktop, wall or panel
Keyboard technology	Capacitive Touch
Memory	4Mb
Digital input / output	4 configurable, 24Vdc +- 20%, 0,1A
Interfaces	1 x RS485, 1 x EtherNet, 1 x 4-20mA
Power supply	24Vdc +- 10%, 2A
Temperature range	-20 to +50 degrees Celsius
Humidity	90% RH, non condensing
IP protection	- Standard is panel mounting IP44 - Stand alone with AISI316 IP66 housing

Digital LED Weighing Terminal - Type MCE9625L

MCE9625L

▲ Weighing terminal type MCE9625L shown in stainless steel housing

Special Features

- 2 x RS485, 1 x RS485/422, 2 x RS232 serial interfaces
- 3 x 24Vdc inputs and 3 x 24Vdc outputs
- 7-segment LEDs for displaying data and parameters
- 7 x LEDs for signalling: Zero valid, In on/off, Out on/off
- Numeric keyboard with keys for zeroing, tare function, gross/net and entering parameters, set-points etc.
- Function keys for Start/Stop and Print for handling various processes
- Ten function keys for entering and controlling parameters
- Connection to Fieldbus and supervisory (ERP) systems
- Optional extra LEDs for signalling in OEM applications
- Optional I/O extension: 4 x 24Vdc digital inputs and 8 x 24Vdc, 0.1A digital outputs for connection to photo cells, relays, actuators etc.

Introduction

- Fully digital OIML certified Weighing terminal type MCE9625L with software for all standard weighing applications
- The Eilersen weighing terminals feature a digital signal processor for displaying and processing the data from the Eilersen range of digital load cells and force transducers
- The MCE9625L is a weighing terminal with internal recipe handling to allow automation of batching and manual additions. The weighing terminal features various batch functions for direct control of batch components
- Your investment is protected as the weighing terminal can be extended with extensive functions and optional external communication via RS485, Profibus DP, DeviceNet, EtherNet, 4-20mA etc.
- Special application software can also be designed to customer specifications

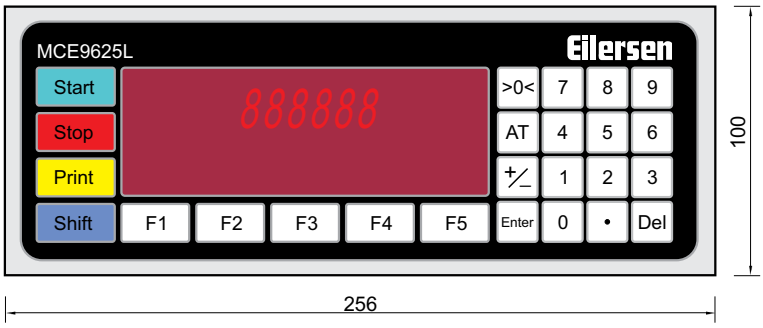
Applications

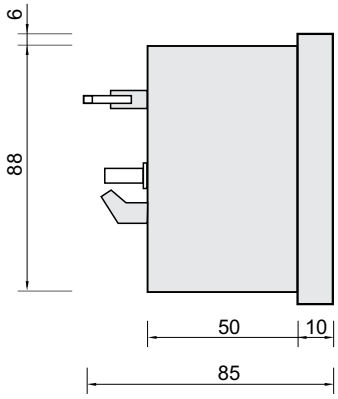
Application software is available for all standard applications:

- Scales
- Filling & Dispensing
- Dosing
- Mixing
- Batching with recipe handling
- Loss-in-Weight
- Force measurement
- Flow
- Vessel weighing
- Level-by-weight
- Checkweighing
- Belt Scales
- Customer specific application software

Digital LED Weighing Terminal - Type MCE9625L

Dimensions (mm)





Note! Panel mounting opening: 245×90mm

Parameter	Data
Digital input / output	Three inputs 24Vdc +- 20% and three outputs 24Vdc/AC +- 20%, 0.1A
Communication	2 x RS485, 1 x RS485/422, 2 x RS232
Jumper	1 accessible jumper for hardware lock of certified parameters
Memory	SEEPROM for non-volatile storage of parameters
Power supply	24Vdc +- 20 %, 0.5A
Temperature range	-30 to +60 degrees Celsius
Humidity	90% RH, non condensing
IP protection	- Standard is panel mounting IP44 - Stand alone with AISI316 IP54 housing - Stand alone with AISI316 IP66 housing

Digital LCD Weighing Terminal - Type MCE9625G

MCE9625G

▲Weighing terminal type MCE9625G for panel mounting

Special Features

- 2 x RS485, 1 x RS485/422, 2 x RS232 serial interfaces
- 3 x 24Vdc inputs and 3 x 24Vdc outputs
- 256 x 64pixel (40 x 8 characters) graphic LCD display with LED backlight for displaying data and parameters plus specific functions for the ten function keys, help screens etc.
- Alphanumeric keyboard with keys for zeroing, tare function, gross/net and entering parameters, set-points, etc.
- Function keys for Start/Stop and Print for handling various processes
- Ten function keys for entering and controlling parameters
- Connection to Fieldbus and supervisory (ERP) systems
- Optional I/O extension: 4 x 24Vdc digital inputs and 8 x 24Vdc, 0.1A digital outputs for connection to photo cells, relays, actuators etc.

Introduction

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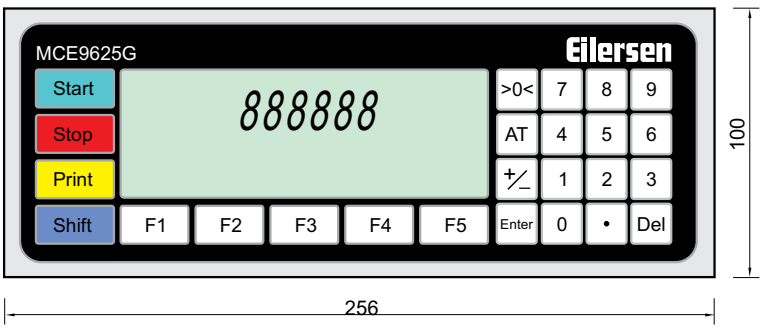
Applications

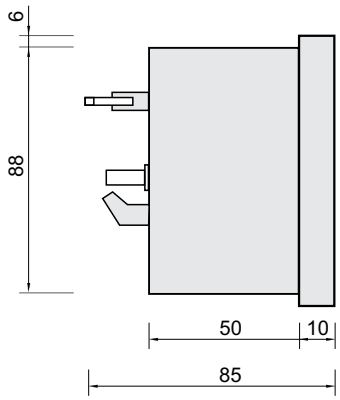
Application software is available for all standard applications:

- Scales
- Filling & Dispensing
- Dosing
- Mixing
- Batching with recipe handling
- Loss-in-Weight
- Force measurement
- Flow
- Vessel weighing
- Level-by-weight
- Checkweighing
- Belt Scales
- Customer specific application software

Digital LCD Weighing Terminal - Type MCE9625G

Dimensions (mm)





Note! Panel mounting opening: 245×90mm

Parameter	Data
Digital input / output	Three inputs 24Vdc +- 20% and three outputs 24Vdc/AC +- 20%, 0.1A
Communication	2 x RS485, 1 x RS485/422, 2 x RS232
Jumper	1 accessible jumper for hardware lock of certified parameters
Memory	SEEPROM for non-volatile storage of parameters
Power supply	24Vdc +- 20 %, 0.5A
Temperature range	-30 to +60 degrees Celsius
Humidity	90% RH, non condensing
IP protection	- Standard is panel mounting IP44 - Stand alone with AISI316 IP54 housing - Stand alone with AISI316 IP66 housing

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Rev. 1-2012