5. Fastening

Note:

Do not unscrew or adjust any screws on the load corners until all load corners are installed.

The load corners are inserted between two plane surfaces. The load corners are screw fitted to the top and bottom mounting plate with 4 M10 screws in each case. The holes in the plates of the load corners are sized larger for subsequent alignment.

6. Attaching the load corners

Route the strain gauge weighing cell cables to the terminal box or terminal.

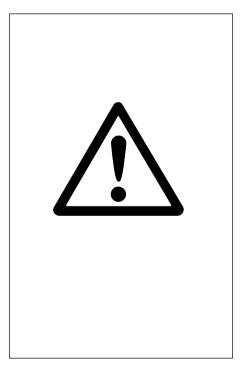
The conductor cores of the strain gauge connection cables have the following assignments:

Signal + (brown) Signal - (white) Supply + (pink) Supply - (grey)

Attach the connection leads in accordance with the above color code.

For adjustment of the load corners, please consult the appropriate operating instructions of the display units used.

7. Cautionary notes for Ex versions

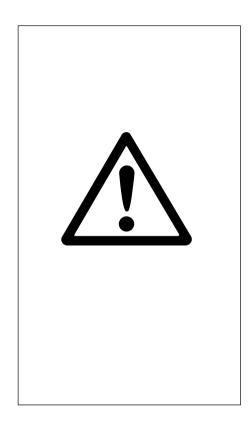


The explosion-protected load corners number among the products used in hazardous areas and which are associated with an increased liability risk.

When the explosion-protected load corners are installed, it is imperative to obey the following basic rules:

- Requirements from the regulations governing electrical systems in hazardous areas must be met (ElexV in Germany).
- The Ex load corners may be installed only by a qualified electrician as described in DIN/VDE 0165.
- A check must be made to see if special clothing or special tools are needed for work in the hazardous area of the enduser.
- Making and isolating the connection to the power supply must be effected solely by electricians of the end user.

Cautionary notes before the installation



The explosion-protected load corners number among the products used in hazardous areas and which are associated with an increased liability risk.

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- A check must be made to see if special clothing or special tools are needed for work in the hazardous area of the enduser.
- Making and isolating the connection to the power supply must be effected solely by electricians of the end user.

Before you start the installation, check whether all requirements for installation in

4. Installation information

- Weighing cells and force transducers should always be installed so that the load is transmitted to the transducers vertically and axially.
- Loading of the weighing cell through lateral forces, bending and torsional moments as well as parallel forces must be avoided.
- The load corners can be matched to both the load carrier and the local conditions.
- Containers can be supported on 3 or 4 load corners, depending on the number of lugs.
- The load corners should be arranged in the upper part of the container. A container guide system to block the effect of wind pressure or other horizontal forces is then often unnecessary.
- Depending on the accuracy requirements of the weighing equipment, permanently attached pipelines and the like should be horizontal and provided with flexible connecting links.



- The load corners can be set as a fixed point or free swinging on site taking into account the prevailing conditions.

Example: A = Fixed point

B = Stops with minimum setting

C = Free support

- In the normal case, only one of the load corners can be set as a fixed support; the other load corners must be set as free supports.
- With the B settings, various expansions and/or deformations must be taken into account.
- Roller conveyors must be aligned at the transition points so they have the same height.
- With crane loading, work must be performed with max. 3 m/min lowering speed or shockabsorbing materials used between the load carrier and load corners.



1. Use

Load corners are suitable for the mounting of load carriers, e.g. platforms, containers, tanks, roller conveyors, conveyor belts, agitators or other production equipment.

2. Technical data

2.1 Standard version

Housing material Chrome-nickel steel X5 CrNi 1810

Weighing cell Ring load cell (RLC)

Identification of the weighing cell

Type label at the end of the cable of the RLC

Material High-grade steel

Type of protection Hermetically sealed, IP 68/66

Measurement path Approx. 0.3 mm

Characteristic value 2 mV/V

Interconnection characteristic

Supply voltage

Nominal temperature range

Operating temperature range

Within +/- 0.02 %

15 V, max. 30 V

-10 to +40 °C

-30 to +70 °C

Load limit 150 % of the load cell capacity

2.2 Additional features of Ex version

Type of protection II 2G EEx ia IIC T6....T4

-20°C ≤ Ta +40°C II 2D IP68/66 T 70°C

Identification Ex stamp on weighing cell

weighing cell cable marked blue

Other data can be found in the declaration of conformity of the Ex weighing cells.

3. Standard nominal loads

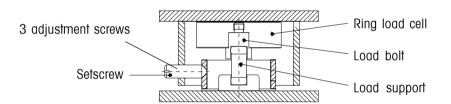
Model	Nom. load (t)	Load limit (t)	Side load (t)	Lifting force (t)	Cell cable (m)
RWM1	0.5	0.75	_	_	3
	1	1.5	_	_	3
RWM2	0.5	0.75	0.5	0.25	3
	1	1.5	0.5	0.25	3
	2	3	1	0.5	5
	3.5	5.25	1	0.5	5
	5	7.5	1	0.5	5

8. Adjustments

RWM1: No adjustment necessary as there are no lateral stops and no arresters.

RWM2: Centring of the load cell with the top and bottom part of the load corner is done in the factory. After alignment and installation of all load corners, the 3 horizontal oscillation limit screws (adjustment screws) must be adjusted to between 1 and max. 2 mm play, depending on the application, and securedby lock nuts. Through this optional adjustment possibility of the load corners under a load carrier, movements of the load carrier in a

horizontal direction can be matched to different circumstances.



9. Spare parts list

Designation	Order number	Minimum order quantity	
Ring load cell 0.5 t - 3000d Ex1	00505697	1	
Ring load cell 1 t - 3000d Ex1	00505698	1	
Ring load cell 2 t - 3000d Ex1	00205396	1	
Ring load cell 3.5 t - 3000d Ex1	00205397	1	
Ring load cell 5 t - 3000d Ex1	00205398	1	
Leveling foot, adjustable (RWM1)	00204970	1	
O-ring	00203936	1	
Load support (RWM2)	00205403	1	
Load bolt 0,5t/1t (RWM2)	00205108	1	
Load bolt 2t/3,5t/5t (RWM2)	00205406	1	
Setscrew M12x40 (RWM2)	00205404	3	

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Installation instructions

METTLER TOLEDO MultiRange RWM1, RWM2 load corners



