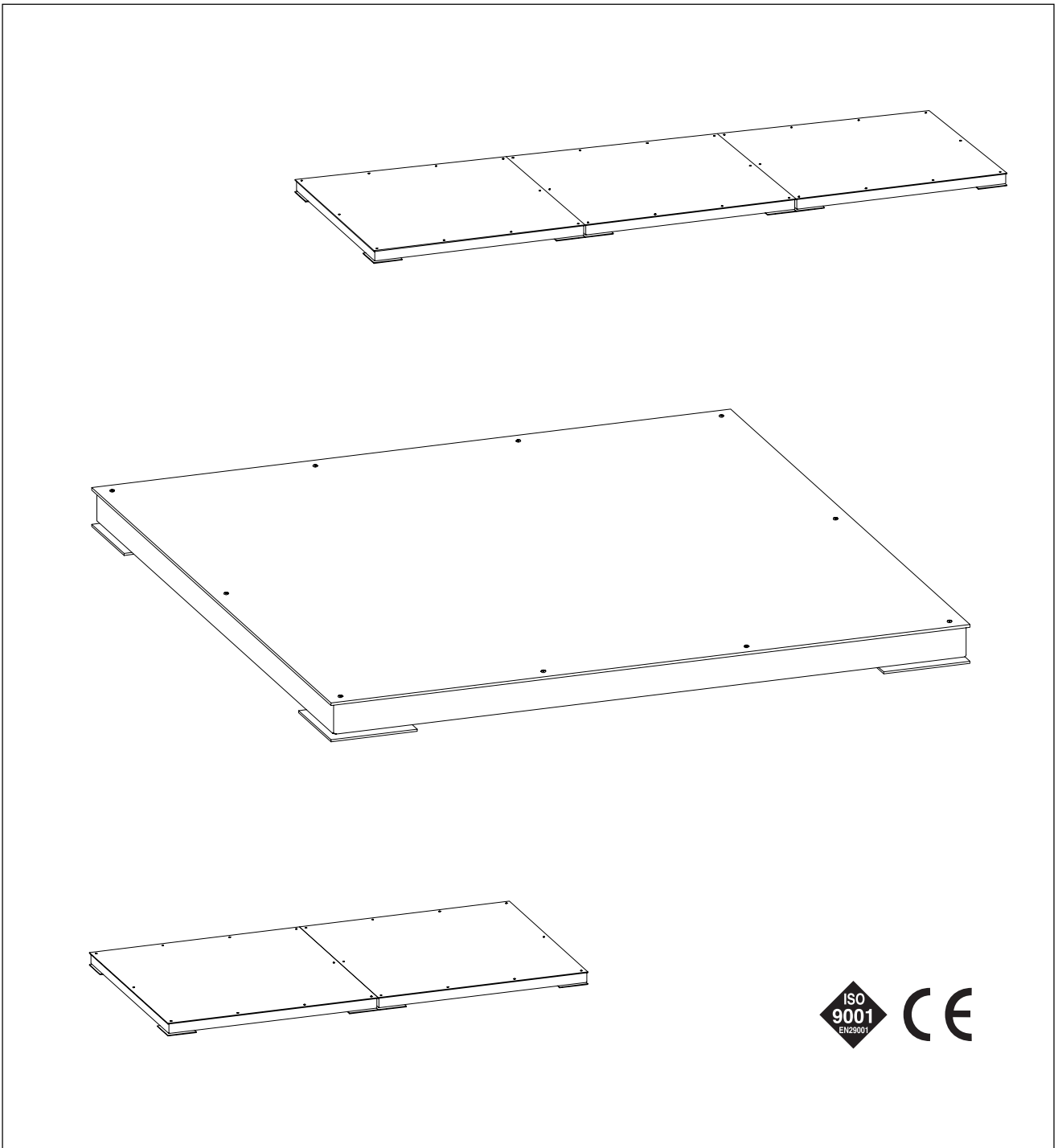


Installation information

METTLER TOLEDO MultiRange
Floor/Pit scales
DRF... / DSF...

METTLER TOLEDO



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1. Installation

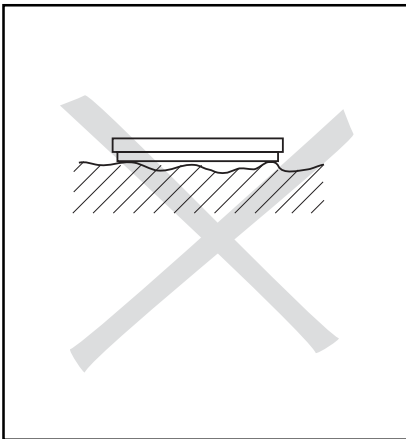
1.1 Preparatory work

DRF/DSF-line painted version

- Never operate in hazardous areas!

DRF/DSF-line stainless steel version

- The explosion-protected weighing platform is approved for operation in hazardous areas. (Technical data see operating instruction)
There is an increased danger of injuries and damage when using the weighing platform in hazardous areas! Exercise particular care when using in such areas. The rules for behavior are based on the concept of " Safe Distribution" established by METTLER TOLEDO.



Selection of the location

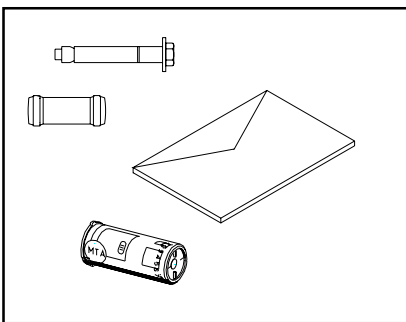
- The foundation at the installation site must be capable of safely supporting the weight of the scale at the support points when it carries the maximum load. At the same time, it should be so stable that no vibrations occur during weighing operations. These requirements also apply if the weighing platform is integrated in conveying systems and the like.
- Ensure the vibrations due to machines near the installation site are kept to a minimum.

Ambient conditions for the painted version

- Use weighing platform only in a dry environment.

Ambient conditions for the stainless steel version

- Weighing platform can be used in a dry or wet environment.



Unpacking the accessories

Please ensure that the accessories supplied with the weighing platform are completely removed from the load frame.

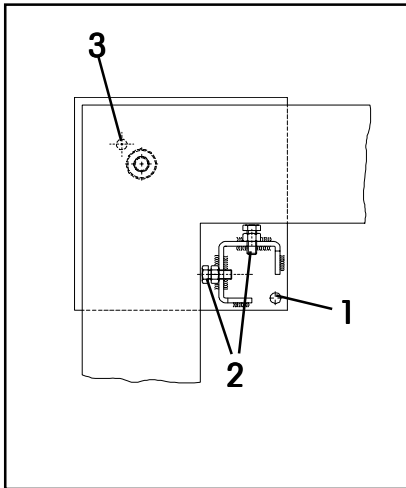
- 1 set dowels
- 1 set load bolts
- 1 set brackets (only with several modules)
- 1 set labels
- 1 identcard
- 1 operating instruction

1.2. Equipotential bonding

The equipotential bonding must be installed by a professional electrician when using the weighing platform in zones 1/2 and 21/22. METTLER TOLEDO Service only has a monitoring consulting here.

- => Connect equipotential bonding (PA) of all devices (weighing platform and service terminal) in accordance with the country-specific regulations and standards. In the process, make sure that all device housings are connected to the same potential via the PA terminals.

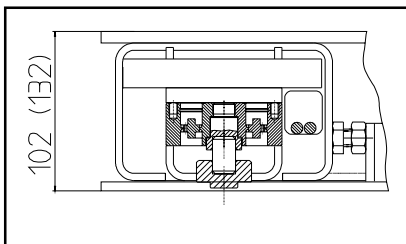
1.3 Floor installation



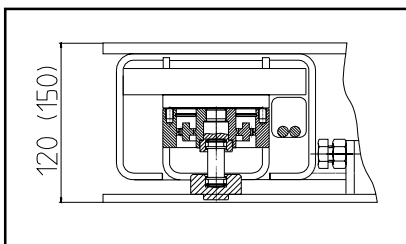
Fastening

- Unscrew fastener screws of the load plate and remove load plate.
- Then set up the **complete** scale at its final location. The foundation must be level. Small differences in height can be compensated by use of adjustment plates.
- Mark drill positions (1). Drill out holes for dowels and vacuum off dirt particles.
- Fasten baseplates to the floor using heavy duty dowels.
- Unscrew stop screws (2) and then lift off load frame.
- Mark drill positions (3). Drill out holes for dowels and vacuum off dirt particles.
- Fasten baseplates with the remaining heavy duty dowels to the floor.
- Remove assembly bolts and insert load supports in the baseplates.
- Mount load frame perpendicularly. Route connection cable to module 1.
- Install connection brackets (see 1.4.2) and adjust stops.

Assembly position

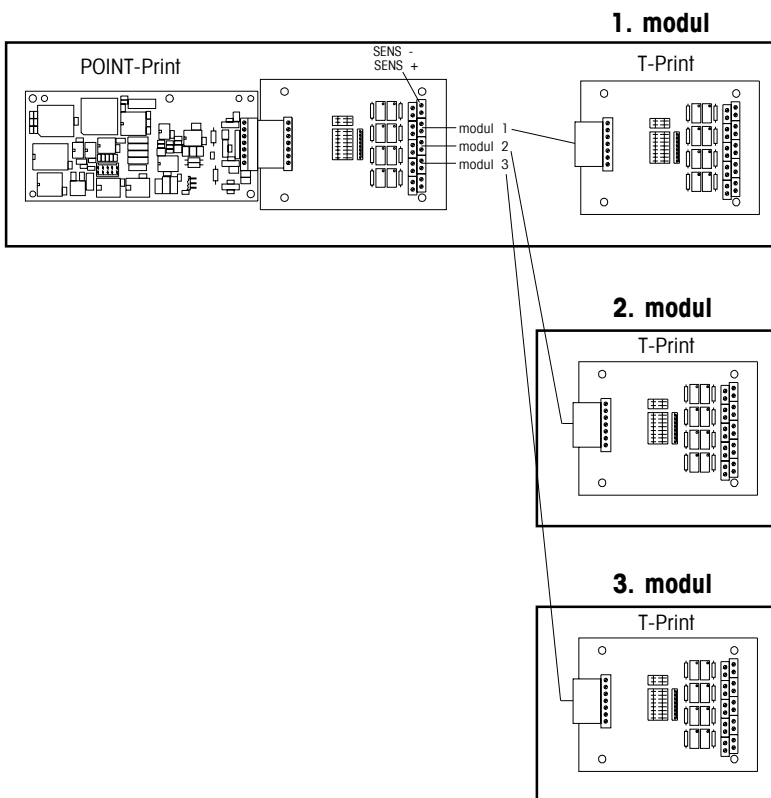


Weighing position



1.4 Connection of several modules

1.4.1 Electronic connection



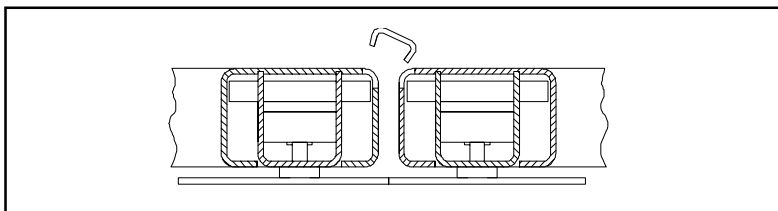
Connection of modules

- When connecting additional modules, pay attention to the identification of the modules..
- The modules must not be mixed up as they have been matched to one another with the potentiometer on the POINT-Print.
- The connections SEN+ and SEN- of modules 2 and 3 must be connected to the SENS lines of module 1 at the POINT-Print.

Attachment of connection cables

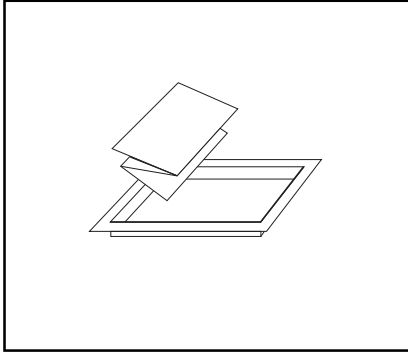
Terminal	POINT / T	Color
EXE +		gray
EXE -		blue
SIG +		white
SIG -		brown
SEN +		yellow
SEN -		green

1.4.2 Mechanical connection



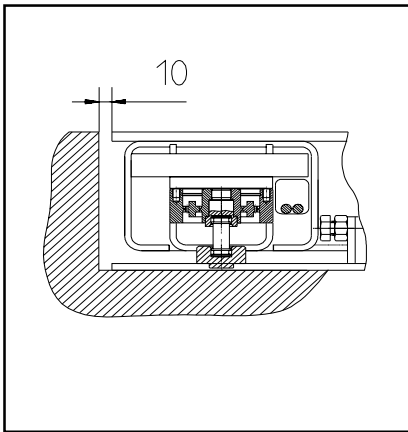
- When all scales are fastened to the floor, the modules are connected with the fastener brackets.
- Note that the stops must be adjusted so that the scale oscillates.

1.5 Pit installation



Preparing the pit

The pit installation kit includes the fastening material and a detailed set of pit installation instructions. Proper preparation of the pit following these instructions is assumed here.



Installing the weighing platform

Some of the work steps involved in installation in the pit are the same as those in floor installation.

- Measure pit depth at the corners (DRF... 125 mm, DSF... 155 mm);
- Align all modules in the pit so that there is a gap of approx. 10 mm at the sides.
- Fasten the scale as described for the floor installation.
- When all modules are installed, the connection cables can be wired as described in section 1.4.1.

1.6 Terminal connection

- Route connection cable to the terminal.

Caution

Route connection cable to the terminal such that it is protected against possible damage.

- Attaching terminal.
Consult the description of the terminal regarding the steps for its attachment.

2. Scale configurations

2.1 DRF.../DSF... configurations

The scale is configured in the factory as follows:

- verifiable
- SingleRange, 3000 e / 6000 e resolution

The identcard is prepared in the factory with the appropriate measurement data plate.

Type	Maximum load	Readability		
		SingleRange SR verifiable 1 x 3000 e	1 x 6000	configurable * MultiRange MR verifiable
DRF/DSF3000...	3000 kg	1 kg	0,5 kg	0,5 / 1 kg
DRF/DSF6000...	6000 kg	2 kg	1 kg	1 / 2 kg
DSF12000...	12000 kg	5 kg	2 kg	2 / 5 kg

* IDNET-version

The scale types listed above are supplied with an A/D-converter Point as standard. Additional versions can thus be configured in the service mode (free mode) description service manual A/D-converter Point 22004256.

3. Planning of attachments

3.1 General information

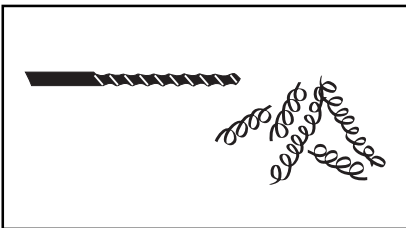


The weighing platform may be fixed only at the corners of the base frame.

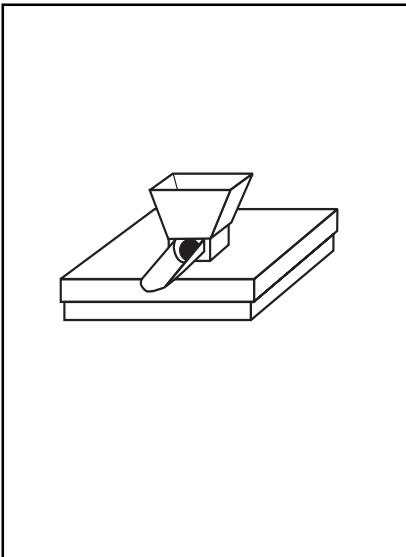
Moving or rotating parts on the weighing platform must be so designed that they do not influence the weighing result. Rotating parts must be balanced.

The load frame must be free on all sides to ensure that accumulated dirt or any parts which drop down do not form a bridge between it and the base frame.

Cables or tubing between the weighing platform and other machine parts must be routed so that they do not exert any force on the weighing platform.



In the mounting of attachments, ensure that no metal filings or turnings fall into the gap between the strain gauge weighing cell and the load frame. Clean gap on completion of mounting work.



Preload range

The weight of the structural parts which are permanently mounted on the weighing platform is called the preload. If the preload exceeds the preload range, the weighing platform must be compensated electrically, so that the complete weighing range becomes available.

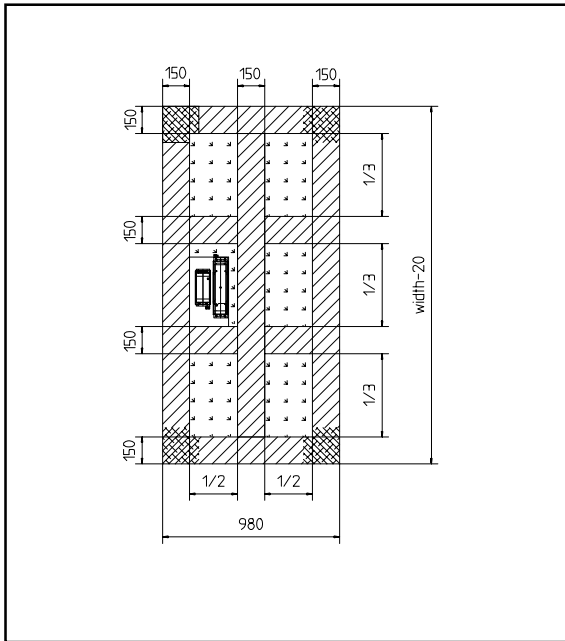
Type	Max. load	Max. preload *
DRF.../DSF3000...	3000 kg	4500 kg
DRF6000...	6000 kg	1500 kg
DSF6000...	6000 kg	7500 kg
DSF 12000	12000 kg	3000 kg

* **Attention:**

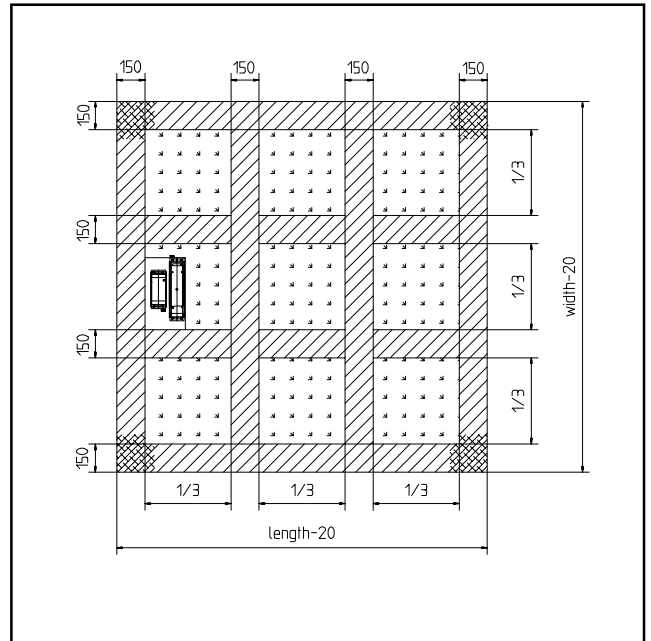
The preload range and the zero setting range must be within the maximum preload.

3.2 Fastening possibilities

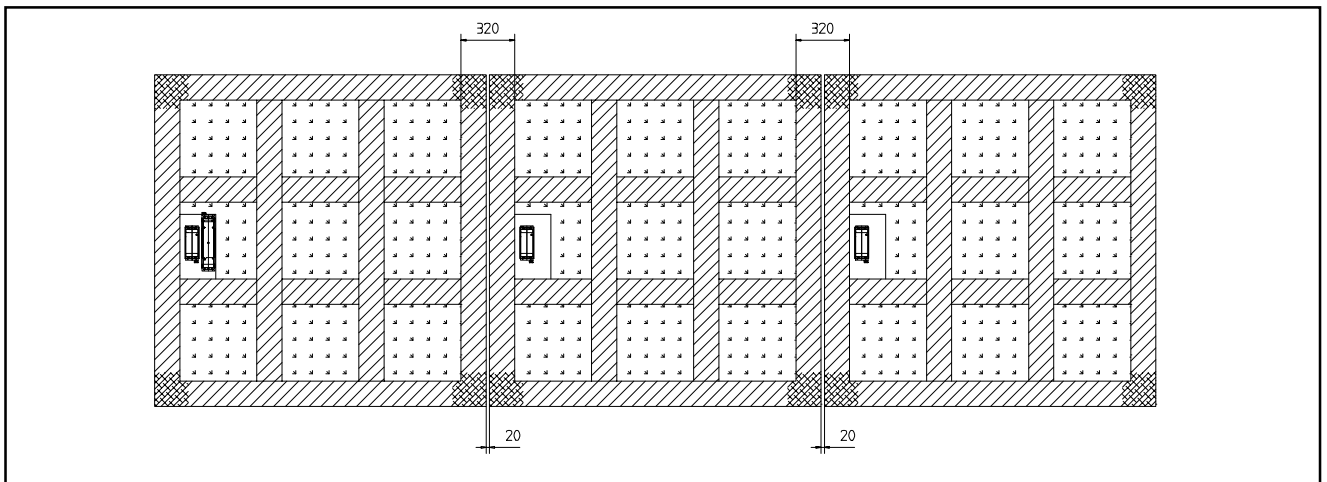
Module size 1000*1500 up to 1499*2000






Module size 1500*1500 up to 2000*2000



Connection of several modules



-  no fastening
-  no breakthrough possibility
-  breakthrough possibility



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