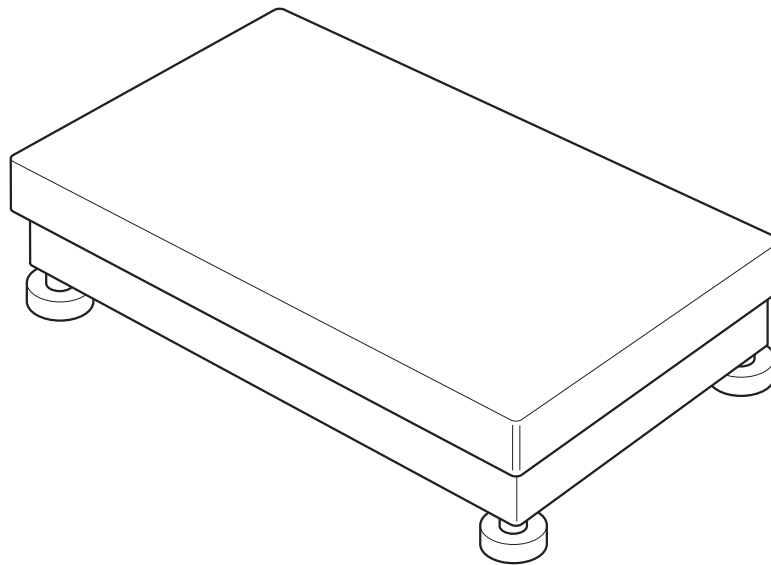


Installation information

METTLER TOLEDO MultiRange
Table and stand scales

METTLER TOLEDO

MA15s/MA30s
MB60/MCC150/MCC300



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1 Installation

1.1 Preparatory work

1.1.1 Selecting installation location

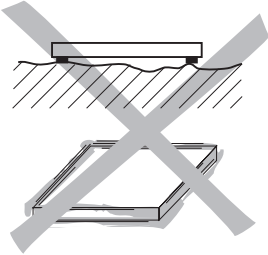


▲ The explosion-protected weighing platform is approved for operation in Zone 2 (gases) and Zone 22 (dusts) hazardous areas. There is an increased danger of injuries and damage when using the weighing platform in hazardous areas! Special care must be taken when working in such hazardous areas. The rules for behaviour are based on the concept of "Safe Distribution" established by METTLER TOLEDO.

▲ Any protective foils present in the explosion-protected area, e.g. on the load plate, must always be removed.

▲ The foundation at the installation location must be capable of safely support the weight of the weighing platform at its 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 when the weighing platform is integrated in conveying systems and the like.

▲ Ensure that vibrations due to machines near the installation site are kept to a minimum.



1.1.2 Ambient conditions

- Use powder-coated/enamelled weighing platforms only in a dry environment.
- In a damp environment, in wet operation or when working with chemicals: Use stainless-steel weighing platforms.

1.1.3 Accessories

- Completely unpack the accessories provided with the weighing platform.
- 1 Identcard
 - 1 Set of signs for selectable configurations

1.2 Setting up and levelling

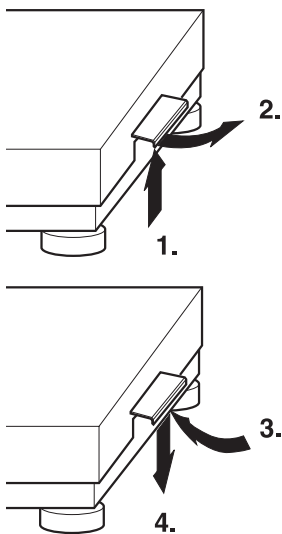
1.2.1 Setting up MA15s/MA30s

1. Remove the weighing platform and the separately enclosed load plate from the packing.
2. Place the load plate on the weighing platform.

1.2.2 Setting up MB60

1. Lift the weighing platform out of the transport packing and set it down at the installation location.
2. Remove the 4 corner padding pieces between the load plate and the frame.
3. Lift off the load plate and remove the 4 pieces of cardboard.
4. Mount the load plate again.

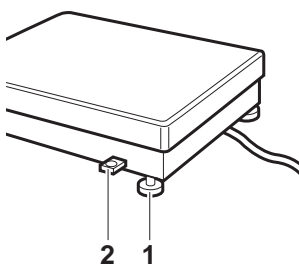
1.2.3 Setting up MCC150/MCC300



1. Lift the weighing platform out of the transport packing and set it down at the installation location.
2. Remove the 4 corner padding pieces between the load plate and the frame.
3. Remove the load plate by lifting the two side handles vertically (1.) and pivoting outward (2.).
4. Remove the 4 pieces of cardboard.
5. Remount the load plate by swinging the handles inward (3.) and reengaging in initial position (4.), i.e. the handles must be in the bottom position and vertical.

When the handles are correctly engaged, it should not be possible to lift off the load plate.

1.2.4 Levelling



1. Level the weighing platform with the 4 foot bolts (1) using the level indicator (2): The air bubble of the level indicator must come to rest within the ring marking.
2. Ensure even contact of the foot bolts. Check the stability of the weighing platform by pressing down on or rocking it at the corners.
3. Lock the foot bolts with the nuts.

1.3 Installing connection cable

Note

The connection cable may be lengthened to a maximum of 100 m.

- Route the connection cable to the terminal so that it is protected from possible damage.

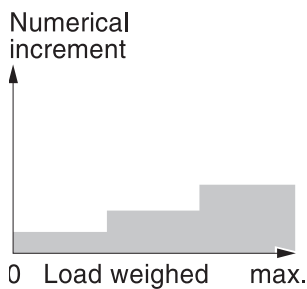
ATTENTION

- If the cable is laid in a pipe, ensure that the pipe is of a sufficient diameter or is slit open. The cable may not be cut through.

2 Configuration possibilities

2.1 General information

2.1.1 MultiInterval



- MultiInterval precision means automatic switchover of the numerical increment (readability) in dependence on the applied load.
- All other adjustment variables (adjustment to the weighing process and vibrations, as well as adjustment of stability monitoring and the zero point correction) are adjusted to the usual user conditions, however can be changed in the master mode of the weighing terminal if necessary.

Notes

- The Identcard provided is labelled with the standard configuration. Mount the Identcard in accordance with the installation instructions of the weighing terminal concerned.
- If the standard configuration does not meet your needs, it is possible to reconfigure the weighing platform with the terminal. To do this, see the terminal operating instructions of the Service Manual for the Point A/D Converter.
- A set of measuring data signs is provided with the weighing platform. Apply the selected configuration corresponding to the factory-mounted measuring data sign to the Identcard, and the Max-Min sign near the terminal display.
- When the configuration is changed, it is also possible to change the preload range in addition to the weighing range and the readability.

2.2 Configuration data

2.2.1 Configuration data for MA15s, MA30s, factory setting

Standard configuration	MA15s	MA30s
Maximum load	15 kg	30 kg
Readability	0 ... 3 kg 0.001 kg 3 ... 6 kg 0.002 kg 6 ... 15 kg 0.005 kg	0 ... 6 kg 0.002 kg 6 ... 15 kg 0.005 kg 15 ... 30 kg 0.01 kg
Tare range, subtractive	15 kg	30 kg
Preload range Zero-set range Zero-set range (typ.)	± 0.3 kg 2.7 kg	± 0.6 kg 5.4 kg
Calibration data as per OIML		
Calibration class	III	III
Calibration value	0.001 kg	0.002 kg
Minimum load	0.02 kg	0.04 kg
Temperature range	-10 °C ... +40 °C	-10 °C ... +40 °C

2.2.2 Configuration data for MB60/MCC150/MCC300, factory setting

Standard configuration	MB60	MCC150	MCC300
Maximum load	60 kg	150 kg	300 kg
Readability	0 ... 15 kg 0.005 kg 15 ... 30 kg 0.01 kg 30 ... 60 kg 0.02 kg	0 ... 30 kg 0.01 kg 30 ... 60 kg 0.02 kg 60 ... 150 kg 0.05 kg	0 ... 60 kg 0.02 kg 60 ... 150 kg 0.05 kg 150 ... 300 kg 0.1 kg
Tare range, subtractive	60 kg	150 kg	300 kg
Preload range Zero-set range Zero-set range (typ.)	± 1.2 kg 10.8 kg	± 3 kg 27 kg	± 6 kg 54 kg
Calibration data as per OIML			
Calibration class	III	III	III
Calibration value	0.005 kg	0.01 kg	0.02 kg
Minimum load	0.1 kg	0.2 kg	0.4 kg
Temperature range	-10 °C ... +40 °C	-10 °C ... +40 °C	-10 °C ... +40 °C

3 Planning assemblies

3.1 Notes on planning

Due to their design characteristics, the weighing platforms are suitable for installation in conveying systems. The following specifications and dimensional drawings form the basis for the design of the required assemblies.

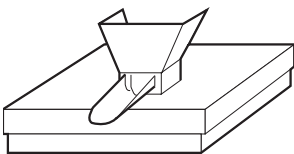
- The weighing platform may only be supported by the support feet, and never by the frame or lever parts.
- The weighing platform may only be permanently installed on the support feet.
- Moving or rotating parts on the weighing platform must be designed so that they do not affect the weighing result. Balance rotating parts.
- The load plate must be free on all sides so that not connection between the load plate and permanently mounted parts is made, even by falling parts or dirt deposits.
- Lay cables or hoses between the weighing platform and other machine parts so that they do not exert any force on the weighing platform.

CAUTION

When mounting assemblies, make sure that no metal chips get into the weighing platform.

→ Remove the load plate to machine the weighing platform.

3.2 Preload range



The weight of the structural parts permanently mounted on the weighing platform is referred to as "preload". The preload is electrically compensated in the weighing platform so that the full weighing range is available.

The maximum preload (or the zero-set range) that can be compensated is dependent on the configured weighing range.

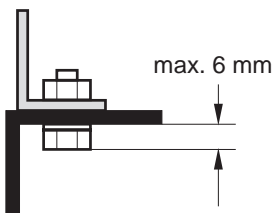
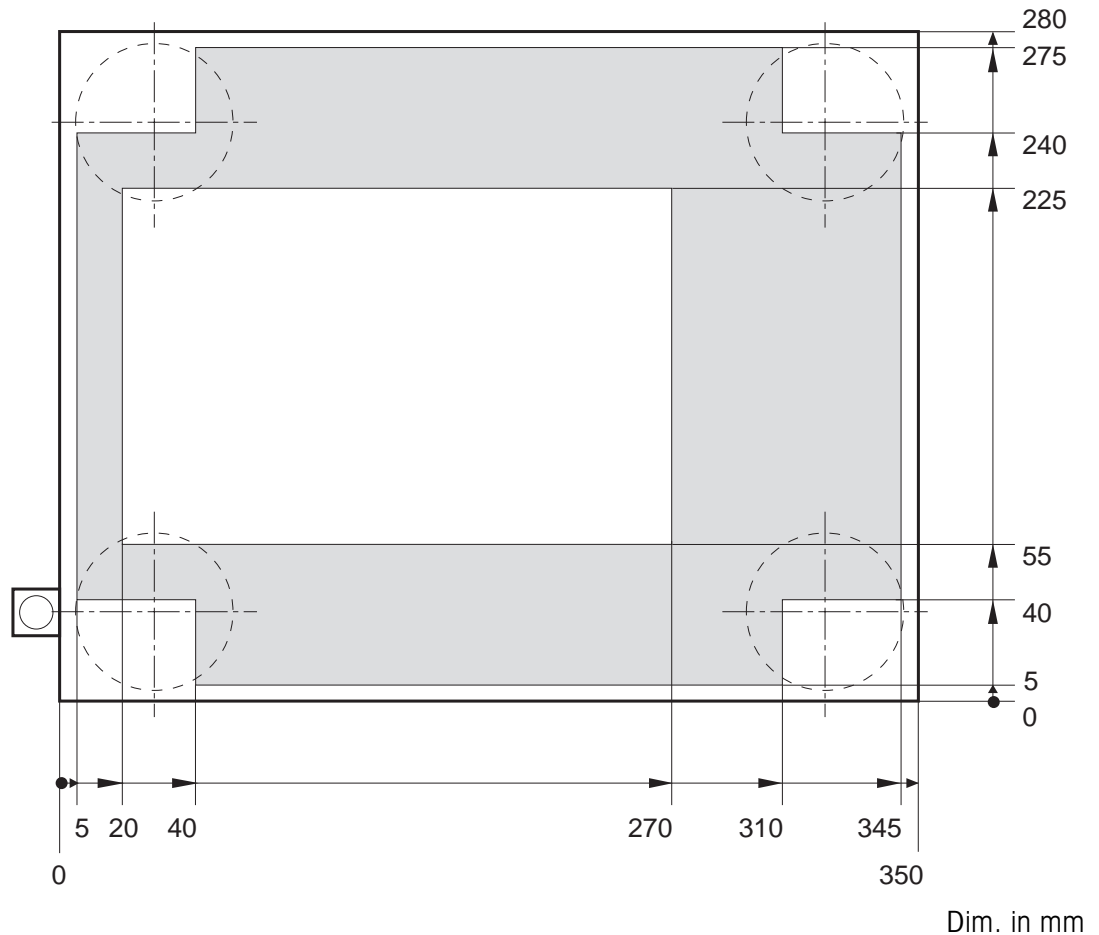
CAUTION

The assemblies must already be mounted when connecting the weighing platform.

Model	Weighing range	Max. preload
MA15s	15 kg	2.7 kg
MA30s	30 kg	5.4 kg
MB60	60 kg	10.8 kg
MCC150	150 kg	27 kg
MCC300	300 kg	54 kg

3.3 Mounting possibilities

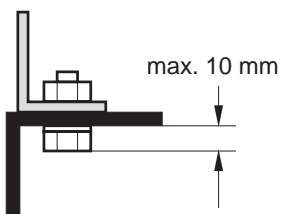
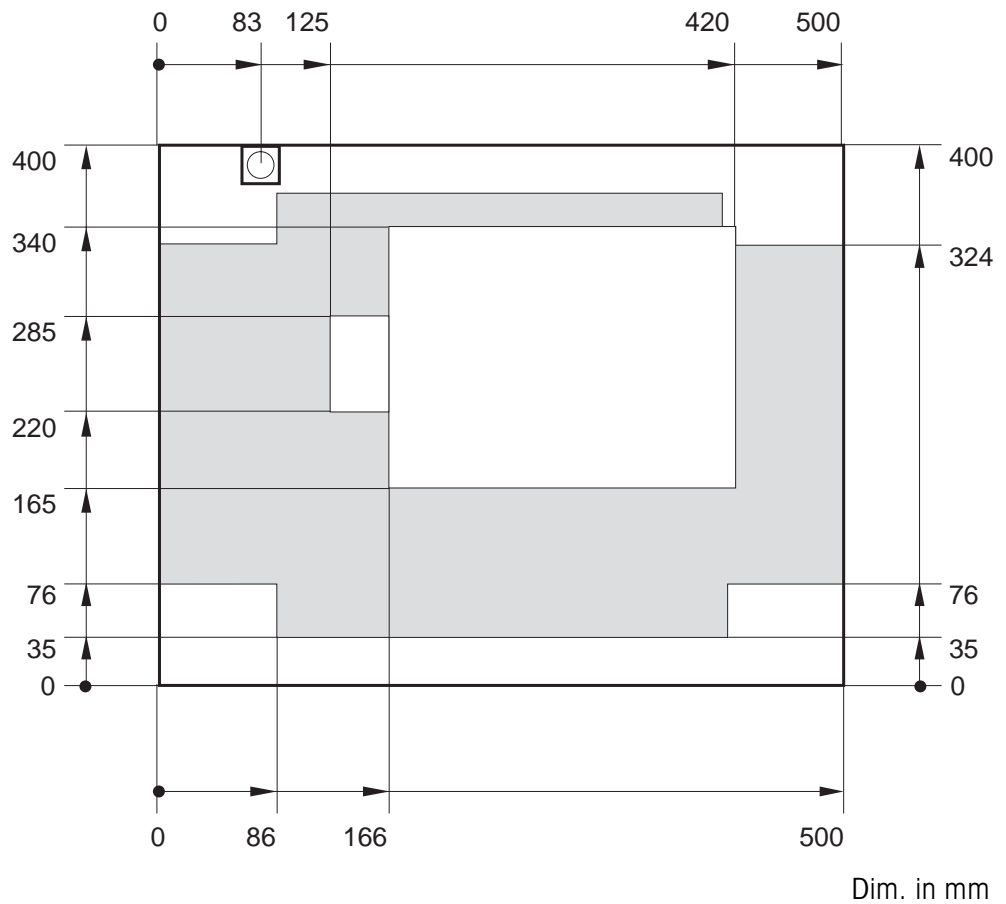
3.3.1 Mounting possibilities for MA15s/MA30s



- Bridge assemblies can be mounted in the shaded areas.
- Recommended mounting type: Bolting on, welding on.
Remove the load plate and drill through for this purpose.
- Mounting parts (e.g. bolts and nuts) may extend a maximum of 6 mm beyond the underside of the load plate.

Technical version: 08/00

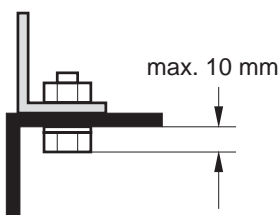
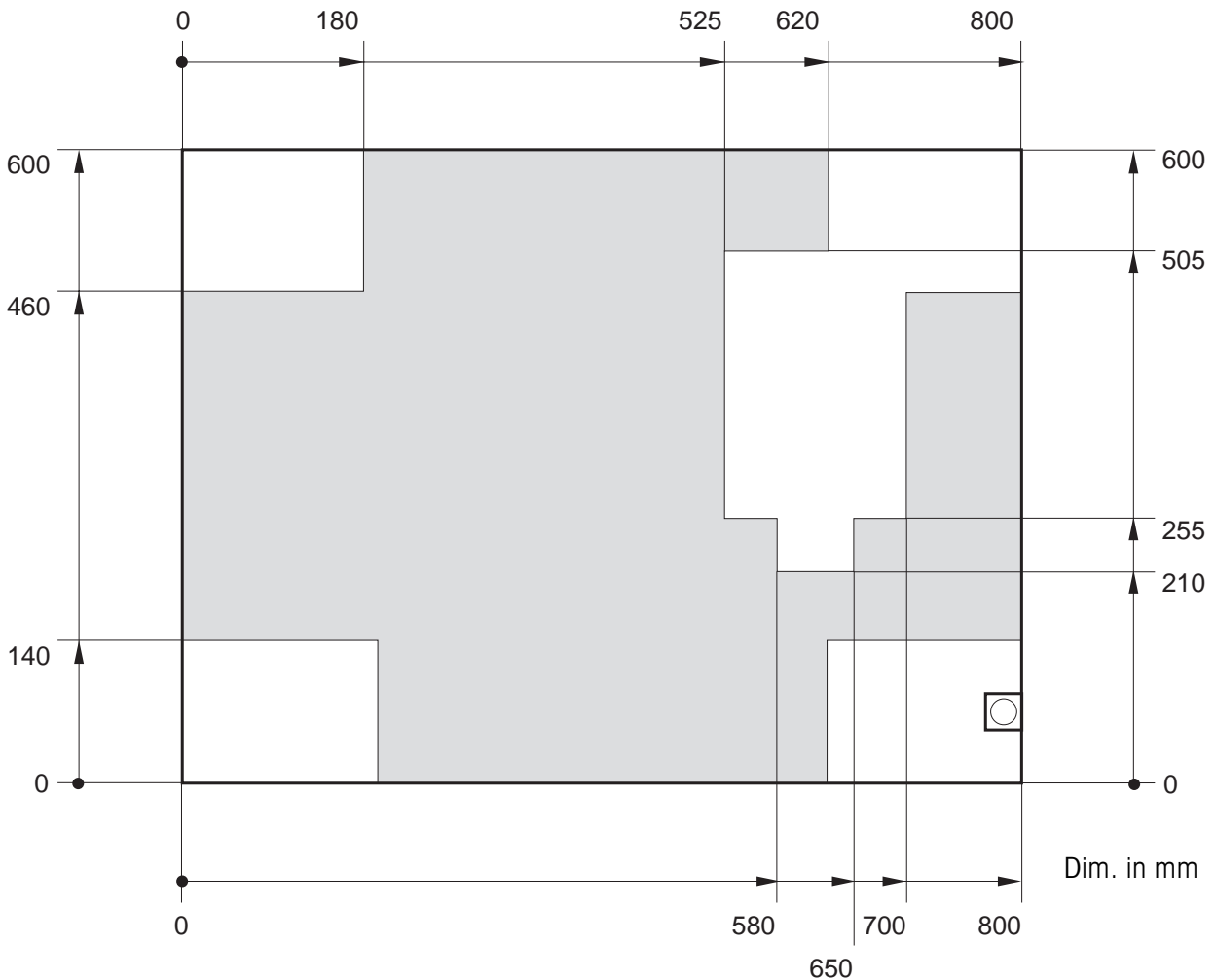
3.3.2 Mounting possibilities for MB60



- Bridge assemblies can be mounted in the shaded areas.
- Recommended mounting type: Bolting on.
Remove the load plate and drill through for this purpose.
- Mounting parts (e.g. bolts and nuts) may extend a maximum of 10 mm beyond the underside of the load plate.

Technical version: 08/00

3.3.3 Mounting possibilities for MCC150/MCC300

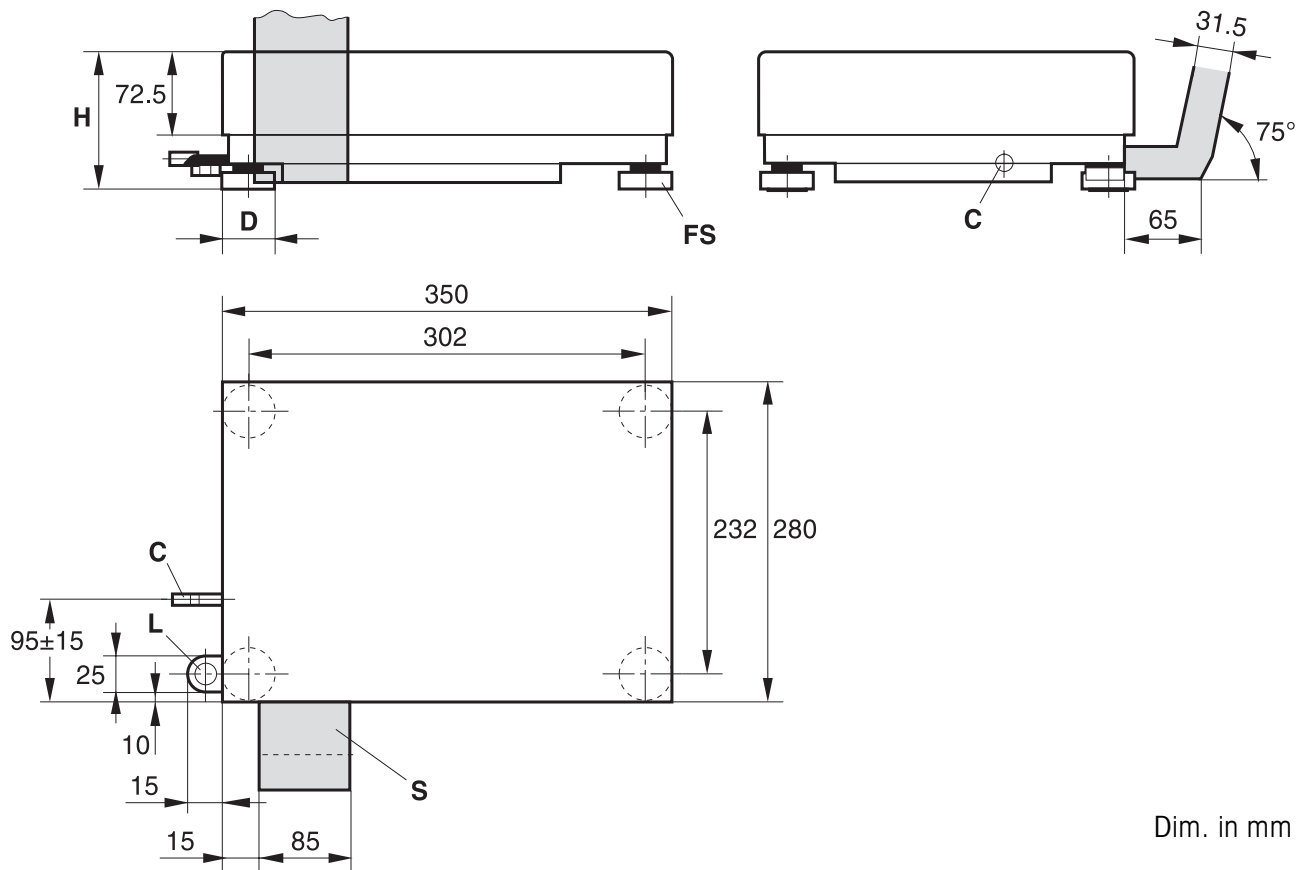


- Bridge assemblies can be mounted in the shaded areas.
- Recommended mounting type: Bolting on.
Remove the load plate and drill through for this purpose.
- Mounting parts (e.g. bolts and nuts) may extend a maximum of 10 mm beyond the underside of the load plate.

Technical version: 08/00

4 Dimensions

Dimensions of MA15s/MA30s

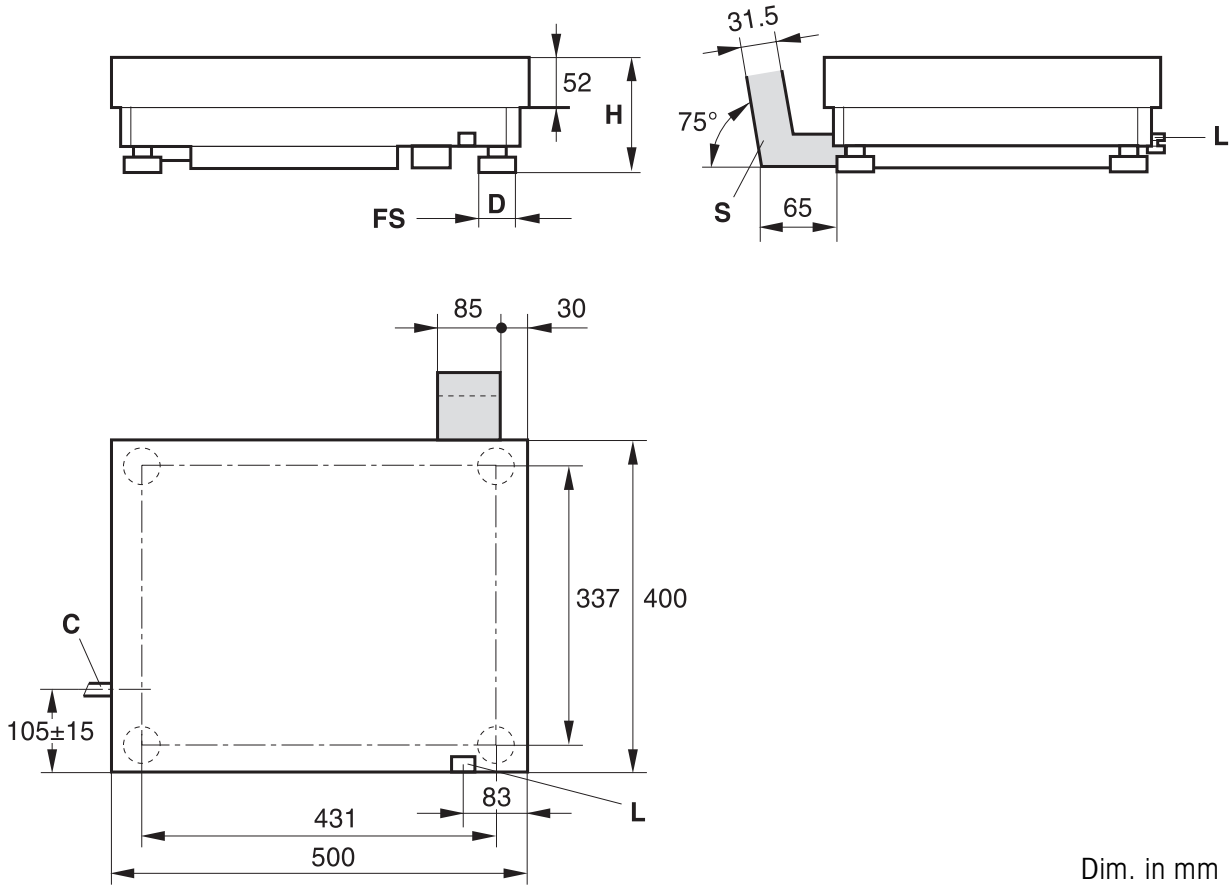


Dim. in mm

- H adjustable with 4 foot bolts
Min. H = 117 mm
Max. H = 130 mm
- FS Foot bolt
Required area D = 35 mm dia.
Spanner size = 17 mm
Thread = M10
- S Tripod
- L Level indicator
- C Cable connection

Technical version: 08/00

Dimensions of MB60

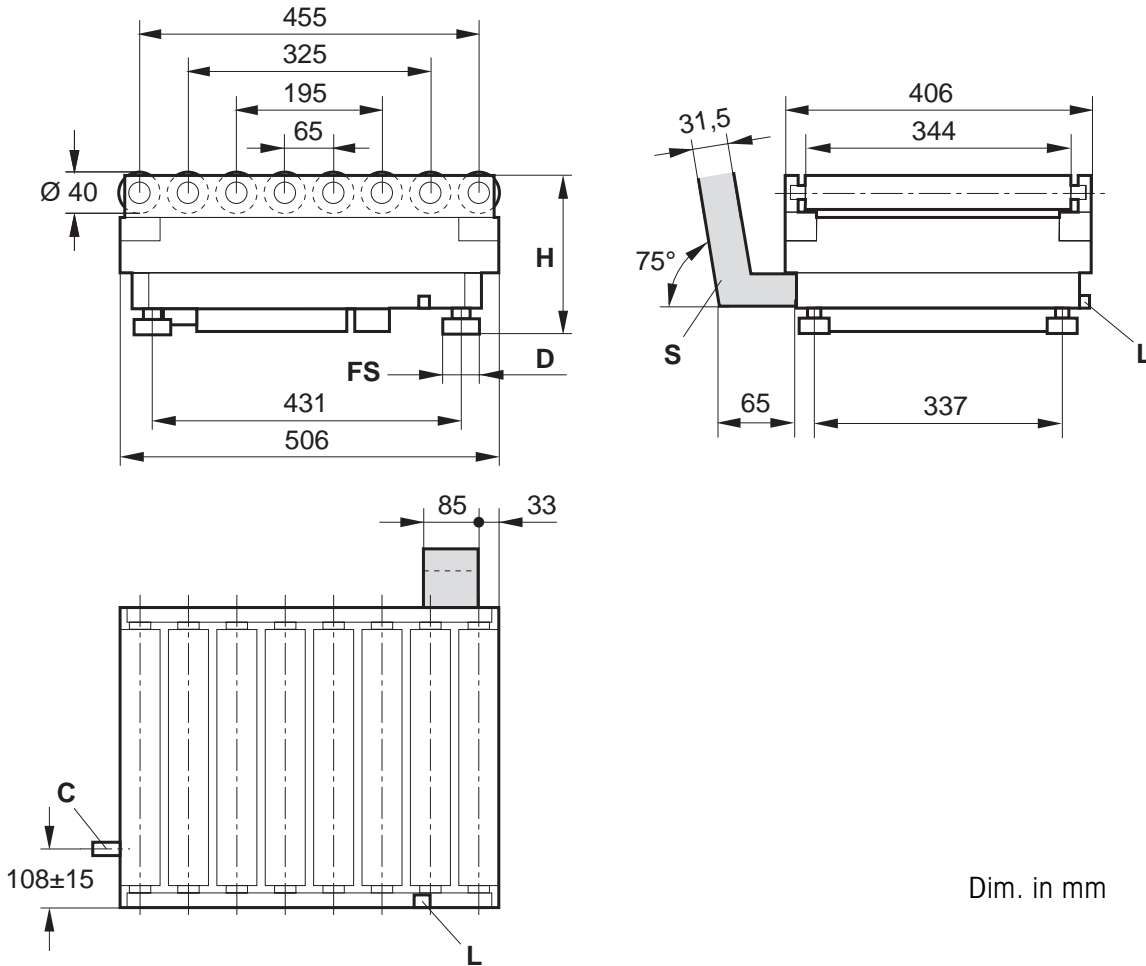


Dim. in mm

- H adjustable with 4 foot bolts
Min. H = 123 mm
Max. H = 148 mm
- FS Foot bolt
Required area D = 35 mm dia.
Spanner size = 17 mm
Thread = M10
- S Tripod
- L Level indicator
- C Cable connection

Technical version: 08/00

Dimensions of MB60 roller conveyor

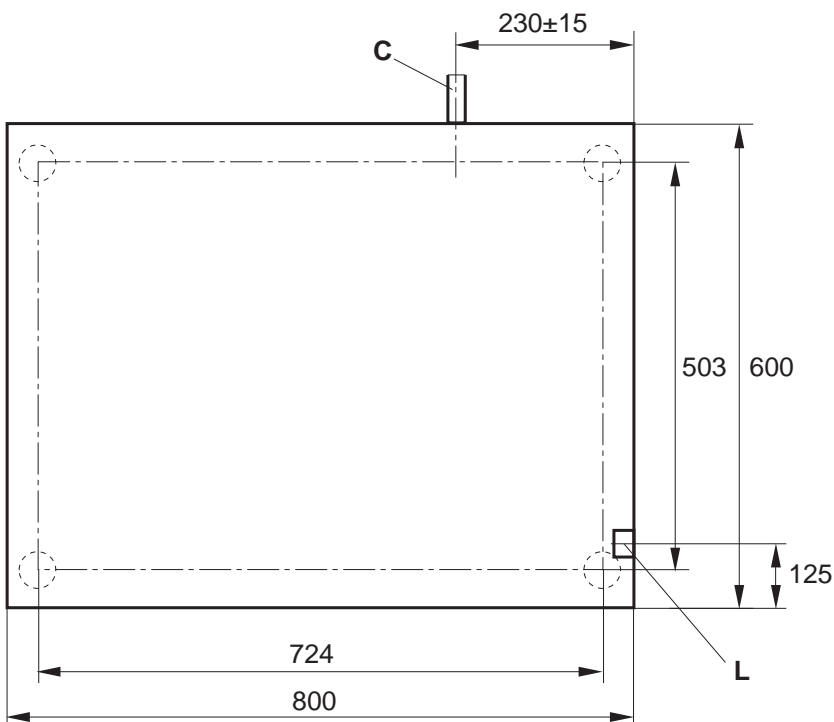
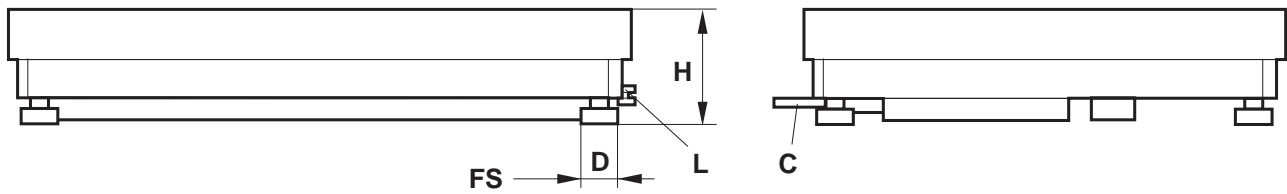


Dim. in mm

- H adjustable with 4 foot bolts
Min. H = 170 mm
Max. H = 195 mm
 - FS Foot bolt
Required area D = 35 mm dia.
Spanner size = 17 mm
Thread = M10
 - S Tripod
 - L Level indicator
 - C Cable connection
- Weight of roller conveyor = 9.0 kg net

Technical version: 08/00

Dimensions of MCC150/MCC300

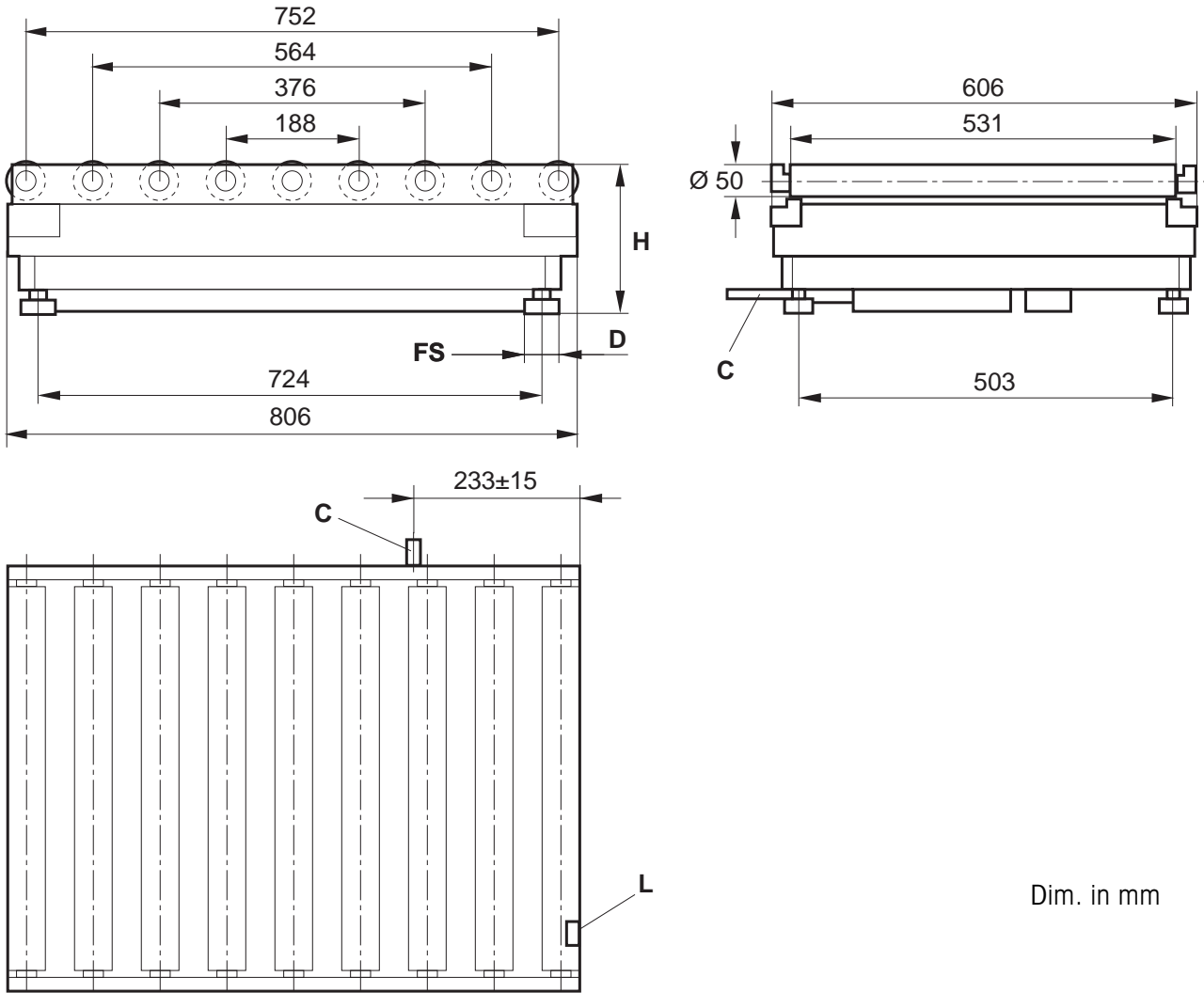


Dim. in mm

- H adjustable with 4 foot bolts
Min. H = 130 mm
Max. H = 155 mm
- FS Foot bolt
Required area D = 35 mm dia.
Spanner size = 17 mm
Thread = M10
- L Level indicator
- C Cable connection

Technical version: 08/00

Dimensions of MCC150/MCC300 roller conveyor



Dim. in mm

- H adjustable with 4 foot bolts
Min. H = 185 mm
Max. H = 210 mm
 - FS Foot bolt
Required area D = 35 mm dia.
Spanner size = 17 mm
Thread = M10
 - L Level indicator
 - C Cable
- Weight of roller conveyor = 22.0 kg net

Technical version: 08/00



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