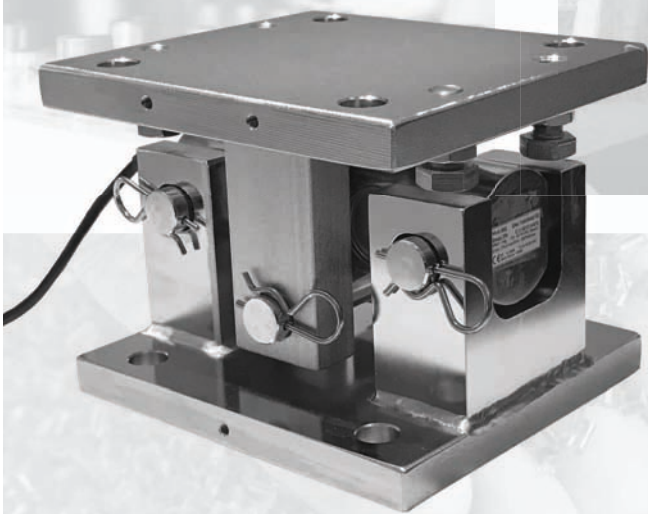


# MOUNTING INSTRUCTIONS



**KIT DE** Mounting Accessory for Double-ended Shearbeam load cell mod. DDR, 460



## **PRECAUTIONS**

READ this manual BEFORE operating or servicing the mounting KIT.

FOLLOW these instructions carefully.

SAVE this manual for future use.

CAUTION:

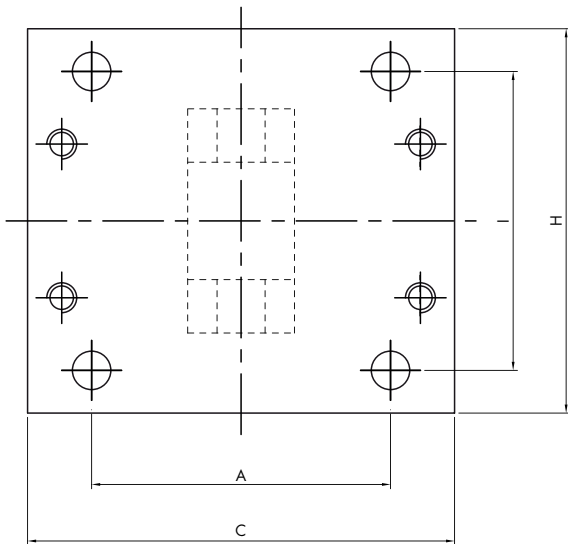
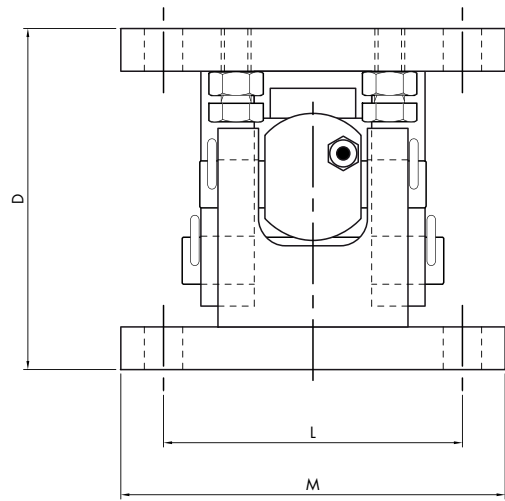
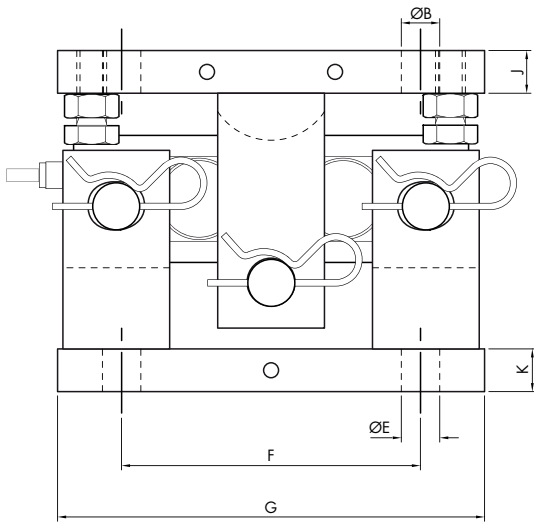
The installation and maintenance of this mounting KIT must be allowed to qualified personnel only.

Pay attention during inspection, testing and adjustment.

Failure to observe these precautions may be dangerous.

DO NOT ALLOW untrained personnel to work, clean, inspect, repair or tamper this mounting KIT.

## DIMENSIONS



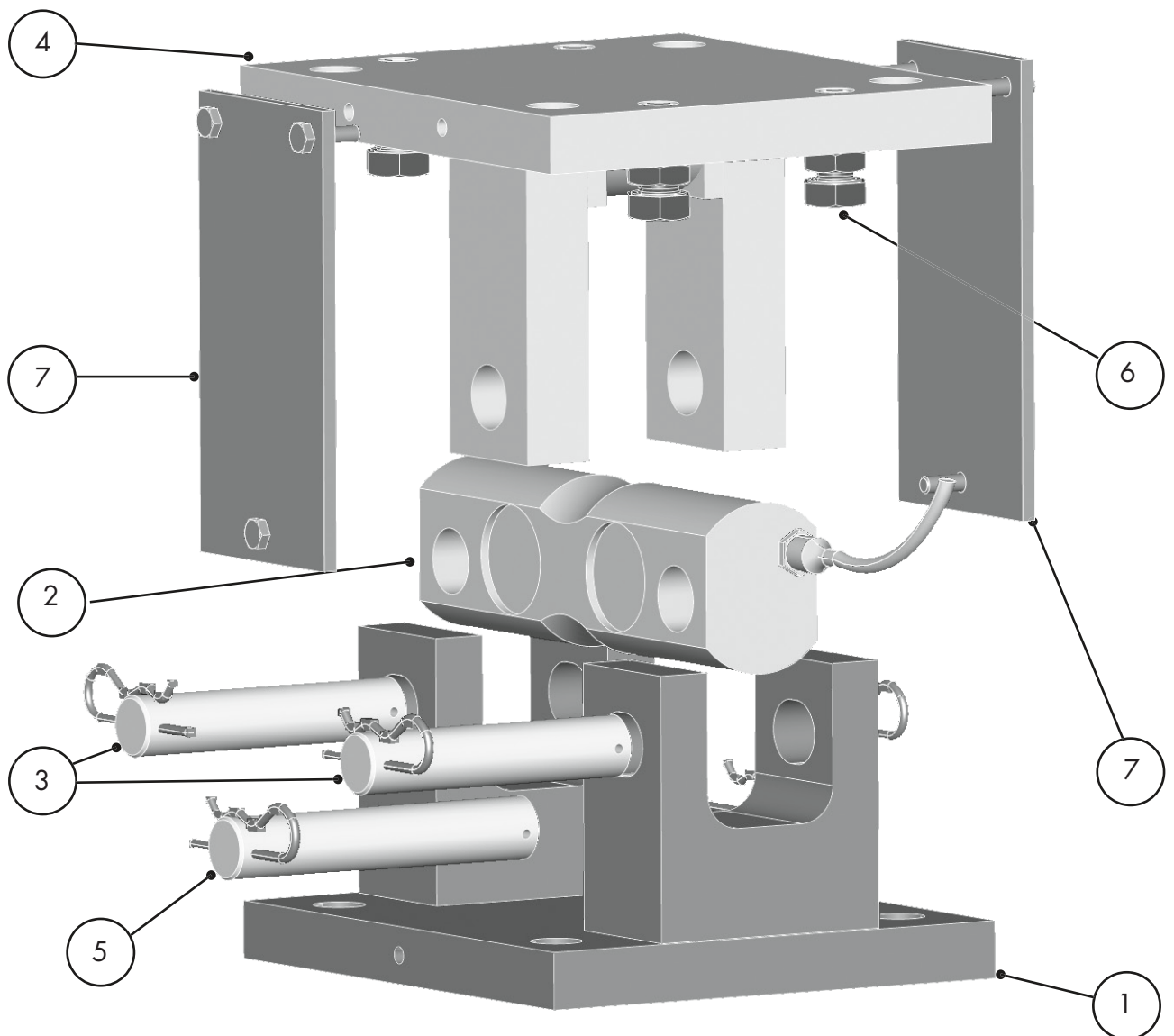
MODEL	CAPACITY t	A	ØB	C	D	ØE	F	G	H	I	J	K	L	M	WEIGHT
DE1 AS/SS	2÷20	140	18	200	160	18	140	200	180	140	20	20	140	180	17 kg
DE2 AS/SS	30÷50	175	22	300	200	22	175	300	220	175	25	25	175	220	39 kg
DE3 AS/SS	75÷100	220	26	370	270	26	220	370	300	220	30	30	220	300	82 kg

### MAXIMUM LOAD (TONS) ALLOWED

	DE1 AS	DE2 AS	DE3 AS	DE1 SS	DE2 SS	DE3 SS
ALLOWED THERMAL EXPANSION	±5 mm	±5 mm	±10 mm	±5 mm	±5 mm	±10 mm
LIFTING FORCE	6.4 t	10.3 t	21.1 t	8 t	13 t	21.8 t
SIDE LOAD	4.2 t	7 t	9.7 t	3.6 t	5.4 t	7.4 t
LONGITUDINAL LOAD	9.4 t	14.6 t	15.4 t	7.2 t	14.4 t	18.4 t

## LEGEND

1. Base plate with load cell holder, with 4 through holes for fixing to the floor or on supporting structures
2. Double-ended shear beam load cell
3. Load cell fixing pins and split pins
4. Upper loading plate with 4 throughholes for fixing the structure to be weighed
5. Pin and split pin for tilt guard function
6. Screws for load cell discharge function
7. Side block plates that allow the entire module to be used as a centering template



## DESCRIPTION

The DE1-2-3 weighing modules provide the anti-tilt system and are therefore suitable for weighing tanks, silos, roller conveyors, etc.

The DE1 module is used with the load cell mod. DDR with capacity from 5 to 20 t.

The DE2 module is used with the load cell mod. DDR with capacity from 30 to 50 t.

The DE3 module is used with the load cell mod. DDR with capacity from 75 to 100 t.

These DE series modules mainly consist of a base plate [1] which must be fixed to the foundation and where the load cell is positioned [2] through the use of two pins [3], and an upper loading plate [4] where the tank / silo to be weighed is fixed.

The DE series modules have the following safety systems:

- Tilt guard function: the pin [5] counteracts the lifting of the upper loading plate [4].
- centering template: screwing 2 clamping plates [7] between the base plate and the upper plate in order to guarantee the correct alignment of the load on the cell
- load cell lock: N ° 4 load bearing screws on the base plate, to be used for positioning the load cell inside its seat during assembly or to discharge the load cell from the weight of the structure in case of transportation of the entire system or replacement of the load cell

The DE module is supplied without the load cell, but assembled to fix the structure to be weighed.

### ASSEMBLY PRECAUTIONS

These accessories must be mounted as shown in the following examples.

The base plate must be mounted on a solid, leveled and flat foundation.

The surfaces in contact with the base and top plates must be leveled, flat and clean.

The foundations must be sufficiently rigid so that the deformations due to the load are minimal and within acceptable limits.

Do not weld with mounted load cells.

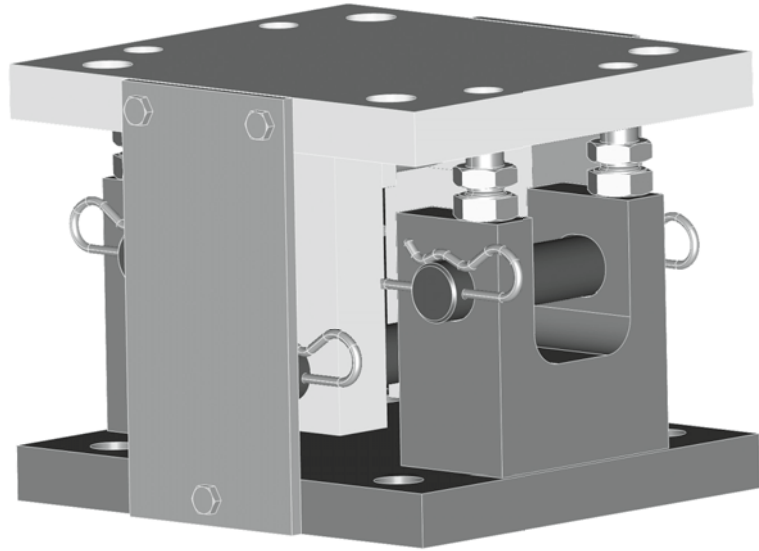
The load on the load cells must be uniform. Therefore check this requirement and if necessary use shims to obtain an optimal planarity level.

Measure the individual load cell signals to prevent overloads. In the event of overload, compensate for the height of the least loaded point by adding shims.

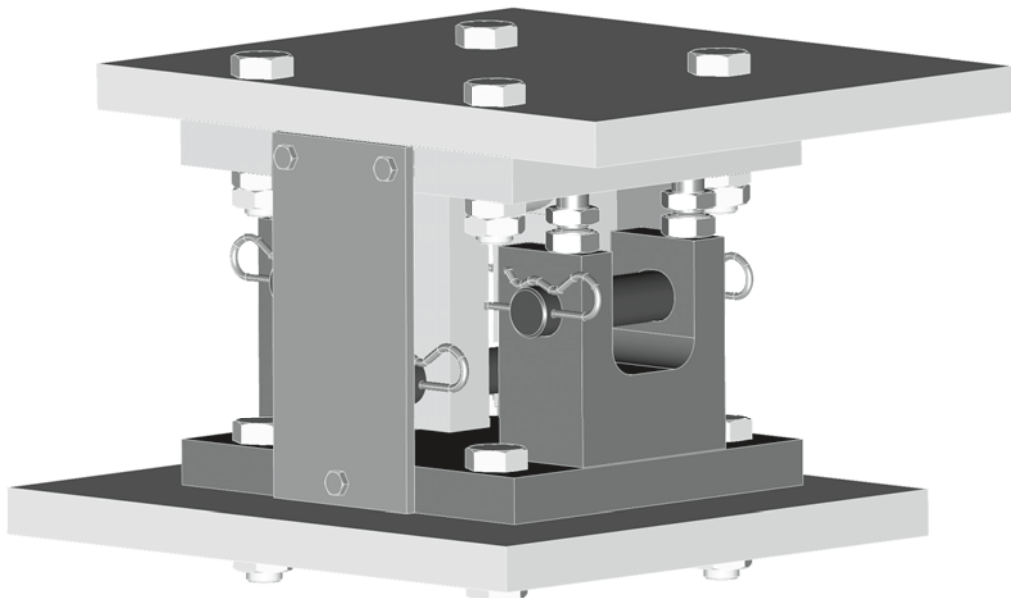
Make sure that, after assembly, the DE series module complete with the load cell, is free from an external forces, mechanical constraints, rigid pipes etc ...

## MOUNTING INSTRUCTIONS

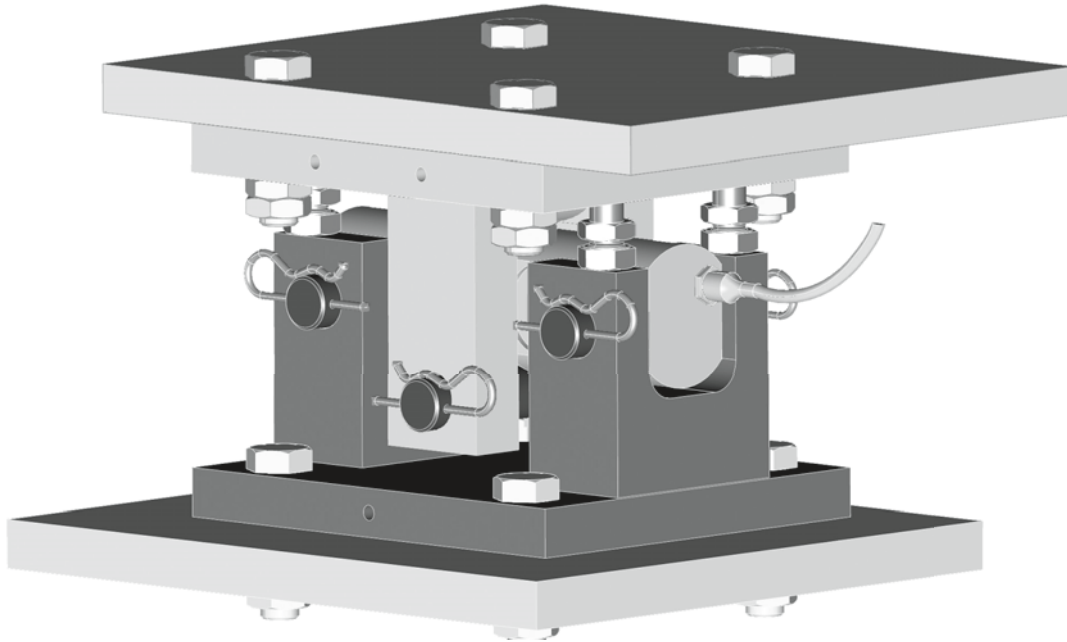
1. Use the DE mounting kit already assembled as a drilling template. This ensures that the load cell will work correctly.



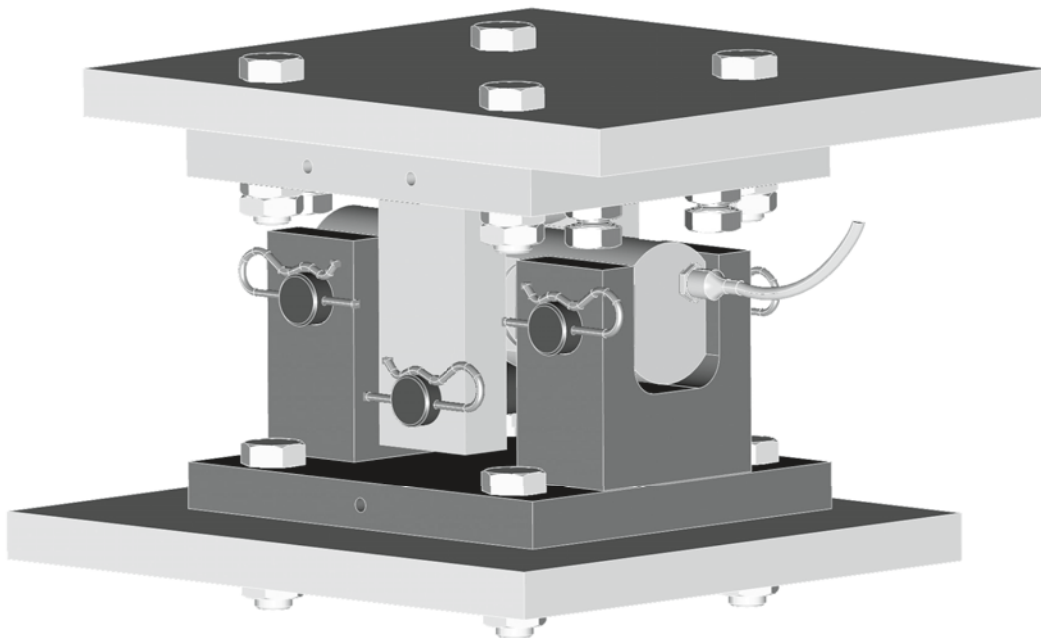
2. Fix the base plate to the floor and the structure to be weighed to the upper plate.



3. Perform all mechanical connections and especially welds. At this point it is possible to remove the side plates and position the load cell in its seat by means of pins and split pins. If necessary, adjust the 4 screws under the upper plate for positioning the load cell. Make the electrical connections. The entire weighing system will be ready to be shipped or started.



4. To installing the system, screw the 4 screws under the upper plate, so that the weight loads the load cell only in the center.



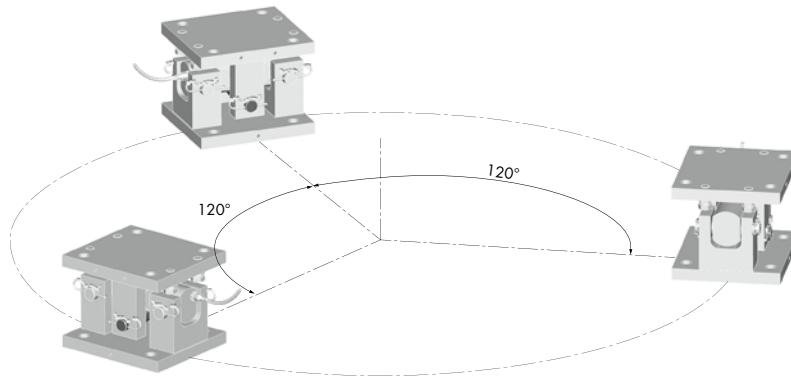
5. Make sure that the upper plate is perfectly parallel with the lower plate and if necessary shim in order to obtain a correct load distribution.

**NOTE.** In case of load cell replacement, unscrew the nr 4 bolts [6] until their contact with the structure of the load cell seats; in this way the whole load will weigh on the base plate. Remove the pins [3], extract the load cell lengthwise and replace it. Reassemble the pins [3] locking them with the split pins and tighten the 4 screws [6] to the upper plate.

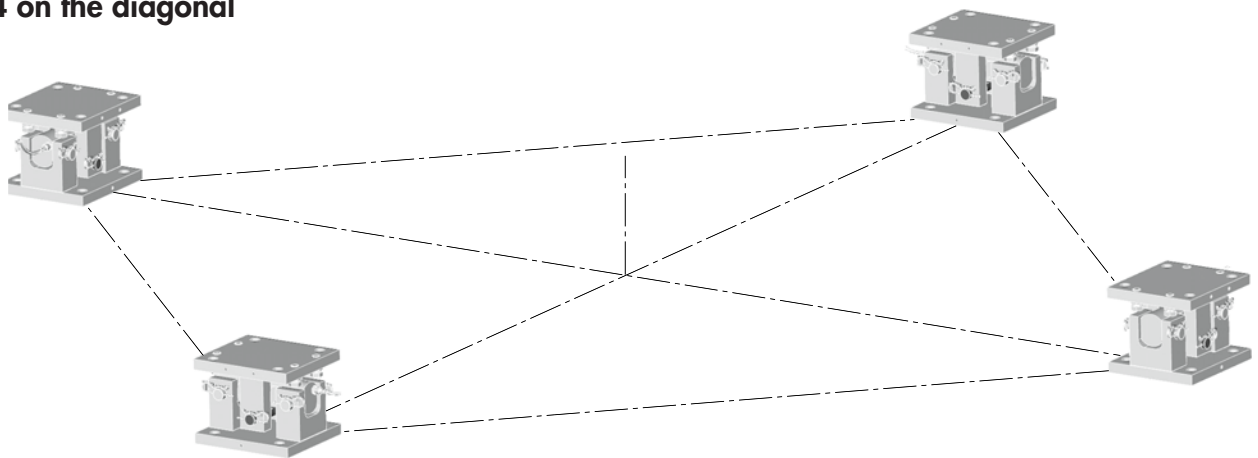


# ORIENTATION OF WEIGHT MODULES

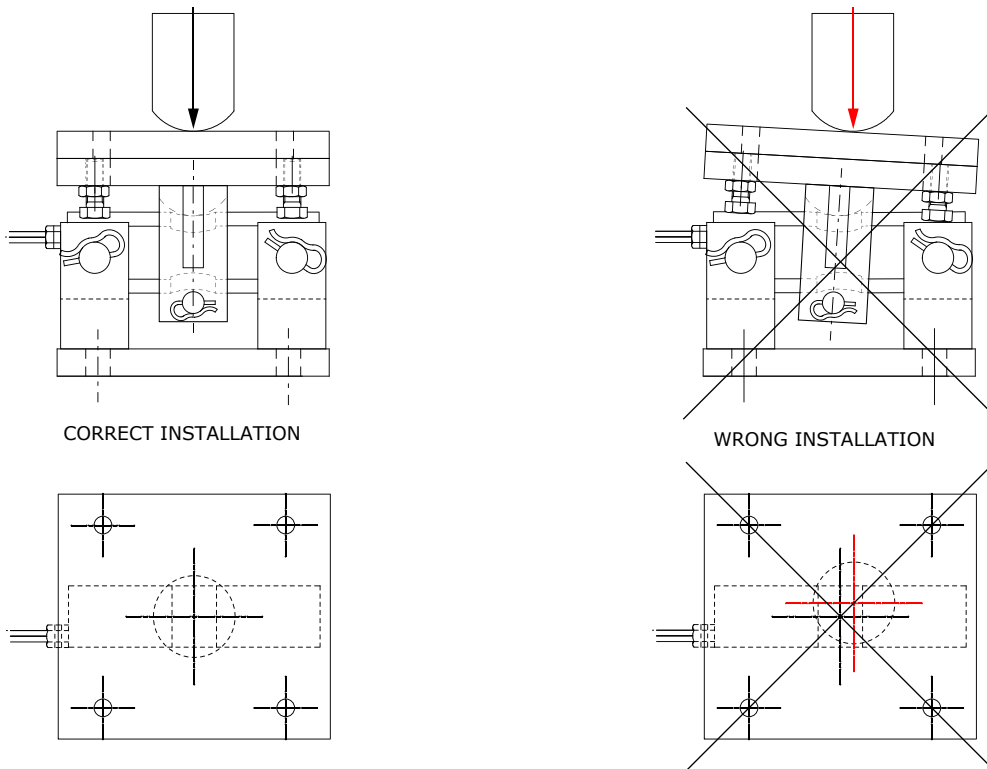
3 x 120°



4 on the diagonal



Load position detail









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