

SENSiQ[®] Secure Mount SSM and SENSiQ[®] Elastomer Mount SEM

Accessories for load cell mount

- Heat insulation plates
- Weld-on plates
- Dimensionally compatible with mounts SSM and SEM
- Heat insulation plates protect the load cells and extend the application range
- Weld-on plates simplify installation
- Can also be used for height leveling

Application

Heat insulation plates prevent heat transfer from a load carrier, e.g. a hot hopper, to the load cells via the mount elements.

In this way, errors of measurements caused by inadmissibly high temperatures or thermal gradients can be prevented.

The load cell's application range is extended.

Weld-on plates simplify installation of the load cell mounts. There is no necessity to make precise fastening borings above and below the mount or to correct them during installation.

Weld-on plates can also be used for height leveling, e.g. when retrofitting.

Heat insulation and weld-on plates can be combined.

Construction

Heat insulation plates consist of several layers of insulating material which are separated by thin steel plates to improve load distribution. The predefined packs extend the load cells' application temperature range to 150 °C.

Heat insulation plates with different dimensions are also available on request for different ambient conditions.

The weld-on plates are designed thus that they can be combined with both SENSiQ Secure Mount SSM and SENSiQ Elastomer Mount SEM.

Function

The heat insulation plates installed above the mount prevent heat con-duction from the load carrier into the load cells via the load reception elements.

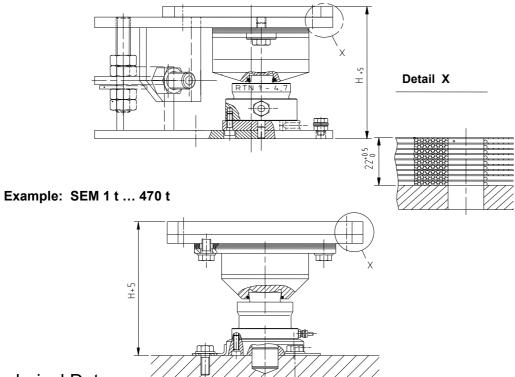
On the one hand, inadmissibly high temperatures which might in the worst case cause permanent dam-age to the load cell are kept away from the load cell and on the other, temperature gradients at the load cell are avoided which may impair accuracy.

Nominal and service temperature ranges of the load cells are thus extended.



Standard variants of heat insulation plates

Example: SSM 1 t ... 4.7 t



Technical Data

| Туре | Material of metal parts | Height | Overall height H + 5 | Material number |
|---------------|-------------------------|--------|----------------------|-----------------|
| SEM 1 t 4.7 t | 1.4301 | 34 | 132 | D733119.01 |
| SEM 10 t 22 t | 1.4301 | 34 | 164 | D733119.02 |
| SEM 33 t | S235, galvanised | 34 | 202 | D733119.03 |
| SEM 47 t | S235, galvanised | 62 | 260 | V081425.B01 |
| SEM 68 t | S235, galvanised | 72 | 292 | V081425.B02 |
| SEM 100 t | S235, galvanised | 82 | 321 | V081425.B03 |
| SEM 150 t | S235, galvanised | 97 | 417 | V081425.B04 |
| SEM 220 t | S235, galvanised | 112 | 485 | V081425.B05 |
| SEM 330 t | S235, galvanised | 132 | 559 | V081425.B06 |
| SEM 470 t | S235, galvanised | 157 | 677 | V081425.B07 |
| SSM 1 t 4.7 t | 1.4301 | 22 | 138 | V020696.B01 |
| SSM 10 t 22 t | 1.4301 | 22 | 172 | V020696.B02 |
| SSM 33 t | S235, galvanised | 22 | 214 | V020696.B05 |
| SSM 47 t | S235, galvanised | 52 | 305 | V024275.B01 |

Heat insulation plates are as a rule installed above the bearings.

Heat insulation plates for SSM >47 t are available upon request. But then the horizontal load capacity and lifting force is reduced.

Attention: Thermal insulation boards may only be used in the explosion-protected area only in Zone 2/21/22 without restriction. For zone 1 the declaration of conformity must be observed.



Temperature range

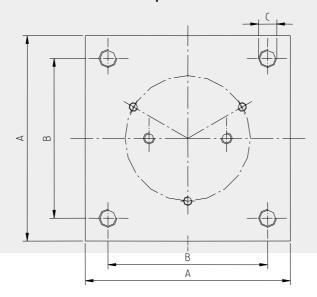
- Up to a container temperature of 80 °C, heat insulation plates are not necessary.
- The setup shown with single heat insulation is suitable for temperature of up to 150 °C.
- At higher temperatures special solutions are available upon request.

Notice

Load transmission must be without force bypass over the entire temperature range.

This means: Limit stops and lift-off protection must have sufficient play despite thermal expansion.

Standard variants of the weld-on plates



Technical Data

| Туре | Material | Height | Α | В | С | Material number |
|---------------------|------------------|--------|-----|-----|------|-----------------|
| SEM / SSM 1 t 4.7 t | 1.4301 | 15 | 140 | 100 | M 12 | D733120.06 |
| SEM / SSM 1 t 4.7 t | S235, galvanised | 15 | 140 | 100 | M 12 | D733120.01 |
| SEM / SSM 10 t 22 t | 1.4301 | 20 | 180 | 140 | M 16 | D733120.04 |
| SEM / SSM 10 t 22 t | S235, galvanised | 20 | 180 | 140 | M 16 | D733120.02 |
| SEM / SSM 33 t | S235, galvanised | 25 | 240 | 200 | M 20 | D733120.03 |

In combination with SSM, the weld-on plates can be used above and below the mount. With elastomer mounts SEM this can only be done in the load area of 1 t \dots 4.7 t.

With SEM mounts of 10 t and up, weld-on plates can only be used above the mount; if necessary the elastomer at the bottom is welded directly.

It is recommended that weld-on plates with 10 mm fillet weld to the connection structure.

Designs for other nominal loads or with different thickness are available on request.



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