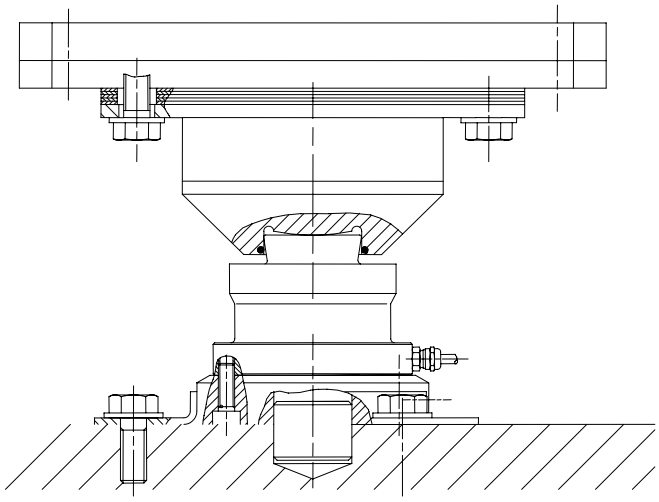
Accessories for load cell compact mounts VKN and elastomer mounts VEN



- **Heat insulation plates**
- **Weld-on plates**
- **Dimensionally compatible with elastomer mounts VEN and load cell compact mounts VKN**
- **Heat insulation plates protect the load cells and extend the application range**
- **Weld-on plates simplify installation**
- **Can also be used for height levelling**

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 levelling, 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 load cell compact mounts VKN and elastomer mounts VEN.

Function

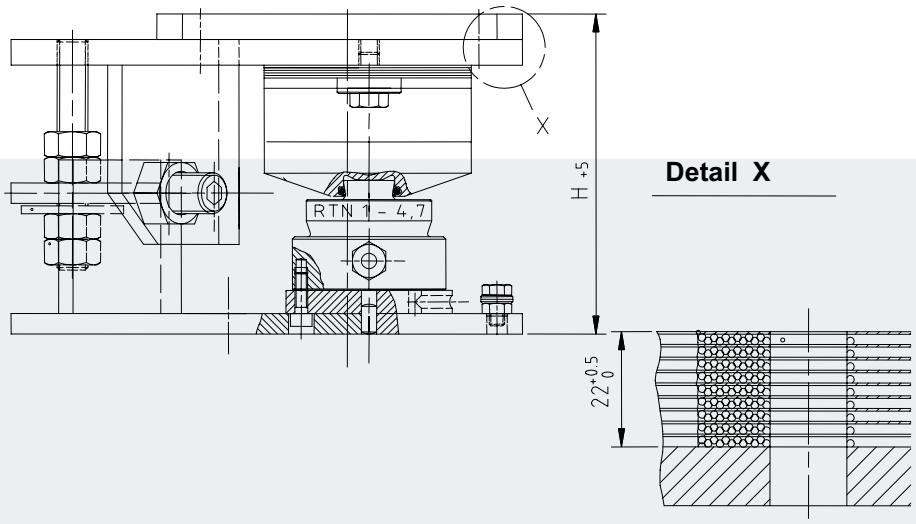
The heat insulation plates installed above the mount prevent heat conduction from the load carrier into the load cells via the load reception elements.

On the one hand, inadmissibly high temperatures which might in the worst case cause permanent damage 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.

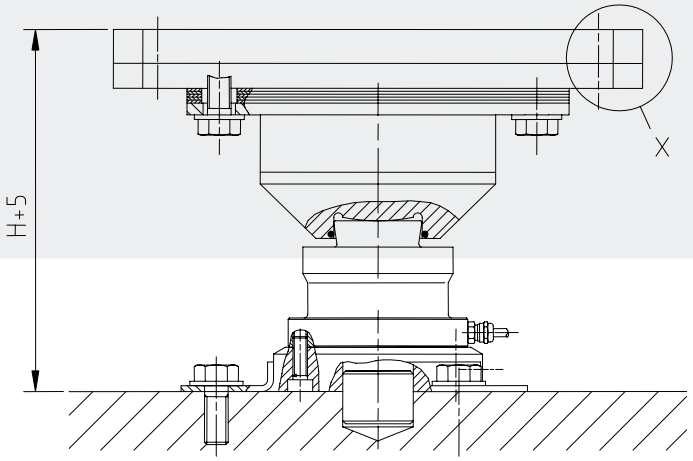
Nominal and service temperature range of the load cells are thus extended.

Standard-Ausführungen Wärmeisolationsplatten

example: VKN 1-4.7t



example: VEN 1-4.7t



Technical Data

Type	Material of metal parts	Total thickness	Overall height H + 5	Size	Material number
VEN 1 – 4,7t	1.4301	34	132		D733119.01
VEN 10 – 22t	1.4301	34	164		D733119.02
VEN 33t	St 37, galv. verz.	34	202		D733119.03
VKN 1 – 4,7t	1.4301	22	138	140 x 140	V020696.B01
VKN 10 – 22t	1.4301	22	172	180 x 180	V020696.B02
VKN 33t	St 37, galv. verz.	22	214	250 x 250	V020696.B05
VKN 47t	St 37, galv. verz.	52	305		V024275.B01
VKN 68t	St 37, galv. verz.	67	342		V030337.B01
VKN 100t	St 37, galv. verz.	97	401		V032405.B01
VKN 150t	St 37, galv. verz.	122	517		V032425.B01

Heat insulation plates are as a rule installed above the mount.
Other thickness/material available on request.

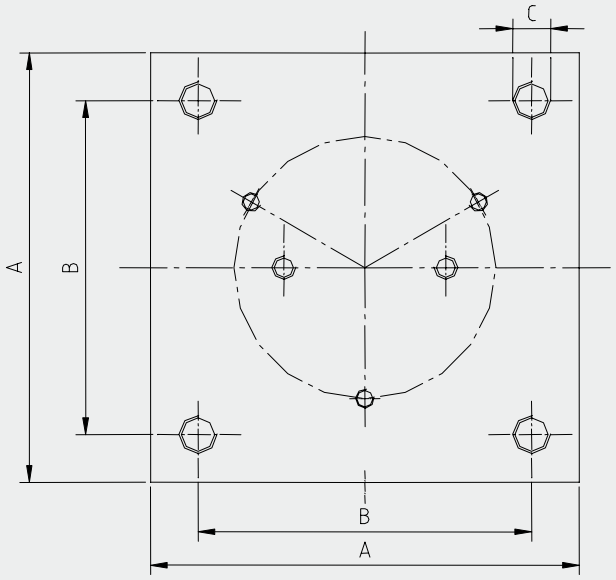
Temperature range

- 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.
- Special solutions are available on request for higher temperatures or ambient temperatures above 80° C.

Directions

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.

Design of the weld-on plates



Technical Data

Type	Material	Thickness	A	B	C	Material number
VEN / VKN 1 – 4,7t	1.4301	15	140	100	M 12	D733120.06
VEN / VKN 1 – 4,7t	St 37, galv. verz.	15	140	100	M 12	D733120.01
VEN / VKN 10 – 22t	1.4301	20	180	140	M 16	D733120.04
VEN / VKN 10 – 22t	St 37, galv. verz.	20	180	140	M 16	D733120.02
VEN / VKN 33t	St 37, galv. verz.	25	240	200	M 20	D733120.03

In combination with load cell compact mounts VKN, the weld-on plates can be used above and below the mount. With elastomer mounts VEN this can only be done in the load area of 1 - 4.7t.
In the case of VEN mounts with rated capacities of 10t and higher, weld-on plates can be used only above the mount. If required, the bottom elastomer is directly welded.

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