

SENSiQ™ Fixed Mount PLUS (SFM PLUS)

Fixed bearing for load cell applications for nominal loads from 10 t ... 330 t



- **Simple and robust construction, even more stable than the normal SENSiQ™ Fixed Mount**
- **Stable against shear forces up to 40 % of the nominal load**
- **Height dimension is compatible with the SENSiQ™ Secure Mount PLUS**
- **Easy to assemble**
- **Design and manufacturing certified after DIN EN 1090-2 EXC 2**
- **Material: S235, painted**

Application

SENSiQ Fixed Mount PLUS is used for uncomplicated weighing tasks, such as e.g. fill level measuring systems.

In combination with one or two load cells (partial-load measurement) this represents a cost-efficient solution sufficiently accurate for many situations.

In particular this applies to applications with a defined center of gravity, such as hoppers with fluid contents.

Equipment

The SENSiQ Fixed Mount PLUS consists of a double T-beam with reinforcing ribs. The reinforcing ribs create a defined bending zone and a greater stability against shear forces so that additional pinning of the hopper or the supporting beam is in many cases no longer required.

The SENSiQ Fixed Mount PLUS are higher than the SENSiQ™ Elastomer Mount so shims will be required if they are used in combination. No compensation is required if used in combination with the SENSiQ Secure Mount PLUS.

Additionally the height of the bearings can be adjusted with the used of shims by up to 5 mm.

The SENSiQ Fixed Mount PLUS are welded directly on both sides to the steel frame construction.

Function

The measuring displacement from the load cell and the load cell bearing generates in the bending zone of the SENSiQ Fixed Mount PLUS a return force that acts on the load cell that can be compensated for during adjustment.

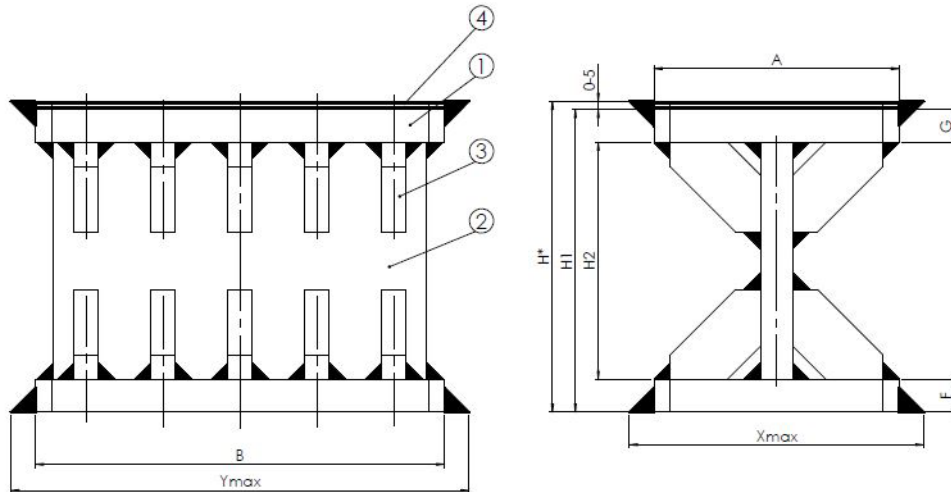
Depending on the point of contact, larger weighing errors can arise due to horizontal forces acting perpendicular to the tilting horizon.

Therefore it is essential that multiple SENSiQ Fixed Mount PLUS must be installed with a common tilting horizon (see the planning-in drawings).

The load distribution between the SENSiQ Fixed Mount PLUS and the load cells depends on the symmetry of the load carriers/hoppers, the location of the bulk material center of gravity and the horizontal forces (wind loads, pipe connections, agitators), in particular if there are 4 supporting points.

As opposed to a full-load measurement using load cells, influencing factors of this kind can cause significantly greater weighing errors.

SENSiQ Fixed Mount PLUS 10 t ... 330 t



Ref.	Model Designation
1	Plate
2	Center plate
3	Rib
4	Leveling plates are enclosed, suitable for adjustment of heights up to 5 mm

Dimensions

Nominal load t	A mm	B mm	F mm	G mm	H* mm	H1 mm	H2 mm	Xmax mm	Ymax mm	Max. shear force kN
10 ... 22	150	250	20	20	190	185	145	180	280	88
33	170	300	20	20	225	220	180	200	330	132
47	200	370	20	20	275	270	230	230	400	188
68	240	440	30	30	300	295	235	270	470	272
100	300	550	35	35	340	335	265	330	580	400
150	350	650	40	40	415	410	330	380	680	600
220	440	800	50	50	475	470	370	470	830	880
330	550	1000	60	60	530	525	405	580	1030	1320

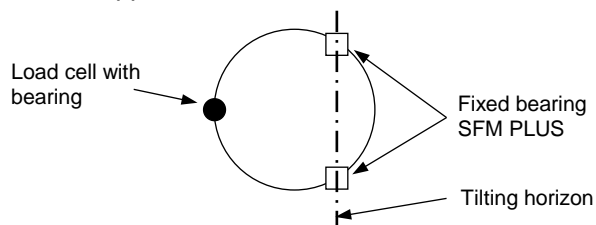
* Max. height using shims

Important Information

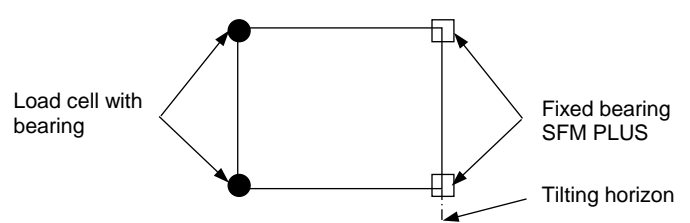
The connecting surfaces for the bearings must be planar and metallically bright. Painted surfaces are not suited for mounting the SENSiQ Fixed Mount.

Arrangement of supporting points

Round hopper with 2 x SFM and 1 LC



Rectangular hopper with 2 x SFM and 2 LCs



Technical Data

Available nominal load		10 t ... 330 t
Weight	10 t ... 22 t	25 kg
	33 t	38 kg
	47 t	65 kg
	68 t	99 kg
	100 t	176 kg
	150 t	296 kg
	220 t	515 kg
	330 t	976 kg
Material		S235JR
Height compensation		5 mm
Operating temperature range Caution: Take into account specifications of SENSiQ Elastomer Mount and load cell.		-30 °C ... +110 °C

SENSiQ Fixed Mount PLUS (without load cell or weld-on plate)

Variants	Order number
10 t ... 22 t	V554135.B02
33 t	V554136.B02
47 t	V554137.B02
68 t	V554138.B02
100 t	V554139.B02
150 t	V554140.B02
220 t	V554141.B02
330 t	V554142.B02

Please contact us for further information on the SENSiQ Fixed Mount PLUS and ask for the manual and the detailed planning-in drawings if required.

The following products also are available



SENSiQ™ Fixed Mount
1 t ... 470 t
BV-D2182



SENSiQ™ Secure Mount PLUS
10 t ... 330 t
BV-D2444



SENSiQ™ Elastomer Mount
0.25 t ... 470 t
BV-D2044



Ring-Torsion Load Cells
RTN 1 t ... 470 t
BV-D2019



SENSiQ™ Secure Mount
0.25 t ... 470 t
BV-D2083



SENSiQ™ Pendulum Mount
1 t ... 100 t
BV-D2025

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