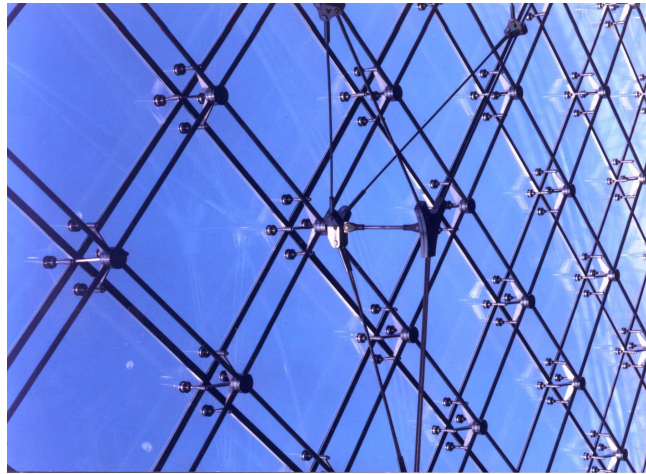


OKAPOINT Point Supported Insulating Glass

The OKAPOINT system distinguishes itself by

- elastic joints
- bolts pre-assembled in screw-in bushes
- countersunk or surface-mounted version



General Description

The OKAPOINT point support for insulating glass is available in a countersunk version and in a surface mounted version. The following two pages show a cross-section of the supports. The supports are fitted with an elastic joint. The pivot of the joint is in the plane of the lower or inner single pane.

In the OKAPOINT FXR 1109 countersunk support, a pure aluminium bushing is inserted between the stainless steel and the glass hollow to transmit the forces. Thanks to its high ductility, the pure aluminium (Al 99.5, see 4.3) allows stress peaks in the countersunk area to be absorbed. To drill a sink hole, the outer pane must be at least 10 mm thick.

Product-specific instructions

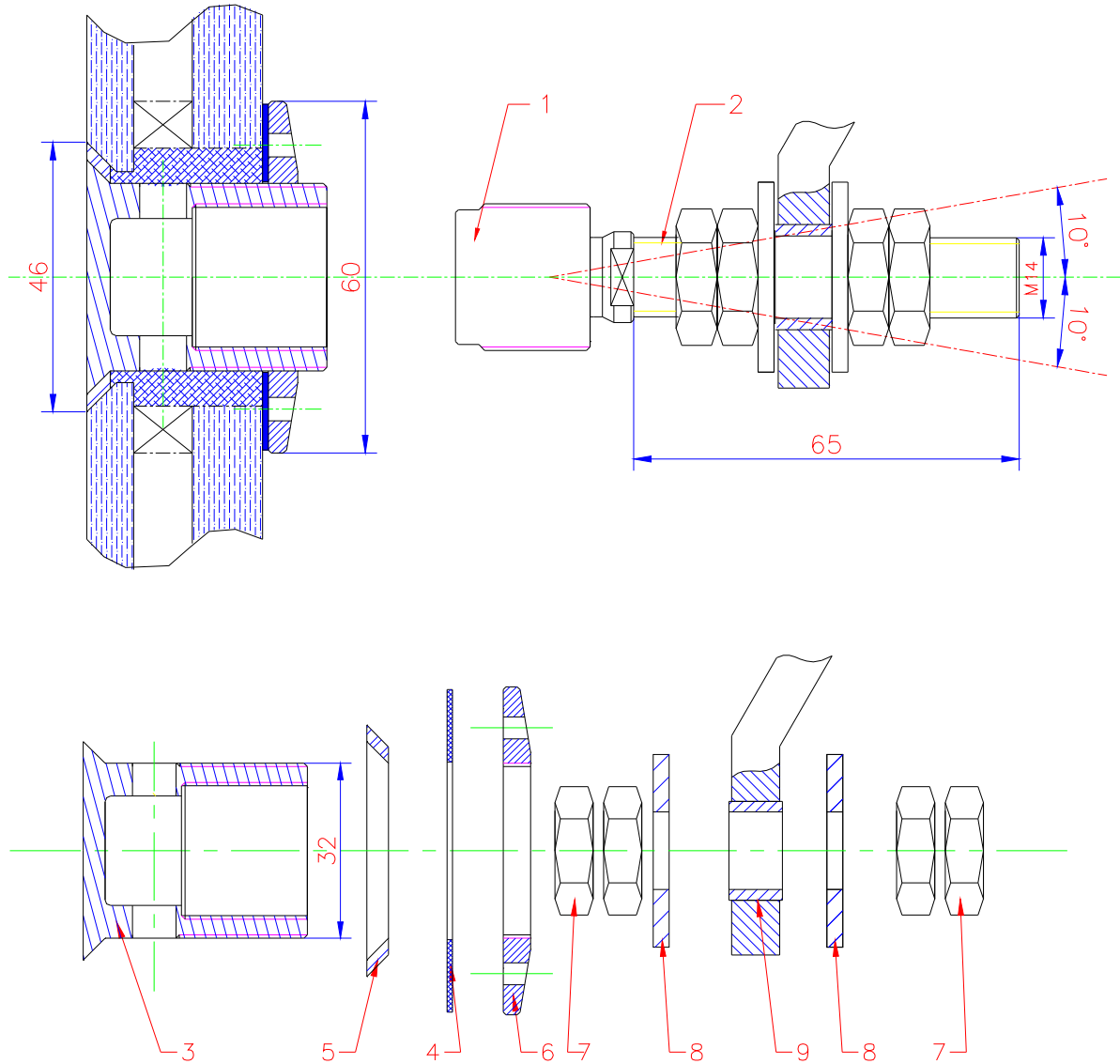
Since there is no general approval by construction supervision authorities for point-supported glazing, agreement must be reached with the competent building authorities before execution as to whether approval is required in individual cases and whether the planned construction will be accepted as a whole.

The customer is responsible for obtaining approval from the building authorities for this construction.

In our technical statements we presume that the load-bearing metal substructure is sufficiently torsionally rigid and stable to be able to absorb the dead weight of the glass panes as well as the surface loads that may occur, without major deformation.

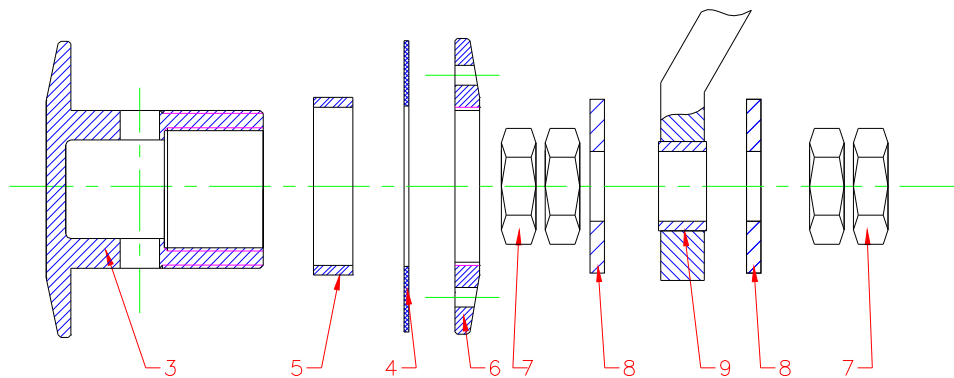
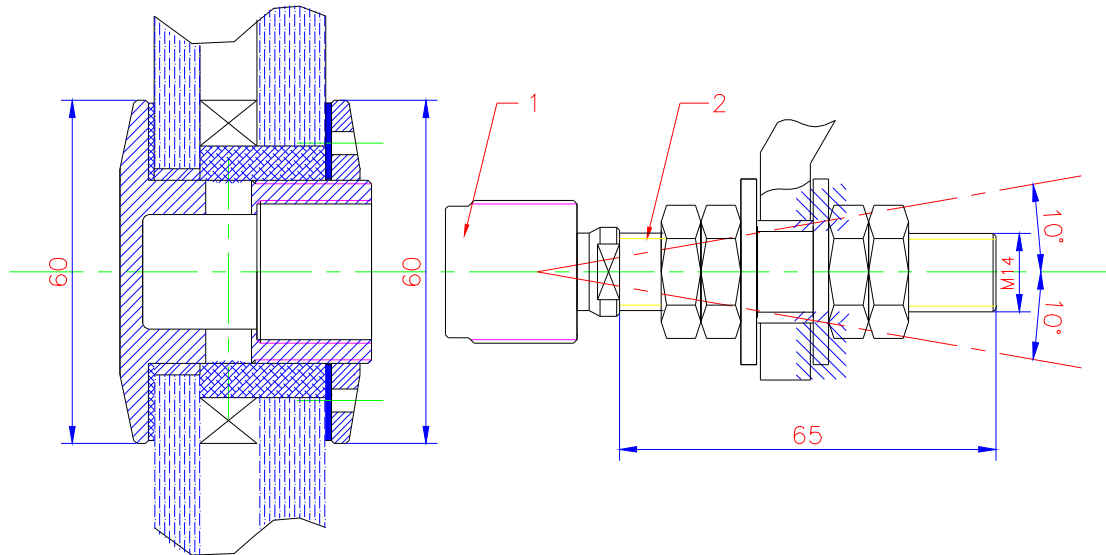
We generally include the specified glass thickness in our quotation. Since we have no detailed information about the loads to be assessed, we have not checked the glass thickness. Our quotation is therefore subject to the correctness of the static calculations. If the local building authorities require static verification, this can only be provided by a recognised structural engineer specialising in statics. The entire construction shall be statically verified and checked. Our offer does not include the costs for the static calculations.

FXR 1109 in the countersunk version



1	threaded bearing bush	6	ring nut
2	bolt	7	nut DIN 439
3	insulating glass sleeve	8	washer
4	sliding ring	9	bush
5	aluminium spacer		

FXR 1109 in the surface mounted version



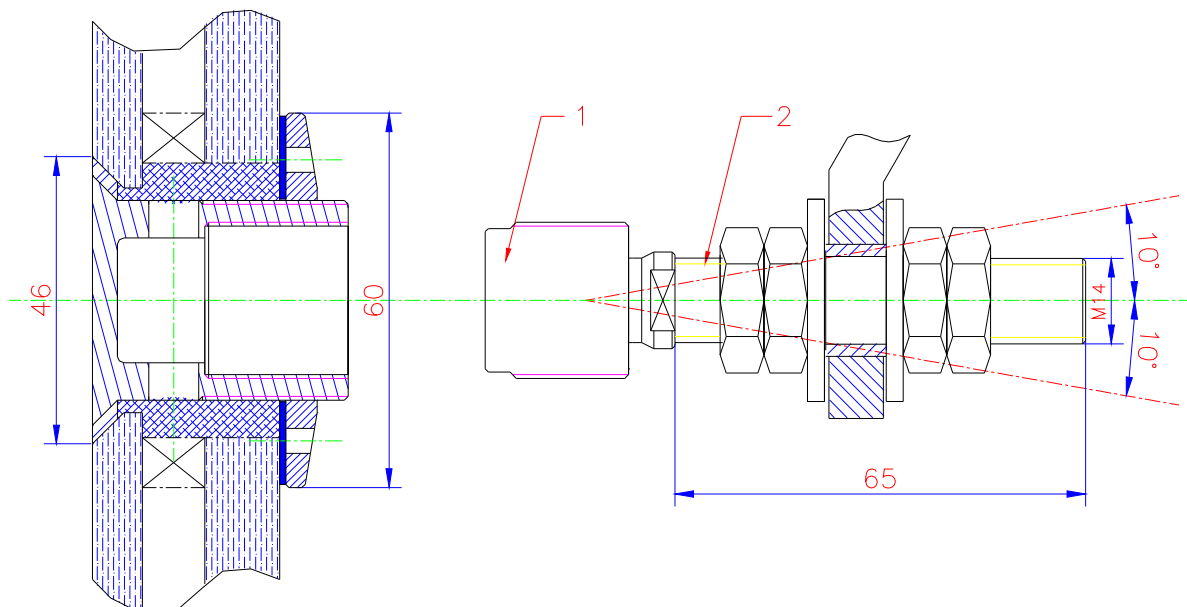
No component tests or static verification in the form of finite element calculations for approval in individual cases are included in our prices.
 Any changes in execution required as a consequence of special building authority conditions or static recalculations are payable by the customer.

Assembly of the point support on the construction site

The retaining bolt with the elastomer joint is preassembled in a screw-in bush before it is delivered to the construction site. On the construction site, the screw-in bush is then screwed into the support preassembled in the insulating glass unit (see schematic diagram below). The unit is screwed in by hand.

To prevent dirt from entering the fine thread, the hole in the preassembled support is masked. Before shipping, the screw-in bushes are screwed into the support in the factory, in order to guarantee that the bushes turn smoothly in the fine thread.

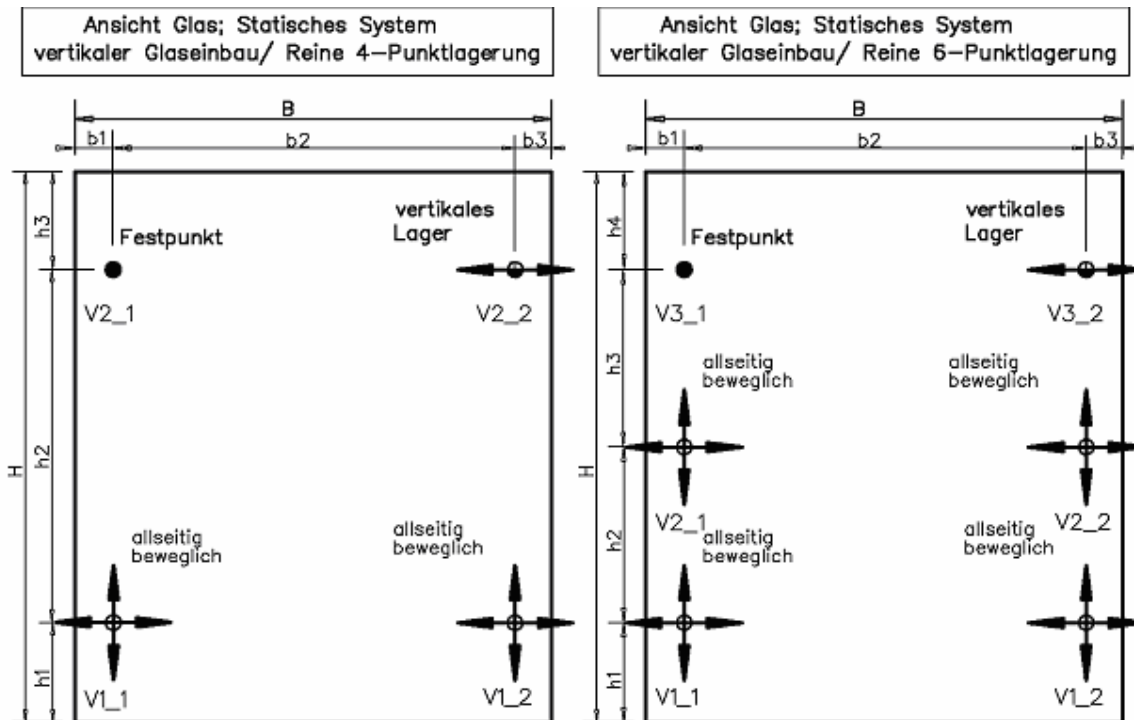
The insulating glass unit with the point support already assembled is then securely mounted on the substructure. Depending on the thickness of the glass, the sleeve may be visible above the nut.



**Insulating Glass with pre-assembled
OKAPOINT FXR 1109**

Glass pane support – static system

When the glass pane is supported, a certain, that is, unrestrained mounting is essential in static terms. This is achieved by means of the following mounting diagram:



LEGENDE

	Bohrung \varnothing B2 Gleitfolie aufbringen Bewegung/Dehnung innerhalb der Bohrung B2 in X und Y Achse
	Langlochbohrung LLB Gleitfolie aufbringen Bewegung/Dehnung innerhalb der Langlochbohrung LLB in X Achse
	Langlochbohrung LLB Keine Gleitfolie aufbringen; Aufnahme der bauseitigen Toleranzen nur in X Achse

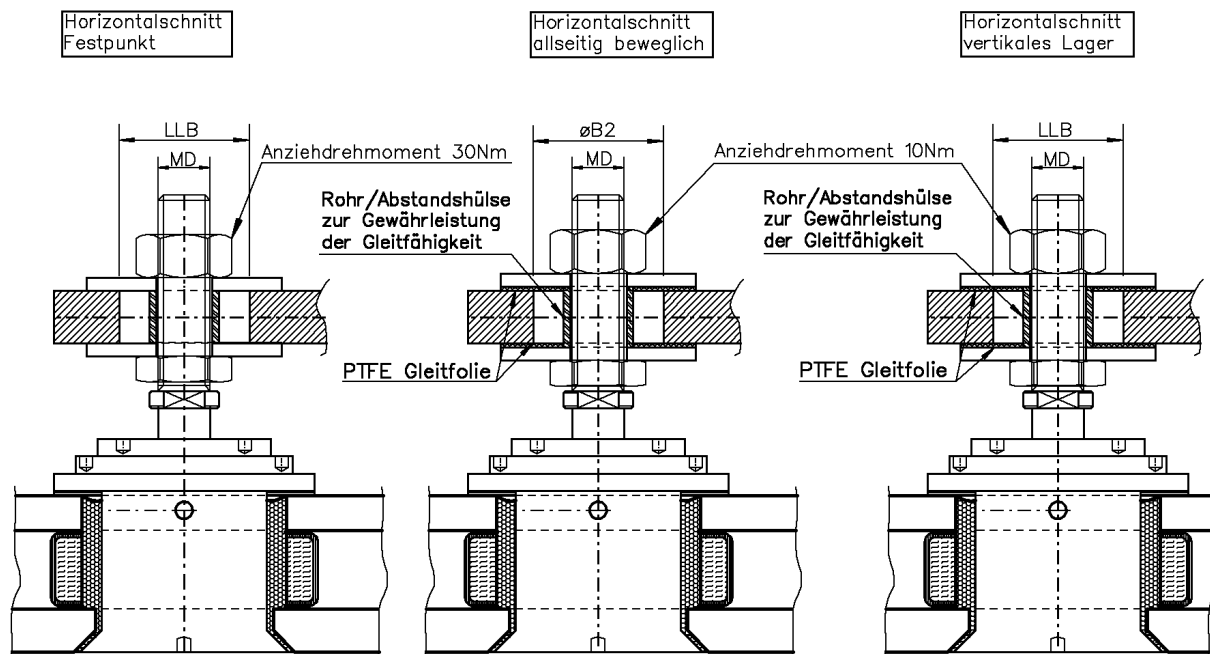
English legend page 5: see last page of this text

Design of the attachment to the substructure

The following points must be noted regarding attachment:

- Insertion of the spacer sleeve
- Insertion of the PTFE sliding foil for moving mounts
- Tightening torque 10 Nm for moving mount
30 Nm for fixed mount (cf. Chapter 3.2)
- All screw connections must be secured using Loctite

In order to accommodate tolerances, the fixed point is designed as an elongated hole. All screw connections must be secured using suitable means, e.g. Loctite. The following drawing is a schematic diagram only.



English legend page 6: see end of this text

Legend page 5:

(left)

View of pane: static system

vertical installation / straight 4-point support

Fixed point

Vertical mount

Movable in all directions (x2)

(right)

(words identical; please note: 6-point support)

LEGEND

Hole Ø B2

Apply sliding foil

Movement/expansion within hole B2 in X and Y axis

Elongated hole LLB

Apply sliding foil

Movement/expansion within elongated hole LLB in X axis

Elongated hole LLB

Do not apply sliding foil

Structural tolerances can only be absorbed in X axis

Legend page 6:

Horizontal cross-section

Fixed point

Horizontal cross-section

Vertical mount

Horizontal cross-section

Movable in all directions

Elongated hole

Tightening torque 30 Nm

Elongated hole

Tightening torque 10 Nm

Hole

Tube/spacer sleeve to
guarantee easy sliding

PTFE sliding foil