

Modern interior design would be unthinkable without glass doors. They create more light, link spaces up and make for pleasant settings. The inherent transparency of glass doors means that great care needs to be taken when designing hardware for them, however. It is the lock, handle and hinges, after all, that lend a glass door its visual identity. FSB has rounded off its offering for commercial doors with a range of hardware for glass doors with outer frames only. The various styles of lockset plate available can all be combined with virtually any standard FSB lever handle or, for commercial applications, with proven handle-and-rose furniture incorporating the AGL compensating bearing. Coordinating the visuals for doors, glass doors and windows is made easy as a result.

Glass door furniture



Illustration r.h.

4220 41 r.h.

4220 51 l.h.

- Aluminium
- AluGrey
- Stainless steel

Rectangular lockset plate with heavy-duty lock for glass doors (DIN 18251, Class 4) designed for use with Europrofile cylinder and lifter assembly centres 72 mm 8 mm steel-bushed split follower latch cast steel bolt head bright nickel-plated zinc die casting handle bushing glass-fibre reinforced polyamide to suit all FSB lever handles



Illustration r.h.

4220 42 r.h.

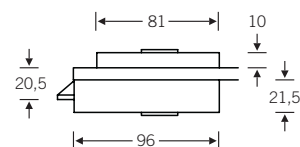
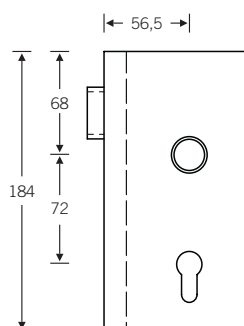
4220 52 l.h.

- Aluminium
- AluGrey
- Stainless steel

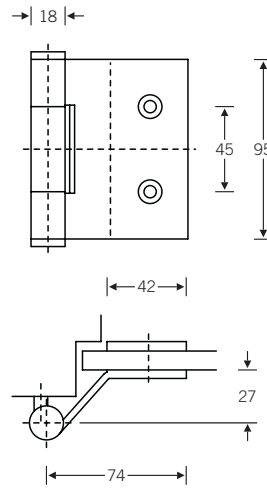
Rectangular lockset plate with heavy-duty lock for glass doors (DIN 18251, Class 4) designed for use with Europrofile cylinder and lifter assembly centres 72 mm 8 mm steel-bushed split follower latch cast steel bolt head bright nickel-plated zinc die casting handle bushing glass-fibre reinforced polyamide to suit FSB commercial hardware with roses

The handles shown are merely illustrative. Virtually any FSB handle can be used. For technical details please refer to Page 338.

Matching strike boxes for double-leaf glass doors Page 334



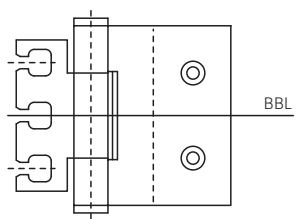
Hinges for glass doors



4228

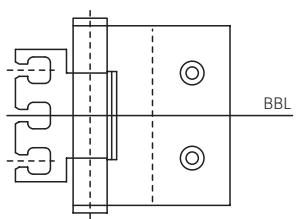
- Satin chromium-plated steel
- Stainless steel

VARIANT glass door hinge in satin chromium-plated steel to suit Aluminium and AluGrey finishes or in stainless steel with hinge connector



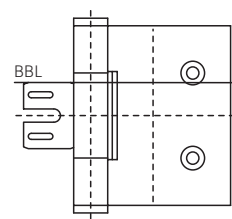
4228 0101

VARIANT VXG 7990/100K commercial hinge for glass doors on rebated timber, steel or aluminium frames with three-dimensionally adjustable mating elements



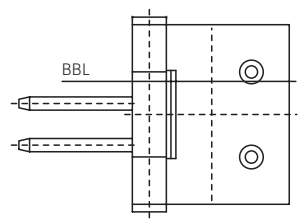
4228 0102

VARIANT VNG 7990/100K commercial hinge for glass doors on rebated steel frames with three-dimensionally adjustable mating elements



4228 0103

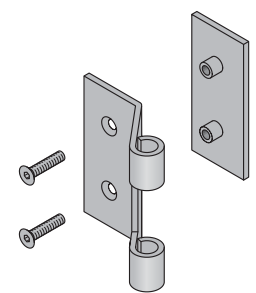
VARIANT VG 8790K commercial hinge for glass doors on rebated steel frames



4228 ..04

41 r.h. | 51 l.h. VARIANT VG 3990K commercial hinge for glass doors on rebated wooden soffit and blockwork frames

Loading capacity 60 kg



Glass door furniture



4223 41 r.h.

4223 51 l.h.

- Aluminium
- AluGrey
- Stainless steel

Softly rectangular lockset plate with heavy-duty lock for glass doors (DIN 18251, Class 4) designed for use with Europrofile cylinder and lifter assembly centres 72 mm 8 mm steel-bushed split follower latch cast steel bolt head bright nickel-plated zinc die casting handle bushing glass-fibre reinforced polyamide to suit all FSB lever handles

Illustration r.h.



4223 42 r.h.

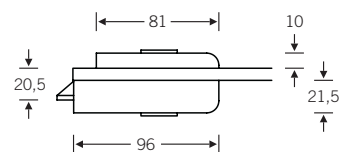
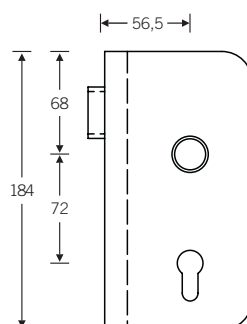
4223 52 l.h.

- Aluminium
- AluGrey
- Stainless steel

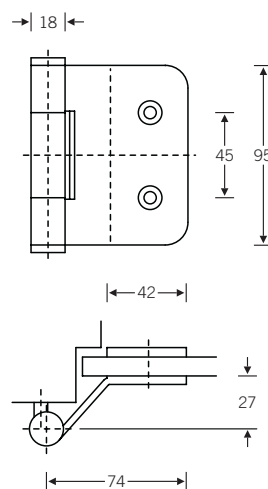
Softly rectangular lockset plate with heavy-duty lock for glass doors (DIN 18251, Class 4) designed for use with Europrofile cylinder and lifter assembly centres 72 mm 8 mm steel-bushed split follower latch cast steel bolt head bright nickel-plated zinc die casting handle bushing glass-fibre reinforced polyamide to suit FSB commercial hardware with roses

Illustration r.h.

The handles shown are merely illustrative. Virtually any FSB handle can be used. For technical details please refer to Page 338. Matching strike boxes for double-leaf glass doors Page 334.



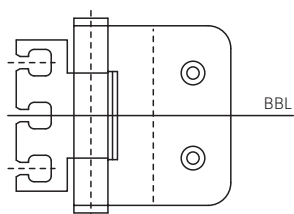
Hinges for glass doors



4227

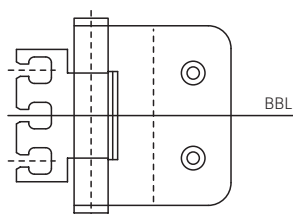
- Satin chromium-plated steel
- Stainless steel

VARIANT glass door hinge in satin chromium-plated steel to suit Aluminium and AluGrey finishes or in stainless steel with hinge connector



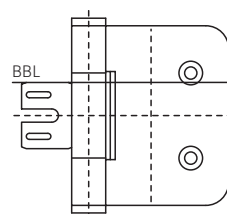
4227 0101

VARIANT VXG 7990/100 commercial hinge for glass doors on rebated timber, steel or aluminium frames with three-dimensionally adjustable mating elements



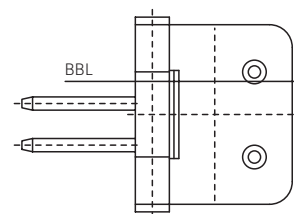
4227 0102

VARIANT VNG 7990/100 commercial hinge for glass doors on rebated steel frames with three-dimensionally adjustable mating elements



4227 0103

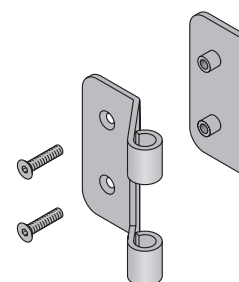
VARIANT VG 8790 commercial hinge for glass doors on rebated steel frames



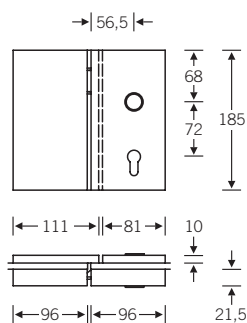
4227 ..04

41 r.h. | 51 l.h. VARIANT VG 3990 commercial hinge for glass doors on rebated wooden soffit and blockwork frames

Loading capacity 60 kg



Strike boxes for double-leaf glass doors



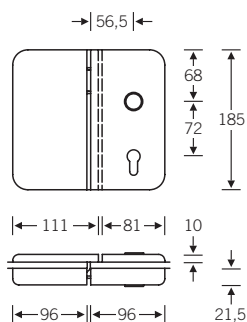
4220 45 r.h.

4220 55 l.h.

- Aluminium
- AluGrey
- Stainless steel

to match lockset plate 4220

Illustration l.h.



4223 45 r.h.

4223 55 l.h.

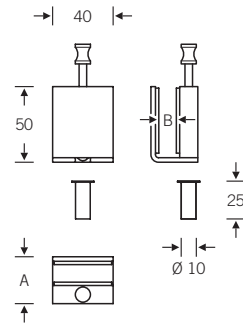
- Aluminium
- AluGrey
- Stainless steel

to match lockset plate 4223

Illustration l.h.

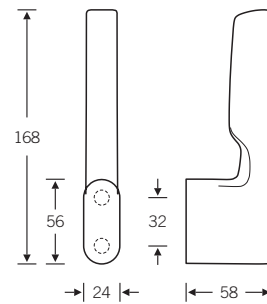
The strike boxes shown here are DIN lefthand (l.h.) for DIN righthand (r.h.) locks

Door holder
Sliding door handle



4230
■ Stainless steel

| thickness of glass (B) | width overall (A) | order code. |
|------------------------|-------------------|-------------|
| 8 mm | 27 mm | 4230 0000 |
| 10 mm | 29 mm | 4230 1000 |
| 12 mm | 31 mm | 4230 1200 |

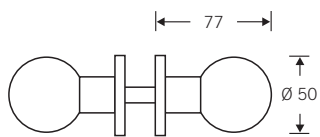


3686
■ Aluminium
■ AluGrey
■ Stainless steel

Sliding door handle for fixing in pairs

Design: Jahn/Lykouria

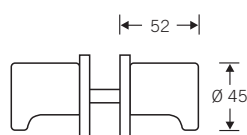
Doorknobs for glass doors



2302 07

- Aluminium
- AluGrey
- Stainless steel
- Brass

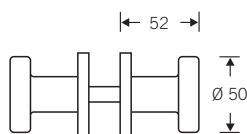
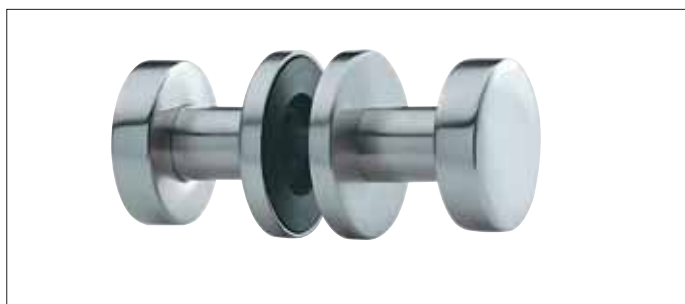
Bore hole Ø 13 mm



2322 07

- Aluminium
- Stainless steel

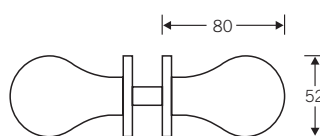
Bore hole Ø 13 mm



2329 07

- Aluminium Ø 50 mm
- AluGrey Ø 50 mm
- Stainless steel Ø 55 mm

Bore hole Ø 13 mm



2374 07

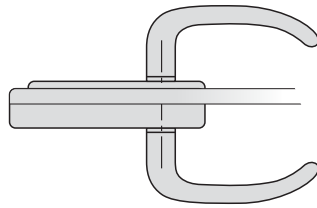
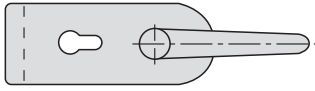
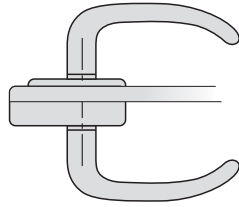
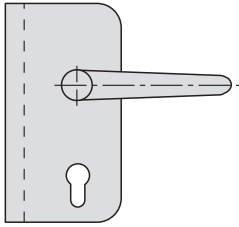
- Aluminium
- AluGrey

Bore hole Ø 13 mm

Deadknobs

Deadknobs are generally fitted directly to glass doors. There are no locks involved. The knobs are joined together at the assembly stage by means of an 8 mm square spindle (for two female parts).

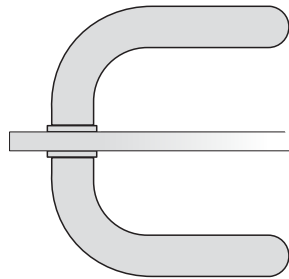
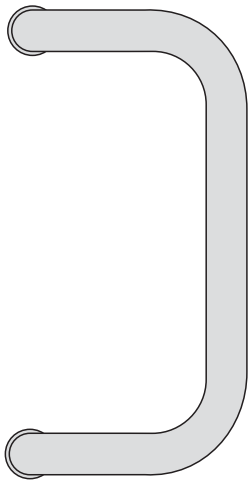
Lever handle sets to suit
lockset plates on glass doors
Pull handles for glass doors



Lever handle sets to suit
lockset plates on glass doors

Besides making its own special-purpose hardware for glass doors, with very few exceptions FSB also has the wherewithal to adapt its entire range of lever and knob handles to the hardware for glass doors commonly marketed by competitors. Slight technical alterations concerning how the lever handles are connected and how fastening is effected do, however, need to be borne in mind in the process. For clarity's sake, exact details of the lock type (e.g. maker's name and product code) should be furnished when ordering lever

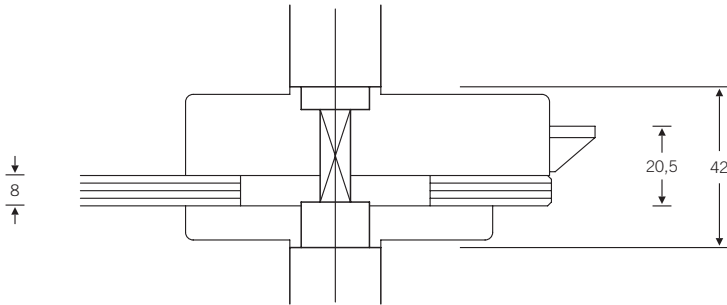
handles and doorknobs for lockset plates on glass doors. Please submit orders well in advance to allow for the adaptation input required. It is not possible to deliver from stock.



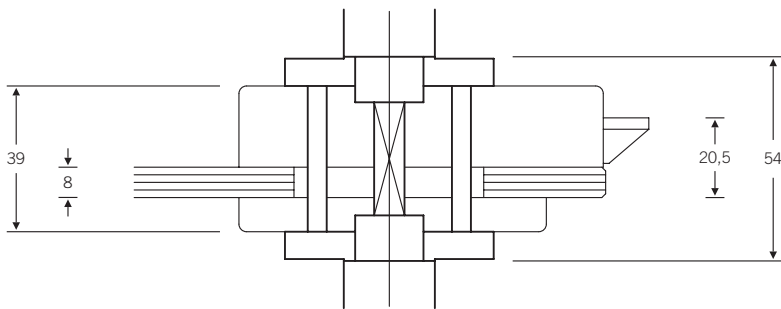
Pull handles for glass doors

Pull handles of round or oval cross-section can be deployed in a great variety of ways, on one or both faces of a door, as design features with special fastenings serving to either operate the door or fulfil a safety function.

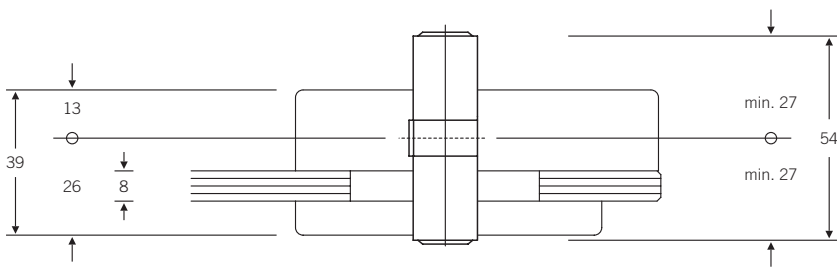
Technical notes



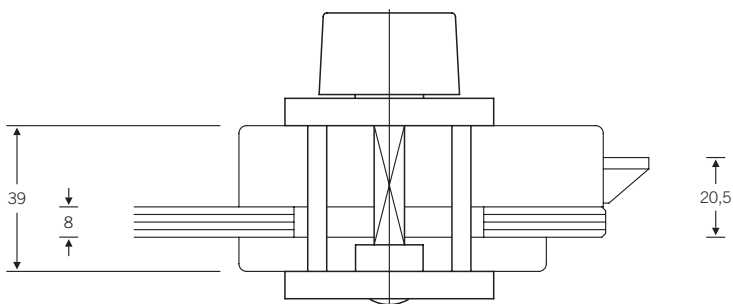
A modified lever handle set is required for glass-door lockset plates 4220 41/51 and 4223 41/51.



Lockset plates 4220 42/52 and 4223 42/52 can be fitted with either standard roses and lever handle sets or commercial fittings.



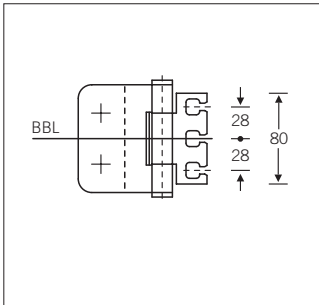
Lock cylinders with a minimum length of 54 mm (27 mm to both sides) are required for all lockset plates on glass doors.



Lockset plates for glass doors are also available in a bathroom variant. They can be fitted with standard roses and are suitable for doors opening both inwards and outwards.

Lever handles are not supplied as part of these hardware sets. Please order the desired model separately, indicating that it is to be used on glass doors and detailing the lockset plate type and DIN handing.

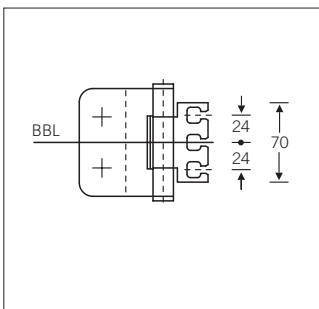
Frame connection dimensions



VARIANT commercial hinge for glass doors on rebated timber, steel or aluminium frames with three-dimensionally adjustable mating elements VX

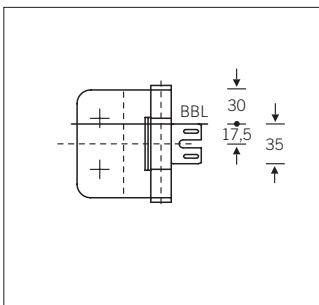
- suitable for wholly glazed doors with standard vertical borehole layout
- for glass 8 and 10 mm thick
- twistproof threaded stud
- concealed, no-maintenance axial-radial sliding bearings
- combinable with mating element:
 - for blockwork frames VX 7601 3D

for soffit frames VX 7602 3D
 for blockwork frames VX 7605 3D
 for steel frames VX 7611 3D
 VX 7612 3D
 for aluminium frames VX 7621 3D
 · non-handed



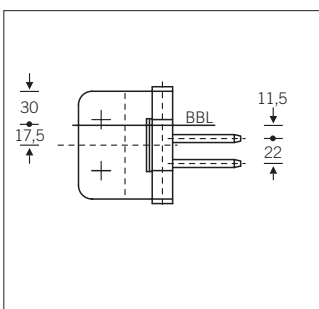
VARIANT commercial hinge for glass doors on rebated steel frames with three-dimensionally adjustable mating elements

- suitable for wholly glazed doors with standard vertical borehole layout
- for glass 8 and 10 mm thick
- twistproof threaded stud
- concealed, no-maintenance axial-radial sliding bearings
- combinable with mating element VN 7608/120 3D
- non-handed



VARIANT commercial hinge for glass doors on rebated steel frames

- suitable for wholly glazed doors with standard vertical borehole layout
- for glass 8 and 10 mm thick
- for mating elements V 8600 or V 8610
- non-handed



VARIANT-commercial hinge for glass doors on rebated wooden soffit and blockwork frames

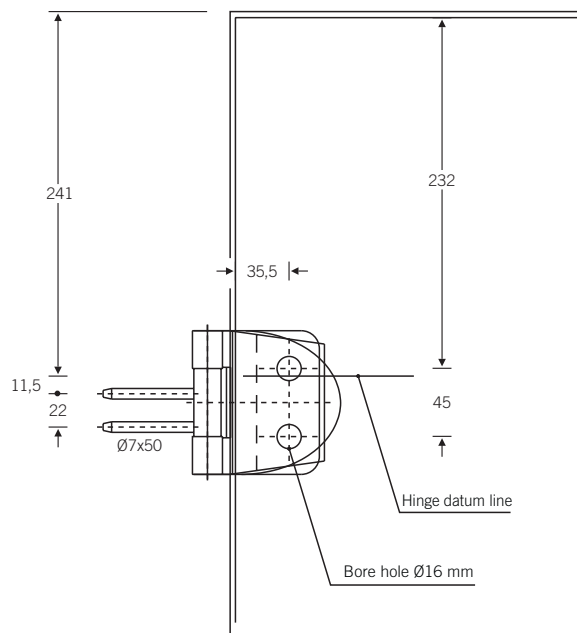
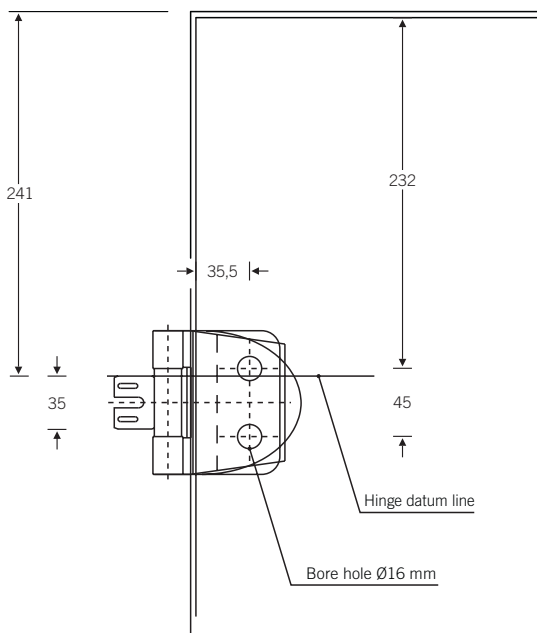
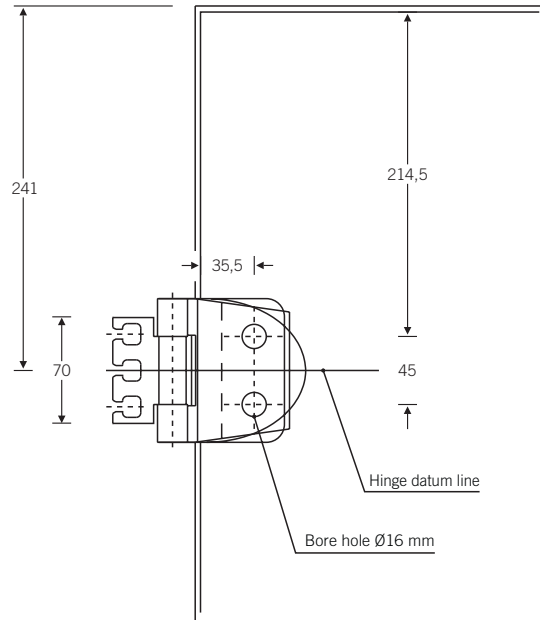
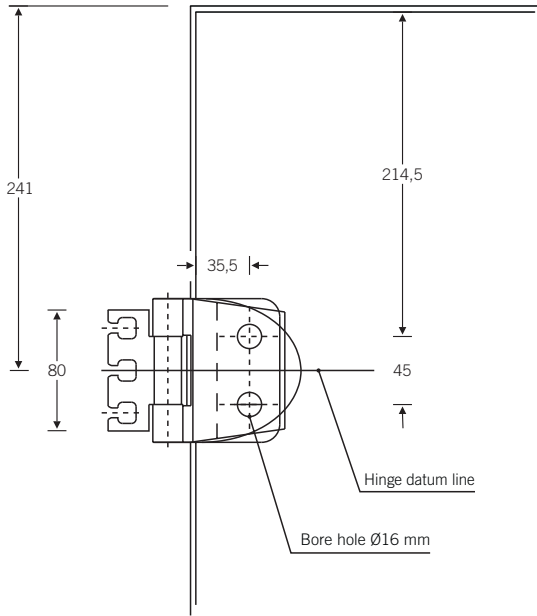
- suitable for wholly glazed doors with standard vertical borehole layout
- for glass 8 and 10 mm thick
- for mating elements of the V 3600, V 3610, V 3630, V 3650 series and clamping block V 3604 or V 3607
- necessary to indicate DIN handing

SIMONSWERK engineering and quality are a byword for safety and stability to the highest professional standards. For further information on hinges, hinge connectors, frame fastening elements etc., please consult the latest SIMONSWERK manual.

SIMONSWERK GmbH
 Baubeschlagtechnik
 Bosfelder Weg 5
 33378 Rheda-Wiedenbrück
 Germany

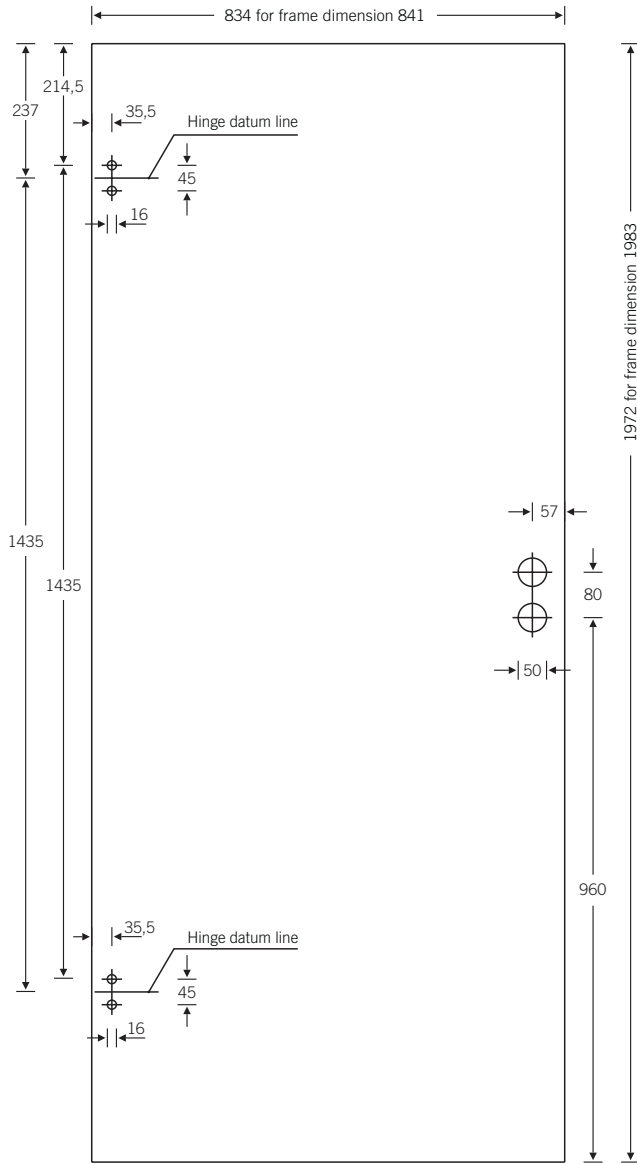
Telephone +49 5242 413-0
 Telefax +49 5242 413-210
 www.simonswerk.de
 mail@simonswerk.de

Technical notes

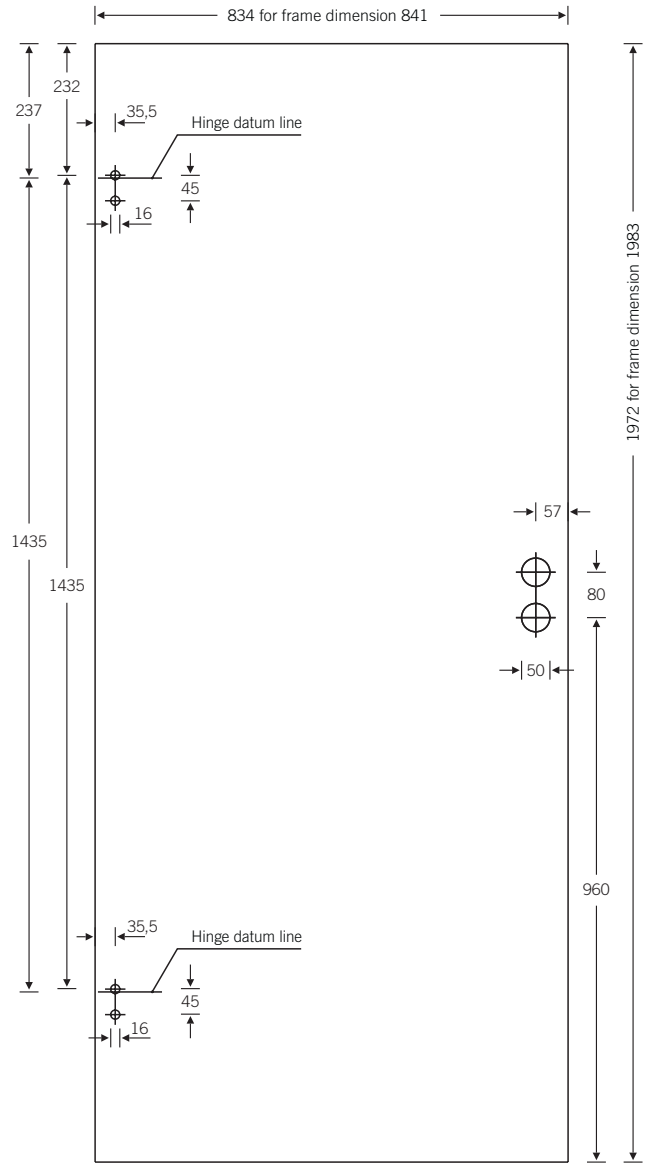


The positioning of hinge connectors relative to the hinge datum line also necessitates adapting bore holes in the glass door. This should be borne in mind most notably in the cases of VX and VN commercial hinges.

Door dimensions acc. DIN 18101



4227 01 | 4227 02
4228 01 | 4228 02



4227 03 | 4227 04
4228 03 | 4228 04

| | | | |
|---------------------------|------------|------------|-------------|
| T.D.I.U.S.* | 750 x 2000 | 875 x 2000 | 1000 x 2000 |
| Frame rebate dimensions | 716 x 1983 | 841 x 1983 | 966 x 1983 |
| Standard glass dimensions | 709 x 1972 | 843 x 1972 | 959 x 1972 |

| | | | |
|---------------------------|------------|------------|-------------|
| T.D.I.U.S.* | 750 x 2125 | 875 x 2125 | 1000 x 2125 |
| Frame rebate dimensions | 716 x 2108 | 841 x 2108 | 966 x 2108 |
| Standard glass dimensions | 709 x 2097 | 834 x 2097 | 959 x 2097 |

* = theoretical dimensions in unfinished state

Functional and associative aspects.

The formal implications of using colour are manifold. Colour makes houses larger or smaller, makes them stand out against or blend in with Nature. Besides its spatial (physiological) effect, colour also has the psychological effect of triggering associations. A darker shade of light blue applied to the outside of buildings can, for instance, have nautical connotations and, applied to the interior, intuitively make reference to the function of having a bath. Whilst social concerns were in no way a decisional driving force for Le Corbusier, colour was nevertheless expected to be of service to humanity in architecture. He saw his investigations as aiming to provide

people's individual tendencies and inner needs with tools conducive to "self-revelation". His deliberations are also to be seen as a reaction against the sometimes oppressive external impact of large edifices. Colour was a multilayered means of visual expression for Le Corbusier: an element engendering identity and meaning that completes architecture without alienating it.