



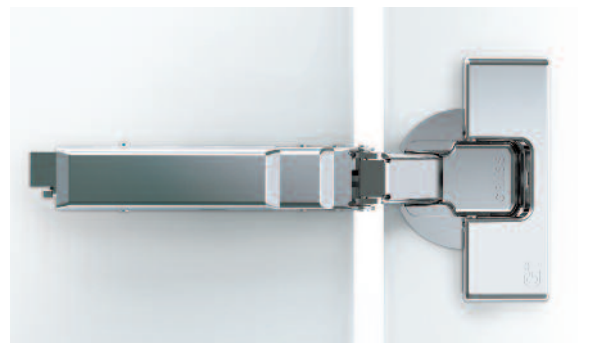
TIOMOS HINGES



G* GRASS®

TIOMOS HINGE SYSTEM

Integrated Soft-close, stylish design, maximum stability.
The hinge system for the future.







Tiomos, an elegant hinge system today that meets the technical and functional requirements of tomorrow.

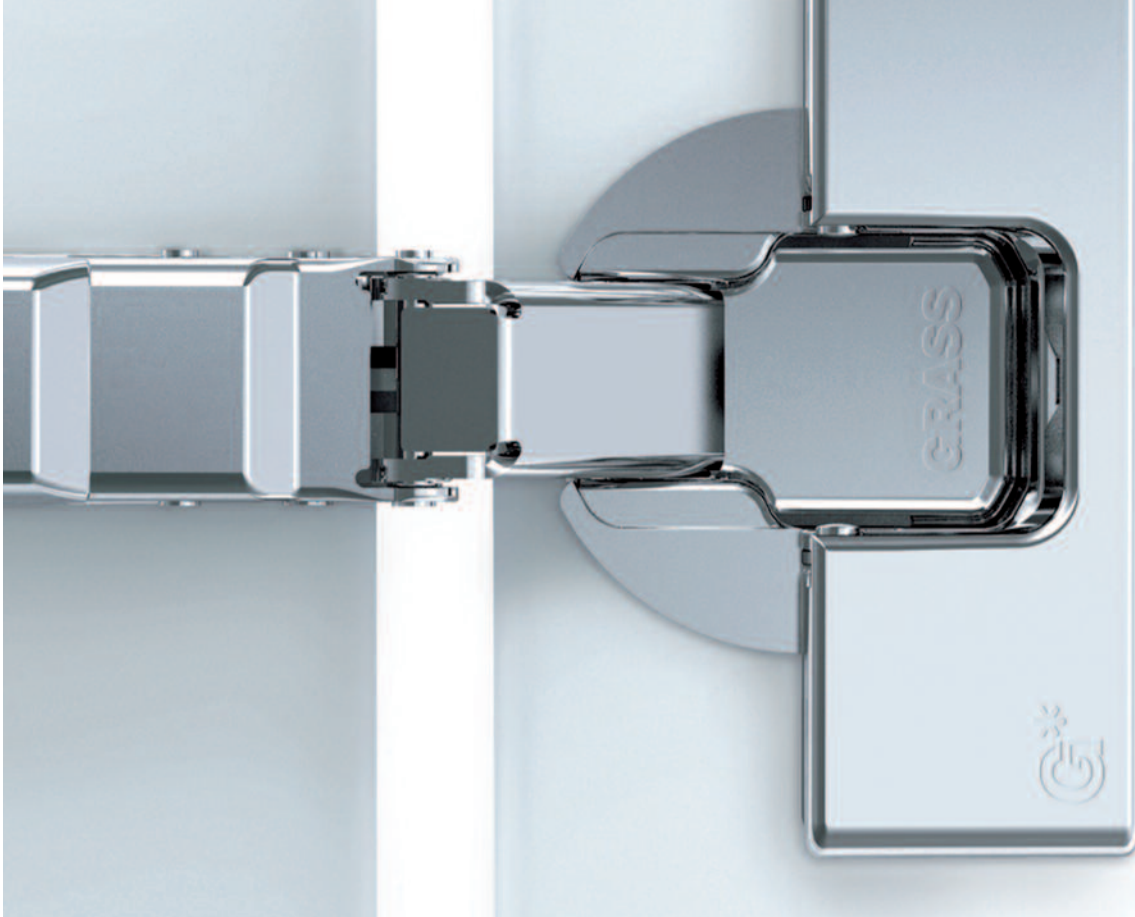


Our developers set out to create a product innovation – a completely new hinge system. The result was Tiomos. Not only does Tiomos outperform any other hinge in the industry, it offers a timeless design as well as its own individual character.

Tiomos is a completely new hinge concept. The product range provides perfect movement for virtually every application, from standard doors to wide angle doors, from frameless applications to face frame applications. Tiomos is available in a 45mm or 42mm boring pattern for dowelled hinges and 45mm for screw-on hinges and now in the ever popular tool free version -

Tiomos Impresso.

The Tiomos offers an adjustable Soft-close mechanism, which is fully integrated and concealed in the hinge arm. The closing process is extremely smooth from the degree that the Soft-close is activated until the door is completely shut. With the superb engineering and design, size and weight of the door will not be a factor. The cabinet doors pull open with ease and minimal gaps can be achieved with the new design of the hinge. In summary, Tiomos offers the ideal solution to the ever increasing requirements of today's manufacturers.



One hinge system to cover all applications.
Tiomos provides movement systems for virtually every application.

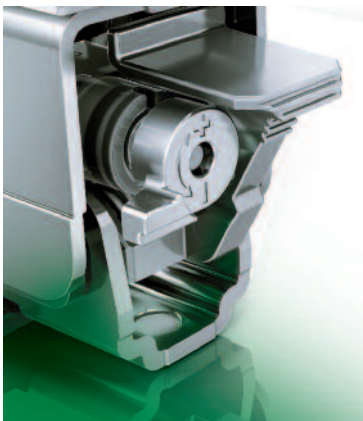
Tiomos is not a revamp of an existing hinge system but an evolutionary new development.

The product range provides perfect movement for virtually every application, from standard doors to wide angle doors, from diagonal corner hinges to pie cut corner hinges, in both frameless and face frame applications. The Tiomos is offered in a Self-close version or a Soft-close version, in a 42mm boring pattern, 45mm boring pattern, and the tool-less Impresso in a 42/45mm pattern. In summary, Tiomos offers the ideal solution to the ever increasing requirements of today's manufacturers.



TIOMOS HINGE SYSTEM

One hinge system featuring a multitude of innovative aspects.



Soft-close technology is concealed within the hinge arm.

Three levels of closing pressure are available with the Tiomos adjustable Soft-close mechanism, which is fully integrated and concealed in the hinge arm. The hinges arrive with the adjustment lever in the horizontal position. A turn to the left or the right will adjust the Soft-close mechanism to your individual requirements.



Perfect alignment with a twist of the hand.

For fine adjustment, the Tiomos hinge system offers three dimensional adjustment. Depth adjustment (+3/-2mm) is based on the worm gear principle and is continuous and self-locking. Depending on the type of base plate chosen, height adjustment ($\pm 2.5\text{mm}$) can be achieved via a worm gear or through elongated holes. Side adjustment ($\pm 2\text{mm}$) is on the hinge arm.



The new kinematics inside Tiomos.

The complex inner workings of this high-tech hinge are hidden from view, but they are most impressive when working as one. With the new kinematics in place the doors are extremely easy to open. And this mechanism makes alignment with the smallest of gaps and reveals possible opening up new possibilities to cabinet designers.



For stronger damping action, turn the adjustment lever by 90° to the right.



Tiomos hinges leave the factory with the adjustment lever in the horizontal position.

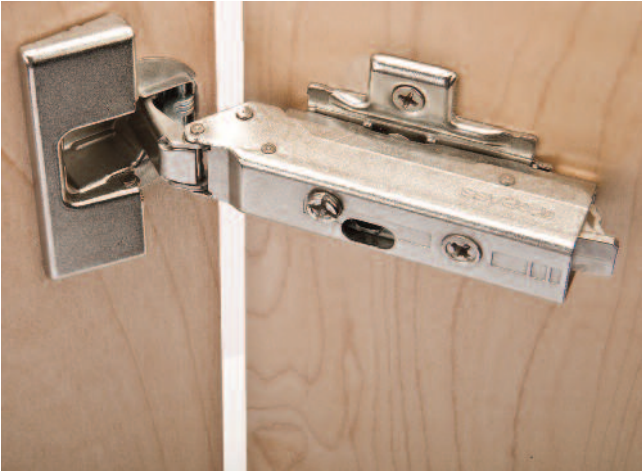


For a gentler closing action, the adjustment lever of the Soft-close damper is turned to the left by 90°.

Technical Information

For Tiomos

Features



- Adjustable soft-close mechanism integrated and concealed in the hinge arm
- Continuous, smooth closing action from the degree that the Soft-close is activated until the door is completely closed
- Uniform closing action regardless of the door size, weight, or materials
- Soft-close mechanism can be adjusted easily and without tools, even after doors are installed
- Each Tiomos hinge has 3 settings for closing performance
- Increased applications:
 - * Full overlay from 24 - 13.5mm
 - * Overlay from 19 - 11.5mm
 - * Half Overlay from 12.5 - 5mm
 - * Inset

• Depth adjustment (+3/-2mm)

is smooth and self-locking via worm screw principle

• Integrated damper adjustment

with 3 Soft-close settings.
Adjustment system is concealed in the hinge arm.

• Ergonomic clip

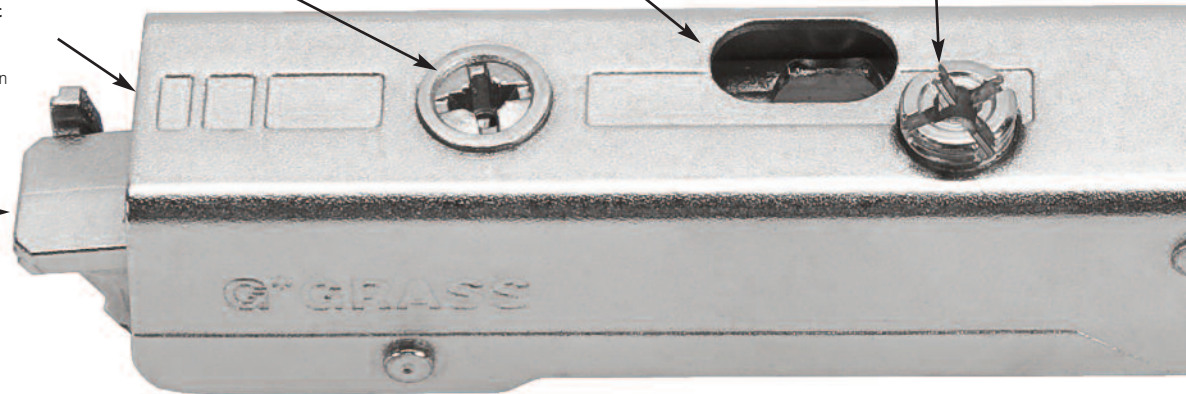
release with audible locking

• Easy height adjustment ($\pm 2.5\text{mm}$)

via hinge arm

• Side adjustment ($\pm 2\text{mm}$)

with overturn stop



3 Soft-close settings

adjust to meet your individual Soft-close requirements.

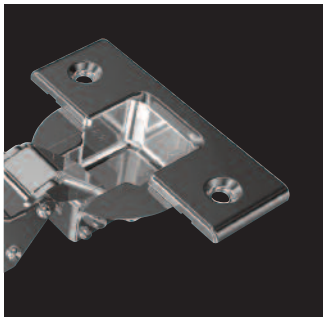


Wide selection

of hinge overlays and specialty hinges cover all application needs.

Features & Benefits

- One hinge type for all door thicknesses 14 - 24mm
- 3-dimensional adjustment with suitable base plate
 - * Depth adjustment $\pm 3/-2$ mm via self-locking worm screw
 - * Height adjustment ± 2.5 mm via hinge arm
 - * Side adjustment with overturn stop ± 2 via hinge arm
- Soft-close or Self-close hinges are available
- For face frame or frameless cabinets
- Impresso for tool free application
- 42mm and 45mm boring patterns

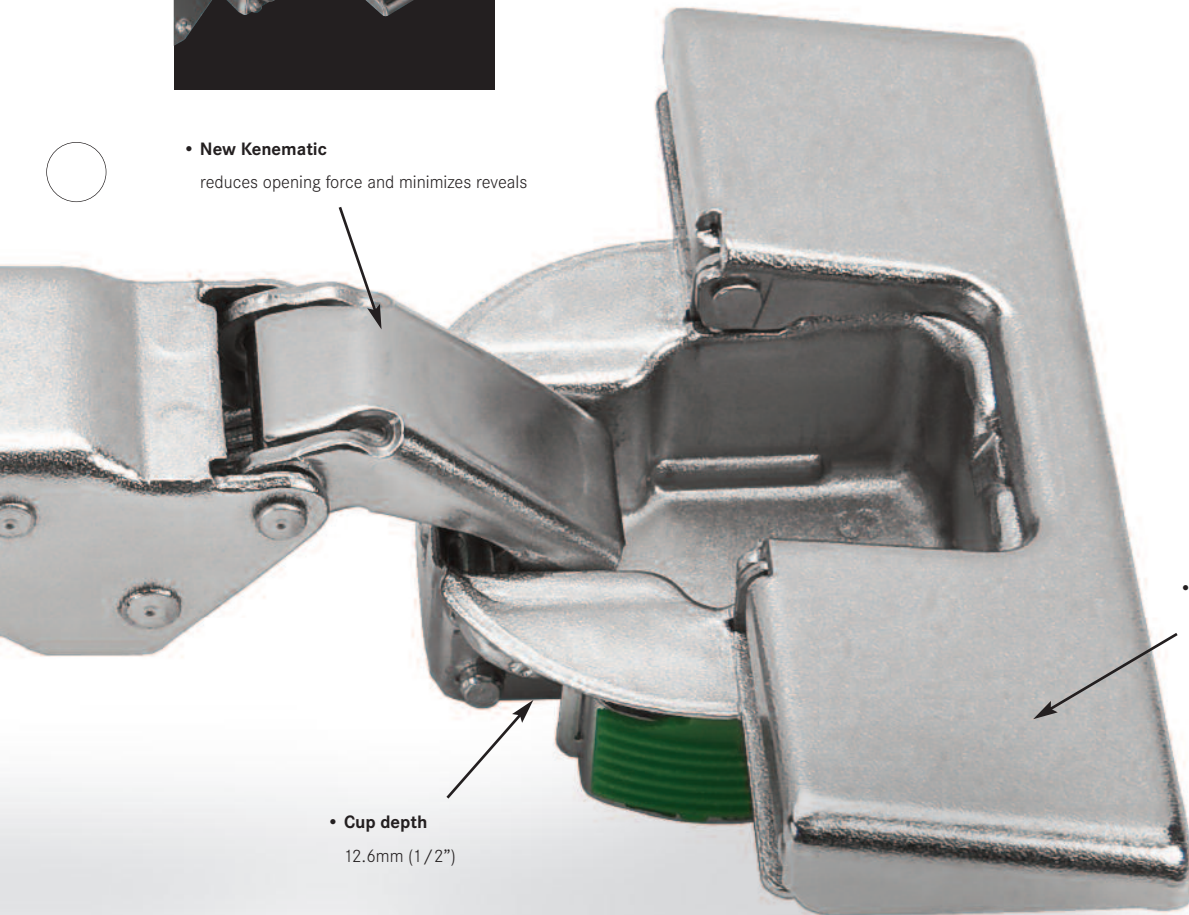


Dowelled and Screw-on cup attachments. Dowelled available in both 42mm and 45mm patterns. Screw-on available in 45mm pattern.





• **Impresso Hinges**
for tool free application

• **New Kenematic**
reduces opening force and minimizes reveals



• **Cup depth**
12.6mm (1/2")

• **Tiomos Styles**
42mm pattern, Screw-on,
45mm pattern, Screw-on and Dowelled,
and Impresso 42/45mm pattern

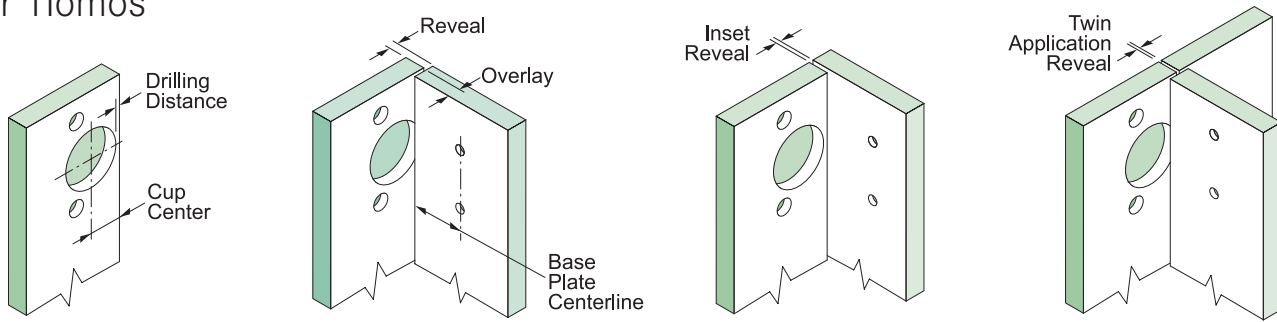
| Opening angle | | Description | Full overlay | Overlay | Half overlay | Inset | Page |
|---------------|---|--|---|--|---|---|------|
| | | Technical Information | | | | | 6-9 |
| 110° |  | Tiemos 110 <ul style="list-style-type: none"> Optimal reveals up to 24 mm door thickness Convenient depth adjustment via worm gear |  |  |  |  | 14 |
| 120° |  | Tiemos 120 <ul style="list-style-type: none"> Optimal reveals up to 24 mm door thickness Convenient depth adjustment via worm gear |  |  |  | | 16 |
| 160° |  | Tiemos 160 <ul style="list-style-type: none"> Optimal reveals up to 32 mm door thickness Zero protrusion For cabinets with inset drawers or pull-out shelves |  |  |  | | 18 |
| 95° |  | Tiemos 95 <ul style="list-style-type: none"> Optimal reveals up to 36 mm door thickness Convenient depth adjustment via worm gear |  |  |  |  | 20 |
| 110° |  | Tiemos 110/90A <ul style="list-style-type: none"> Hinge for blind corner cabinets, overlay Convenient depth adjustment via worm gear | |  | | | 22 |
| 110° |  | Tiemos 110/90E <ul style="list-style-type: none"> Hinge for blind corner cabinets, inset Convenient depth adjustment via worm gear | | | |  | 24 |
| 110° |  | Tiemos 110/30A <ul style="list-style-type: none"> For 30° angled cabinets, overlay Convenient depth adjustment via worm gear | |  | | | 26 |
| 110° |  | Tiemos 110/30E <ul style="list-style-type: none"> For 30° angled cabinets, inset Convenient depth adjustment via worm gear | | | |  | 28 |
| 110° |  | Tiemos 110/37A <ul style="list-style-type: none"> For 37° angled cabinets, overlay Convenient depth adjustment via worm gear | |  | | | 30 |
| 110° |  | Tiemos 110/37E <ul style="list-style-type: none"> For 37° angled cabinets, inset Convenient depth adjustment via worm gear | | | |  | 32 |
| 110° |  | Tiemos 110/45A <ul style="list-style-type: none"> For 45° angled cabinets, overlay Convenient depth adjustment via worm gear | |  | | | 34 |

| Opening angle | | Description | Full overlay | Overlay | Half overlay | Inset | Page |
|---------------|--|---|--------------|---------|--------------|-------|------|
| 110° | | Tiomos 110/45E <ul style="list-style-type: none"> • For 45° angled cabinets, inset • Convenient depth adjustment via worm gear | | | | | 36 |
| 120° | | Tiomos 120/-15A <ul style="list-style-type: none"> • For -15° angled cabinets, overlay • Convenient depth adjustment via worm gear | | | | | 38 |
| 120° | | Tiomos 120/-30A <ul style="list-style-type: none"> • For -30° angled cabinets, overlay • Convenient depth adjustment via worm gear | | | | | 40 |
| 120° | | Tiomos 120/-45A <ul style="list-style-type: none"> • For -45° angled cabinets, overlay • Convenient depth adjustment via worm gear | | | | | 42 |
| 110° | | Tiomos PCC <ul style="list-style-type: none"> • For pie cut corner application • Convenient depth adjustment via worm gear | | | | | 44 |

| | | |
|--|--|----|
| | Tiomos base plates | 46 |
| | Accessories <ul style="list-style-type: none"> • Hinge arm cover caps • Opening angle reduction clips | 50 |
| | Machinery | 52 |
| | Test Criteria | 54 |

Technical Information

For Tiomos



Number of hinges per door

The number of hinges is determined by the door height, door weight, quality of the material and the fixing of the cup and base plate.

The load and height data refer to 24" standard door widths.

The table refers to hinges with and without integrated dampers. Grass strongly recommends a trial mount for all hinges and base plates.

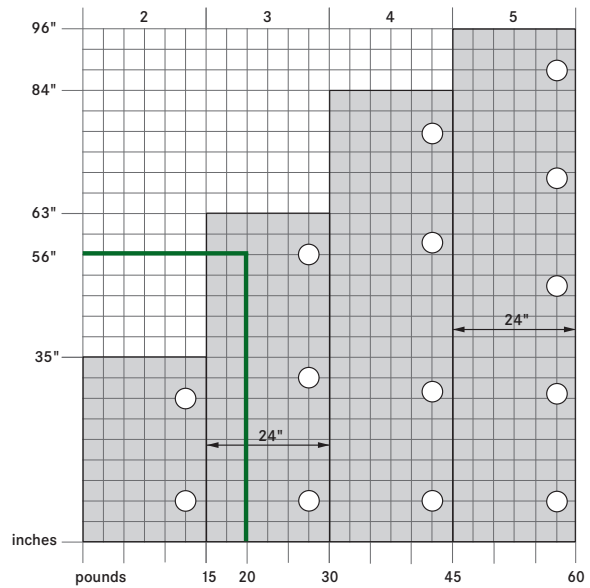
Attach base plates using all available screw holes.

Example:

For doors measuring 56" x 24" and weighing 19 lbs., Grass recommends the installation of 3 hinges.

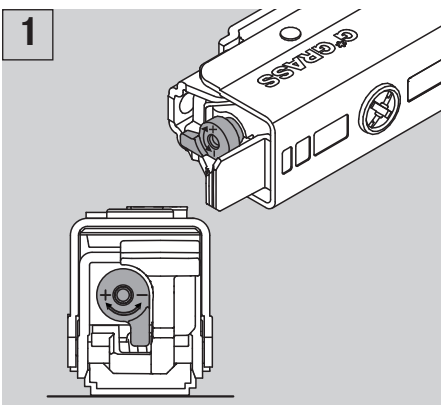
Note: The distance between the top and bottom hinge must be greater than the width of the door.

The **Tiomos** hinge meets and exceeds the minimum requirements of ANSI/BHMA A156.9 Standard.



Tool-less Soft-close adjustment

Soft-closing performance can be regulated for any door size and weight with the Tiomos adjustable integrated Soft-close. Depending upon the requirement, the Soft-closing settings can be adjusted easily and without tools. With 2 hinges there are 6 Soft-close settings.

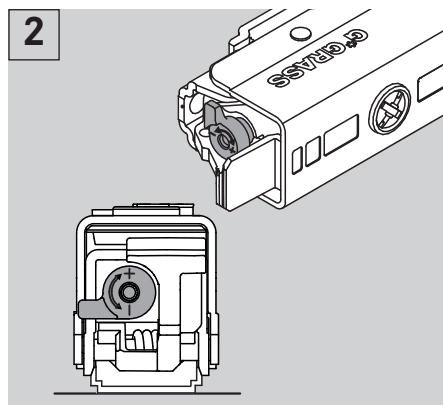


1 Light setting

Adjustment lever points toward the cabinet wall

Appropriate for:

- Small, light doors

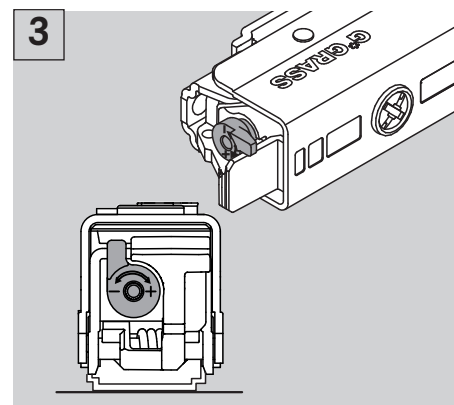


2 Medium setting (factory setting)

Adjustment lever is parallel to the cabinet wall. This setting covers 80% of door applications.

Appropriate for:

- Standard doors



3 Strong setting

Adjustment lever points toward the cabinet interior

Appropriate for:

- Large, heavy doors

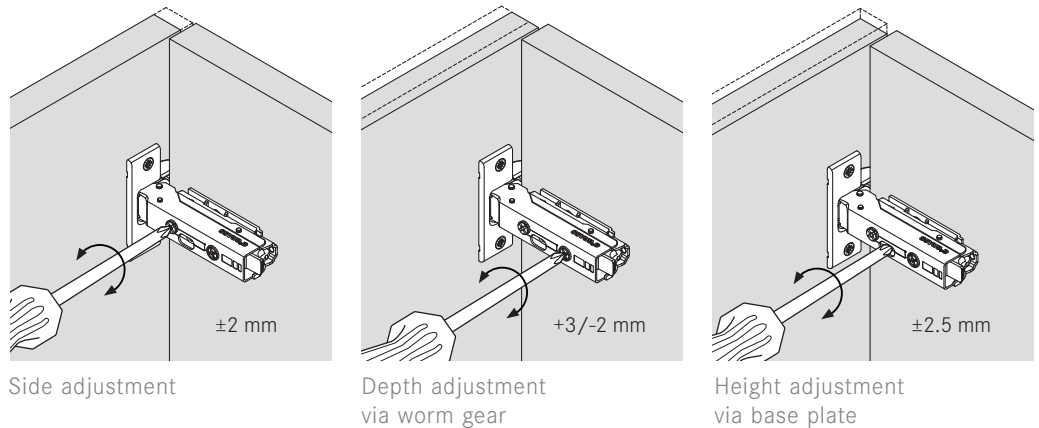
Adjustments

The options for height adjustment depend on the type of base plate. All adjustments can be made independent of one another.

For depth adjustment, select base plates have worm gear adjustment access through the hinge arm.

Use a #2 POZI drive screw driver for hinge adjustment.

Attach base plates using all available screw holes.



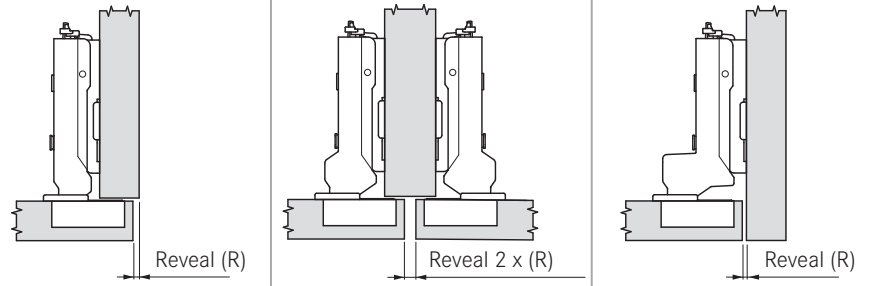
Reveal

Full Overlay/Overlay Door

Half Overlay Door

Inset Door

The reveal (R) is the distance required between two doors or between the door and side wall of the cabinet to allow sufficient space for opening the door. The required reveal width (R) depends on the thickness of the door. Most cabinet makers prefer a reveal (R) of between 3mm and 6mm.



Reveal for full overlay, overlay, and half overlay doors

The table shows the reveal necessary between two doors or between door and side wall to allow enough space for opening the door.

Example:

For a door thickness of 19mm and a drilling distance (DD) of 6mm a (R) reveal of 0.9 is needed.

| Door Thickness | Drilling Distance (DD) | | | | | Reveal (min.) (R) |
|----------------|------------------------|-----|-----|-----|-----|-------------------|
| | 3 | 4 | 5 | 6 | 7 | |
| 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 | |
| 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.5 | 1.1 | |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | |
| 17.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | |
| 16.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | |

Note:

Reveal dimensions were determined with a door edge radius of 1mm. Hinge dimensions and calculation of reveal with factory setting.

Reveal for inset door:

The table shows the minimum reveal for an inset door, depending on the drilling distance (DD) and the base plate height (BPH).

Example:

A drilling distance (DD) of 6mm results from using a base plate with height 03 and a reveal (R) of 1.0mm.

| Minimum Reveal (R) | Drilling Distance (DD) | | | | | Base Plate Height (BPH) |
|--------------------|------------------------|---|---|-----|-----|-------------------------|
| | 3 | 4 | 5 | 6 | 7 | |
| 0.0 | 0 | | | 2 | 3 | |
| 0.5 | | | | | 3.5 | |
| 1.0 | 0 | | 2 | 3 | | |
| 1.5 | | | | 3.5 | | |
| 2.0 | 2 | 3 | | | | |
| 3.0 | 2 | 3 | | | | |
| 4.0 | 3 | | | | | |

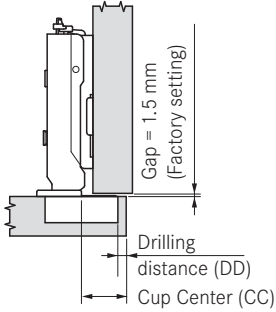
IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

Technical Information

For Tiomos

Minimum gap – Drilling distance

The **Minimum gap** is the gap between the closed door and the front of the cabinet.



| Drilling Distance DD | | Cup Center CC | |
|----------------------|---|---------------|------|
| 1/8" | 3 | 13/16" | 20.5 |
| 5/32" | 4 | 27/32" | 21.5 |
| 3/16" | 5 | 7/8" | 22.5 |
| 1/4" | 6 | 15/16" | 23.5 |
| 9/32" | 7 | 31/32" | 24.5 |
| 5/16" | 8 | 1" | 25.5 |

Example:

For a door thickness (DT) of 17mm and a drilling distance (DD) of 6mm a minimum gap of 1.0mm is needed.

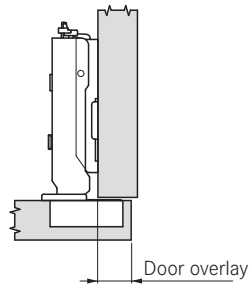
| Door Thickness (DT) | Drilling Distance (DD) | | | | | | |
|---------------------|------------------------|-----|-----|-----|-----|--|-------------|
| | 3 | 4 | 5 | 6 | 7 | | |
| 24.0 | 1.0 | 1.0 | 1.0 | 1.2 | 2.1 | | |
| 22.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | | |
| 21.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | | |
| 20.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 19.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 18.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| | | | | | | | Minimum gap |

The **drilling distance (DD)** is the distance between the edge of the door and the cup hole.

The **cup center** is the distance of the drilling distance plus 1/2 of the cup diameter.

Door overlay max.

The **door overlay** is the part of the cabinet side wall or face frame that is covered by the door.



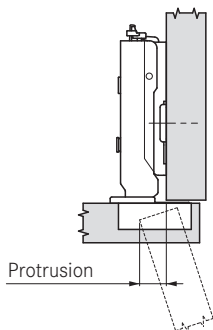
Example:

For a hinge with a cranking of 03, a base plate height (BPH) of 2mm, and a drilling distance (DD) of 4mm, the door overlay is 14mm.

| Door overlay max. | Drilling Distance (DD) | | | | | | |
|-------------------|------------------------|-----|-----|-----|-----|--|-------------------------|
| | 3 | 4 | 5 | 6 | 7 | | |
| 19.0 | | | | | 0 | | |
| 18.0 | | | | | 0 | | |
| 17.0 | | | 0 | | 2 | | |
| 16.5 | | | | | | | |
| 16.0 | | 0 | | 2 | 3 | | |
| 15.5 | | | | | 3.5 | | |
| 15.0 | 0 | | 2 | 3 | | | |
| 14.5 | | | | 3.5 | | | |
| 14.0 | | 2 | 3 | | | | |
| 13.5 | | | 3.5 | | | | |
| 13.0 | 2 | 3 | | | | | |
| 12.5 | | 3.5 | | | | | |
| 12.0 | 3 | | | | | | |
| 11.5 | 3.5 | | | | | | Base Plate Height (BPH) |

Door edge protrusion

The **door edge protrusion** is the amount by which the edge of the open door protrudes into the opening and varies depending on the type of hinge and method of fixing. It is stated on the respective catalog page and refers to the stated base plate for the factory setting. It can be changed by changing the height of the base plate and operation the lateral adjustment.

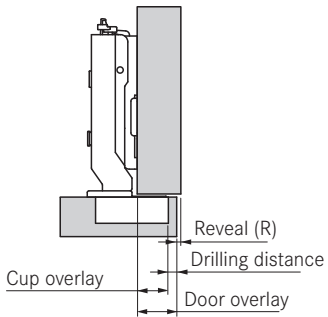


Door positions

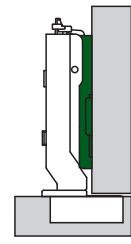
Achieve overlay with hinge cranking **Or achieve overlay with base plate**

Full Overlay (Cranking 00) **Full Overlay**

The cup overlay (factory setting) plus drilling distance determine the door overlay. Dimensions can be found in a table on the respective page of the catalog.

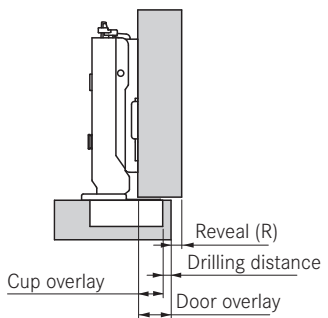


Using a hinge with a cranking of 00 and a base plate height (BPH) 00

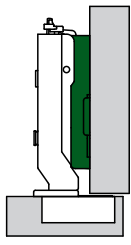


Overlay (Cranking 03) **Overlay**

The cup overlay (factory setting) plus drilling distance determine the door overlay. Dimensions can be found in a table on the respective page of the catalog.

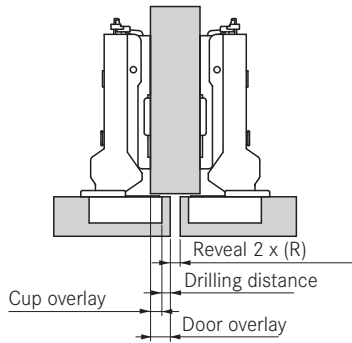


Using a hinge with a cranking of 00 and a base plate height (BPH) 03

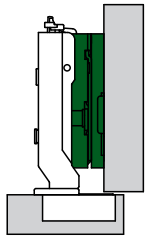


Half Overlay (Cranking 9.5) **Half Overlay**

The cup overlay (factory setting) plus drilling distance determine the door overlay. Dimensions can be found in a table on the respective page of the catalog.

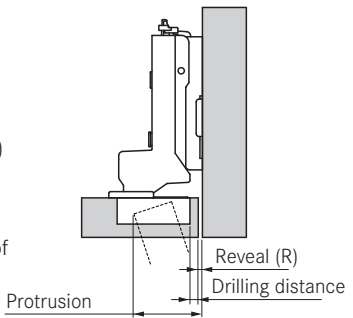


Using a hinge with a cranking of 00 and a base plate height (BPH) 9.5

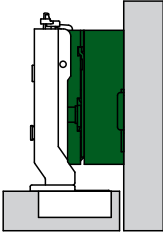


Inset (Cranking 19) **Inset**

There is no door overlay. The reveal between the side of the cabinet and the door depends on the base plate height (BPH) and the drilling distance (DD). Dimensions can be found in a table on the respective page of the catalog.



Using a hinge with a cranking of 03 and a base plate height 19 (BPH).

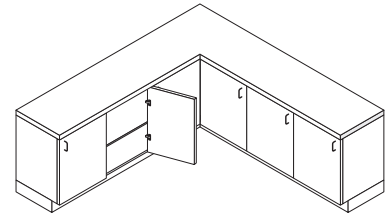


Tiomos 110

110° hinge for standard doors



- 3-dimensional adjustment with suitable base plate
- Accommodates overlays up to 24mm (15/16")
- Optimal reveal up to 24 mm door thickness
- Soft-close or Self-close hinges available
- For face frame or frameless cabinets
- Convenient depth adjustment with worm gear



| | | | | |
|-------------------|---------------------------|-----------------|-----------------|-----------------|
| Tiomos 110 | Opening Angle 110° | Impresso | Screw-on | Dowelled |
|-------------------|---------------------------|-----------------|-----------------|-----------------|

| Full overlay | Cranking 00 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--------------|--|---------|------------|----------------------|----------------------|------------|----------------------|----------------------|-----|
| | Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated | 42 / 45 | Soft-close | F017139414228 | 45 | Soft-close | F028138519228 | F028138523228 | 150 |
| | | | Self-close | F034139385228 | | Self-close | F045138457228 | F045138461228 | 150 |
| | | 42 | Soft-close | - | F028138341228 | 150 | | | |
| | | | Self-close | - | F045138279228 | 150 | | | |
| Overlay | Cranking 03 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
| | Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated | 42 / 45 | Soft-close | F017139415228 | 45 | Soft-close | F028138520228 | F028138524228 | 150 |
| | | | Self-close | F034139386228 | | Self-close | F045138458228 | F045138462228 | 150 |
| | | 42 | Soft-close | - | F028138342228 | 150 | | | |
| | | | Self-close | - | F045138280228 | 150 | | | |
| Half overlay | Cranking 9.5 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
| | Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated | 42 / 45 | Soft-close | F017139416228 | 45 | Soft-close | F028138521228 | F028138525228 | 150 |
| | | | Self-close | F034139387228 | | Self-close | F045138459228 | F045138463228 | 150 |
| | | 42 | Soft-close | - | F028138343228 | 150 | | | |
| | | | Self-close | - | F045138281228 | 150 | | | |
| Inset | Cranking 19 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
| | Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated | 42 / 45 | Soft-close | F017139417228 | 45 | Soft-close | F028138522228 | F028138526228 | 150 |
| | | | Self-close | F034139388228 | | Self-close | F045138460228 | F045138464228 | 150 |
| | | 42 | Soft-close | - | F028138344228 | 150 | | | |
| | | | Self-close | - | F045138282228 | 150 | | | |

| Cover cap | Item No. | PU |
|----------------------|----------------------|------|
| Steel, nickel-plated | F072135500247 | 1000 |

| Opening angle reduction clip to 85° | Item No. | PU |
|-------------------------------------|----------------------|----|
| Plastic, black | F072135751517 | 50 |

| Hinge cup cover cap | Item No. | PU |
|----------------------|----------------------|-----|
| Steel, nickel-plated | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|---------------------------|-----------------|-----|
| #6 x 5/8" FHP, NI | 81001-43 | 500 |

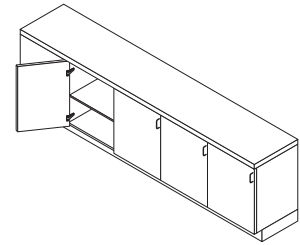
PU = packaging unit

Tiomos 120

120° hinge for standard doors



- 3-dimensional adjustment with suitable base plate
- Accommodates overlays up to 24mm (15/16")
- Optimal reveal up to 24mm door thickness
- Soft-close or Self-close hinges available
- For face frame or frameless cabinets
- Convenient depth adjustment with worm gear



| Tiomos 120 | Opening Angle 120° | Impresso | Screw-on | Dowelled |
|------------|--------------------|----------|----------|----------|
|------------|--------------------|----------|----------|----------|

| Full overlay | Cranking 00 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--------------|--|---------|------------|----------------------|----------------------|------------|----------------------|----------------------|-----|
| | Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated | 42 / 45 | Soft-close | F017139428228 | 45 | Soft-close | F028138547228 | F028138855228 | 150 |
| | | | Self-close | F034139399228 | | Self-close | F045138485228 | F045138489228 | 150 |
| | | 42 | Soft-close | - | F028138369228 | 150 | | | |
| | | | Self-close | - | F045138307228 | 150 | | | |
| Overlay | Cranking 03 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
| | Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated | 42 / 45 | Soft-close | F017139429228 | 45 | Soft-close | F028138548228 | F028138552228 | 150 |
| | | | Self-close | F034139400228 | | Self-close | F045138486228 | F045138490228 | 150 |
| | | 42 | Soft-close | - | F028138370228 | 150 | | | |
| | | | Self-close | - | F045138308228 | 150 | | | |
| Half overlay | Cranking 9.5 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
| | Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated | 42 / 45 | Soft-close | F017139430228 | 45 | Soft-close | F028138549228 | F028138553228 | 150 |
| | | | Self-close | F034139401228 | | Self-close | F045138487228 | F045138491228 | 150 |
| | | 42 | Soft-close | - | F028138371228 | 150 | | | |
| | | | Self-close | - | F045138309228 | 150 | | | |

| Cover cap | Item No. | PU |
|----------------------|----------------------|-----|
| Steel, nickel-plated | F072135500247 | 150 |

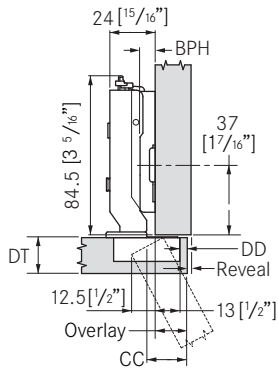
| Opening angle reduction clip to 85° | Item No. | PU |
|-------------------------------------|----------------------|----|
| Plastic, black | F072135751517 | 50 |

| Hinge cup cover cap | Item No. | PU |
|----------------------|----------------------|-----|
| Steel, nickel-plated | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|---------------------------|-----------------|-----|
| #6 x 5/8" FHP, NI | 81001-43 | 500 |

PU = packaging unit

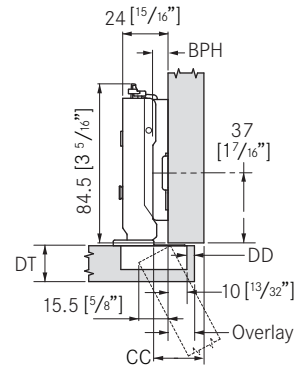
Full overlay Overlay Half overlay



Drawing shows Tiomos with a base plate height (BPH) 02.

Drilling Distance (DD)

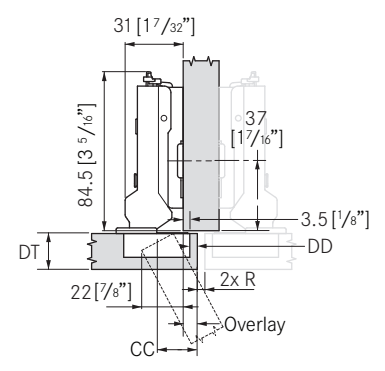
| Door overlay | Drilling Distance (DD) | | | | |
|--------------|------------------------|-----|---|-----|-------------------------|
| | 3 | 4 | 5 | 6 | 7 |
| 22.0 | | | | | 0 |
| 21.0 | | | | 0 | |
| 20.0 | | | 0 | 2 | |
| 19.0 | | 0 | | 2 | 3 |
| 18.5 | | | | 3.5 | |
| 18.0 | 0 | | 2 | 3 | |
| 17.5 | | | | 3.5 | |
| 17.0 | | 2 | 3 | | |
| 16.5 | | | | 3.5 | |
| 16.0 | 2 | 3 | | | |
| 15.5 | | 3.5 | | | |
| 15.0 | 3 | | | | |
| 14.5 | 3.5 | | | | |
| | | | | | Base Plate Height (BPH) |



Drawing shows Tiomos with a base plate height (BPH) 02.

Drilling Distance (DD)

| Door overlay | Drilling Distance (DD) | | | | |
|--------------|------------------------|-----|---|---|-------------------------|
| | 3 | 4 | 5 | 6 | 7 |
| 19.0 | | | | | 0 |
| 18.0 | | | | 0 | |
| 17.0 | | | 0 | 2 | |
| 16.5 | | | | | |
| 16.0 | | 0 | | 2 | 3 |
| 15.5 | | | | | 3.5 |
| 15.0 | 0 | | 2 | 3 | |
| 14.5 | | | | | 3.5 |
| 14.0 | | 2 | 3 | | |
| 13.5 | | | | | 3.5 |
| 13.0 | 2 | 3 | | | |
| 12.5 | | 3.5 | | | |
| 12.0 | 3 | | | | |
| 11.5 | 3.5 | | | | |
| | | | | | Base Plate Height (BPH) |



Drawing shows Tiomos with a base plate height (BPH) 02.

Drilling Distance (DD)

| Door overlay | Drilling Distance (DD) | | | | |
|--------------|------------------------|-----|---|---|-------------------------|
| | 3 | 4 | 5 | 6 | 7 |
| 12.5 | | | | | 0 |
| 11.5 | | | | 0 | |
| 10.5 | | | 0 | 2 | |
| 10.0 | | | | | |
| 9.5 | 0 | | | 2 | 3 |
| 9.0 | | | | | 3.5 |
| 8.5 | 0 | | 2 | 3 | |
| 8.0 | | | | | 3.5 |
| 7.5 | | 2 | 3 | | |
| 7.0 | | | | | 3.5 |
| 6.5 | 2 | 3 | | | |
| 6.0 | | 3.5 | | | |
| 5.5 | 3 | | | | |
| 5.0 | 3.5 | | | | |
| | | | | | Base Plate Height (BPH) |

Minimum gaps Reveal With 85° angle reduction clip

The minimum gap is the gap between the closed door and the front of the cabinet.

| Door Thickness | Drilling Distance (DD) | | | | |
|----------------|------------------------|-----|-----|-----|-------------|
| | 3 | 4 | 5 | 6 | 7 |
| 24.0 | 1.2 | 2.1 | 3.0 | 3.9 | 4.7 |
| 22.0 | 1.0 | 1.1 | 2.0 | 2.9 | 3.8 |
| 21.0 | 1.0 | 1.0 | 1.6 | 2.4 | 3.3 |
| 20.0 | 1.0 | 1.0 | 1.1 | 2.0 | 2.9 |
| 19.0 | 1.0 | 1.0 | 1.0 | 1.5 | 2.4 |
| 18.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.9 |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | | | | | Minimum gap |

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

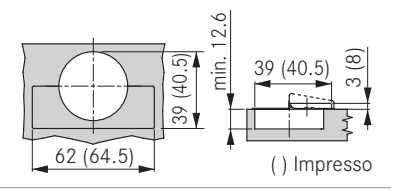
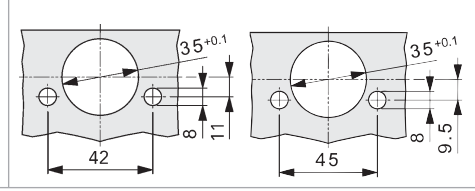
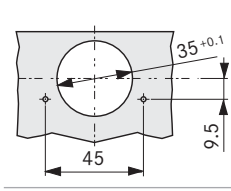
IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| Door Thickness | Drilling Distance (DD) | | | | |
|----------------|------------------------|-----|-----|-----|------------|
| | 3 | 4 | 5 | 6 | 7 |
| 24.0 | 6.4 | 5.4 | 4.4 | 3.4 | 2.4 |
| 22.0 | 3.0 | 2.0 | 1.5 | 1.5 | 1.5 |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | | | | | Reveal (R) |

With 85° angle reduction clip

| Door Thickness | Drilling Distance (DD) | | | | |
|----------------|------------------------|------|-----|-----|------------|
| | 3 | 4 | 5 | 6 | 7 |
| 36.0 | 11.1 | 10.3 | 9.7 | 9.1 | 8.5 |
| 30.0 | 5.4 | 4.8 | 4.4 | 4.3 | 4.2 |
| 28.0 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 |
| 26.0 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 |
| 24.0 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 |
| 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 16.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| | | | | | Reveal (R) |

Screw-on Impresso and Dowelled Cup dimensions

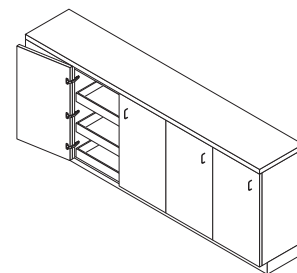


Tiomos 160

160° Wide angle hinge



- 3-dimensional adjustment with suitable base plate
- Accommodates overlays up to 25.4 mm (1")
- Soft-close or Self-close hinges available
- For face frame or frameless cabinets
- Convenient depth adjustment with worm gear
- Zero protrusion when door is opened 90°
- 10mm cup depth
- For door thicknesses up to 32 mm (1 1/4")
- Minimal reveal



| | | | | |
|-------------------|---------------------------|-----------------|-----------------|-----------------|
| Tiomos 160 | Opening Angle 160° | Impresso | Screw-on | Dowelled |
|-------------------|---------------------------|-----------------|-----------------|-----------------|

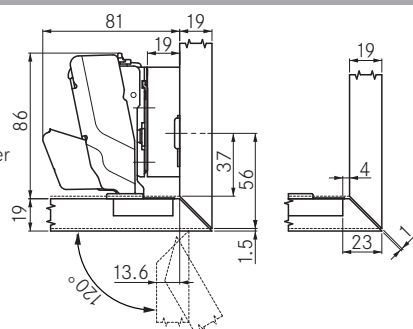
| Full overlay | Cranking 00 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|-------------|------------|----------------------|----------------------|------------|----------------------|----------------------|----------|----|
| <p>Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated</p> | 42 / 45 | Soft-close | F017139435217 | 45 | Soft-close | F028138561217 | F028138564217 | 50 | |
| | | Self-close | F034139406217 | | Self-close | F045138499217 | F045138502217 | 50 | |
| | 42 | Soft-close | - | F028138382217 | 50 | | | | |
| | | Self-close | - | F045138320217 | 50 | | | | |

| Overlay | Cranking 03 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|-------------|------------|----------------------|----------------------|------------|----------------------|----------------------|----------|----|
| <p>Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated</p> | 42 / 45 | Soft-close | F017139436217 | 45 | Soft-close | F028138562217 | F028138565217 | 50 | |
| | | Self-close | F034139407217 | | Self-close | F045138500217 | F045138503217 | 50 | |
| | 42 | Soft-close | - | F028138383217 | 50 | | | | |
| | | Self-close | - | F045138321217 | 50 | | | | |

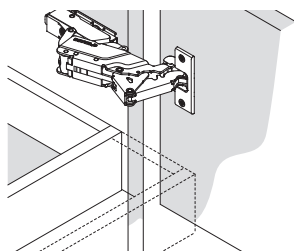
| Half overlay | Cranking 9.5 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|---|--------------|------------|----------------------|----------------------|------------|----------------------|----------------------|----------|----|
| <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139437217 | 45 | Soft-close | F028138563217 | F028138566217 | 50 | |
| | | Self-close | F034139408217 | | Self-close | F045138501217 | F045138504217 | 50 | |
| | 42 | Soft-close | - | F028138384217 | 50 | | | | |
| | | Self-close | - | F045138322217 | 50 | | | | |

Mitered corner application

Use 120° opening angle reduction clip.
Prevents doors from bumping with the cabinet side in inset applications and mitered corner applications.



Zero door protrusion at 90°



Zero protrusion for application with inset drawers. With 00 cranking and 00 height of base plate the door is flush with the cabinet at 90°.

| Hinge cup cover cap | Item No. | PU |
|---------------------|----------|----|
|---------------------|----------|----|

| | | |
|----------------------|----------------------|-----|
| Steel, nickel-plated | F072135503228 | 150 |
|----------------------|----------------------|-----|

| Angle reduction clip to 120° | Item No. | PU |
|------------------------------|----------|----|
|------------------------------|----------|----|

| | | |
|----------------|----------------------|----|
| Plastic, black | F072135753117 | 50 |
|----------------|----------------------|----|

| Wood screw, nickel-plated | Item No. | PU |
|---------------------------|----------|----|
|---------------------------|----------|----|

| | | |
|-------------------|-----------------|-----|
| #6 x 5/8" FHP, NI | 81001-43 | 500 |
|-------------------|-----------------|-----|

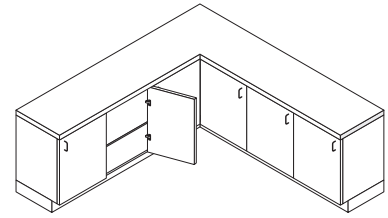
PU = packaging unit

Tiomos 95

95° hinge for thick doors



- 3-dimensional adjustment with suitable base plate
- Accommodates overlays up to 24mm (15/16")
- Optimal reveal up to 36 mm (1 7/16") door thickness
- Soft-close or Self-close hinges available
- For face frame or frameless cabinets
- Convenient depth adjustment with worm gear



| Tiomos 95 | Opening Angle 95° | Impresso | Screw-on | Dowelled |
|-----------|-------------------|----------|----------|----------|
|-----------|-------------------|----------|----------|----------|

| Full overlay | Cranking 00 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--------------|--|---------|------------|----------------------|----------------------|------------|----------------------|----------------------|-----|
| | Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated | 42 / 45 | Soft-close | F017139438228 | 45 | Soft-close | F028138567228 | F028138571228 | 150 |
| | | | Self-close | F034139409228 | | Self-close | F045138505228 | F045138509228 | 150 |
| | | 42 | Soft-close | - | F028138389228 | 150 | | | |
| | | | Self-close | - | F045138327228 | 150 | | | |

| Overlay | Cranking 03 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|---------|--|---------|------------|----------------------|----------------------|------------|----------------------|----------------------|-----|
| | Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated | 42 / 45 | Soft-close | F017139439228 | 45 | Soft-close | F028138568228 | F028138572228 | 150 |
| | | | Self-close | F034139410228 | | Self-close | F045138506228 | F045138510228 | 150 |
| | | 42 | Soft-close | - | F028138390228 | 150 | | | |
| | | | Self-close | - | F045138328228 | 150 | | | |

| Half overlay | Cranking 9.5 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--------------|---|---------|------------|----------------------|----------------------|------------|----------------------|----------------------|-----|
| | Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated | 42 / 45 | Soft-close | F017139440228 | 45 | Soft-close | F028138569228 | F028138573228 | 150 |
| | | | Self-close | F034139411228 | | Self-close | F045138507228 | F045138511228 | 150 |
| | | 42 | Soft-close | - | F028138391228 | 150 | | | |
| | | | Self-close | - | F045138329228 | 150 | | | |

| Inset | Cranking 19 | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|-------|---|---------|------------|----------------------|----------------------|------------|----------------------|----------------------|-----|
| | Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated | 42 / 45 | Soft-close | F017139441228 | 45 | Soft-close | F028138570228 | F028138574228 | 150 |
| | | | Self-close | F034139412228 | | Self-close | F045138508228 | F045138512228 | 150 |
| | | 42 | Soft-close | - | F028138392228 | 150 | | | |
| | | | Self-close | - | F045138330228 | 150 | | | |

| Cover cap | Item No. | PU |
|----------------------|----------------------|------|
| Steel, nickel-plated | F072135500247 | 1000 |

| Opening angle reduction clip to 85° | Item No. | PU |
|-------------------------------------|----------------------|----|
| Plastic, black | F072135751517 | 50 |

| Hinge cup cover cap | Item No. | PU |
|----------------------|----------------------|-----|
| Steel, nickel-plated | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|---------------------------|-----------------|-----|
| #6 x 5/8" FHP, NI | 81001-43 | 500 |

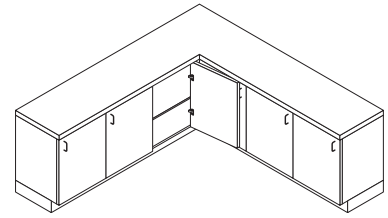
PU = packaging unit

Tiomos 110/90A

110° blind corner hinge for overlay doors



- For blind corner construction
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear




Tiomos 110/90A


Opening Angle 110°


Impresso

Screw-on

Dowelled

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------------------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139426223 | 45 | Soft-close | F028138535223 | F028138545223 | 100 |
| | | Self-close | F034139397223 | | Self-close | F045138473223 | F045138483223 | 100 |

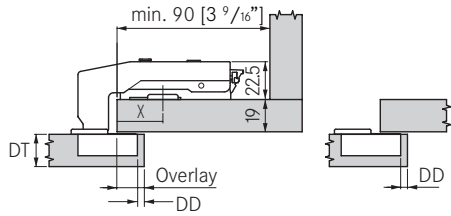
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

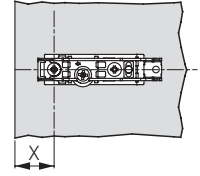
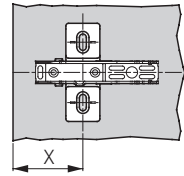
| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

Inset



Drawing shows Tiomos with a base plate height **(BPH) 03**.



| | | Drilling Distance (DD) | | | | |
|-----------------------|----|------------------------|----|----|----|----|
| | | 3 | 4 | 5 | 6 | 7 |
| Drilling distance (X) | 30 | 18 | 19 | 20 | 21 | 22 |
| | 29 | 17 | 18 | 19 | 20 | 21 |
| | 28 | 16 | 17 | 18 | 19 | 20 |
| | 27 | 15 | 16 | 17 | 18 | 19 |
| | 26 | 14 | 15 | 16 | 17 | 18 |
| Door Overlay | | | | | | |

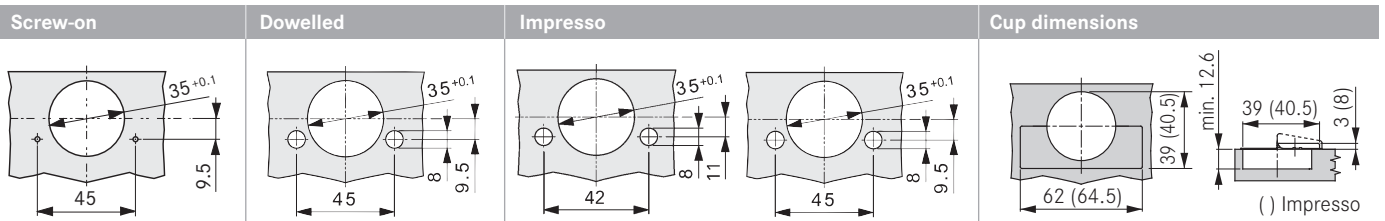
| | | Drilling Distance (DD) | | | | |
|-----------------------|----|------------------------|----|----|----|----|
| | | 3 | 4 | 5 | 6 | 7 |
| Drilling distance (X) | 13 | 18 | 19 | 20 | 21 | 22 |
| | 12 | 17 | 18 | 19 | 20 | 21 |
| | 11 | 16 | 17 | 18 | 19 | 20 |
| | 10 | 15 | 16 | 17 | 18 | 19 |
| | 9 | 14 | 15 | 16 | 17 | 18 |
| Door Overlay | | | | | | |

Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1 mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------|-----|-----|-----|-----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door Thickness | 24.0 | 1.0 | 1.0 | 1.0 | 1.2 | 2.1 |
| | 22.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 |
| | 21.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 |
| | 20.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 19.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 18.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | |
| Reveal (R) | | | | | | |

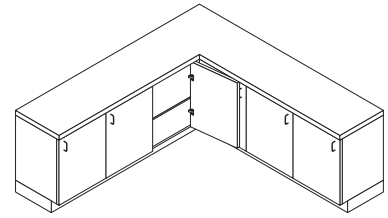


Tiomos 110/90E

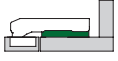
110° blind corner hinge for inset doors



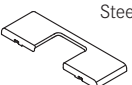
- For blind corner construction
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/90E Opening Angle 110° Impresso Screw-on Dowelled

| Inset | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------------------|-----|
| | | | | | | | | |
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139427223 | 45 | Soft-close | F028138536223 | F028138546223 | 100 |
| | | Self-close | F034139398223 | | Self-close | F045138474223 | F045138484223 | |

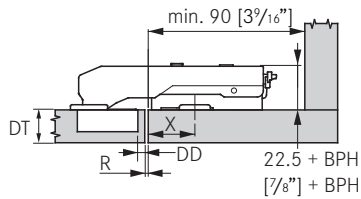
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

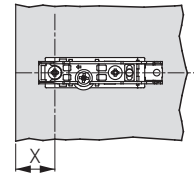
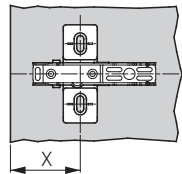
| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

Inset



Drawing shows Tiomos with a base plate height (BPH) 03.



| | | Drilling Distance (DD) | | | | |
|-----------------------|------|------------------------|---|---|---|--|
| | | 4 | 5 | 6 | 7 | |
| Drilling distance (X) | 28.0 | 1 | 0 | | | |
| | 27.0 | 2 | 1 | 0 | | |
| | 26.0 | 3 | 2 | 1 | 0 | |
| Door reveal | | | | | | |

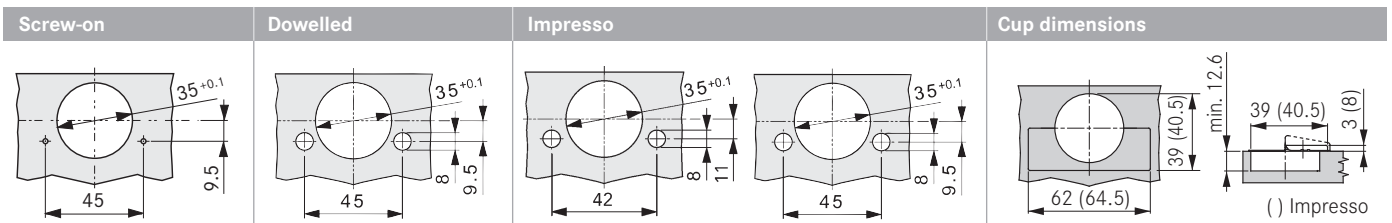
| | | Drilling Distance (DD) | | | | |
|-----------------------|------|------------------------|---|---|---|--|
| | | 4 | 5 | 6 | 7 | |
| Drilling distance (X) | 11.0 | 1 | 0 | | | |
| | 10.0 | 2 | 1 | 0 | | |
| | 9.0 | 3 | 2 | 1 | 0 | |
| Door reveal | | | | | | |

Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1 mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------|-----|-----|-----|-----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door Thickness | 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 |
| | 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| | 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| | 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| | 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| | 17.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 16.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | |
| Reveal (R) | | | | | | |

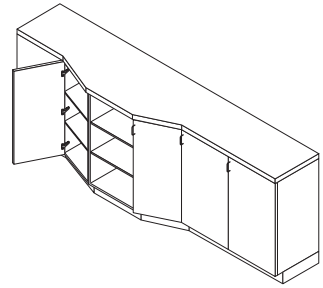


Tiomos 110/30A


+30° angle corner cabinet hinge for overlay doors





- For 30° angle corner cabinets
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/30A Opening Angle 110° Impresso Screw-on Dowelled

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|---|---------|------------|----------------------|---------|------------|----------------------|----------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139420223 | 45 | Soft-close | F028138529223 | - | 100 |
| | | Self-close | F034139391223 | | Self-close | F045138467223 | - | 100 |

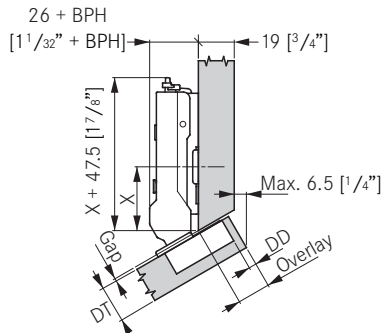
| Cover cap | Item No. | PU |
|---|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|---|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

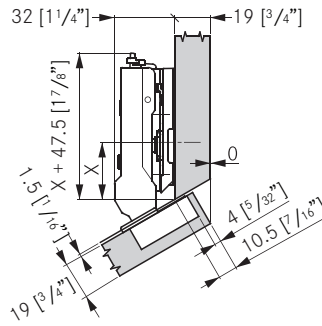
| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

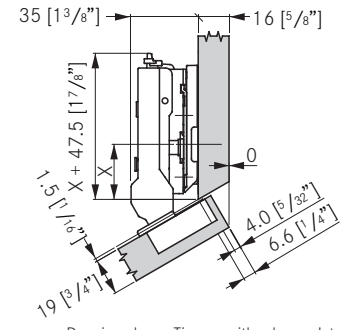
Overlay



Drawing shows Tiomos with a base plate height (BPH) 0.



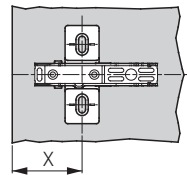
Drawing shows Tiomos with a base plate height (BPH) 6.



Drawing shows Tiomos with a base plate height (BPH) 9.5.

Drilling Distance (DD)

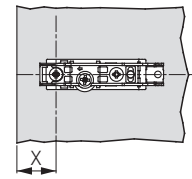
| | 3 | 4 | 5 | 6 | 7 |
|---------------------|-------------------------|-----|-----|-----|---|
| 20.5 | | | | | 0 |
| 19.5 | | | | 0 | |
| 18.5 | | | 0 | 2 | |
| 17.5 | 0 | | 2 | 3 | |
| 16.5 | 0 | | | 3.5 | |
| 16.0 | | 2 | 3 | | |
| 15.5 | | | 3.5 | | |
| 15.0 | 2 | 3 | | | |
| 14.5 | | 3.5 | | | |
| 14.0 | 2 | 3 | | | |
| 13.5 | | 3.5 | | | |
| 13.0 | 3 | | | | |
| 12.5 | 3.5 | | | 6 | |
| 11.5 | | | 6 | | |
| 10.5 | | 6 | | | |
| Door overlay | Base Plate Height (BPH) | | | | |



Base plate height

| | 0 | 2 | 3 | 3.5 | 6 |
|---|------|------|------|------|------|
| X | 34.0 | 33.0 | 32.0 | 32.0 | 30.5 |

Wing base plate position (X)



Base plate height

| | 0 | 2 | 3 | 3.5 |
|---|------|------|------|------|
| X | 17.0 | 16.0 | 15.0 | 15.0 |

Straight base plate position (X)

Minimum gaps

The minimum gap is the gap between the closed door and the front of the cabinet.

| | Drilling Distance (DD) | | | | |
|-----------------------|------------------------|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 7 |
| 24.0 | 1.0 | 1.0 | 1.0 | 1.2 | 2.1 |
| 22.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 |
| 21.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 |
| 20.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 19.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 18.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Door Thickness | Minimum gap | | | | |

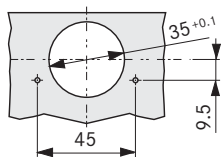
Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

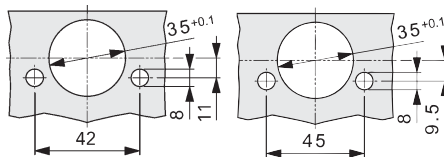
IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| | Drilling Distance (DD) | | | | |
|-----------------------|------------------------|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 7 |
| 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 |
| 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 17.0 | .06 | .06 | .06 | .06 | .06 |
| 16.0 | .06 | .06 | .06 | .06 | .06 |
| Door Thickness | Reveal (R) | | | | |

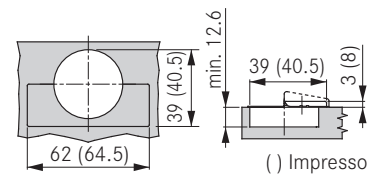
Screw-on



Impresso



Cup dimensions

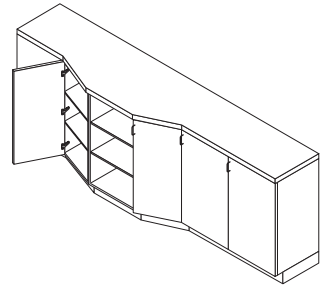


Tiomos 110/30E

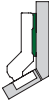
+30° angle corner cabinet hinge for inset doors





- For 30° angle corner cabinets
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/30E Opening Angle 110° Impresso Screw-on Dowelled

| Inset | Pattern | Type | | Item No. | Pattern | Type | | Item No. | Item No. | PU |
|--|---------|------------|------------|----------------------|---------|------------|----------------------|----------------------|----------|-----|
| | | Soft-close | Self-close | | | Soft-close | Self-close | | | |
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | | F017139421223 | 45 | Soft-close | | F028138530223 | - | 100 |
| | | | Self-close | F034139392223 | | Self-close | F045138468223 | - | 100 | |

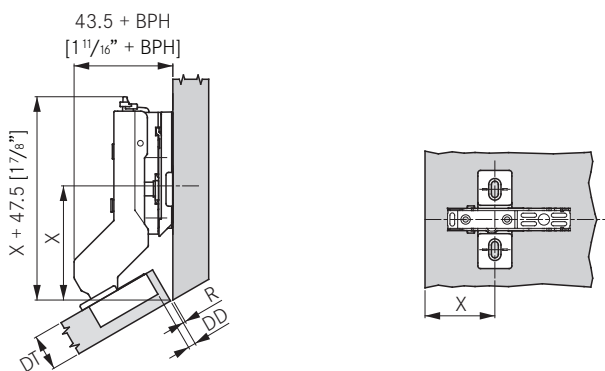
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

Inset



Drawing shows Tiomos with a base plate height (BPH) 9.5.

| | | Drilling Distance (DD) | | | | |
|----------------|------|-------------------------|---|-----|-----|-----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door thickness | 22.0 | 9.5 | | | 12 | |
| | 21.0 | | | | | |
| | 20.0 | | | | 12 | |
| | 19.0 | | | 9.5 | | |
| | 18.0 | | | | | |
| | 17.0 | | | | 9.5 | |
| | 16.0 | | | | | 9.5 |
| | 15.0 | 6 | | | | |
| | | Base Plate Height (BPH) | | | | |

| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------------|---|------|------|------|
| | | 3 | 4 | 5 | 6 | 7 |
| Door thickness | 22.0 | 63.5 | | | 61.5 | |
| | 21.0 | | | | | |
| | 20.0 | | | | 60.0 | |
| | 19.0 | | | 60.0 | | |
| | 18.0 | | | | | |
| | 17.0 | | | | 58.0 | |
| | 16.0 | | | | | 56.5 |
| | 15.0 | 57.5 | | | | |
| | | Wing Base Plate position (X) | | | | |

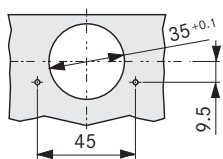
Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm!
Hinge dimensions and reveal calculation based on factory setting.

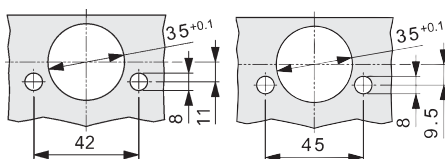
IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------|-----|-----|-----|-----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door Thickness | 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 |
| | 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| | 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| | 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| | 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| | 17.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| | 16.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 15.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | |
| | | Reveal (R) | | | | |

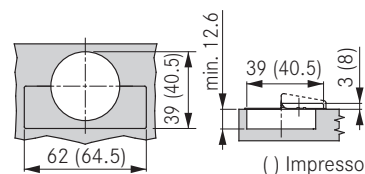
Screw-on



Impresso



Cup dimensions

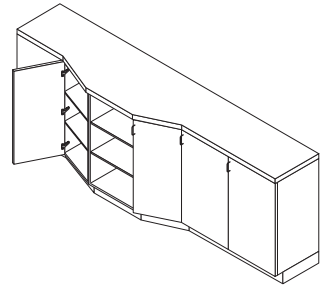


Tiomos 110/37A


+37° angle corner cabinet hinge for overlay doors





- For 37° angle corner cabinets
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/37A Opening Angle 110° Impresso Screw-on Dowelled

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------------------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F01713942223 | 45 | Soft-close | F028138531223 | F028138541223 | 100 |
| | | Self-close | F034139393223 | | Self-close | F045138469223 | F045138479223 | 100 |

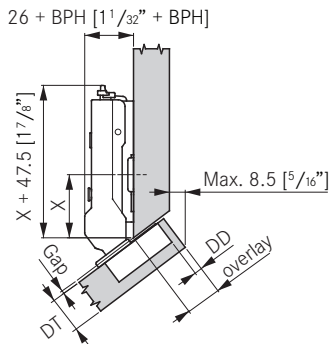
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

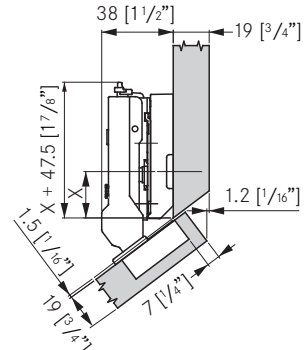
| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

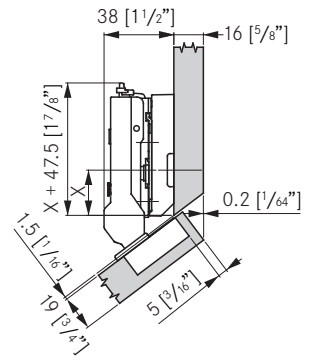
Overlay



Drawing shows Tiomos with a base plate height (BPH) 0.



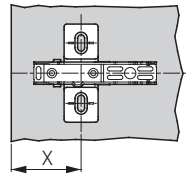
Drawing shows Tiomos with a base plate height (BPH) 12.



Drawing shows Tiomos with a base plate height (BPH) 12.

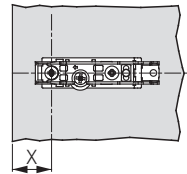
Drilling Distance (DD)

| | 3 | 4 | 5 | 6 | 7 |
|---------------------|-------------------------|---|---|---|---|
| 21.5 | | | | | 0 |
| 21.0 | | | | 0 | |
| 20.0 | | | 0 | | |
| 19.0 | 0 | | | | |
| 18.5 | | | | 2 | |
| 18.0 | 0 | | | | 3 |
| 17.5 | | | 2 | | |
| 17.0 | | | | 3 | |
| 16.5 | 2 | | | | |
| 16.0 | | | | 3 | |
| 15.5 | 2 | | | | |
| 15.0 | | 3 | | | |
| 14.5 | | | | | 6 |
| 14.0 | 3 | | | | |
| 13.0 | | | | | 6 |
| 12.0 | | | | 6 | |
| 11.0 | | | 6 | | |
| 10.0 | 6 | | | | |
| Door overlay | Base Plate Height (BPH) | | | | |



Base plate height

| | 0 | 2 | 3 | 3.5 | 6 |
|------------------------------|------|------|------|------|------|
| X | 33.5 | 32.0 | 31.0 | 31.0 | 29.0 |
| Wing base plate position (X) | | | | | |



Base plate height

| | 0 | 2 | 3 | 3.5 |
|----------------------------------|------|------|------|------|
| X | 16.5 | 15.0 | 14.0 | 14.0 |
| Straight base plate position (X) | | | | |

Minimum gaps

The minimum gap is the gap between the closed door and the front of the cabinet.

| Door Thickness | Drilling Distance (DD) | | | | |
|----------------|------------------------|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 7 |
| 24.0 | 1.0 | 1.0 | 1.0 | 1.2 | 2.1 |
| 22.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 |
| 21.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 |
| 20.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 19.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 18.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | Minimum gap | | | | |

Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| Door Thickness | Drilling Distance (DD) | | | | |
|----------------|------------------------|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 7 |
| 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 |
| 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 17.0 | .06 | .06 | .06 | .06 | .06 |
| 16.0 | .06 | .06 | .06 | .06 | .06 |
| | Reveal (R) | | | | |

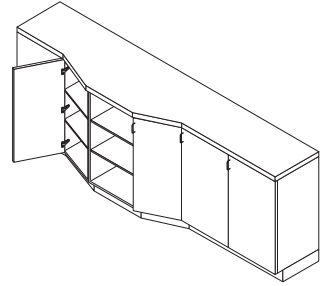
| Screw-on | Dowelled | Impresso | Cup dimensions |
|----------|----------|----------|----------------|
| | | | |
| | | | () Impresso |

Tiomos 110/37E

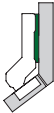
+37° angle corner cabinet hinge for inset doors





- For 37° angle corner cabinets
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/37E Opening Angle 110° Impresso Screw-on Dowelled

| Inset | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139423223 | 45 | Soft-close | F028138532223 | - | 100 |
| | | Self-close | F034139394223 | | Self-close | F045138470223 | - | 100 |

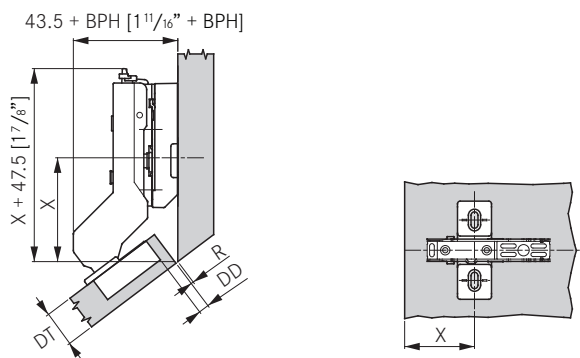
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

Inset



Drawing shows Tiomos with a base plate height (BPH) 12.

| | | Drilling Distance (DD) | | | | |
|----------------|------|-------------------------|-----|-----|----|----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door thickness | 22.0 | 12 | | | | |
| | 21.0 | | 12 | | | |
| | 20.0 | | | 12 | | |
| | 19.0 | | | | 12 | |
| | 18.0 | | | | | |
| | 17.0 | | 9.5 | | | 12 |
| | 16.0 | | | 9.5 | | |
| | 15.0 | | | | | |
| | | Base Plate Height (BPH) | | | | |

| | | Drilling Distance (DD) | | | | |
|--------------|------|------------------------------|------|------|------|------|
| | | 3 | 4 | 5 | 6 | 7 |
| Door overlay | 22.0 | 59.0 | | | | |
| | 21.0 | | 57.5 | | | |
| | 20.0 | | | 56.5 | | |
| | 19.0 | | | | 55.0 | |
| | 18.0 | | | | | |
| | 17.0 | | 54.5 | | | 53.0 |
| | 16.0 | | | 53.0 | | |
| | 15.0 | | | | | |
| | | Wing Base Plate position (X) | | | | |

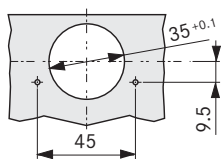
Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

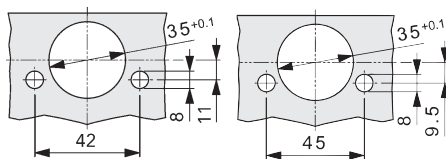
IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------|-----|-----|-----|-----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door Thickness | 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| | 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| | 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| | 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| | 17.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| | 16.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| | 15.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| | | Reveal (R) | | | | |

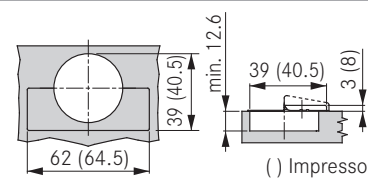
Screw-on



Impresso



Cup dimensions

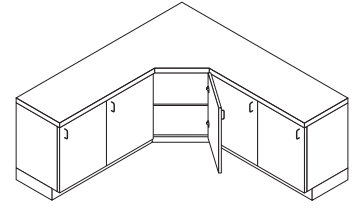


Tiomos 110/45A


+45° angle corner cabinet hinge for overlay doors





- For 45° angle corner cabinets
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/45A Opening Angle 110° Impresso Screw-on Dowelled

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|---|---------|------------|----------------------|---------|------------|----------------------|----------------------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139424223 | 45 | Soft-close | F028138533223 | F028138543223 | 100 |
| | | Self-close | F034139395223 | | Self-close | F045138471223 | F045138481223 | 100 |

| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

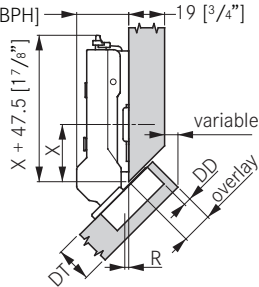
| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

Overlay

28 + BPH

[1 1/8" + BPH]

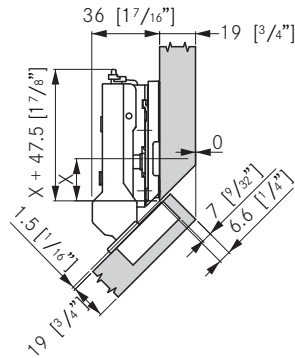


Drawing shows Tiomos with a base plate height (BPH) 0.

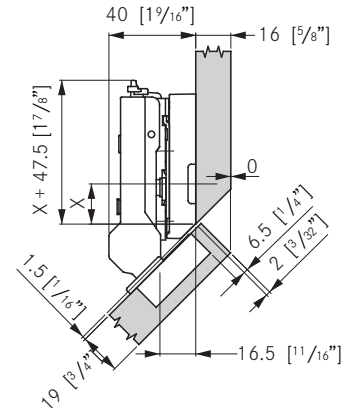
Drilling Distance (DD)

| Door overlay | Drilling Distance (DD) | | | | | | |
|--------------|------------------------|---|---|-----|---|--|--|
| | 3 | 4 | 5 | 6 | 7 | | |
| 19.5 | | | | | 0 | | |
| 19.0 | | | | | | | |
| 18.5 | | | | 0 | | | |
| 18.0 | | | | | | | |
| 17.5 | | 0 | | | | | |
| 17.0 | | | | | | | |
| 16.5 | 0 | | | 2 | | | |
| 16.0 | | | | | | | |
| 15.5 | 0 | | | 2 | | | |
| 15.0 | | | | | 3 | | |
| 14.5 | | 2 | | 3.5 | | | |
| 14.0 | | | | 3 | | | |
| 13.5 | 2 | | | 3.5 | | | |
| 13.0 | | 3 | | | | | |
| 12.5 | 2 | | | 3.5 | | | |
| 12.0 | 3 | | | | | | |
| 11.0 | 3 | | | | 6 | | |
| 10.0 | | | | 6 | | | |

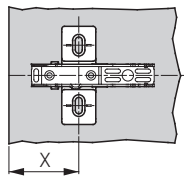
Base Plate Height (BPH)



Drawing shows Tiomos with a base plate height (BPH) 9.5.



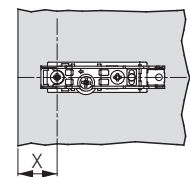
Drawing shows Tiomos with a base plate height (BPH) 12.



Base plate height

| | 0 | 2 | 3 | 3.5 | 6 |
|---|------|------|------|------|------|
| X | 30.5 | 28.5 | 27.5 | 27.0 | 24.5 |

Wing base plate position (X)



Base plate height

| | 0 | 2 | 3 | 3.5 |
|---|------|------|------|------|
| X | 13.5 | 11.5 | 10.5 | 10.0 |

Straight base plate position (X)

Minimum gaps

The minimum gap is the gap between the closed door and the front of the cabinet.

| Door Thickness | Drilling Distance (DD) | | | | | | |
|----------------|------------------------|-----|-----|-----|-----|--|--|
| | 3 | 4 | 5 | 6 | 7 | | |
| 24.0 | 1.0 | 1.0 | 1.0 | 1.2 | 2.1 | | |
| 22.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | | |
| 21.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | | |
| 20.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 19.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 18.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |

Minimum gap

Reveal

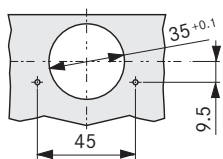
Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

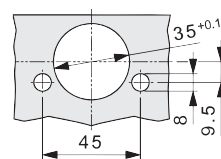
| Door Thickness | Drilling Distance (DD) | | | | | | |
|----------------|------------------------|-----|-----|-----|-----|--|--|
| | 3 | 4 | 5 | 6 | 7 | | |
| 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 | | |
| 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | | |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | | |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | | |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | | |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | | |
| 17.0 | .06 | .06 | .06 | .06 | .06 | | |
| 16.0 | .06 | .06 | .06 | .06 | .06 | | |

Reveal (R)

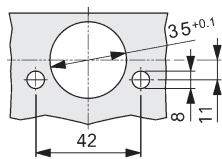
Screw-on



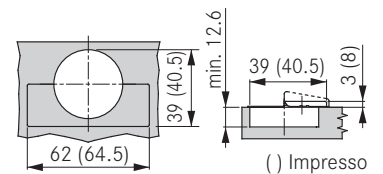
Dowelled



Impresso



Cup dimensions

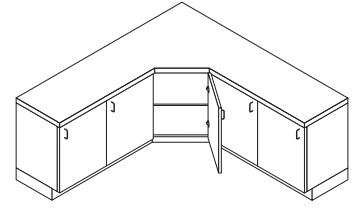


Tiomos 110/45E

+45° angle corner cabinet hinge for inset doors





- For 45° angle corner cabinets
- 110° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 110/45E Opening Angle 110° Impresso Screw-on Dowelled

| Inset | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|-------|---------|------------|----------------------|---------|------------|----------------------|----------------------|-----|
| | | | | | | | | |
| | | Self-close | F034139396223 | | Self-close | F045138472223 | F045138482223 | 100 |

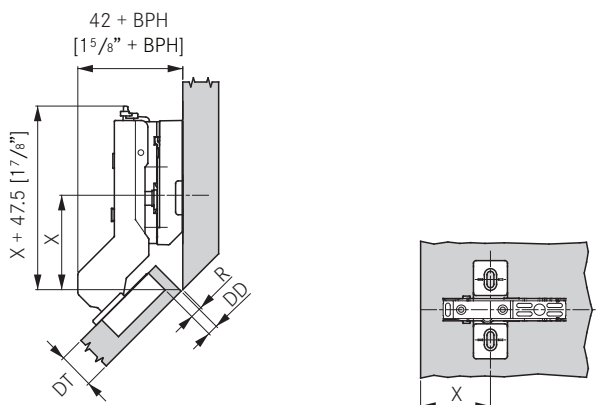
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

Inset



Drawing shows Tiomos with a base plate height (BPH) 12.

| | | Drilling Distance (DD) | | | | |
|----------------|------|-------------------------|----|----|----|---|
| | | 3 | 4 | 5 | 6 | 7 |
| Door thickness | 22.0 | | | | | |
| | 21.0 | | | | | |
| | 20.0 | | | | | |
| | 19.0 | 12 | | | | |
| | 18.0 | | 12 | | | |
| | 17.0 | | | 12 | | |
| | 16.0 | | | | 12 | |
| 15.0 | | | | | 12 | |
| | | Base Plate Height (BPH) | | | | |

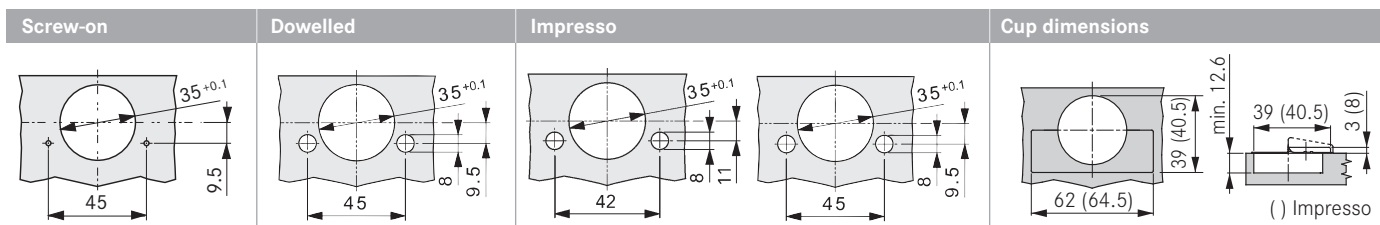
| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------------|------|------|------|---|
| | | 3 | 4 | 5 | 6 | 7 |
| Door thickness | 22.0 | | | | | |
| | 21.0 | | | | | |
| | 20.0 | | | | | |
| | 19.0 | 52.0 | | | | |
| | 18.0 | | 50.5 | | | |
| | 17.0 | | | 49.0 | | |
| | 16.0 | | | | 47.5 | |
| 15.0 | | | | | 46.0 | |
| | | Wing Base Plate position (X) | | | | |

Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| | | Drilling Distance (DD) | | | | |
|----------------|------|------------------------|-----|-----|-----|-----|
| | | 3 | 4 | 5 | 6 | 7 |
| Door Thickness | 24.0 | 2.4 | 2.1 | 2.1 | 2.1 | 2.0 |
| | 22.0 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| | 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| | 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| | 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| | 17.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 16.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | |
| | | Reveal (R) | | | | |

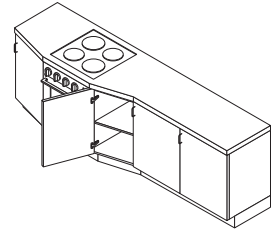


Tiomos 120/-15A


-15° angle corner cabinet hinge for overlay doors




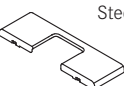
- For -15° angle corner cabinets
- 120° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 120/-15A **Opening Angle 120°** **Impresso** **Screw-on** **Dowelled**

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139432223 | 45 | Soft-close | F028138555223 | - | 100 |
| | | Self-close | F034139403223 | | Self-close | F045138493223 | - | 100 |

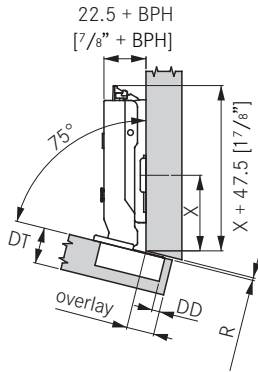
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

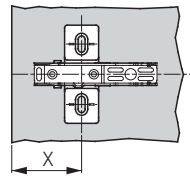
Overlay



Drawing shows Tiomos with a base plate height (BPH) 0.

| Door overlay | Drilling Distance (DD) | | | | |
|--------------|------------------------|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 7 |
| 18.0 | | | | | 0 |
| 17.0 | | | | 0 | |
| 16.0 | | | 0 | | |
| 15.0 | | 0 | | | |
| 14.5 | | | | 2 | 3 |
| 14.0 | 0 | | | | 3.5 |
| 13.5 | | | 2 | 3 | |
| 13.0 | | | | 3.5 | |
| 12.5 | | 2 | 3 | | |
| 12.0 | | | 3.5 | | |
| 11.5 | | 3 | | | 6 |
| 11.0 | | 3.5 | | | |
| 10.5 | 3 | | | 6 | |
| 10.0 | 3.5 | | | | |
| 9.5 | | | 6 | | |
| 8.5 | | 6 | | | |

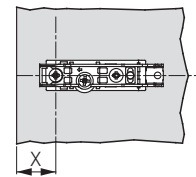
Base Plate Height (BPH)



Base plate height

| | 0 | 2 | 3 | 3.5 | 6 |
|---|----|------|------|-----|------|
| X | 40 | 40.5 | 40.5 | 41 | 41.5 |

Wing base plate position (X)



Base plate height

| | 0 | 2 | 3 | 3.5 |
|---|----|------|------|-----|
| X | 23 | 23.5 | 23.5 | 24 |

Straight base plate position (X)

Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| Door Thickness | Drilling Distance (DD) | | | | | Reveal (R) |
|----------------|------------------------|-----|-----|-----|-----|------------|
| | 3 | 4 | 5 | 6 | 7 | |
| 24.0 | 6.4 | 5.4 | 4.4 | 3.4 | 2.4 | |
| 22.0 | 3.0 | 2.0 | 1.5 | 1.5 | 1.5 | |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | |

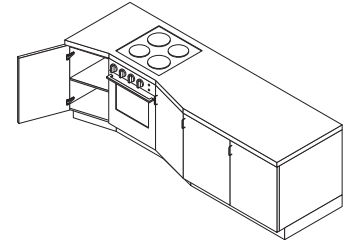
| Screw-on | Impresso | Cup dimensions |
|----------|----------|---------------------|
| | | <p>() Impresso</p> |

Tiomos 120/-30A


-30° angle corner cabinet hinge for overlay doors





- For -30° angle corner cabinets
- 120° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 120/-30A Opening Angle 120° Impresso Screw-on Dowelled

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139433223 | 45 | Soft-close | F028138556223 | - | 100 |
| | | Self-close | F034139404223 | | Self-close | F045138494223 | - | 100 |

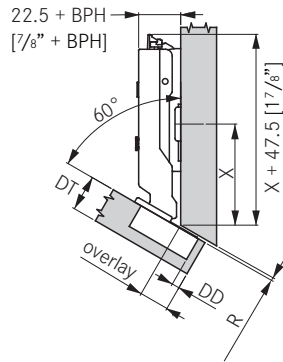
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

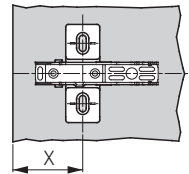
PU = packaging unit

Overlay



Drawing shows Tiomos with a base plate height (BPH) 02.

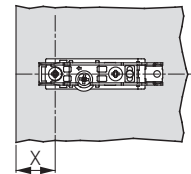
| Door overlay | Drilling Distance (DD) | | | | | | |
|--------------|-------------------------|-----|-----|---|-----|--|--|
| | 3 | 4 | 5 | 6 | 7 | | |
| 19.0 | | | | | 0 | | |
| 18.0 | | | | 0 | | | |
| 17.0 | | | 0 | | | | |
| 16.5 | | | | | 2 | | |
| 16.0 | | 0 | | | | | |
| 15.5 | | | | 2 | | | |
| 15.0 | 0 | | | | 3 | | |
| 14.5 | | | 2 | | 3.5 | | |
| 14.0 | | | | | 3 | | |
| 13.5 | | 2 | | | 3.5 | | |
| 13.0 | | | 3 | | | | |
| 12.5 | 2 | | 3.5 | | | | |
| 12.0 | | 3 | | | 6 | | |
| 11.5 | | 3.5 | | | | | |
| 11.0 | 3 | | | | 6 | | |
| 10.5 | 3.5 | | | | | | |
| 10.0 | | | 6 | | | | |
| 9.0 | | 6 | | | | | |
| 8.0 | 6 | | | | | | |
| | Base Plate Height (BPH) | | | | | | |



Base plate height

| | 0 | 2 | 3 | 3.5 | 6 |
|---|------|----|------|------|----|
| X | 53.5 | 55 | 55.5 | 55.5 | 57 |

Wing base plate position (X)



Base plate height

| | 0 | 2 | 3 | 3.5 |
|---|------|----|------|------|
| X | 36.5 | 38 | 38.5 | 38.5 |

Straight base plate position (X)

Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| Door Thickness | Drilling Distance (DD) | | | | | | |
|----------------|------------------------|-----|-----|-----|-----|--|--|
| | 3 | 4 | 5 | 6 | 7 | | |
| 24.0 | 6.4 | 5.4 | 4.4 | 3.4 | 2.4 | | |
| 22.0 | 3.0 | 2.0 | 1.5 | 1.5 | 1.5 | | |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | | |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | | |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | | |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | | |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | | |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| | Reveal (R) | | | | | | |

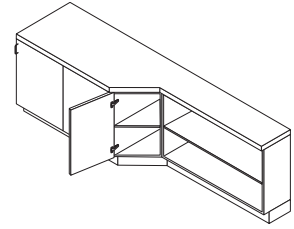
| Screw-on | Impresso | Cup dimensions |
|----------|----------|----------------|
| | | |

Tiomos 120/-45A

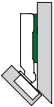
-45° angle corner cabinet hinge for overlay doors



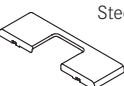
- For -45° angle corner cabinets
- 120° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



Tiomos 120/-45A Opening Angle 120° Impresso Screw-on Dowelled

| Overlay | Pattern | Type | Item No. | Pattern | Type | Item No. | Item No. | PU |
|--|---------|------------|----------------------|---------|------------|----------------------|----------|-----|
|  <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p> | 42 / 45 | Soft-close | F017139434223 | 45 | Soft-close | F028138557223 | - | 100 |
| | | Self-close | F034139405223 | | Self-close | F045138495223 | - | 100 |

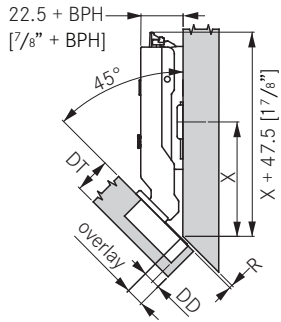
| Cover cap | Item No. | PU |
|--|----------------------|------|
|  <p>Steel, nickel-plated</p> | F072135500247 | 1000 |

| Hinge cup cover cap | Item No. | PU |
|--|----------------------|-----|
|  <p>Steel, nickel-plated</p> | F072135503228 | 150 |

| Wood screw, nickel-plated | Item No. | PU |
|--|-----------------|-----|
|  <p>#6 x 5/8" FHP, NI</p> | 81001-43 | 500 |

PU = packaging unit

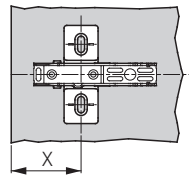
Overlay



Drawing shows Tiomos with a base plate height (BPH) 02.

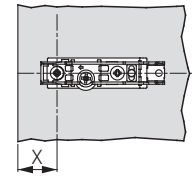
Drilling Distance (DD)

| Door overlay | Drilling Distance (DD) | | | | |
|--------------|-------------------------|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 7 |
| 12.0 | | | | | 0 |
| 11.5 | | | | 0 | |
| 10.5 | | | 0 | | |
| 9.5 | 0 | | | | 2 |
| 8.5 | 0 | | | 2 | |
| 8.0 | | | | | 3 |
| 7.5 | | | 2 | | 3.5 |
| 7.0 | | | | 3 | |
| 6.5 | | 2 | | 3.5 | |
| 6.0 | | | 3 | | |
| 5.5 | 2 | | 3.5 | | |
| 5.0 | | 3 | | | |
| 4.5 | | 3.5 | | | |
| 4.0 | 3 | | | | 6 |
| 3.5 | 3.5 | | | | |
| 3.0 | | | | 6 | |
| 2.0 | | | 6 | | |
| 1.0 | | 6 | | | |
| 0.0 | 6 | | | | |
| | Base Plate Height (BPH) | | | | |



Base plate height

| | 0 | 2 | 3 | 3.5 | 6 |
|------------------------------|------|------|------|-----|------|
| X | 60.5 | 62.5 | 63.5 | 64 | 66.5 |
| Wing base plate position (X) | | | | | |



Base plate height

| | 0 | 2 | 3 | 3.5 |
|----------------------------------|------|------|------|-----|
| X | 43.5 | 45.5 | 46.5 | 47 |
| Straight base plate position (X) | | | | |

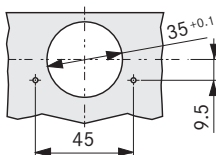
Reveal

Reveal dimensions were determined with an edge radius (of the door) of 1mm! Hinge dimensions and reveal calculation based on factory setting.

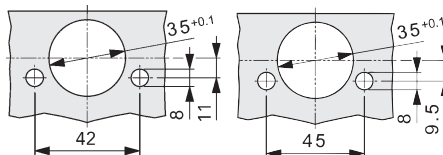
IMPORTANT To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

| Door Thickness | Drilling Distance (DD) | | | | | Reveal (R) |
|----------------|------------------------|-----|-----|-----|-----|------------|
| | 3 | 4 | 5 | 6 | 7 | |
| 24.0 | 6.4 | 5.4 | 4.4 | 3.4 | 2.4 | |
| 22.0 | 3.0 | 2.0 | 1.5 | 1.5 | 1.5 | |
| 21.0 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | |
| 20.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | |
| 19.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | |
| 18.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | |
| 17.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | |
| 16.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | |
| | | | | | | Reveal (R) |

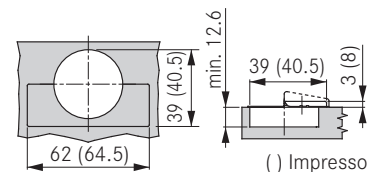
Screw-on



Impresso



Cup dimensions

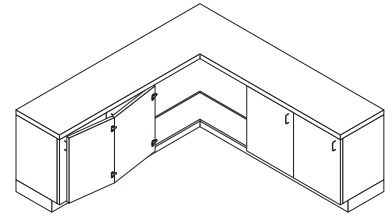


Tiomos PCC

Pie-cut corner cabinet hinge



- 3-dimensional adjustment with suitable base plate
- Designed for connecting two folding doors in corner cabinet
- For door thicknesses 16 to 22 mm
- Self-close hinges available
- Used in conjunction with Tiomos 160 hinges



Tiomos PCC

Screw-on

Dowelled

Overlay

| Pattern | Type | Item No. | Item No. | PU |
|---------|------------|----------------------|----------------------|-----|
| 42 | Self-close | - | F045138336228 | 150 |
| 45 | Self-close | F045138517228 | F045138518228 | 150 |

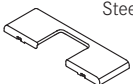


Hinge cup: steel, nickel-plated
Hinge arm: zinc, nickel-plated

| Cover cap | Item No. | PU |
|----------------------|----------------------|------|
| Steel, nickel-plated | F072135500247 | 1000 |



| Hinge cup cover cap | Item No. | PU |
|----------------------|----------------------|-----|
| Steel, nickel-plated | F072135503228 | 150 |

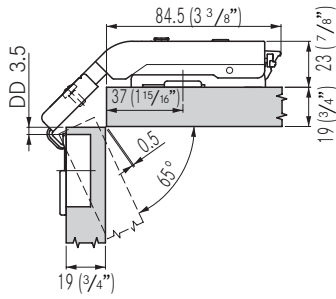


| Wood screw, nickel-plated | Item No. | PU |
|---------------------------|-----------------|-----|
| #6 x 5/8" FHP, NI | 81001-43 | 500 |

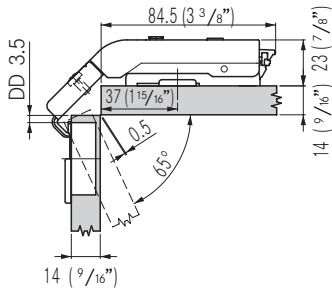


PU = packaging unit

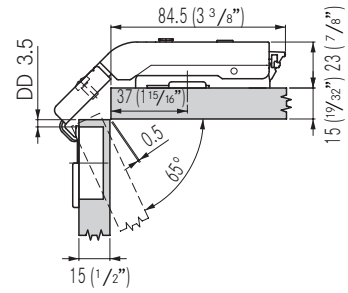
Hinge Application



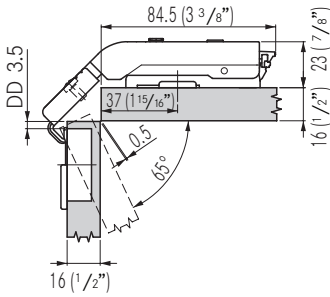
19mm door thickness with base plate height 0



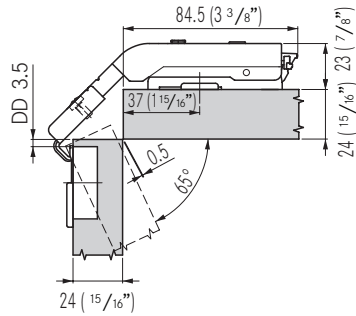
14mm door thickness with base plate height 0



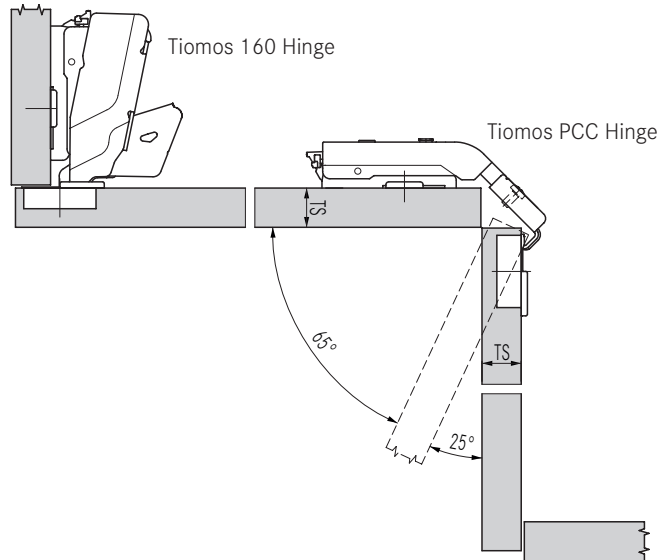
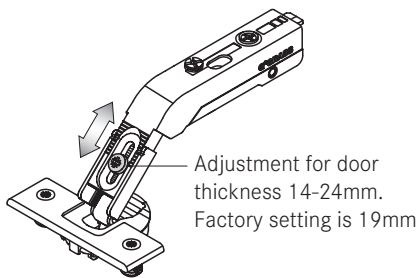
15mm door thickness with base plate height 0



16mm door thickness with base plate height 0



24mm door thickness with base plate height 0

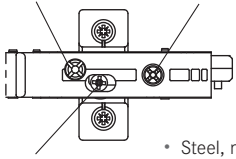


| Screw-on | Dowelled | Cup dimensions |
|----------|----------|---------------------|
| | | <p>() Impresso</p> |

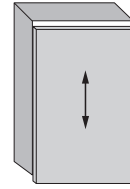
Tiomos base plates

For Tiomos hinges

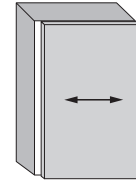
Tiomos wing base plates



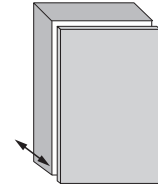
- Steel, nickel plated
- Depth adjustment via worm gear
- Height adjustment via worm gear or elongated hole
- Side adjustment via hinge
- Use a #2 Pozzi drive screwdriver for hinge adjustment
- Attach baseplates using all available screw holes



Height adjustment via base plate
Via worm gear ± 2 mm
Via elongated holes ± 2.5 mm



Side Adjustment
 ± 2 mm



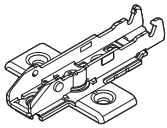
Depth adjustment
 $+3/-2$ mm

All adjustment options can be made independently of one another.

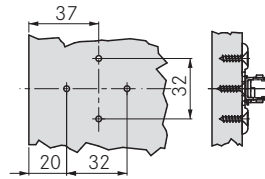
Wing base plate, 4 point fixing

37/32

For wood screws



- Height adjustment via worm gear

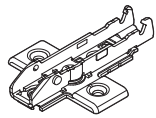


| Height | Item No. | PU |
|--------|----------------------|-----|
| 0 | F058139746228 | 150 |
| 2 | F058139747228 | 150 |
| 3 | F058139748228 | 150 |
| 3.5 | F058139749228 | 150 |

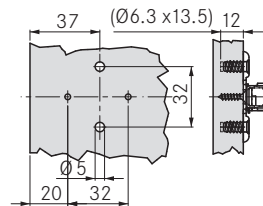
Wing base plate, 4 point fixing

37/32

For Euro screws



- Height adjustment via worm gear

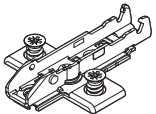


| Height | Item No. | PU |
|--------|----------------------|-----|
| 0 | F058139756228 | 150 |
| 2 | F058139757228 | 150 |
| 3 | F058139758228 | 150 |
| 3.5 | F058139759228 | 150 |

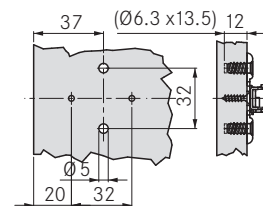
Wing base plate, 4 point fixing

37/32

With pre-mounted Euro screws (13.5 mm)



- Height adjustment via worm gear

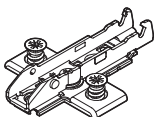


| Height | Item No. | PU |
|--------|----------------------|-----|
| 0 | F058139761228 | 150 |
| 2 | F058139762228 | 150 |
| 3 | F058139763228 | 150 |
| 3.5 | F058139764228 | 150 |

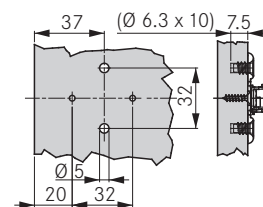
Wing base plate, 4 point fixing

37/32

With pre-mounted Euro screws (10 mm)



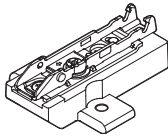
- Height adjustment via worm gear
- For twin application



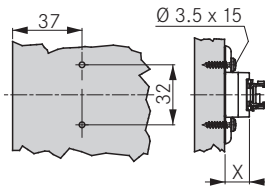
| Height | Item No. | PU |
|--------|----------------------|-----|
| 0 | F058139863228 | 150 |
| 2 | F058139864228 | 150 |
| 3 | F058139865228 | 150 |
| 3.5 | F058139866228 | 150 |

PU = packaging unit

Wing base plate, 2 point fixing **37/32** **For wood screws**

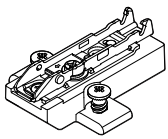


- Zinc die-cast/Steel, nickel plated
- Height adjustment via worm gear

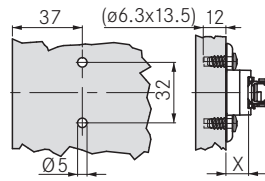


| Height(x) | Item No. | PU |
|-----------|-----------------------|----|
| 6 | F058139892 217 | 50 |
| 9.5 | F058139898 217 | 50 |
| 12 | F058139893 217 | 50 |
| 19 | F058139894 217 | 50 |

Wing base plate, 2 point fixing **37/32** **With pre-mounted euro screws (13.5 mm)**

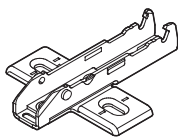


- Zinc die-cast/Steel, nickel plated
- Height adjustment via worm gear

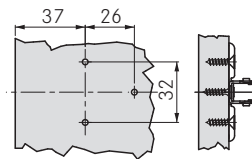


| Height(x) | Item No. | PU |
|-----------|-----------------------|----|
| 6 | F058139873 217 | 50 |
| 9.5 | F058139882 217 | 50 |
| 12 | F058139874 217 | 50 |
| 19 | F058139875 217 | 50 |

Wing steel base plate, 3 point fixing **37/32** **For wood screws**

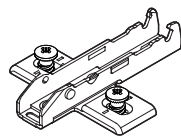


- Height adjustment via elongated screw holes

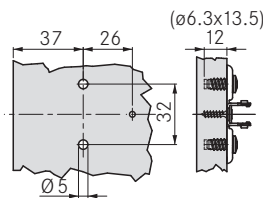


| Height | Item No. | PU |
|--------|-----------------------|-----|
| 0 | F058139721 228 | 150 |
| 2 | F058139722 228 | 150 |
| 3 | F058139723 228 | 150 |
| 3.5 | F058139724 228 | 150 |

Wing steel base plate, 3 point fixing **37/32** **With pre-mounted euro screws (13.5 mm)**



- Height adjustment via elongated screw holes



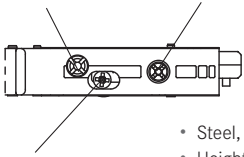
| Height | Item No. | PU |
|--------|-----------------------|-----|
| 0 | F058139736 228 | 150 |
| 2 | F058139737 228 | 150 |
| 3 | F058139738 228 | 150 |
| 3.5 | F058139739 228 | 150 |

PU = packaging unit

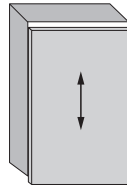
Tiomos base plates

For Tiomos hinges

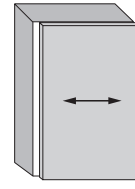
Tiomos straight base plates



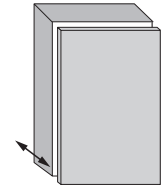
- Steel, nickel plated
- Height and depth adjustment via worm gear
- Side adjustment via hinge
- Use a #2 Pozi drive screwdriver for hinge adjustment
- Attach baseplates using all available screw holes



Height adjustment via base plate
Via worm gear ± 2 mm



Side Adjustment
 ± 2 mm



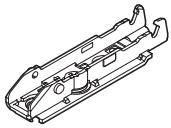
Depth adjustment
 $+3/-2$ mm

All adjustment options can be made independently of one another.

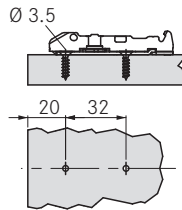
Straight base plate, 2 point fixing

20/32

For wood screws



- Height adjustment via worm gear

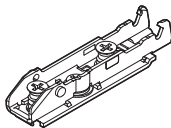


| Height | Item No. | PU |
|--------|----------------------|-----|
| 0 | F059139701228 | 150 |
| 2 | F059139702228 | 150 |
| 3 | F059139703228 | 150 |

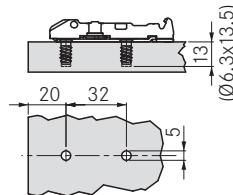
Straight base plate, 2 point fixing

20/32

With pre-mounted Euro screws



- Height adjustment via worm gear



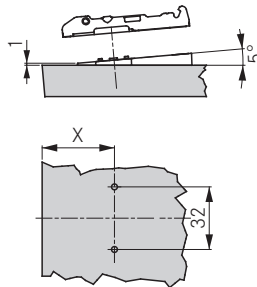
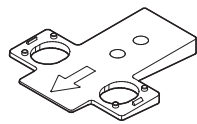
| Height | Item No. | PU |
|--------|----------------------|-----|
| 0 | F059139711228 | 150 |
| 2 | F059139712228 | 150 |
| 3 | F059139713228 | 150 |

+5° Wedge for screw fixing

37/32

For wood screws

- Zinc, nickel plated
- For placing under wing mounting plates
- Can be stacked (max. 3)



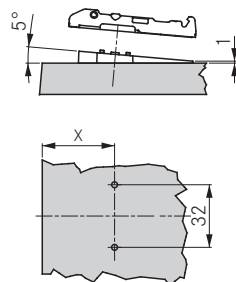
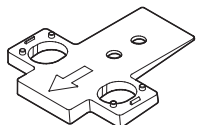
| Height | Item No. | PU |
|--------|----------------------|----|
| 3 | F072135757217 | 50 |

-5° Wedge for screw fixing

37/32

For wood screws

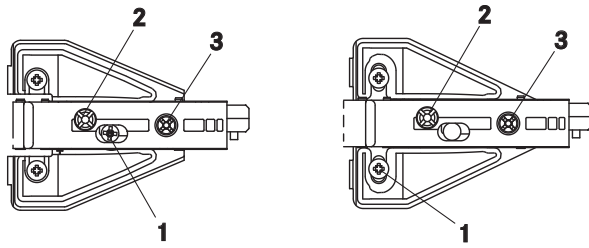
- Zinc, nickel plated
- For placing under wing mounting plates
- Cannot be stacked



| Height | Item No. | PU |
|--------|----------------------|----|
| 3 | F072135758217 | 50 |

PU = packaging unit

Tiomos face frame adapter plates



- Steel, nickel plated
- Depth adjustment via worm gear
- Height adjustment via worm gear or elongated hole
- Side adjustment via hinge
- Use a #2 Pozi drive screwdriver for hinge adjustment
- Attach baseplates using all available screw holes

Height adjustment via base plate
via worm gear ± 2 mm
via elongated holes ± 2.5 mm

Side Adjustment
 ± 2 mm

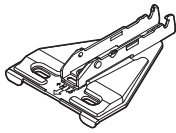
Depth adjustment
 $+3/-2$ mm

All adjustment options can be made independently of one another.

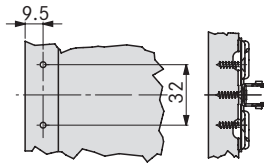
FFA base plate, 2 point fixing

9.5/32

For wood screws



- Height adjustment via elongated screw holes

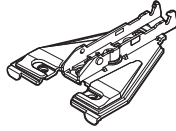


| Height | Item No. | PU |
|--------|-----------------------|-----|
| 1.5 | F058139821 228 | 150 |
| 3.5 | F058139822 228 | 150 |
| 4.5 | F058139823 228 | 150 |
| 5 | F058139824 228 | 150 |

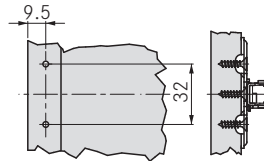
FFA base plate, 2 point fixing

9.5/32

For wood screws



- Height adjustment via worm gear

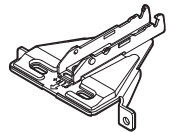


| Height | Item No. | PU |
|--------|-----------------------|-----|
| 1.5 | F058139825 228 | 150 |
| 3.5 | F058139826 228 | 150 |
| 4.5 | F058139827 228 | 150 |
| 5 | F058139828 228 | 150 |

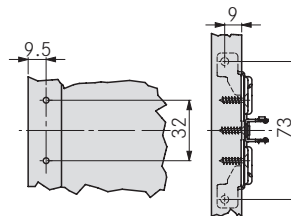
FFAL base plate with flange, 4 point fixing

9.5/32

For wood screws



- Height adjustment via elongated screw holes

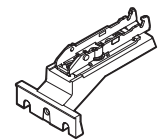


| Height | Item No. | PU |
|--------|-----------------------|-----|
| 3.5 | F058139829 228 | 150 |
| 5 | F058139830 228 | 150 |

Inset FFA base plate, 3 point fixing

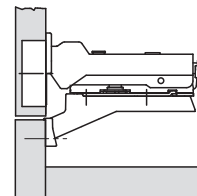
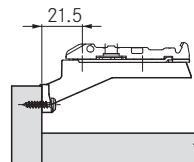
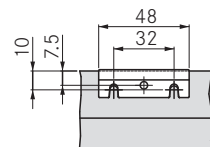
10/32

For wood screws



- Steel, diecast, nickel plated

- Height adjustment via elongated screw holes



Note: Requires a 9.5 crank hinge (half-overlay)

| Height | Item No. | PU |
|--------|-----------------------|-----|
| 0 | F058139831 228 | 150 |

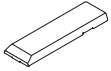
PU = packaging unit

Tiomos Accessories

Cover caps

Hinge arm cover cap

For all crankings

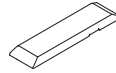


Steel, nickel plated, without imprint*

| Item No. | PU |
|----------------------|------|
| F072135500247 | 1000 |

Hinge arm cover cap, long

For 00 and 03 Cranking only

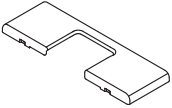


Steel, nickel plated, without imprint*

| Item No. | PU |
|----------------------|------|
| F072135504247 | 1000 |

* Imprinting available upon special request

Hinge cup cover cap



Steel, nickel plated

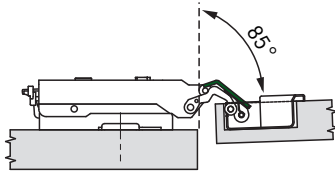
| Item No. | PU |
|----------------------|-----|
| F072135503228 | 150 |

Angle reduction clips

Opening angle reduction clip to 85°

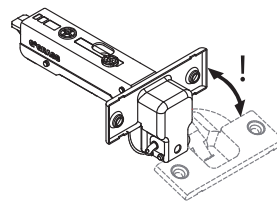
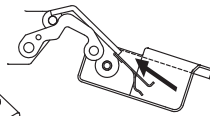
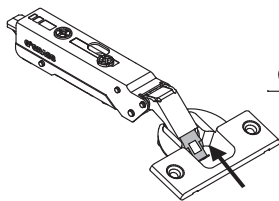
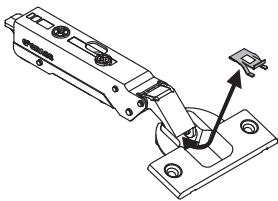


Steel, nickel

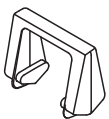


Works for all Tiomos 110° and 120° standard hinges. Reduces the opening angle to 85° to prevent doors from bumping fronts or walls in corner installations.

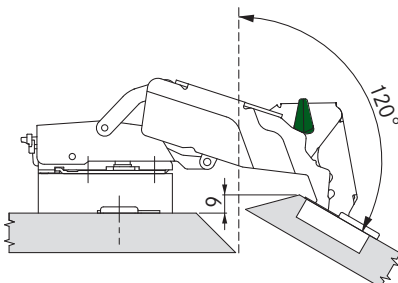
| Item No. | PU |
|----------------------|----|
| F072135751517 | 50 |



Opening angle reduction clip to 120°



Black plastic



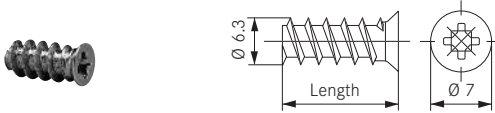
Works for all Tiomos 160° standard hinges. Reduces the opening angle to 120° to prevent doors from bumping the cabinet side in inset and mitered corner applications.

| Item No. | PU |
|----------------------|----|
| F072135753117 | 50 |

PU = packaging unit

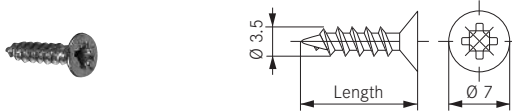
Screws

Euro screw, nickel-plated



| Description | Item No. | PU |
|--------------------------|----------|-----|
| 13mm Euro Screw (1/2") | 81015-43 | 500 |
| 18mm Euro Screw (11/16") | 83000-43 | 500 |
| 7.5mm Euro Screw (5/16") | 83001-43 | 500 |
| 13mm Pan head Euro Screw | 13398-43 | 500 |

Wood screw, nickel-plated



| Description | Item No. | PU |
|--------------------|----------|-----|
| #6 x 1/2" FHP, NI | 81014-43 | 500 |
| #6 x 7/16" FHP, NI | 81016-43 | 500 |
| #6 x 5/8" FHP, NI | 81001-43 | 500 |
| #6 x 3/4" FHP, NI | 81003-43 | 500 |
| #6 x 1" FHP, NI | 81004-43 | 500 |

Pozidrive screwdriver

#2 Pozidrive screwdriver for hinges



| Description | Item No. | PU |
|-----------------------|----------|----|
| Pozidrive screwdriver | 98000-01 | 1 |
| Pozidrive screwdriver | 98000-08 | 50 |

Ecopress

Drilling and insertion machine for 45mm boring pattern

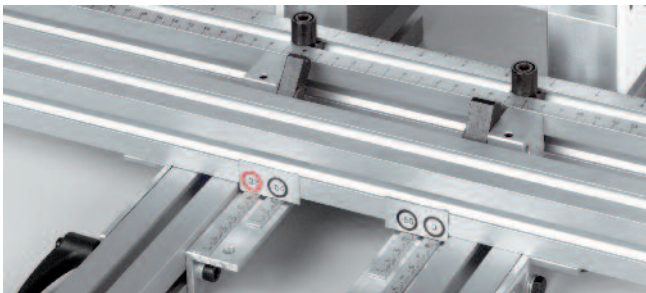


- Bore depth automatically adjusts to material thickness
- Functional design
- Accurate fence is easily adjusted
- Chip removal by air on pneumatic machines
- Easy, fast and efficient operation
- Easy maintenance

| Motor configuration | Item No. | PU |
|-----------------------------|---------------|----|
| 110v single phase pneumatic | F146077951299 | 1 |
| 220v single phase pneumatic | F146077952299 | 1 |
| 220v three phase pneumatic | F146079520299 | 1 |

Scale bar

Graduated scale for exact measurement on the machine.



Pneumatic control

Pneumatic feed and pneumatic hold-down device.



Hold-down block

Optimum fixing on the Ecopress
Pneumatic with the pneumatic hold-down device.



PU = packaging unit

Carbide drill bits for Ecopress

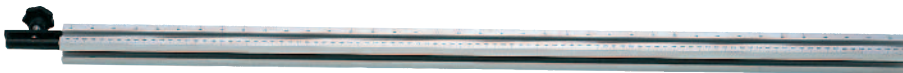


| Diameter | Direction | Item no. | PU |
|----------|-----------|----------|----|
| 35 mm | RH | 00077-01 | 1 |
| 8 mm | LH | 00160-01 | 1 |



| Bit set for hinge drilling | Item no. | PU |
|----------------------------|----------|----|
| 1 x 35 mm/RH, 2 x 8 mm/LH | 00213-01 | 1 |

Extension bars for use with Ecopress



| Type | From/ Up to | Item no. | PU |
|--------|-------------------|----------|----|
| Type 1 | 360 mm - 1360 mm | 37535-01 | 1 |
| Type 2 | 1360 mm - 2350 mm | 37536-01 | 1 |

Additional stops for Ecopress



| Type | Item no. | PU |
|-------|----------|----|
| Left | 89610-01 | 1 |
| Right | 89510-01 | 1 |

Insertion rams for Ecopress



F146135759299



F146101310201

| Insertion Dies for Tiomos | Item no. | PU |
|--|----------------------|----|
| For Tiomos 110°/120° hinge, aluminum | F146135759299 | 1 |
| For Tiomos 110°/120° hinge plastic | F146101310201 | 1 |
| Universal insertion die for Tiomos 110°/120°/160° hinge, plastic | F146101308201 | 1 |

PU = packaging unit

Technical Information

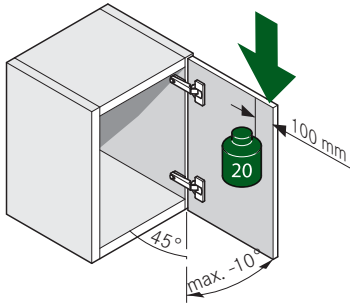
For Tiomos

TEST CRITERIA FOR HINGES

Functional test

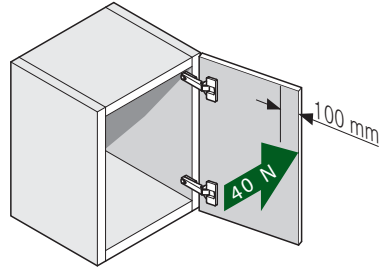
Static load - vertical

Additional load: 44 pounds (20 kg)
Opening angle: max. -10°



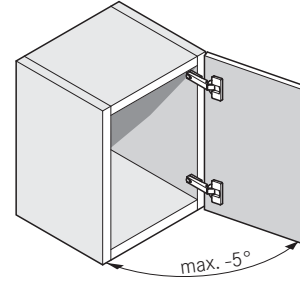
Static load - horizontal

Force: 40 N



Endurance test

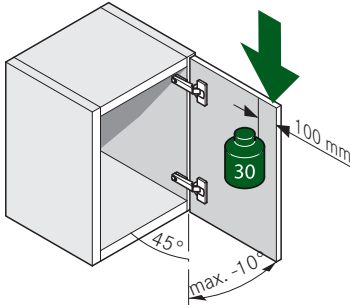
Opening angle: max. -5°
Open and close movements: 100,000



Overload testing

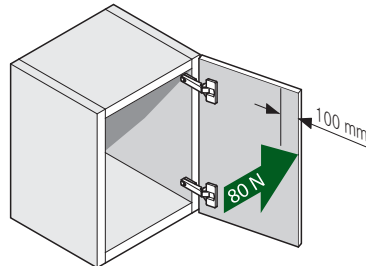
Vertical

Additional load: 66 pounds (30 kg)
Opening angle: max. -10°



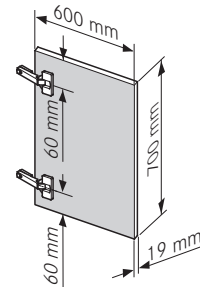
Horizontal

Force: 80 N



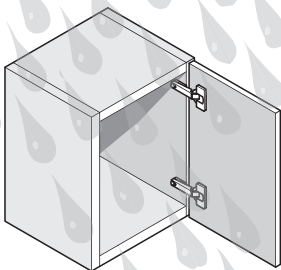
Test door

Weight approx. 11.5 pounds (5.2 kg)



Salt spray and humidity test

Based on DIN ISO 9227 and DIN 6270-2





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1202 Highway 66 South
Kernersville, NC 27284

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