



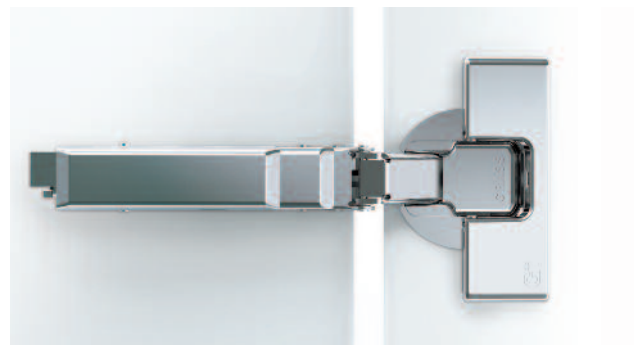
TIOMOS HINGES



**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.



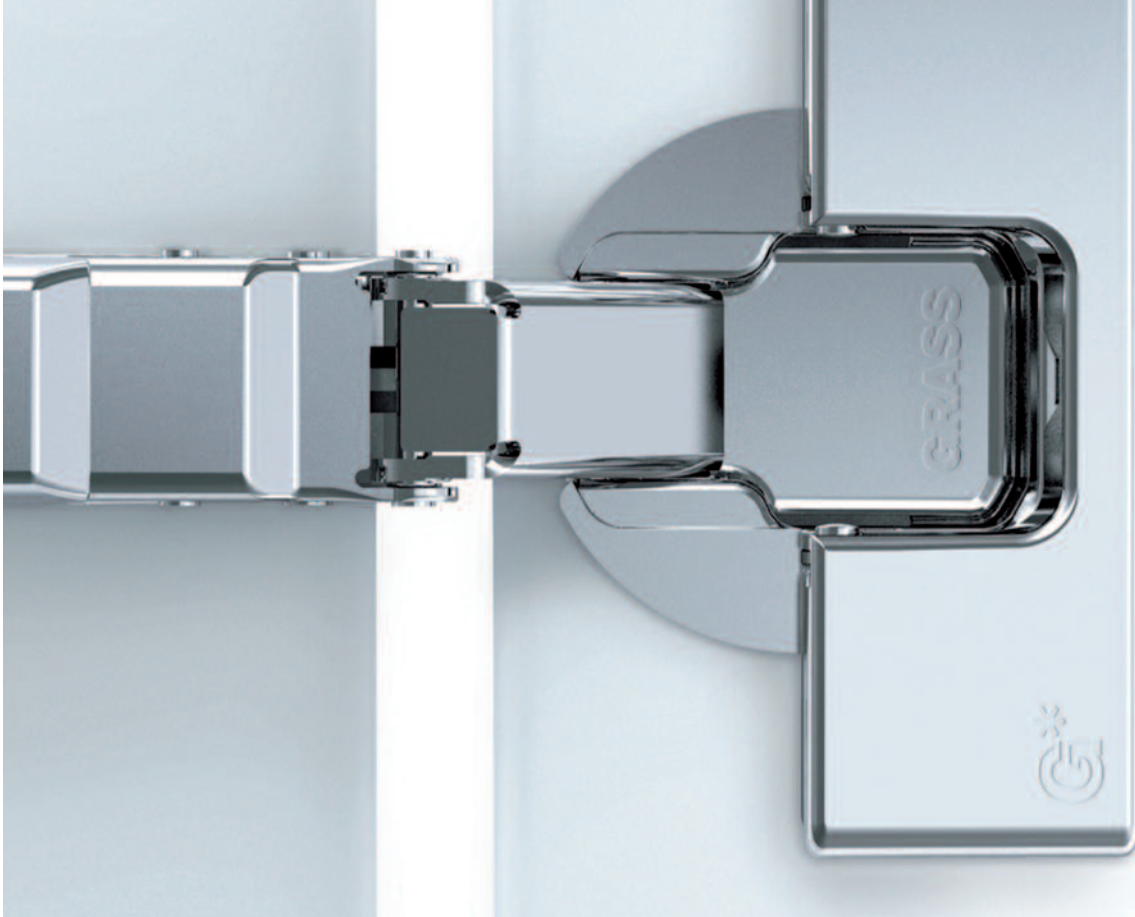
**Our developers set out to create a product innovation – a completely new hinge system. The result was Tiomos.** Not only does Tiomos outperform any other hinge in the industry, it offers a timeless design as well as its own individual character.

Tiomos is a completely new hinge concept. The product range covers virtually every application, from standard doors to wide angle doors, from frameless applications to face frame applications. The Tiomos offers two closing actions: the standard Self-close and the new popular Soft-close. The Soft-close offers a three tier adjustable 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.

Tiomos - the ideal solution to the ever increasing requirements of today's manufacturers.





Tiomos - One hinge system to cover all applications.

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

Tiomos provides perfect movement for essentially every application, from standard doors to wide angle doors, from diagonal corner hinges to pie-cut corner hinges, and 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. The Tiomos Impresso, the ever popular tool free version, is available in a combined 42/45mm pattern.





## 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.






















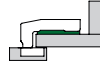

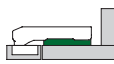










For a stronger closing action, turn the adjustment lever by 90° to the right.



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



For a gentler closing action, turn the adjustment lever by 90° to the left.

Opening angle		Description	Full overlay	Overlay	Half overlay	Inset	Page
		<b>Technical Information</b>					8-15
110°		<b>Tiomos 110</b> <ul style="list-style-type: none"> <li>• Optimal reveals up to 24 mm door thickness</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					16
120°		<b>Tiomos 120</b> <ul style="list-style-type: none"> <li>• Optimal reveals up to 24 mm door thickness</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					18
160°		<b>Tiomos 160</b> <ul style="list-style-type: none"> <li>• Optimal reveals up to 32 mm door thickness</li> <li>• Zero protrusion</li> <li>• For cabinets with inset drawers or pull-out shelves</li> </ul>					20
95°		<b>Tiomos 95</b> <ul style="list-style-type: none"> <li>• Optimal reveals up to 36 mm door thickness</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					22
110°		<b>Tiomos 110/90A</b> <ul style="list-style-type: none"> <li>• Hinge for blind corner cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					24
110°		<b>Tiomos 110/90E</b> <ul style="list-style-type: none"> <li>• Hinge for blind corner cabinets, inset</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					26
110°		<b>Tiomos 110/30A</b> <ul style="list-style-type: none"> <li>• For 30° angled cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					28
110°		<b>Tiomos 110/30E</b> <ul style="list-style-type: none"> <li>• For 30° angled cabinets, inset</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					30
110°		<b>Tiomos 110/37A</b> <ul style="list-style-type: none"> <li>• For 37° angled cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					32
110°		<b>Tiomos 110/37E</b> <ul style="list-style-type: none"> <li>• For 37° angled cabinets, inset</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					34
110°		<b>Tiomos 110/45A</b> <ul style="list-style-type: none"> <li>• For 45° angled cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					36



Opening angle		Description	Full overlay	Overlay	Half overlay	Inset	Page
110°		<b>Tiomos 110/45E</b> <ul style="list-style-type: none"> <li>• For 45° angled cabinets, inset</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					38
120°		<b>Tiomos 120/-15A</b> <ul style="list-style-type: none"> <li>• For -15° angled cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					40
120°		<b>Tiomos 120/-30A</b> <ul style="list-style-type: none"> <li>• For -30° angled cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					42
120°		<b>Tiomos 120/-45A</b> <ul style="list-style-type: none"> <li>• For -45° angled cabinets, overlay</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					44
110°		<b>Tiomos PCC</b> <ul style="list-style-type: none"> <li>• For pie cut corner application</li> <li>• Convenient depth adjustment via worm gear</li> </ul>					46

	<b>Tiomos base plates</b>	48
	<b>Tipmatic</b> <ul style="list-style-type: none"> <li>• For use with free swing hinges</li> <li>• For handle-free wooden doors</li> </ul>	52
	<b>Accessories</b> <ul style="list-style-type: none"> <li>• Cover caps</li> <li>• Angle reduction clips</li> <li>• Clip protection</li> </ul>	54
	<b>Machinery</b>	56
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# 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
- Wide selection of hinges and specialty hinges cover all application needs
- 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

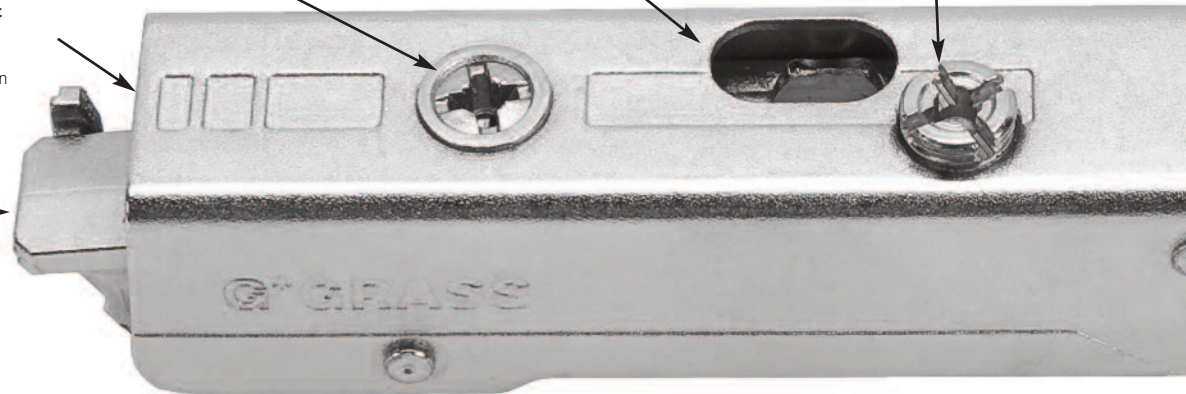
release with audible locking

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

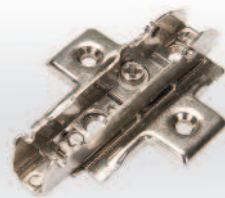
via hinge arm on baseplate

#### • Side adjustment ( $\pm 2\text{mm}$ )

with overturn stop



**3 Soft-close settings**  
adjust to meet your individual Soft-close requirements.

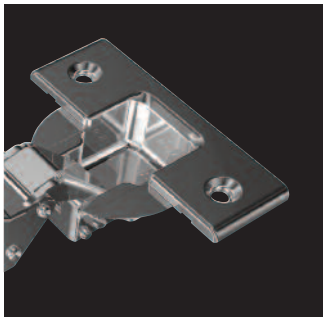


**Height adjustment**  
is based on the worm gear principle that is continuous and self-locking.

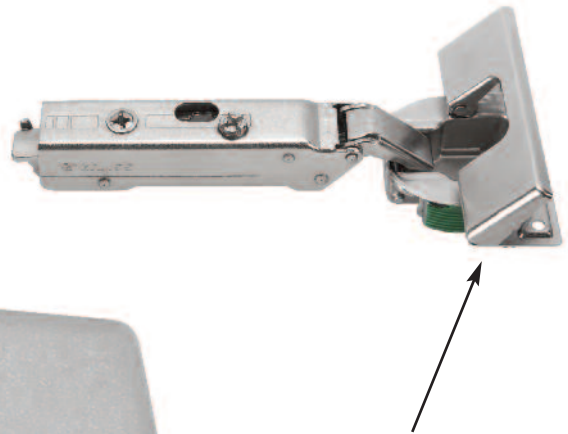


## Features & Benefits

- 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  $\pm 2.5$ mm on base plate via hinge arm
  - \* Side adjustment with overturn stop  $\pm 2$  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

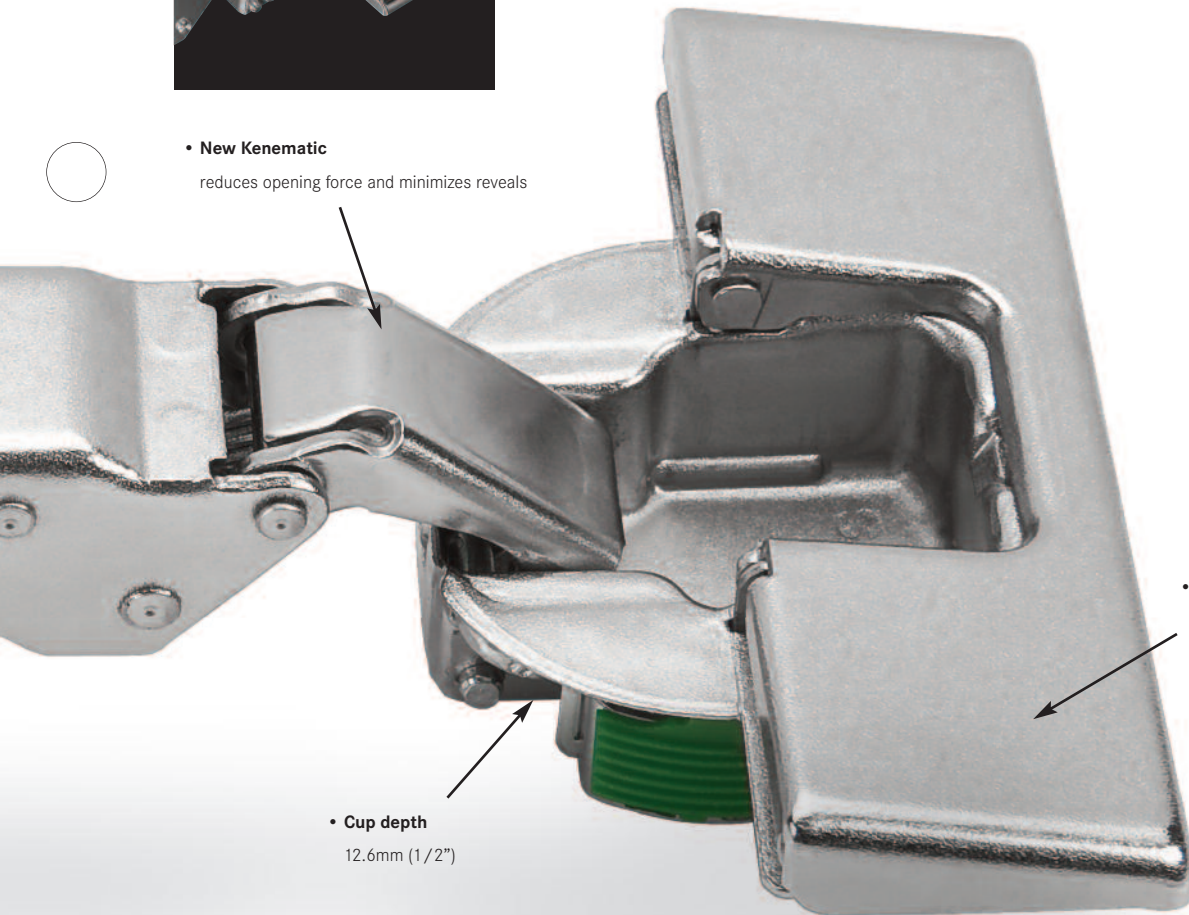


**Dowelled and Screw-on** cup attachments. Dowelled available in both 42mm and 45mm patterns. Screw-on available in 45mm pattern.



• **Impresso Hinges**  
for tool free application

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

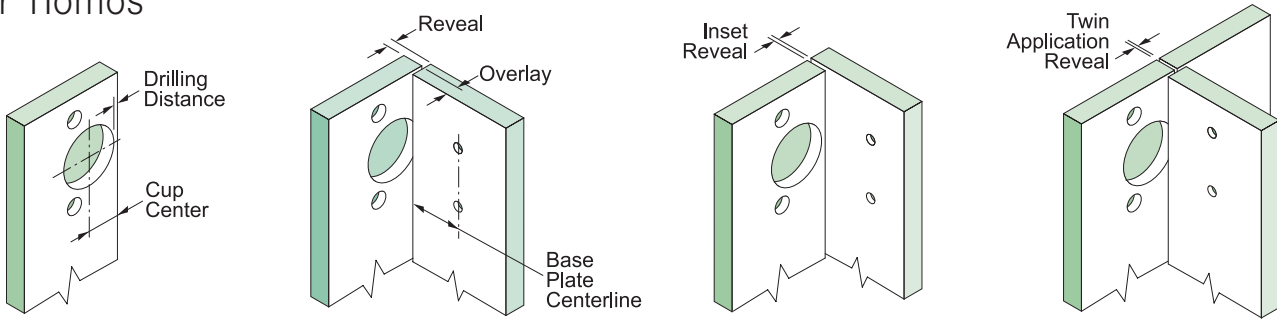


• **Cup depth**  
12.6mm (1/2")

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

# 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.

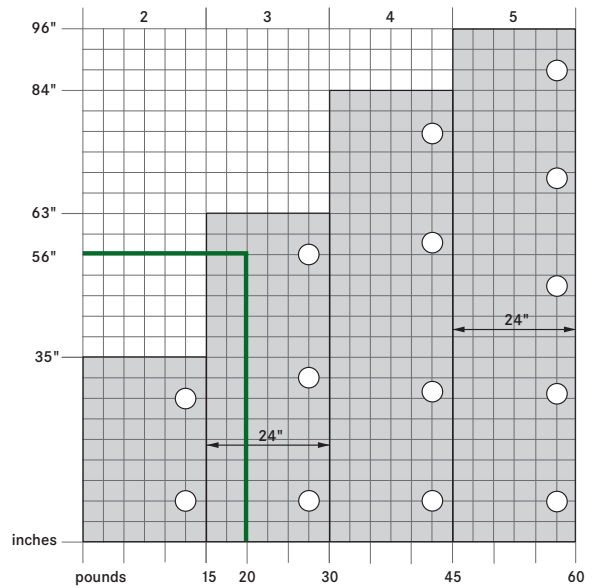
Attach base plates using all available screw holes.

Example:

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

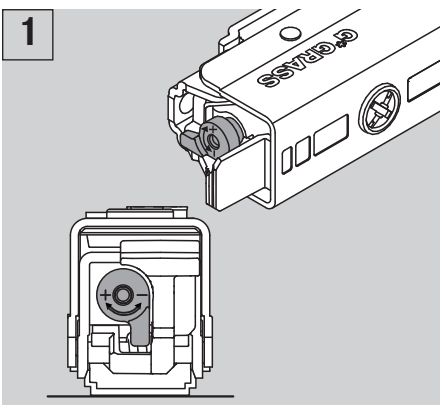
Note: The distance between the top and bottom hinge must be greater than the width of the door.

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.

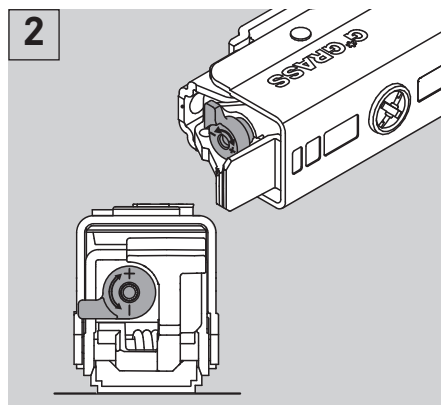


#### Light setting

Adjustment lever points toward the cabinet wall

Appropriate for:

- Small, light doors

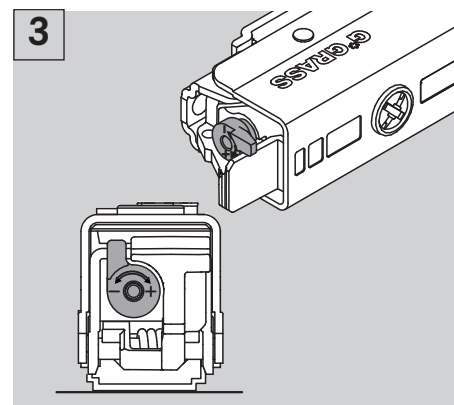


#### Medium setting (factory setting)

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

Appropriate for:

- Standard doors



#### Strong setting

Adjustment lever points toward the cabinet interior

Appropriate for:

- Large, heavy doors



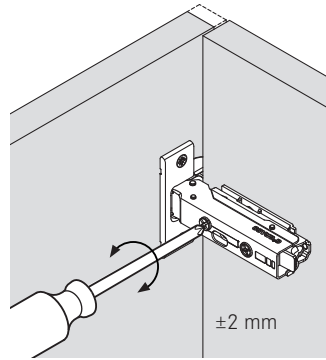
## Adjustments

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

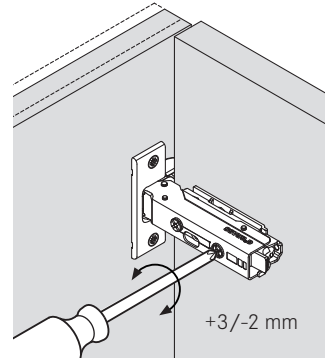
For depth adjustment, select base plates have worm gear adjustment access through the hinge arm.

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

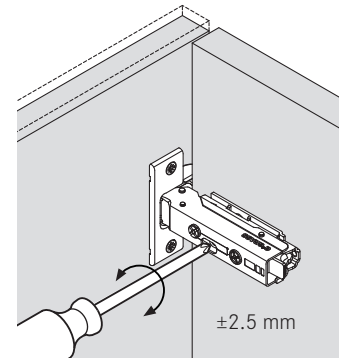
Attach base plates using all available screw holes.



Side adjustment



Depth adjustment via worm gear



Height adjustment via base plate

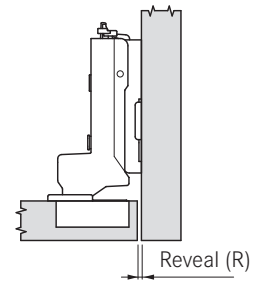
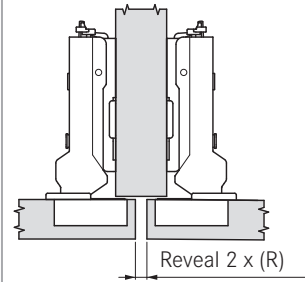
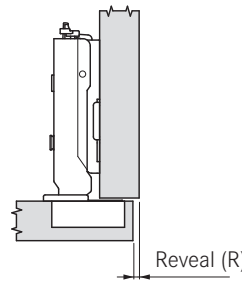
## Reveal

### 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					

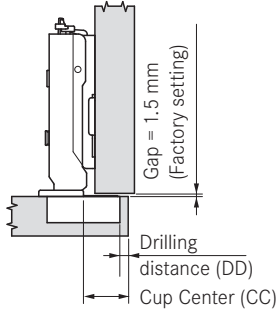
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

# 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.

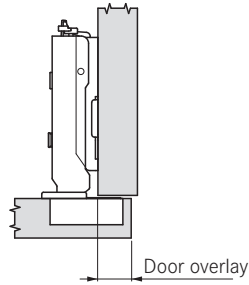
Door Thickness (DT)	Drilling Distance (DD)						
	3	4	5	6	7		
24.0	1.0	1.0	1.0	1.2	2.1		
22.0	1.0	1.0	1.0	1.0	1.5		
21.0	1.0	1.0	1.0	1.0	1.2		
20.0	1.0	1.0	1.0	1.0	1.0		
19.0	1.0	1.0	1.0	1.0	1.0		
18.0	1.0	1.0	1.0	1.0	1.0		
17.0	1.0	1.0	1.0	1.0	1.0		
16.0	1.0	1.0	1.0	1.0	1.0		
							Minimum gap

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.



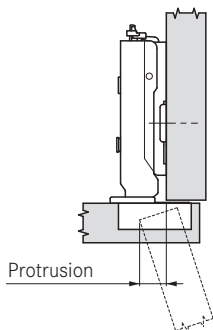
#### Example:

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.



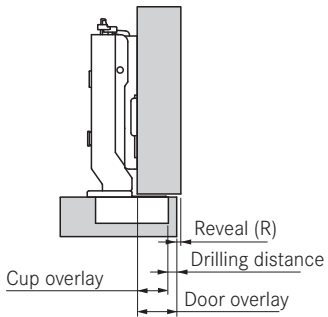


**Door positions**

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

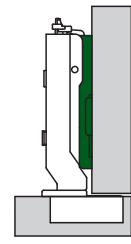
**Full Overlay (Cranking 00)**

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.



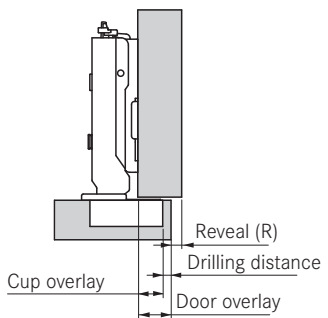
**Full Overlay**

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



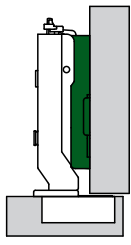
**Overlay (Cranking 03)**

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.



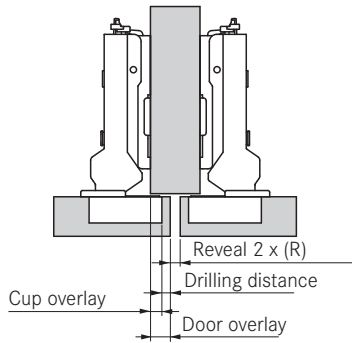
**Overlay**

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



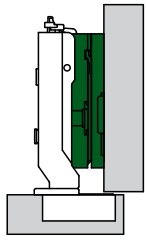
**Half Overlay (Cranking 9.5)**

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.



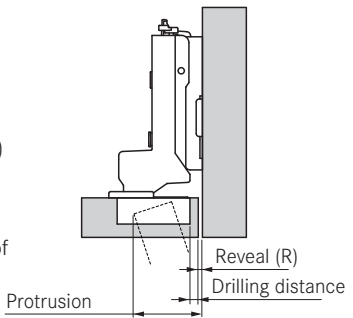
**Half Overlay**

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



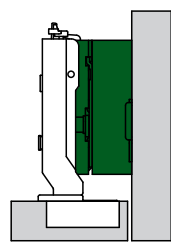
**Inset (Cranking 19)**

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.



**Inset**

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



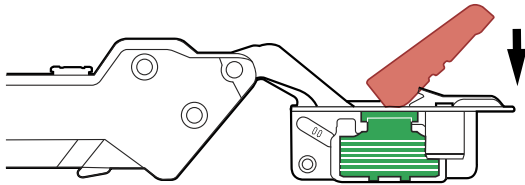
# Tiomos Impresso

## Insertion Guide

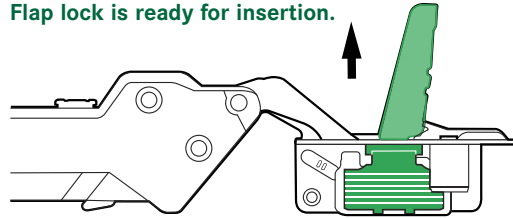
### Flap lock position

The Tiomos Impresso is a high quality performance hinge with superior strength. For the best results for cup insertion into door please follow the Guide shown below.

Flap lock is partially closed.



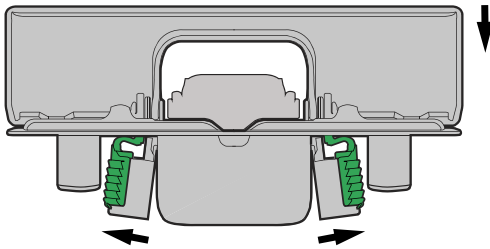
Flap lock is ready for insertion.



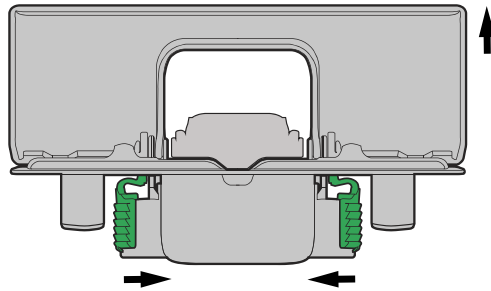
If the hinge cup flap is partially closed due to shipping and handling, lift flap to upright position before inserting into door as illustrated above.

### Expanding bracket position

Flap lock is partially closed.



Flap lock is ready for insertion.

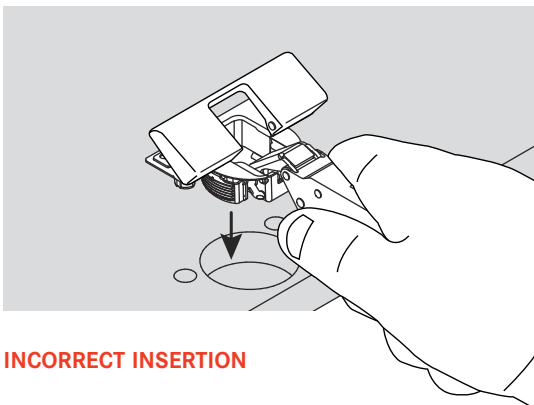


Expanding brackets are positioned incorrectly.

Please ensure that expanding green brackets are in **loose/neutral position** before inserting into door. Please reference illustration above.

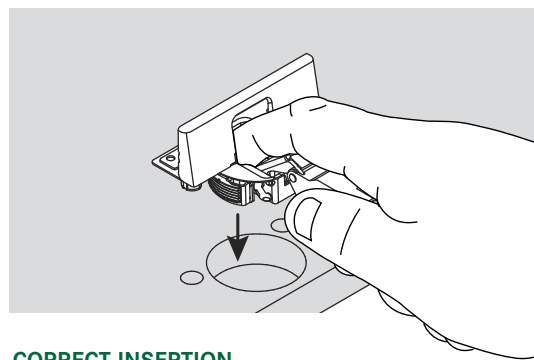
Expanding brackets are positioned correctly.

### Hinge cup insertion

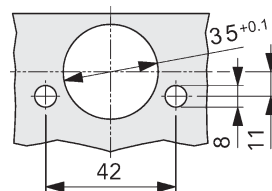


**INCORRECT INSERTION**

For fast and easy insertion use index finger to push cup into door as illustrated above.



**CORRECT INSERTION**



**IMPORTANT: Cup bore hole diameter must be within 35mm - 35.1mm range**



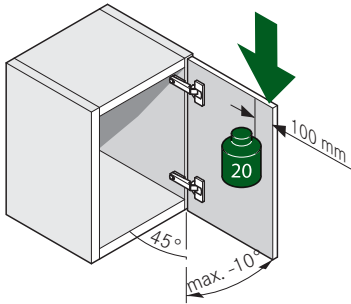
For Tiomos

## TEST CRITERIA FOR HINGES

### Functional test

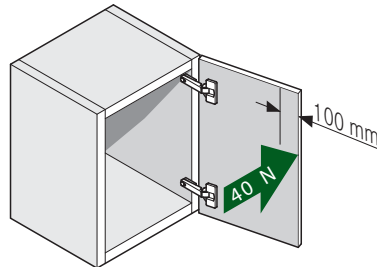
#### Static load - vertical

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



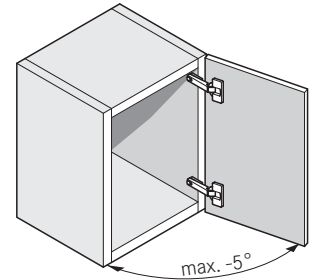
#### Static load - horizontal

Force: 40 N



#### Endurance test

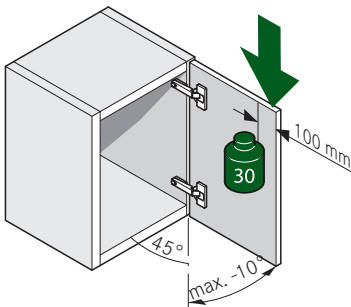
Opening angle: max. -5°  
Open and close movements: 100,000



### Overload testing

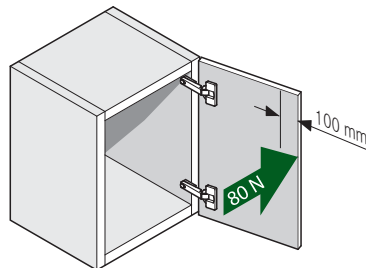
#### Vertical

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



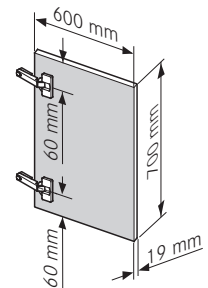
#### Horizontal

Force: 80 N



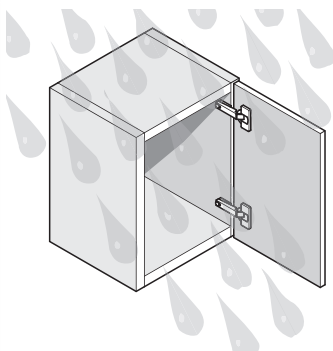
#### Test door

Weight approx. 11.5 pounds (5.2 kg)



### Salt spray and humidity test

Based on DIN ISO 9227 and DIN 6270-2

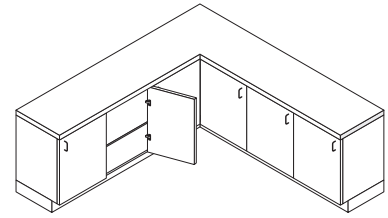


# Tiomos 110

## 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



<b>Tiomos 110</b>	<b>Opening Angle 110°</b>	<b>Impresso</b>	<b>Screw-on</b>	<b>Dowelled</b>
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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	<b>F017139414228</b>	45	Soft-close	<b>F028138519228</b>	<b>F028138523228</b>	150
			Self-close	<b>F034139385228</b>		Self-close	<b>F045138457228</b>	<b>F045138461228</b>	150
		42	Soft-close	-	<b>F028138341228</b>	150			
			Self-close	-	<b>F045138279228</b>	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	<b>F017139415228</b>	45	Soft-close	<b>F028138520228</b>	<b>F028138524228</b>	150
			Self-close	<b>F034139386228</b>		Self-close	<b>F045138458228</b>	<b>F045138462228</b>	150
			Free-swing	<b>F035139443228</b>	42	Soft-close	-	<b>F028138342228</b>	150
		Self-close	-	<b>F045138280228</b>		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	<b>F017139416228</b>	45	Soft-close	<b>F028138521228</b>	<b>F028138525228</b>	150
			Self-close	<b>F034139387228</b>		Self-close	<b>F045138459228</b>	<b>F045138463228</b>	150
			Free-swing	<b>F035139444228</b>	42	Soft-close	-	<b>F028138343228</b>	150
		Self-close	-	<b>F045138281228</b>		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	<b>F017139417228</b>	45	Soft-close	<b>F028138522228</b>	<b>F028138526228</b>	150
			Self-close	<b>F034139388228</b>		Self-close	<b>F045138460228</b>	<b>F045138464228</b>	150
		42	Soft-close	-	<b>F028138344228</b>	150			
			Self-close	-	<b>F045138282228</b>	150			

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

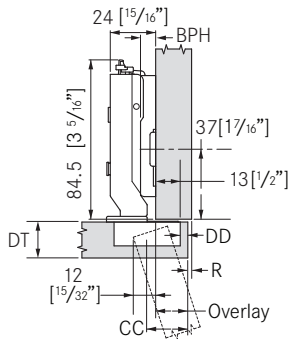
Opening angle reduction clip to 85°	Item No.	PU
Steel, nickel	<b>F072135751517</b>	50

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

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

PU = packaging unit

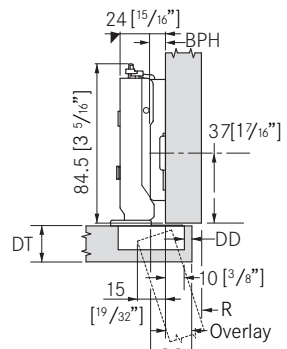
**Full overlay    Overlay    Half overlay    Inset**



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

**Drilling Distance (DD)**

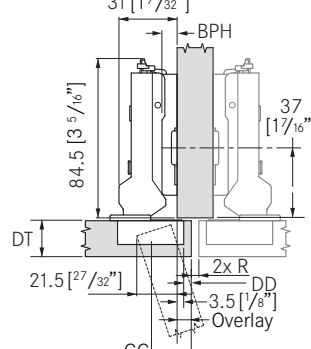
Door overlay	3	4	5	6	7
22.0					0
21.0				0	
20.0		0		2	
19.0		0		2	3
18.5					3.5
18.0	0		2	3	
17.5				3.5	
17.0		2	3		
16.5			3.5		
16.0	2	3			
15.5		3.5			
15.0	3				
14.5	3.5				
	Base Plate Height (BPH)				



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

**Drilling Distance (DD)**

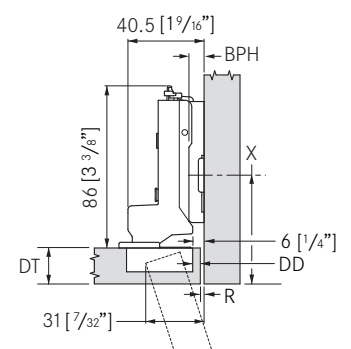
Door overlay	3	4	5	6	7
19.0					0
18.0				0	
17.0			0		2
16.5					
16.0		0		2	3
15.5					3.5
15.0	0		2	3	
14.5				3.5	
14.0		2	3		
13.5			3.5		
13.0	2	3			
12.5		3.5			
12.0	3				
11.5	3.5				
	Base Plate Height (BPH)				



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

**Drilling Distance (DD)**

Door overlay	3	4	5	6	7
12.5					0
11.5				0	
10.5			0		2
10.0				2	3
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)				



Drawing shows Tiomos with a base plate height (BPH) 02. X = 38.5+ DT

**Drilling Distance (DD)**

Reveal min (R)	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				
	Base Plate Height (BPH)				

**Minimum gaps**

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

\*only achievable with 85° angle reduction clip

Door Thickness	Drilling Distance (DD)					Minimum gap
	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	

**Reveal**

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

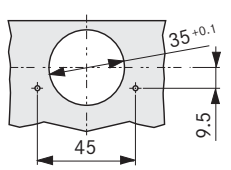
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

Door Thickness	Drilling Distance (DD)					Reveal (R)
	3	4	5	6	7	
24.0	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	

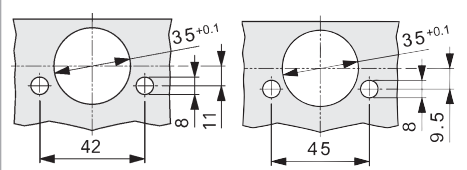
**With 85° angle reduction clip**

Door Thickness	Drilling Distance (DD)					Reveal (R)
	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	

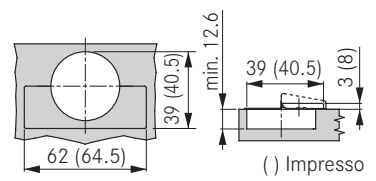
**Screw-on**



**Impresso and Dowelled**



**Cup dimensions**



Subject to technical modifications without notice.

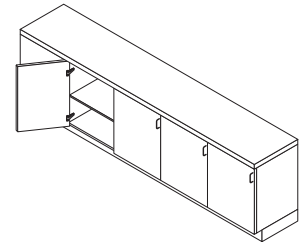


# Tiomos 120

## 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
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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	<b>F017139428228</b>	45	Soft-close	<b>F028138547228</b>	<b>F028138551228</b>	150
			Self-close	<b>F034139399228</b>		Self-close	<b>F045138485228</b>	<b>F045138489228</b>	150
		42	Soft-close	-	<b>F028138369228</b>	150			
			Self-close	-	<b>F045138307228</b>	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	<b>F017139429228</b>	45	Soft-close	<b>F028138548228</b>	<b>F028138552228</b>	150
			Self-close	<b>F034139400228</b>		Self-close	<b>F045138486228</b>	<b>F045138490228</b>	150
		42	Soft-close	-	<b>F028138370228</b>	150			
			Self-close	-	<b>F045138308228</b>	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	<b>F017139430228</b>	45	Soft-close	<b>F028138549228</b>	<b>F028138553228</b>	150
			Self-close	<b>F034139401228</b>		Self-close	<b>F045138487228</b>	<b>F045138491228</b>	150
		42	Soft-close	-	<b>F028138371228</b>	150			
			Self-close	-	<b>F045138309228</b>	150			

Cover cap	Item No.	PU
Steel, nickel-plated	<b>F072135500247</b>	150

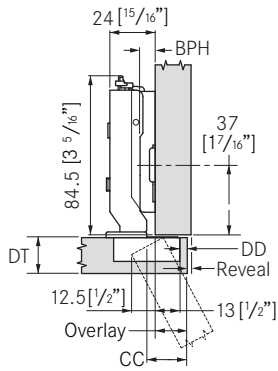
Opening angle reduction clip to 85°	Item No.	PU
Steel, nickel	<b>F072135751517</b>	50

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

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

PU = packaging unit

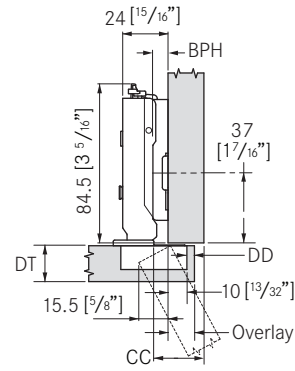
**Full overlay      Overlay      Half overlay**



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

Drilling Distance (DD)

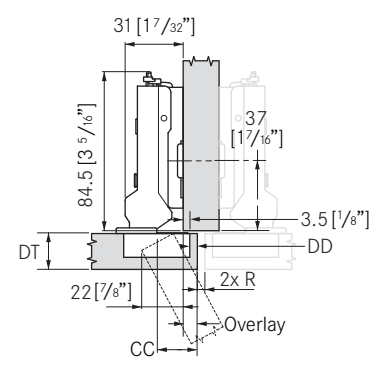
Door overlay	Drilling Distance (DD)				
	3	4	5	6	7
22.0					0
21.0				0	
20.0			0	2	
19.0		0		2	3
18.5				3.5	
18.0	0		2	3	
17.5			3.5		
17.0		2	3		
16.5			3.5		
16.0	2	3			
15.5		3.5			
15.0	3				
14.5	3.5				
					Base Plate Height (BPH)



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

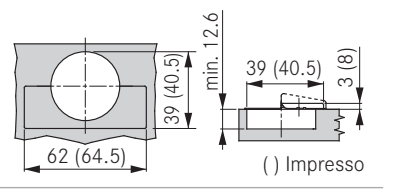
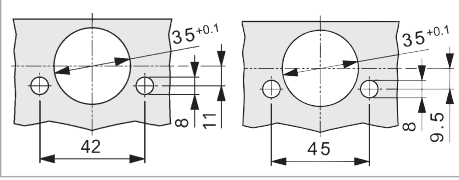
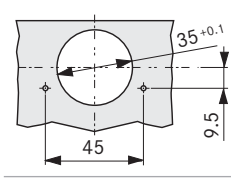
Reveal dimensions were determined with an edge radius (of the door) of 1mm. Hinge dimensions and reveal calculation based on factory setting.

**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)

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**

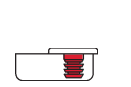
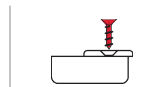
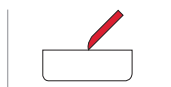
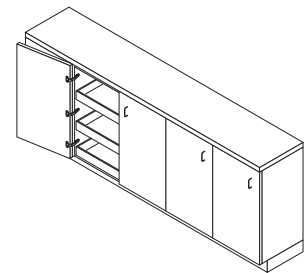


# Tiomos 160

## 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

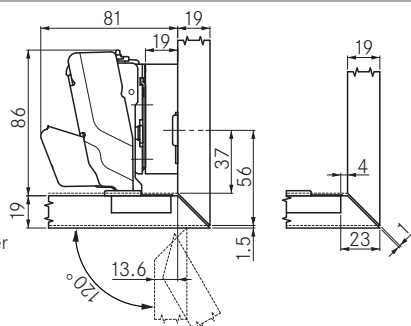
Full overlay	Cranking 00	Pattern	Type	Item No.	Pattern	Type	Item No.	Item No.	PU
 <p>Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated</p>	42 / 45	Soft-close	<b>F017139435</b> 217	45	Soft-close	<b>F028138561</b> 217	<b>F028138564</b> 217	50	
		Self-close	<b>F034139406</b> 217		Self-close	<b>F045138499</b> 217	<b>F045138502</b> 217	50	
	42	Soft-close	-	<b>F028138382</b> 217	50				
		Self-close	-	<b>F045138320</b> 217	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	<b>F017139436</b> 217	45	Soft-close	<b>F028138562</b> 217	<b>F028138565</b> 217	50	
		Self-close	<b>F034139407</b> 217		Self-close	<b>F045138500</b> 217	<b>F045138503</b> 217	50	
	42	Soft-close	-	<b>F028138383</b> 217	50				
		Self-close	-	<b>F045138321</b> 217	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	<b>F017139437</b> 217	45	Soft-close	<b>F028138563</b> 217	<b>F028138566</b> 217	50	
		Self-close	<b>F034139408</b> 217		Self-close	<b>F045138501</b> 217	<b>F045138504</b> 217	50	
	42	Soft-close	-	<b>F028138384</b> 217	50				
		Self-close	-	<b>F045138322</b> 217	50				

### Mitered corner application

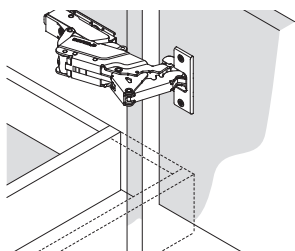
Use Full overlay hinge (00 Cranking) with 19 mm base plate.

Use 120° opening angle reduction clip.

Prevents doors from bumping with the cabinet side in inset applications and mitered corner applications.

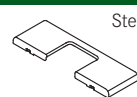


### Zero door protrusion at 90°



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



Steel, nickel-plated

Item No. **F072135503**228

PU 150

### Angle reduction clip to 120°



Plastic, black

Item No. **F072135753**117

PU 50

### Wood screw, nickel-plated



#6 x 5/8" FHP, NI

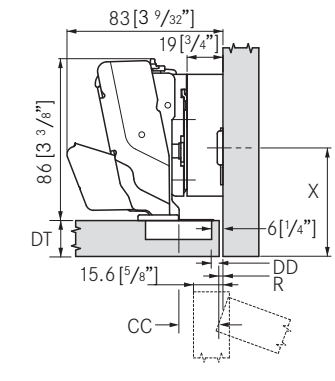
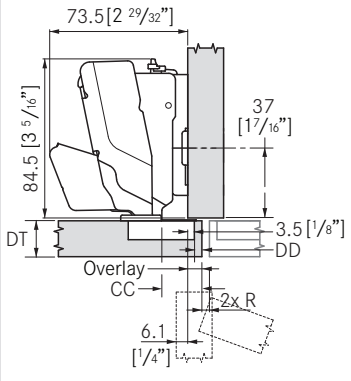
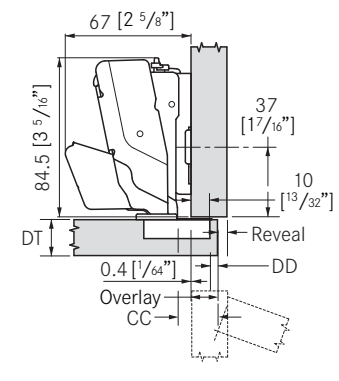
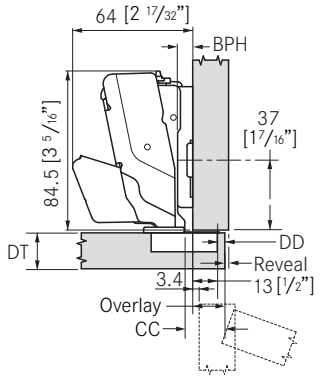
Item No. **81001-43**

PU 500

PU = packaging unit



**Full overlay      Overlay      Half overlay      Inset**



**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
25.0								0
24.0							0	
23.0					0		2	
22.0					0		2	3
21.0				0		2	3	
20.0			0		2	3		
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							

Door overlay

Base Plate Height (BPH)

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
22.0								0
21.0							0	
20.0						0	2	
19.0						0	2	3
18.0					0		2	3
17.0					0	2	3	
16.5						3.5		
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			

Door overlay

Base Plate Height (BPH)

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
15.5								0
14.5							0	
13.5						0	2	
12.5						0	2	3
11.5					0		2	3
10.5					0	2	3	
10.0						3.5		
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			

Door overlay

Base Plate Height (BPH)

Drawing shows Tiomos with a cranking 03 hinge, Base Plate Height (BPH) 19  
 X = 38.5 + DT

**Drilling Distance (DD)**

	3	4	5	6	7
0.0					19
0.5					
1.0					19
1.5					
2.0					19
3.0				19	
4.0					

Reveal (R)

Base Plate Height (BPH)

**Minimum gaps**

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

\*only achievable with 120° angle reduction clip

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
32.0	1.0	1.0						
31.0	1.0	1.0	1.0					
30.0	1.0	1.0	1.0					
29.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
28.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
26.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
24.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
22.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
21.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
20.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
18.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
16.0	1.0	1.0	1.0	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.

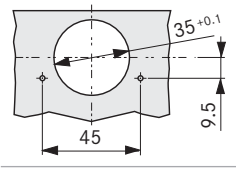
**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
32.0	0.2*	0.2*						
31.0	0.2*	0.2*	0.2*	0.2*				
30.0	0.2	0.2	0.2*	0.2*	0.2*			
29.0	0.2	0.2	0.2	0.2	0.2	0.2*	0.2*	
28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

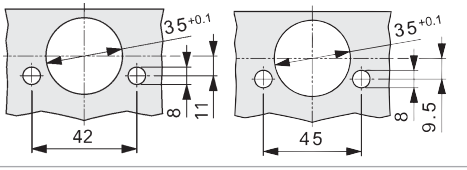
Door Thickness

Reveal (R)

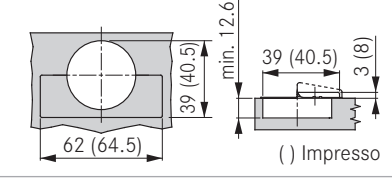
**Screw-on**



**Impresso and Dowelled**



**Cup dimensions**

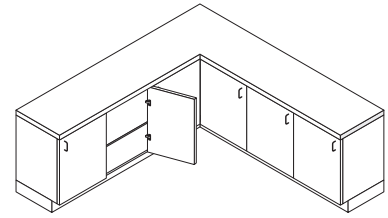


# Tiomos 95

## 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
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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	<b>F017139438228</b>	45	Soft-close	<b>F028138567228</b>	<b>F028138571228</b>	150
			Self-close	<b>F034139409228</b>		Self-close	<b>F045138505228</b>	<b>F045138509228</b>	150
		42	Soft-close	-	<b>F028138389228</b>	150			
			Self-close	-	<b>F045138327228</b>	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	<b>F017139439228</b>	45	Soft-close	<b>F028138568228</b>	<b>F028138572228</b>	150
			Self-close	<b>F034139410228</b>		Self-close	<b>F045138506228</b>	<b>F045138510228</b>	150
		42	Soft-close	-	<b>F028138390228</b>	150			
			Self-close	-	<b>F045138328228</b>	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	<b>F017139440228</b>	45	Soft-close	<b>F028138569228</b>	<b>F028138573228</b>	150
			Self-close	<b>F034139411228</b>		Self-close	<b>F045138507228</b>	<b>F045138511228</b>	150
		42	Soft-close	-	<b>F028138391228</b>	150			
			Self-close	-	<b>F045138329228</b>	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	<b>F017139441228</b>	45	Soft-close	<b>F028138570228</b>	<b>F028138574228</b>	150
			Self-close	<b>F034139412228</b>		Self-close	<b>F045138508228</b>	<b>F045138512228</b>	150
		42	Soft-close	-	<b>F028138392228</b>	150			
			Self-close	-	<b>F045138330228</b>	150			

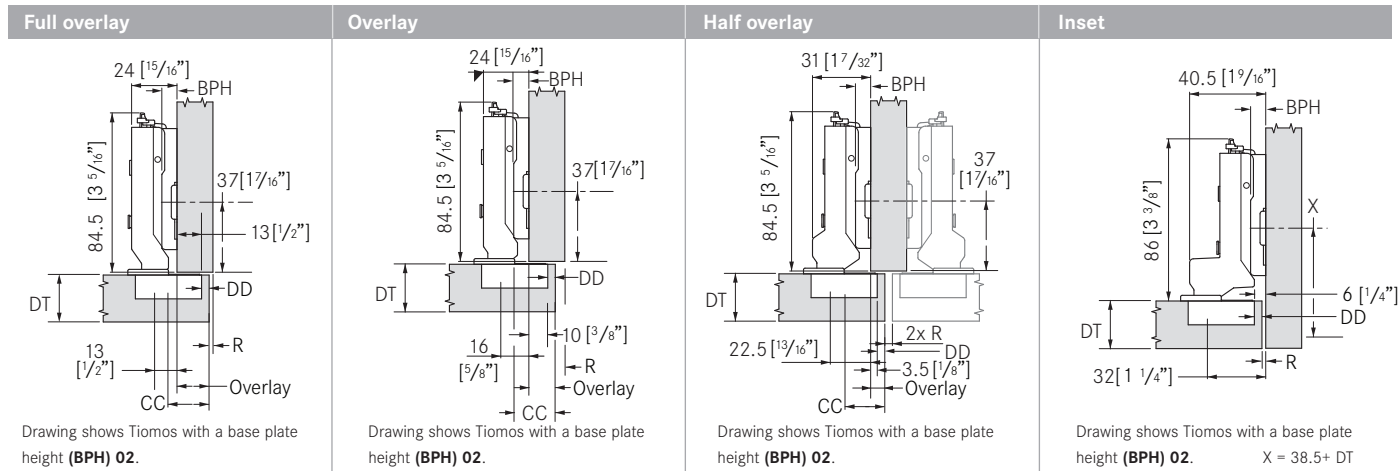
Cover cap	Item No.	PU
Steel, nickel-plated	<b>F072135500247</b>	1000

Opening angle reduction clip to 85°	Item No.	PU
Steel, nickel	<b>F072135751517</b>	50

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

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

PU = packaging unit



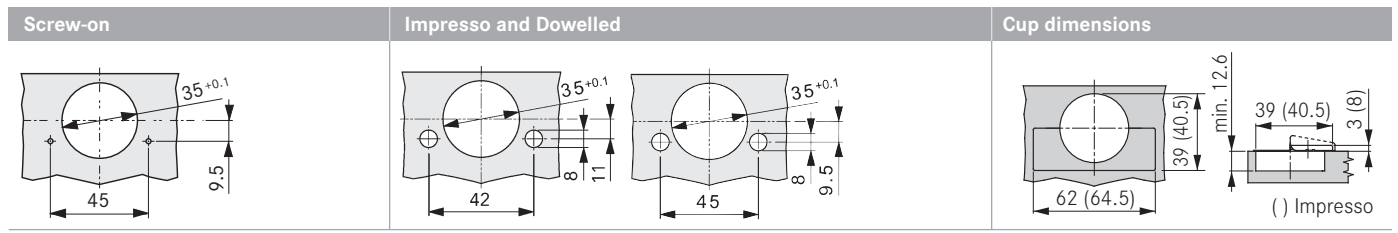
		Drilling Distance (DD)				
		3	4	5	6	7
<b>Door overlay</b>	22.0					0
	21.0				0	
	20.0		0		2	
	19.0		0		2	3
	18.5					3.5
	18.0	0		2	3	
	17.5					3.5
	17.0		2	3		
	16.5					3.5
	16.0	2	3			
	15.5					3.5
	15.0	3				
14.5	3.5					
		Base Plate Height (BPH)				

		Drilling Distance (DD)				
		3	4	5	6	7
<b>Door overlay</b>	19.0					0
	18.0				0	
	17.0			0	2	
	16.5					2
	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)				

		Drilling Distance (DD)				
		3	4	5	6	7
<b>Door overlay</b>	12.5					0
	11.5					0
	10.5			0	2	
	10.0					2
	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)				

		Drilling Distance (DD)					
		3	4	5	6	7	
<b>Reveal min (R)</b>	0.0						
	0.5					3.5	
	1.0	0		2	3		
	1.5					3.5	
	2.0		2	3			
	3.0	2	3				
	4.0	3					
			Base Plate Height (BPH)				

Minimum gaps	Reveal																																																																																																																																														
<p>The minimum gap is the gap between the closed door and the front of the cabinet.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="9" style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Door Thickness</b></th> <th colspan="5">Drilling Distance (DD)</th> </tr> <tr> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> </tr> </thead> <tbody> <tr><td>36.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>2.4</td></tr> <tr><td>30.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.8</td></tr> <tr><td>28.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.7</td></tr> <tr><td>26.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.2</td><td>1.5</td></tr> <tr><td>24.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.5</td></tr> <tr><td>22.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.5</td></tr> <tr><td>20.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td></tr> <tr><td>18.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td></tr> <tr><td>16.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td></tr> <tr> <td colspan="6" style="text-align: right;">Minimum gap</td> </tr> </tbody> </table>	<b>Door Thickness</b>	Drilling Distance (DD)					3	4	5	6	7	36.0	1.0	1.0	1.0	1.0	2.4	30.0	1.0	1.0	1.0	1.0	1.8	28.0	1.0	1.0	1.0	1.0	1.7	26.0	1.0	1.0	1.0	1.2	1.5	24.0	1.0	1.0	1.0	1.0	1.5	22.0	1.0	1.0	1.0	1.0	1.5	20.0	1.0	1.0	1.0	1.0	1.0	18.0	1.0	1.0	1.0	1.0	1.0	16.0	1.0	1.0	1.0	1.0	1.0	Minimum gap						<p>Reveal dimensions were determined with an edge radius (of the door) of 1mm. Hinge dimensions and reveal calculation based on factory setting.</p> <p><b>IMPORTANT</b> To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="9" style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Door Thickness</b></th> <th colspan="5">Drilling Distance (DD)</th> </tr> <tr> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> </tr> </thead> <tbody> <tr><td>36.0</td><td>10.5</td><td>10.0</td><td>8.6</td><td>7.6</td><td>6.7</td></tr> <tr><td>30.0</td><td>4.0</td><td>3.0</td><td>2.5</td><td>1.9</td><td>2.4</td></tr> <tr><td>28.0</td><td>2.0</td><td>1.5</td><td>1.5</td><td>1.3</td><td>1.3</td></tr> <tr><td>26.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td></tr> <tr><td>24.0</td><td>0.6</td><td>0.6</td><td>0.6</td><td>0.6</td><td>0.6</td></tr> <tr><td>22.0</td><td>0.5</td><td>0.5</td><td>0.5</td><td>0.5</td><td>0.5</td></tr> <tr><td>20.0</td><td>0.3</td><td>0.3</td><td>0.3</td><td>0.3</td><td>0.3</td></tr> <tr><td>18.0</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.2</td></tr> <tr><td>16.0</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.2</td></tr> <tr> <td colspan="6" style="text-align: right;">Reveal (R)</td> </tr> </tbody> </table>	<b>Door Thickness</b>	Drilling Distance (DD)					3	4	5	6	7	36.0	10.5	10.0	8.6	7.6	6.7	30.0	4.0	3.0	2.5	1.9	2.4	28.0	2.0	1.5	1.5	1.3	1.3	26.0	1.0	1.0	1.0	1.0	1.0	24.0	0.6	0.6	0.6	0.6	0.6	22.0	0.5	0.5	0.5	0.5	0.5	20.0	0.3	0.3	0.3	0.3	0.3	18.0	0.2	0.2	0.2	0.2	0.2	16.0	0.2	0.2	0.2	0.2	0.2	Reveal (R)					
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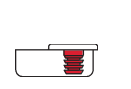
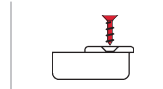
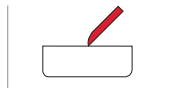
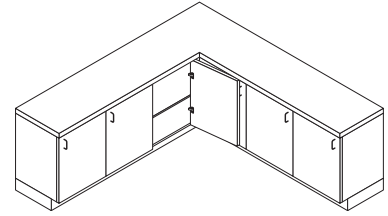


# Tiomos 110/90A

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	<b>F017139426223</b>	45	Soft-close	<b>F028138535223</b>	<b>F028138545223</b>	100
		Self-close	<b>F034139397223</b>		Self-close	<b>F045138473223</b>	<b>F045138483223</b>	100

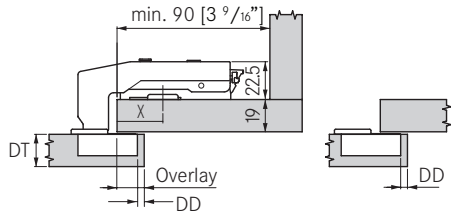
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

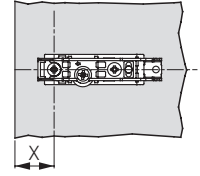
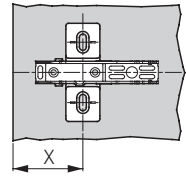
Wood screw, nickel-plated	Item No.	PU
 <p>#6 x 5/8" FHP, NI</p>	<b>81001-43</b>	500

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						

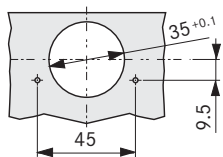
### Reveal

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

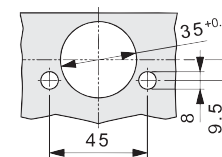
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

		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)						

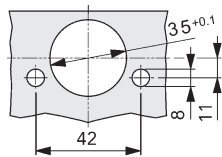
### Screw-on



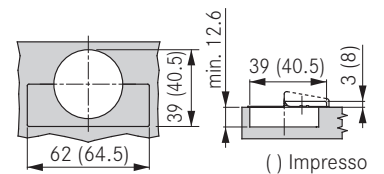
### Dowelled



### Impresso



### Cup dimensions

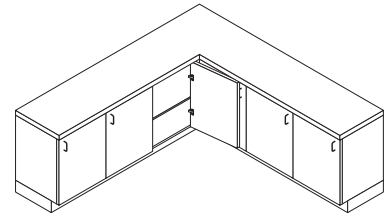


# Tiemos 110/90E

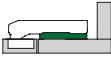
110° blind corner hinge for inset doors




- 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



Tiemos 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	<b>F017139427223</b>	45	
		Self-close	<b>F034139398223</b>		Self-close	<b>F045138474223</b>	<b>F045138484223</b>	100

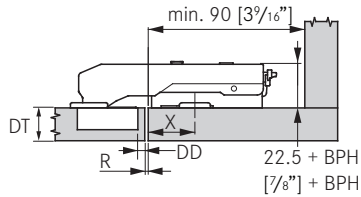
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

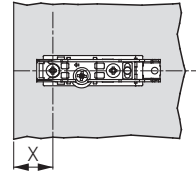
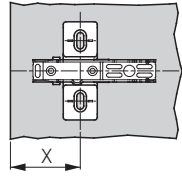
Wood screw, nickel-plated	Item No.	PU
 <p>#6 x 5/8" FHP, NI</p>	<b>81001-43</b>	500

PU = packaging unit

**Inset**



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



**Drilling Distance (DD)**

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

**Drilling Distance (DD)**

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

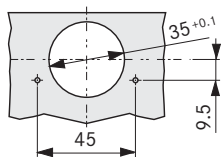
**Reveal**

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

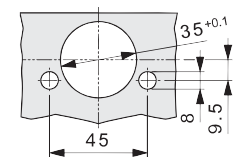
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

Door Thickness	Drilling Distance (DD)					Reveal (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	1.1	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	

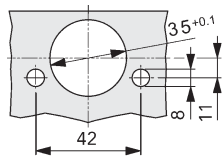
**Screw-on**



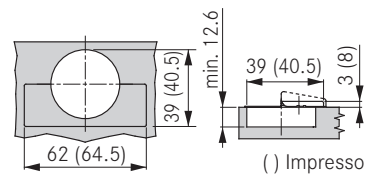
**Dowelled**



**Impresso**



**Cup dimensions**



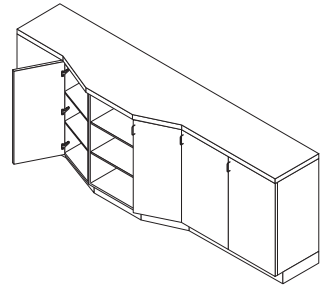


# Tiomos 110/30A


+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	<b>F017139420223</b>	45	Soft-close	<b>F028138529223</b>	-	100
		Self-close	<b>F034139391223</b>		Self-close	<b>F045138467223</b>	-	100

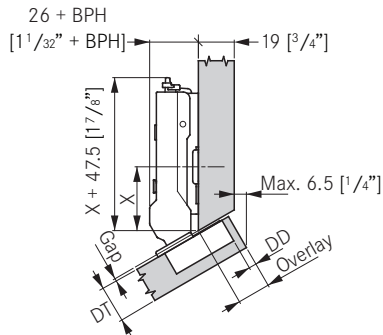
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

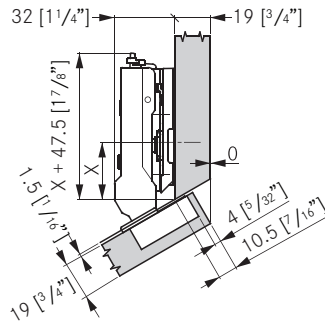
Wood screw, nickel-plated	Item No.	PU
 <p>#6 x 5/8" FHP, NI</p>	<b>81001-43</b>	500

PU = packaging unit

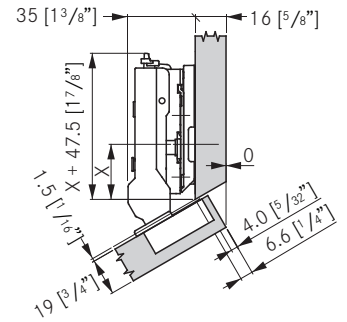
**Overlay**



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



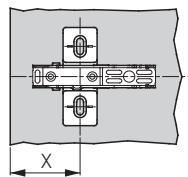
Drawing shows Tiomos with a base plate height (BPH) 6.



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

**Drilling Distance (DD)**

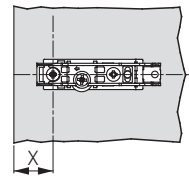
	3	4	5	6	7
20.5					0
19.5				0	
18.5			0		2
17.5		0		2	3
16.5	0				3.5
16.0			2	3	
15.5				3.5	
15.0		2	3		
14.5			3.5		
14.0	2	3			
13.5		3.5			
13.0	3				
12.5	3.5			6	
11.5			6		
10.5		6			
<b>Door overlay</b>	Base Plate Height (BPH)				



**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
<b>Door Thickness</b>	Minimum gap				

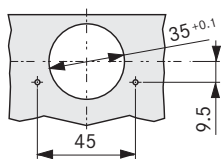
**Reveal**

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

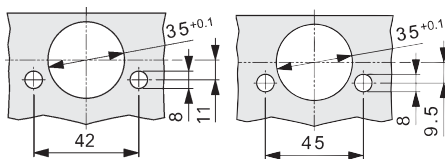
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

	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
<b>Door Thickness</b>	Reveal (R)				

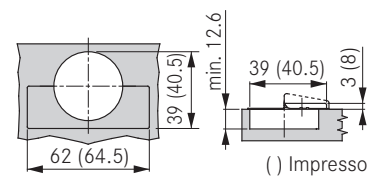
**Screw-on**



**Impresso**



**Cup dimensions**

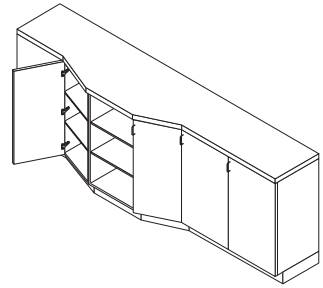


# Tiomos 110/30E

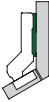
+30° angle corner cabinet hinge for inset doors





- 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
 <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p>	42 / 45	Soft-close	<b>F017139421223</b>	45	Soft-close	<b>F028138530223</b>	-	100
		Self-close	<b>F034139392223</b>		Self-close	<b>F045138468223</b>	-	100

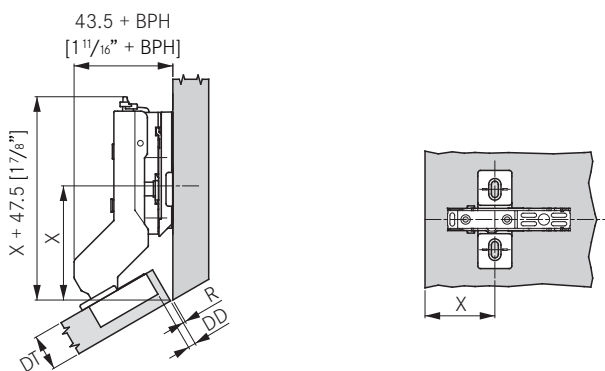
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

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

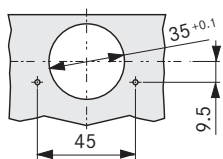
## Reveal

		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)				

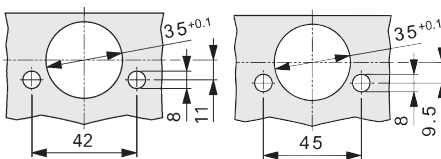
Reveal dimensions were determined with an edge radius (of the door) of 1mm. Hinge dimensions and reveal calculation based on factory setting.

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

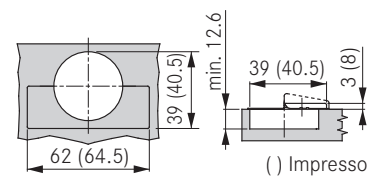
### Screw-on



### Impresso



### Cup dimensions



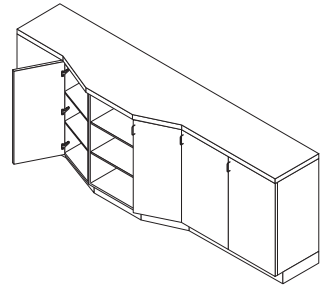


# Tiomos 110/37A


+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	<b>F01713942223</b>	45	Soft-close	<b>F028138531223</b>	<b>F028138541223</b>	100
		Self-close	<b>F034139393223</b>		Self-close	<b>F045138469223</b>	<b>F045138479223</b>	100

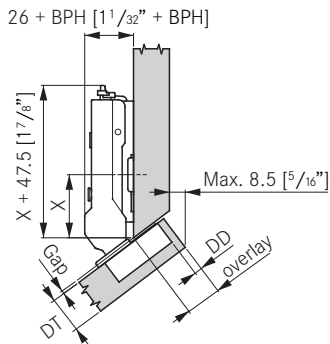
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

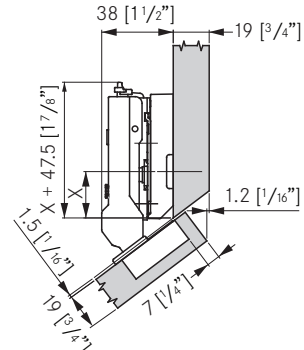
Wood screw, nickel-plated	Item No.	PU
 <p>#6 x 5/8" FHP, NI</p>	<b>81001-43</b>	500

PU = packaging unit

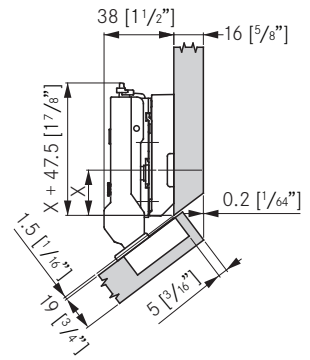
**Overlay**



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



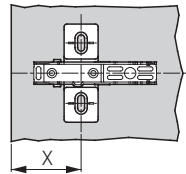
Drawing shows Tiomos with a base plate height (BPH) 12.



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

**Drilling Distance (DD)**

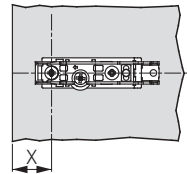
	3	4	5	6	7
21.5					0
21.0				0	
20.0			0		
19.0	0				
18.5				2	
18.0	0				3
17.5			2		
17.0				3	
16.5	2				
16.0				3	
15.5	2				
15.0		3			
14.5					6
14.0	3				
13.0					6
12.0				6	
11.0			6		
10.0	6				
<b>Door overlay</b>	Base Plate Height (BPH)				



**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.

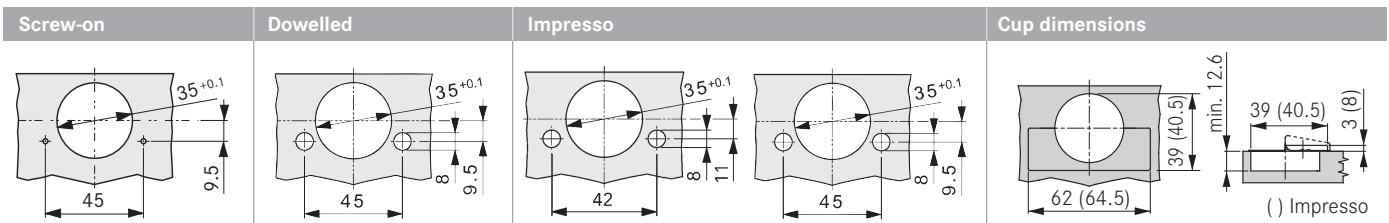
Door Thickness	Drilling Distance (DD)				
	3	4	5	6	7
24.0	1.0	1.0	1.0	1.2	2.1
22.0	1.0	1.0	1.0	1.0	1.5
21.0	1.0	1.0	1.0	1.0	1.2
20.0	1.0	1.0	1.0	1.0	1.0
19.0	1.0	1.0	1.0	1.0	1.0
18.0	1.0	1.0	1.0	1.0	1.0
17.0	1.0	1.0	1.0	1.0	1.0
16.0	1.0	1.0	1.0	1.0	1.0
	Minimum gap				

**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)				

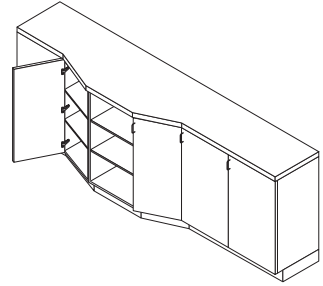


# Tiomos 110/37E

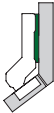
+37° angle corner cabinet hinge for inset doors





- 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	<b>F017139423223</b>	45	Soft-close	<b>F028138532223</b>	-	100
		Self-close	<b>F034139394223</b>		Self-close	<b>F045138470223</b>	-	100

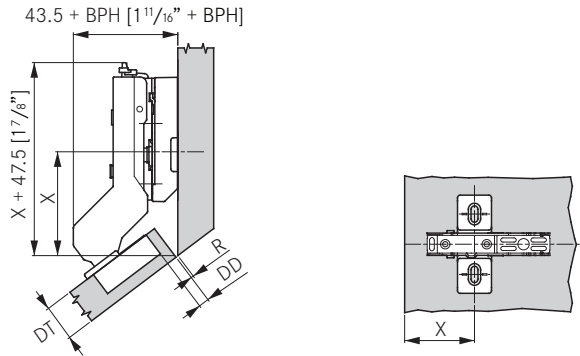
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

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

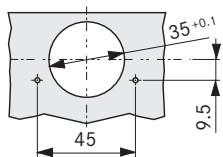
### Reveal

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

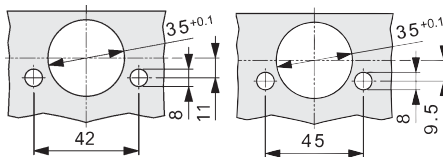
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

		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)				

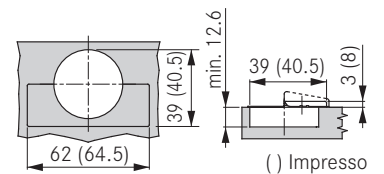
### Screw-on



### Impresso



### Cup dimensions

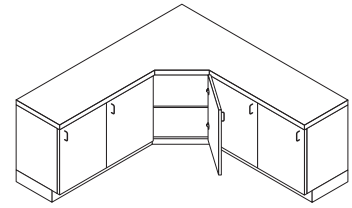


# Tiomos 110/45A


+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	<b>F017139424223</b>	45	Soft-close	<b>F028138533223</b>	<b>F028138543223</b>	100
		Self-close	<b>F034139395223</b>		Self-close	<b>F045138471223</b>	<b>F045138481223</b>	100

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

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

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

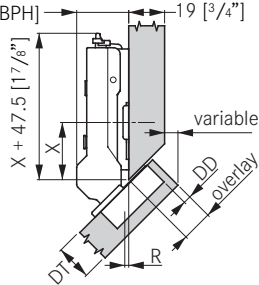
PU = packaging unit



### Overlay

28 + BPH

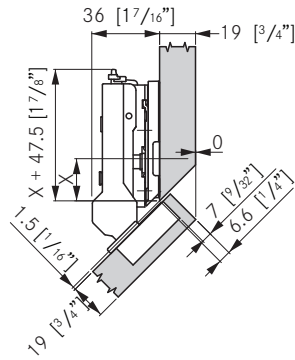
[1 1/8" + BPH]



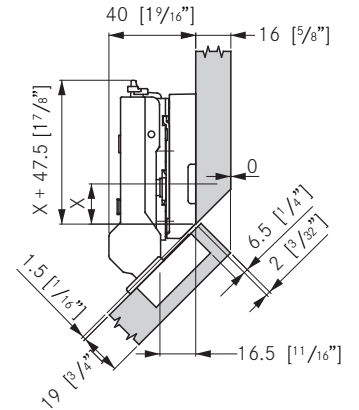
Drawing shows Tiomos with a base plate height (BPH) 0.

Drilling Distance (DD)

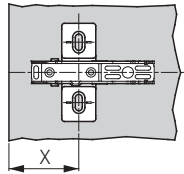
Door overlay	Drilling Distance (DD)						
	3	4	5	6	7		
19.5						0	
19.0							
18.5				0			
18.0							
17.5		0					
17.0							
16.5	0				2		
16.0							
15.5	0				2		
15.0						3	
14.5			2			3.5	
14.0					3		
13.5		2			3.5		
13.0			3				
12.5		2			3.5		
12.0		3					
11.0	3						6
10.0						6	
	Base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



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

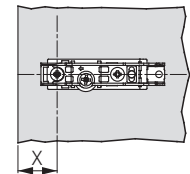


Drawing shows Tiomos with a base plate height (BPH) 12.



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						

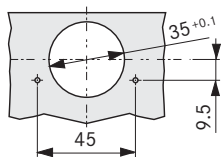
### Reveal

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

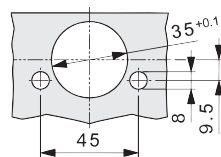
**IMPORTANT** To determine the correct application Grass strongly recommends a trial mounting for all hinges and base plates.

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)						

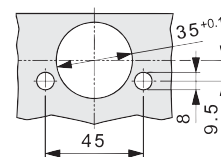
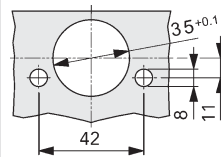
### Screw-on



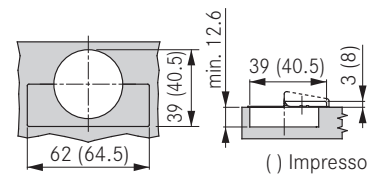
### Dowelled



### Impresso



### Cup dimensions

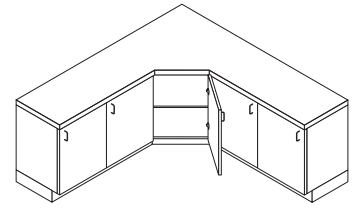


# Tiomos 110/45E

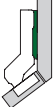
+45° angle corner cabinet hinge for inset doors





- 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
 <p>Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated</p>	42 / 45	Soft-close	<b>F017139425223</b>	45	Soft-close	<b>F028138534223</b>	<b>F028138544223</b>	100
		Self-close	<b>F034139396223</b>		Self-close	<b>F045138472223</b>	<b>F045138482223</b>	

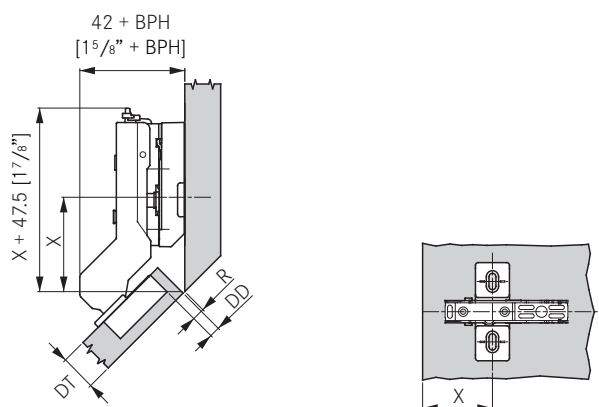
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

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

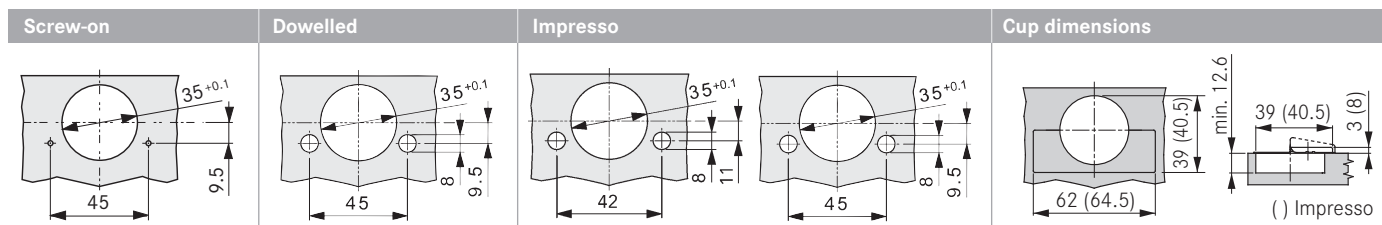
		Drilling Distance (DD)				
		3	4	5	6	7
Door thickness	22.0					
	21.0					
	20.0					
	19.0	52.0				
	18.0		50.5			
	17.0			49.0		
	16.0				47.5	
15.0					46.0	
		Wing Base Plate position (X)				

### 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)				

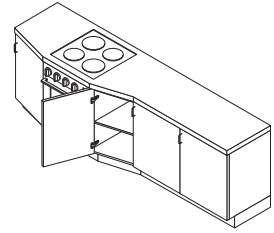


# Tiomos 120/-15A


-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	<b>F017139432223</b>	45	Soft-close	<b>F028138555223</b>	-	100
		Self-close	<b>F034139403223</b>		Self-close	<b>F045138493223</b>	-	100

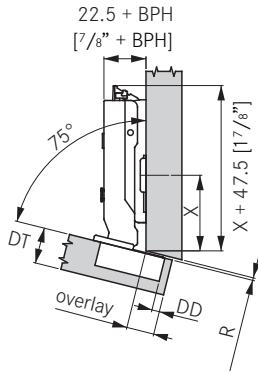
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

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

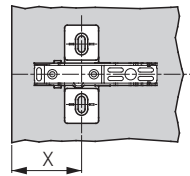
PU = packaging unit

## Overlay



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

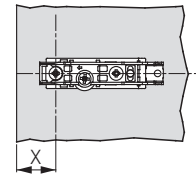
		Drilling Distance (DD)				
		3	4	5	6	7
Door overlay	18.0					0
	17.0				0	
	16.0			0		
	15.0		0			
	14.5				2	3
	14.0	0				3.5
	13.5			2	3	
	13.0				3.5	
	12.5		2	3		
	12.0			3.5		
	11.5		3			6
	11.0		3.5			
	10.5	3				6
10.0	3.5					
9.5			6			
8.5		6				
		Base Plate Height (BPH)				



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.

		Drilling Distance (DD)				
		3	4	5	6	7
Door Thickness	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
		<p>( ) Impresso</p>

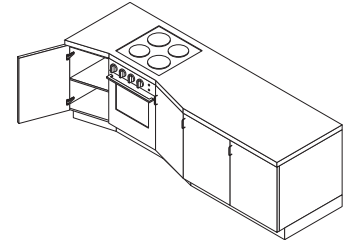


# Tiomos 120/-30A


-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	<b>F017139433223</b>	45	Soft-close	<b>F028138556223</b>	-	100
		Self-close	<b>F034139404223</b>		Self-close	<b>F045138494223</b>	-	100

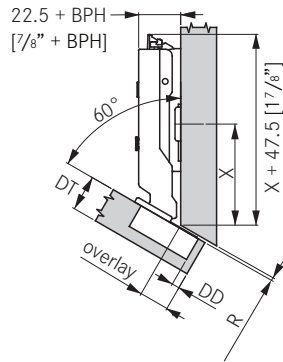
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

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

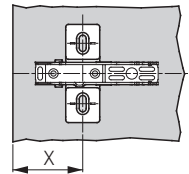
PU = packaging unit

### Overlay



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

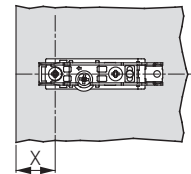
Door overlay	Drilling Distance (DD)						
	3	4	5	6	7		
19.0					0		
18.0				0			
17.0			0				
16.5					2		
16.0		0					
15.5				2			
15.0	0				3		
14.5			2		3.5		
14.0					3		
13.5		2			3.5		
13.0			3				
12.5	2		3.5				
12.0		3			6		
11.5		3.5					
11.0	3				6		
10.5	3.5						
10.0			6				
9.0		6		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

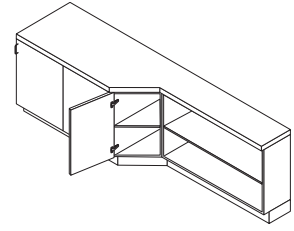
Screw-on	Impresso	Cup dimensions

# Tiomos 120/-45A

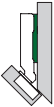
-45° angle corner cabinet hinge for overlay doors



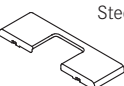
- For -45° angle corner cabinets
- 120° opening angle
- 3-dimensional adjustment with suitable base plate
- Soft-close or Self-close hinges available
- Convenient depth adjustment with worm gear



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	<b>F017139434223</b>	45	Soft-close	<b>F028138557223</b>	-	100
		Self-close	<b>F034139405223</b>		Self-close	<b>F045138495223</b>	-	100

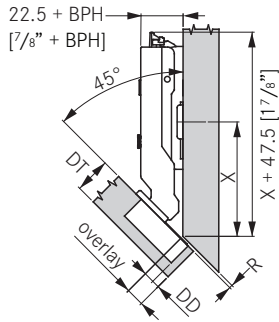
Cover cap	Item No.	PU
 <p>Steel, nickel-plated</p>	<b>F072135500247</b>	1000

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

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

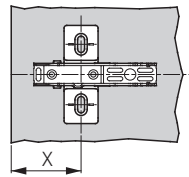
PU = packaging unit

**Overlay**



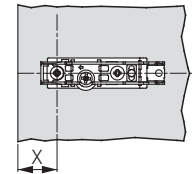
Drawing shows Tiomos with a base plate height (BPH) 02.

Door overlay	Drilling Distance (DD)				
	3	4	5	6	7
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)

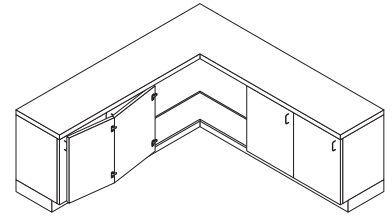
Screw-on	Impresso	Cup dimensions
		<p>( ) Impresso</p>

# 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	-	<b>F045138336228</b>	150
45	Self-close	<b>F045138517228</b>	<b>F045138518228</b>	150

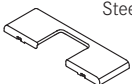


Hinge cup: steel, nickel-plated  
Hinge arm: zinc, nickel-plated

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



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



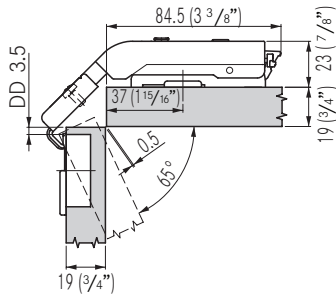
Wood screw, nickel-plated	Item No.	PU
#6 x 5/8" FHP, NI	<b>81001-43</b>	500



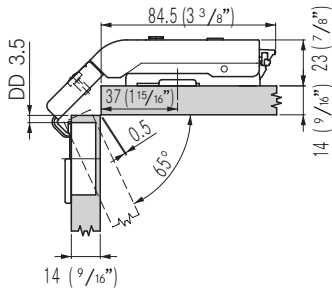
PU = packaging unit



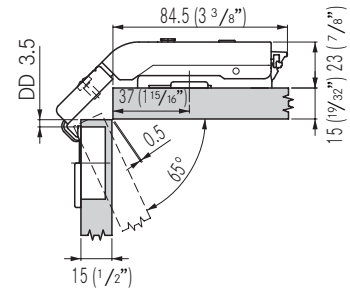
## Hinge Application



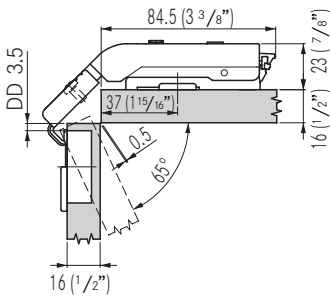
19mm door thickness with base plate height 0



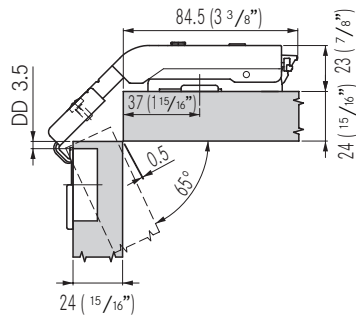
14mm door thickness with base plate height 0



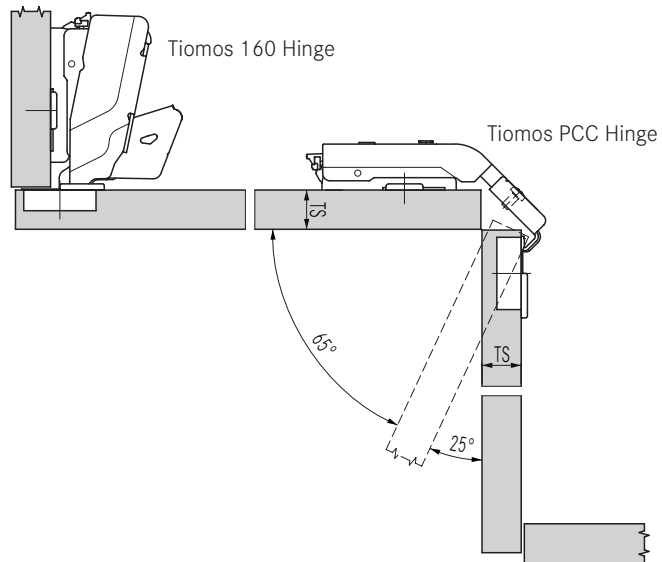
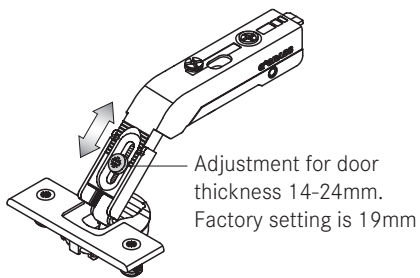
15mm door thickness with base plate height 0



16mm door thickness with base plate height 0



24mm door thickness with base plate height 0

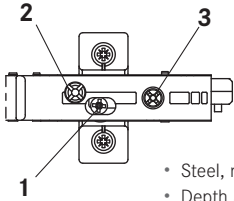


Screw-on	Dowelled	Cup dimensions
		<p>( ) Impresso</p>

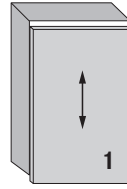
# Tiomos base plates

For Tiomos hinges

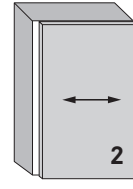
## Tiomos wing base plates



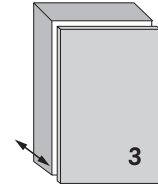
- Steel, nickel plated
- Depth adjustment via worm gear
- Height adjustment via worm gear or elongated hole
- Side adjustment via hinge
- Use a #2 Pozzi drive screwdriver for hinge adjustment
- Attach baseplates using all available screw holes



Height adjustment via base plate  
Via worm gear  $\pm 2$  mm  
Via elongated holes  $\pm 2.5$  mm



Side Adjustment  
 $\pm 2$  mm



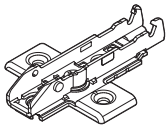
Depth adjustment  
 $+3/-2$  mm

All adjustment options can be made independently of one another.

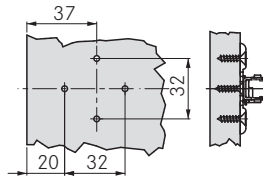
### Wing base plate, 4 point fixing

37/32

For wood screws



- Height adjustment via worm gear

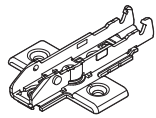


Height	Item No.	PU
0	<b>F058139746228</b>	150
2	<b>F058139747228</b>	150
3	<b>F058139748228</b>	150
3.5	<b>F058139749228</b>	150

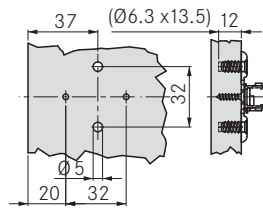
### Wing base plate, 4 point fixing

37/32

For Euro screws



- Height adjustment via worm gear

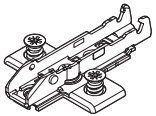


Height	Item No.	PU
0	<b>F058139756228</b>	150
2	<b>F058139757228</b>	150
3	<b>F058139758228</b>	150
3.5	<b>F058139759228</b>	150

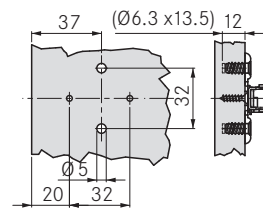
### Wing base plate, 4 point fixing

37/32

With pre-mounted Euro screws (13.5 mm)



- Height adjustment via worm gear

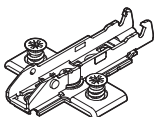


Height	Item No.	PU
0	<b>F058139761228</b>	150
2	<b>F058139762228</b>	150
3	<b>F058139763228</b>	150
3.5	<b>F058139764228</b>	150

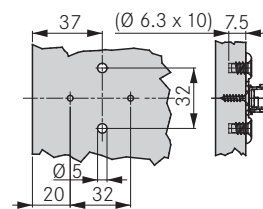
### Wing base plate, 4 point fixing

37/32

With pre-mounted Euro screws (10 mm)

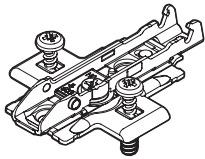


- Height adjustment via worm gear
- For twin application

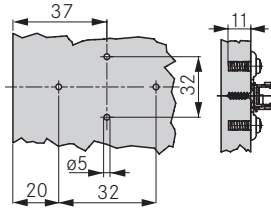


Height	Item No.	PU
0	<b>F058139863228</b>	150
2	<b>F058139864228</b>	150
3	<b>F058139865228</b>	150
3.5	<b>F058139866228</b>	150

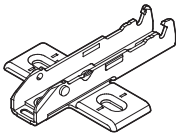
PU = packaging unit

**Wing steel base plate, 4 point fixing**
**37/32**
**Expanding dowels (11mm)**


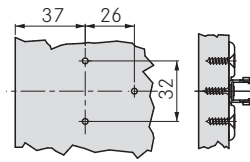
- Height adjustment via worm gear



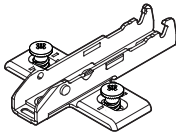
Height	Item No.	PU
0	<b>F058139766</b> 228	150
2	<b>F058139767</b> 228	150
3	<b>F058139768</b> 228	150

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


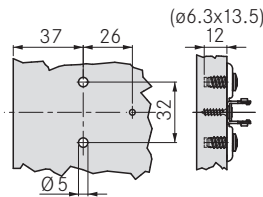
- Height adjustment via elongated screw holes



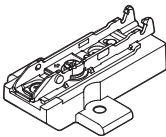
Height	Item No.	PU
0	<b>F058139721</b> 228	150
2	<b>F058139722</b> 228	150
3	<b>F058139723</b> 228	150
3.5	<b>F058139724</b> 228	150

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


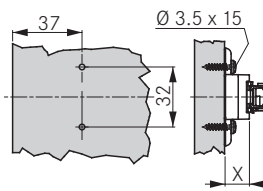
- Height adjustment via elongated screw holes



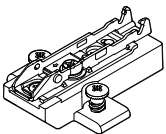
Height	Item No.	PU
0	<b>F058139736</b> 228	150
2	<b>F058139737</b> 228	150
3	<b>F058139738</b> 228	150
3.5	<b>F058139739</b> 228	150

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


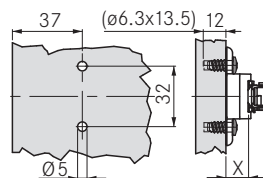
- Zinc die-cast/Steel, nickel plated
- Height adjustment via worm gear



Height(x)	Item No.	PU
6	<b>F058139892</b> 217	50
9.5	<b>F058139888</b> 217	50
12	<b>F058139893</b> 217	50
19	<b>F058139894</b> 217	50
21	<b>F058139895</b> 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



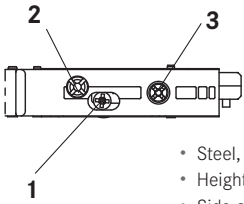
Height(x)	Item No.	PU
6	<b>F058139873</b> 217	50
9.5	<b>F058139882</b> 217	50
12	<b>F058139874</b> 217	50
19	<b>F058139875</b> 217	50
21	<b>F058139896</b> 217	50

PU = packaging unit

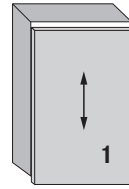
# Tiomos base plates

For Tiomos hinges

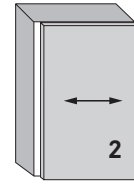
## Tiomos straight base plates



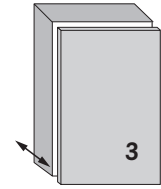
- Steel, nickel plated
- Height and depth adjustment via worm gear
- Side adjustment via hinge
- Use a #2 Pozzi drive screwdriver for hinge adjustment
- Attach baseplates using all available screw holes



Height adjustment via base plate  
Via worm gear  $\pm 2$  mm



Side Adjustment  
 $\pm 2$  mm



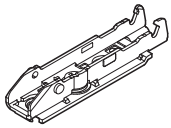
Depth adjustment  
 $+3/-2$  mm

All adjustment options can be made independently of one another.

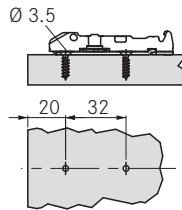
## Straight base plate, 2 point fixing

20/32

For wood screws



- Height adjustment via worm gear

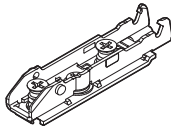


Height	Item No.	PU
0	<b>F059139701228</b>	150
2	<b>F059139702228</b>	150
3	<b>F059139703228</b>	150

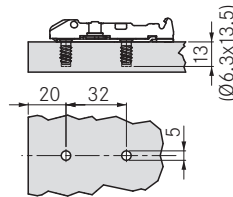
## Straight base plate, 2 point fixing

20/32

With pre-mounted Euro screws



- Height adjustment via worm gear



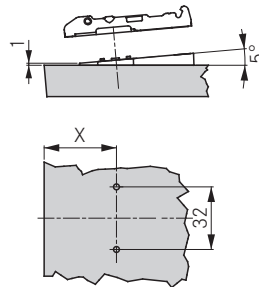
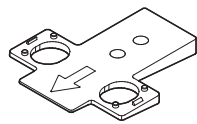
Height	Item No.	PU
0	<b>F059139711228</b>	150
2	<b>F059139712228</b>	150
3	<b>F059139713228</b>	150

## +5° Wedge for screw fixing

37/32

For wood screws

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



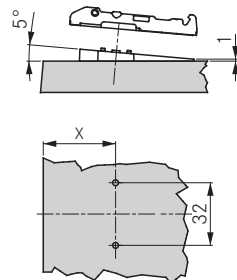
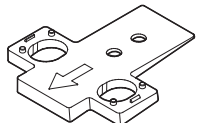
Height	Item No.	PU
3	<b>F072135757217</b>	50

## -5° Wedge for screw fixing

37/32

For wood screws

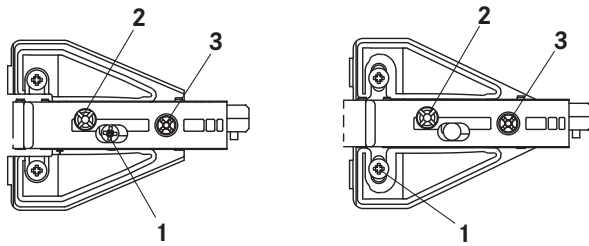
- Zinc, nickel plated
- For placing under wing mounting plates
- Cannot be stacked



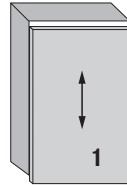
Height	Item No.	PU
3	<b>F072135758217</b>	50

PU = packaging unit

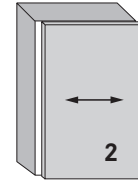
Tiomos face frame adapter plates



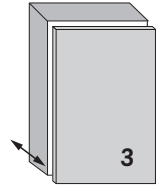
- Steel, nickel plated
- Depth adjustment via worm gear
- Height adjustment via worm gear or elongated hole
- Side adjustment via hinge
- Use a #2 Pozi drive screwdriver for hinge adjustment
- Attach baseplates using all available screw holes



Height adjustment via base plate  
Via worm gear  $\pm 2$  mm  
Via elongated holes  $\pm 2.5$  mm



Side Adjustment  
 $\pm 2$  mm



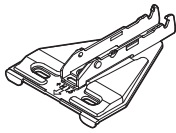
Depth adjustment  
 $+3/-2$  mm

All adjustment options can be made independently of one another.

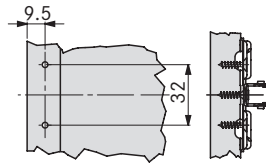
FFA base plate, 2 point fixing

9.5/32

For wood screws



- Height adjustment via elongated screw holes

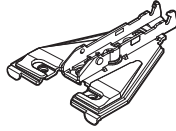


Height	Item No.	PU
1.5	<b>F058139821</b> 228	150
3.5	<b>F058139822</b> 228	150
4.5	<b>F058139823</b> 228	150
5	<b>F058139824</b> 228	150

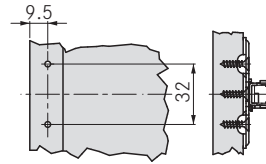
FFA base plate, 2 point fixing

9.5/32

For wood screws



- Height adjustment via worm gear

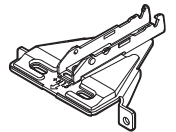


Height	Item No.	PU
1.5	<b>F058139825</b> 228	150
3.5	<b>F058139826</b> 228	150
4.5	<b>F058139827</b> 228	150
5	<b>F058139828</b> 228	150

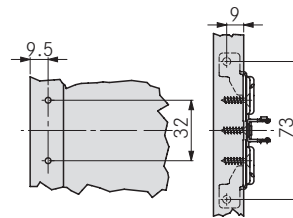
FFAL base plate with flange, 4 point fixing

9.5/32

For wood screws



- Height adjustment via elongated screw holes

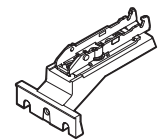


Height	Item No.	PU
3.5	<b>F058139829</b> 228	150
5	<b>F058139830</b> 228	150

Inset FFA base plate, 3 point fixing

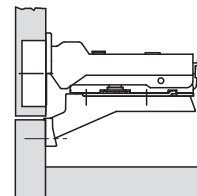
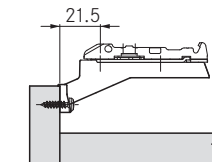
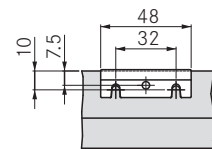
10/32

For wood screws



- Steel, diecast, nickel plated

- Height adjustment via worm gear



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

Height	Item No.	PU
0	<b>F058139831</b> 228	150

PU = packaging unit

# Tipmatic

## For handle-free wooden doors

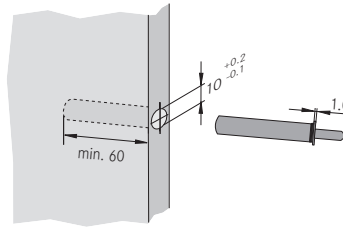


- Gently tapping the front causes the doors to open to a convenient angle
- Any free-swing hinges can be used
- Large magnet catch range – closes doors reliably
- Gap adjustment from 2.5 to 5.5 mm with integrated, self-locking and toolless depth adjustment feature
- Mount on the front side of the cabinet or with an adapter plate

### Tipmatic pin



- Incl. Tipmatic mechanism (hole edge cover 1 mm)
- Stick on strike plate
- Screw on strike plate
- Hole drilled from the front
- Plastic RAL 7036, platinum grey



### For drilling

Item No.

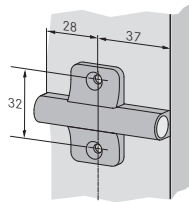
68873-06

PU 25 pieces

### Line Boring Adapter plate



- Suitable for line boring 28 and 37 mm
- Attach with Euro screws (6.3 x 13.5)
- Plastic RAL 7035, light grey



### For Euro screws

Item No.

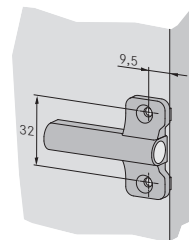
63310-40

PU 25 pieces

### Standard adapter plate



- Quick upgrade installation
- Attach with wood screws (3.5 x 13)
- Plastic RAL 7035, light grey



### For wood screws

Item No.

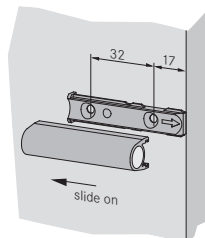
63311-40

PU 25 pieces

### Linear adapter plate



- Design solution – also suitable for insets
- Attach with wood screws (3.5 x 13)
- Plastic RAL 7035, light grey



### For wood screws

Item No.

63309-40

PU 25 pieces

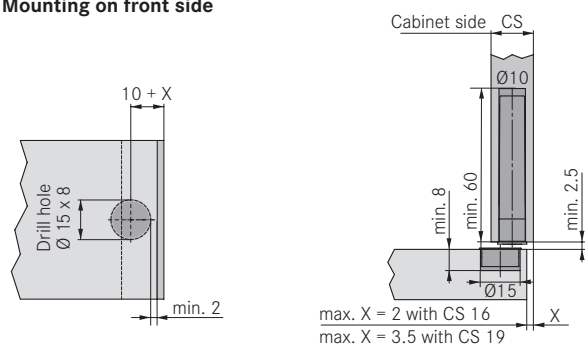
PU = packaging unit



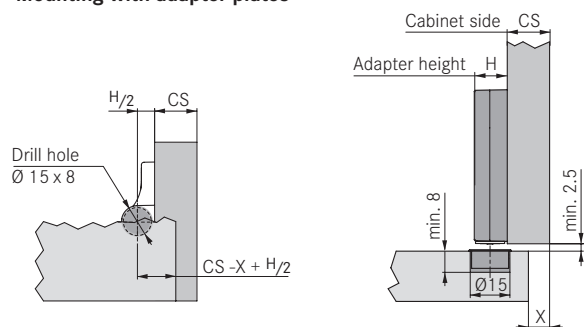
Mounting for full and half overlay wooden doors

Mounting for inset wooden doors

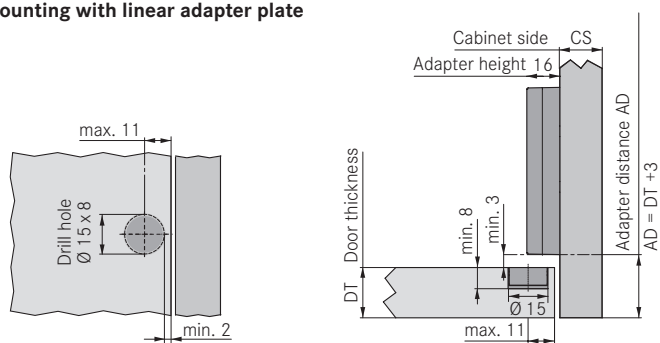
Mounting on front side



Mounting with adapter plates



Mounting with linear adapter plate



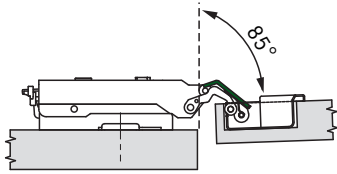
# Tiemos Accessories

## Angle reduction clips

### Opening angle reduction clip to 85°

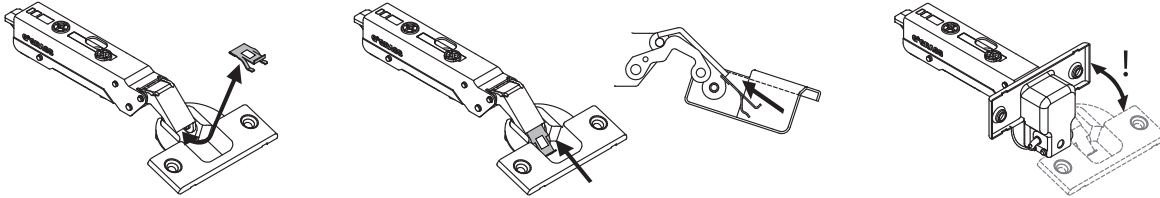


Steel, nickel

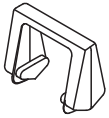


Works for all Tiemos 110° and 120° standard hinges. Reduces the opening angle to 85° to prevent doors from bumping fronts or walls in corner installations.

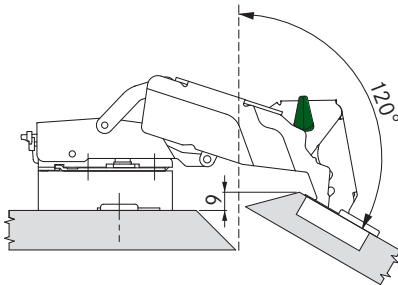
Item No.	PU
<b>F072135751517</b>	50



### Opening angle reduction clip to 120°



Black plastic



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

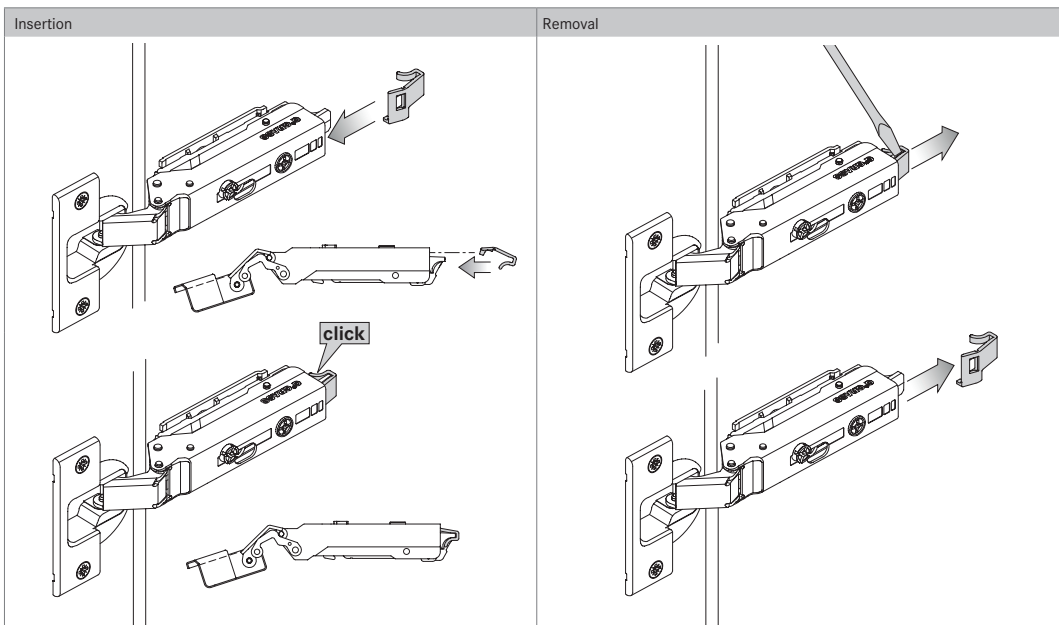
Item No.	PU
<b>F072135753117</b>	50

### Hinge clip protection

Steel, nickel

Prevents accidental release of the hinge from the base plate. For use in lockers, wardrobes, office furniture or similar applications.

Item No.	PU
<b>F072135807540</b>	500

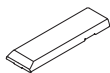


PU = packaging unit

## Cover caps

### Hinge arm cover cap

For all crankings

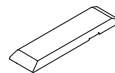


Steel, nickel plated, without imprint\*

Item No.	PU
<b>F072135500247</b>	1000

### Hinge arm cover cap, long

For 00 and 03 Cranking only

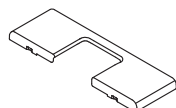


Steel, nickel plated, without imprint\*

\* Imprinting available upon special request

Item No.	PU
<b>F072135504247</b>	1000

### Hinge cup cover cap

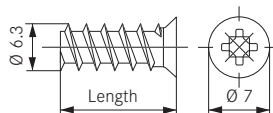


Steel, nickel plated

Item No.	PU
<b>F072135503228</b>	150

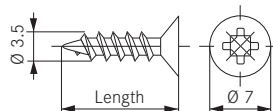
## Screws

### 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

PU = packaging unit

# 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

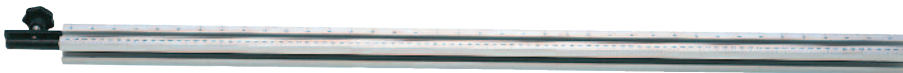


Diameter	Direction	Item no.	PU
35 mm	RH	00077-01	1
8 mm	LH	00160-01	1



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 plastic	<b>F146101310201</b>	1
Universal insertion die for Tiomos 110°/120°/160° hinge, plastic	<b>F146101308201</b>	1

PU = packaging unit

# Assembly Hardware

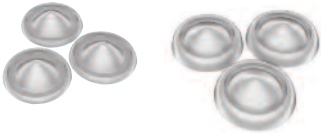
## Shelf Supports



Description	Item No.	PU
Plastic, clear, with steel pin	499.582.50.0050	5000
Metal spoon, nickel plated	499.582.50.2050	2000
Shelf support 7006/9.5, nickel	517.206.64.1015	2500
Shelf support 7035, nickel	517.206.61.0015	2500
H-802 plastic, square, clear	00036-43	500

## Bumper Pads

### AIRSOFT Bumper Pads, plastic, round



Description	Item No.	PU
AirsSoft Bumper pad, 2.5mm, clear	63480-99	480
AirsSoft Bumper pad, 2.5mm, clear	63482-30	5000
AirsSoft Bumper pad, 5mm, clear	63481-43	500
AirsSoft Bumper pad, 5mm, clear	63483-30	5000

### Self-adhesive Bumper Pads



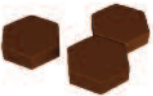
Description	Item No.	PU
Self-adhesive bumper pad, clear, 7mm	630.000.03.0750	1088
Self-adhesive bumper pad, clear, 10mm	630.000.03.1050	1050
Self-adhesive bumper pad, clear, 12mm	630.000.02.1250	5000

### Bumper Pads



Description	Item No.	PU
Bumper pad, round, clear, 3mm	31002-43	500
Bumper pad, round, clear, 1.5mm	31004-43	500

### Bumper Pads



Description	Item No.	PU
Bumper pad, hexagonal, butterscotch, 3mm	00464-43	500

## Cover Caps



Description	Item No.	PU
35mm cover cap, white	22227-42	100
35mm cover cap, almond	22228-42	100
35mm cover cap, brown	22229-42	100

## Door Stop



Description	Item No.	PU
H-950 door stop, clear	00068-43	500

PU = packaging unit



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