

# HÄFELE



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## METALLA 510 HINGES



## HINGES



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Hinges

Designed with perfection and conceived to perform, the new Metalla 510 Hinge Range by Hafele adds efficient functionality to your kitchen cabinets. The standard application hinges, from this range, for shutters made from wood or with wide aluminium frame come with an opening angle of 105° and constitute full-overlay, half-overlay and inset applications respectively. For shutters made with narrow aluminium profile, the range houses a special aluminium profile hinge with the same opening angle. Metalla 510 also includes a 155° wide-angle application hinge for cabinets with internal drawers or shelves.

All hinges from within this range come equipped with an integrated soft-close mechanism in the hinge cup which can be activated via a damper shifter, at an opening angle of either 30° or 10°, for a smooth and noiseless closing. Having cycle tested for 200,000 times, these hinges meet and exceed the LGA certification requirements ensuring high operational durability. Made of high-quality steel with an attractive nickel plated finish, the Metalla 510 hinges are salt spray tested for 48 hours guaranteeing a high degree of corrosion resistance (EN 15570 Level 3).

# HINGES

## INFORMATION

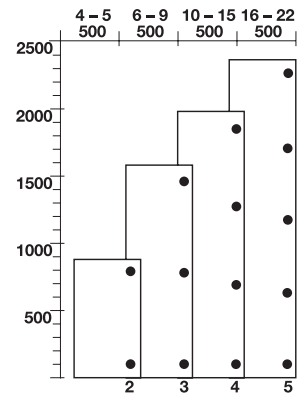
### Number of concealed hinges per door

The values in the table are sample measurements.  
 Trial mounting is recommended.

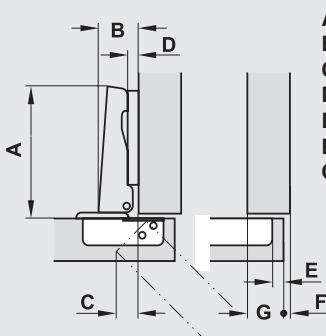
The number of concealed hinges per door depends on:

- > Door width and height
- > Door weight
- > Door material

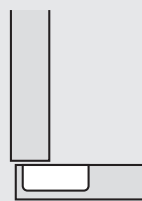
Example: According to the diagram three concealed hinges have to be fitted with a door height of 1,600 mm and a door weight of 6–9 kg.



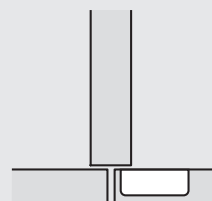
### Mounting



- A Hinge arm length
- B Hinge arm height
- C Door offset
- D Distance (mounting plate)
- E Distance to cup
- F Gap
- G Door overlay



**Full overlay mounting**  
 Concealed hinge with straight hinge arm



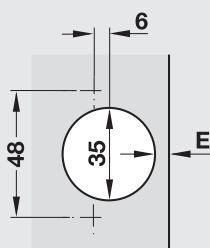
**Half overlay mounting**  
 Concealed hinge with cranked hinge arm

**Inset mounting**  
 Concealed hinge with high cranked hinge arm

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Hinges

### Drilling pattern for cup fixing



Drilling pattern 48 / 6 for Metalla 510 105° Standard Hinge and 155° Wide Angle Hinge

## HINGES - FOR WOODEN DOORS

### Metalla 510 105° Standard Application Hinges



- > With integrated soft closing mechanism in hinge cup
- > The soft closing mechanism can be activated at an opening angle of 30° or 10° via damper shifter



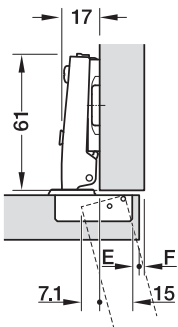
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Door thickness	Distance to cup E mm			
	3.0	4.0	5.0	6.0
15	1.0	0.9	0.9	0.9
16	1.0	1.0	1.0	1.0
17	1.2	1.2	1.1	1.1
18	1.4	1.3	1.2	1.2
19	1.6	1.5	1.5	1.4
20	1.9	1.8	1.8	1.7
21	2.3	2.2	2.1	2.0
22	2.8	2.6	2.5	2.4
23	4.0	3.2	3.0	2.9
24	5.3	4.3	3.6	3.4
Minimum gap F				
Rounding off the edge of door reduces the given values.				

- > Material: Steel: cup and hinge arm
- > Finish: Nickel plated
- > Cup fixing: For screw fixing
- > Installation: Door to cabinet for quick fixing with SM quick fixing system
- > Drilling depth: Hinge cup 12 mm
- > Adjustment facility: Side adjustment -1.5 to +3 mm, Height adjustment -2 to +2 mm, Depth adjustment with mounting plate +2.8 mm
- > Opening Angle: 105°
- > Door thickness: 15-24 mm

Hinges

### Full overlay mounting



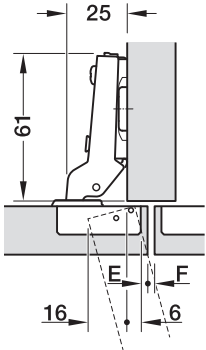
Door overlay mm									
12	13	14	15	16	17	18	19		
				3	4	5	6	2	
Distance to cup mm				E	Mounting plate distance mm				

Standard Set	Article. No.
Metalla 510 105° Full Overlay Hinge, Drilling Pattern 48/6	311.46.591
Individual Components	
105° Full Overlay Hinge, for Screw Fixing	329.14.300
Cruciform Mounting Plate, 2 mm	329.87.000

# HINGES - FOR WOODEN DOORS

## Metalla 510 105° Standard Application Hinges

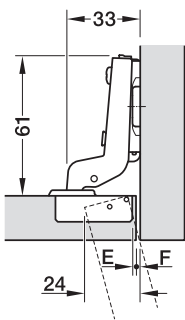
### Half overlay mounting/twin mounting



Door overlay mm									
3	4	5	6	7	8	9	10		
				3	4	5	6	2	
Distance to cup E mm				Mounting plate distance mm					

Standard Set	Article. No.
Metalla 510 105° Half Overlay Hinge, Drilling Pattern 48/6	311.46.590
Individual Components	
105° Half Overlay Hinge, for Screw Fixing	329.14.301
Cruciform Mounting Plate, 2 mm	329.87.000

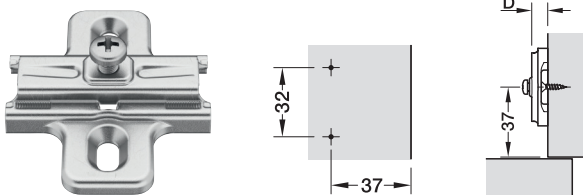
### Inset mounting



Door overlay mm									
		-5	-4	-3	-2	-1	0		
				3	4	5	6	4	
Distance to cup E mm				Mounting plate distance mm					

Standard Set	Article. No.
Metalla 510 105° Inset Hinge, Drilling Pattern 48/6	311.46.592
Individual Components	
105° Inset Hinge, for Screw Fixing	329.14.302
Cruciform Mounting Plate, 4 mm	329.87.001

### Metalla 510 Cruciform Mounting Plates -With Quick Fixing System

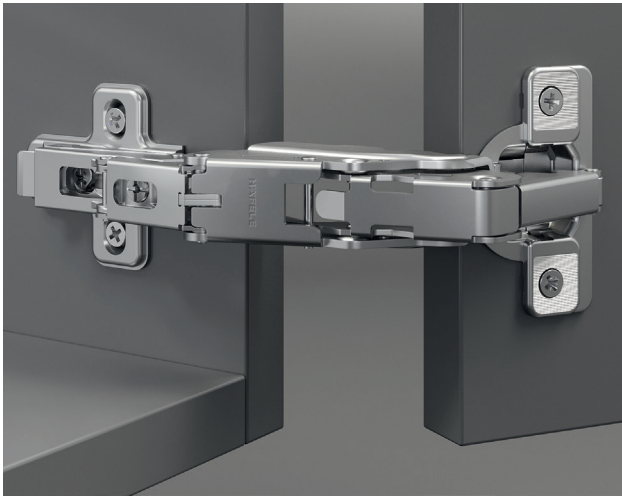


- > Material: Steel
- > Finish: Nickel plated
- > Adjustment facility: Height adjustment  $\pm 2$  mm via slot
- > Edge Distance: 37 mm

Distance D mm	Article. No.
2	329.87.000
4	329.87.001

## HINGES - FOR WOODEN DOORS

### Metalla 510 155° Wide Angle Hinge for Cabinets with Internal Drawers or Shelves



- > Required drilling depth for hinge cup only 8 mm
- > 0-door offset for use with internal pull outs or extending trays
- > With integrated soft closing mechanism in hinge cup



Door thickness	Distance to cup E mm						
	3.0	4.0	5.0	6.0	7.0	8.0	9.0
16	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
20	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
24	0.0	0.0	0.0	0.0	0.0	0.0	0.15
25	0.10	0.15	0.20	0.25	0.30	0.35	0.55
26	0.40	0.45	0.50	0.60	0.70	0.85	1.20
27	0.75	0.85	0.95	1.10	1.30	120° 1.70	100° 2.15
28	1.20	1.35	120° 1.70	120° 1.95	100° 2.30	100° 2.80	92° 3.90
Minimum gap F							
Rounding off the edge of door reduces the given values.							

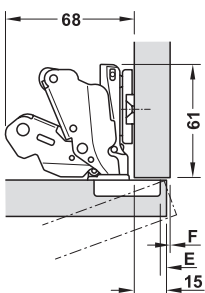
- > Material: Zinc alloy: cup, steel: hinge arm
- > Finish: Nickel plated
- > Cup fixing: For screw fixing
- > Installation: Door to cabinet for quick fixing with SM quick fixing system
- > Drilling depth: Hinge cup with soft closing mechanism: 13.5 mm
- > Adjustment facility: Side adjustment -1.5 to +4.5 mm, Height adjustment -2 to +2 mm, Depth adjustment with mounting plate +2.8 mm
- > Opening Angle: 155°
- > Door thickness: 16-28 mm

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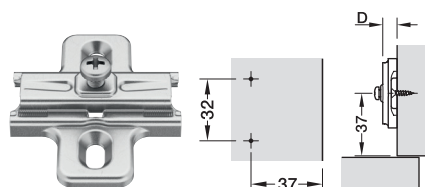
Hinges

### Full overlay mounting

Door overlay mm														
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
						3	4	5	6	7	8			2
Distance to cup E mm						Mounting plate distance mm								



### Metalla 510 Cruciform Mounting Plate -With Quick Fixing System



Standard Set	Article. No.
Metalla 510 155° Full Overlay Wide Angle Hinge, Drilling Pattern 48/6	311.46.594
Individual Components	
155° Full Overlay Hinge, for Screw Fixing	329.14.207
Cruciform Mounting Plate, 2 mm	329.87.000

- > Material: Steel
- > Finish: Nickel plated
- > Adjustment facility: Height adjustment ±2 mm via slot
- > Edge Distance: 37 mm

Distance D mm	Article. No.
2	329.87.000

# HINGES - FOR NARROW ALUMINIUM PROFILED DOORS

## Metalla 510 105° Narrow Aluminium Profile Hinge (For Frame Width: 19 mm)



> With two silicone oil dampers integrated in hinge cup



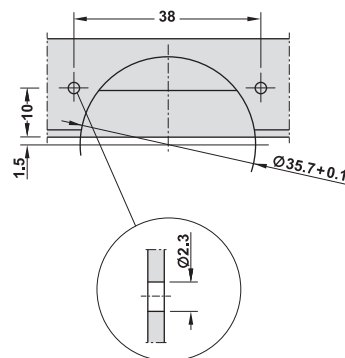
- > Material: Zinc alloy: cup, steel: hinge arm
- > Finish: Nickel plated
- > Cup fixing: For screw fixing
- > Installation: Door to cabinet for quick fixing with SM quick fixing system
- > Drilling depth: Hinge cup 12.5 mm
- > Adjustment facility: Side adjustment from -1.5 to +4.5 mm (via Hinge),  
Height Adjustment : 2 mm (via Mounting Plate),  
Depth Adjustment : Upto 2.8 mm (via Mounting Plate)
- > Opening Angle: 105°
- > Door thickness: 20 mm

➔ Full overlay mounting



Standard Set	Article. No.
Metalla 510 105° Narrow Aluminium Profile Hinge (For Frame Width: 19 mm)	311.46.593
Individual Components	
105° Full Overlay Narrow Aluminium Profile Hinge, for Screw Fixing	329.14.850
Cruciform Mounting Plate, 2 mm	329.87.000
Cover Cap	329.32.620

### Construction dimensions



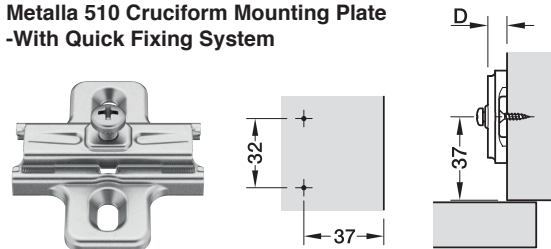
### Cover Caps for Metalla 510 SM



- > Material: Steel
- > Finish: Nickel plated
- > Suitable for: 105° concealed hinges

Distance D mm	Article. No.
Cover cap for hinge cup	329.32.630
Cover cap for Hinge Arm	329.32.640

### Metalla 510 Cruciform Mounting Plate -With Quick Fixing System



- > Material: Steel
- > Finish: Nickel plated
- > Adjustment facility: Height adjustment ±2 mm via slot
- > Edge Distance: 37 mm

Distance D mm	Article. No.
2	329.87.000