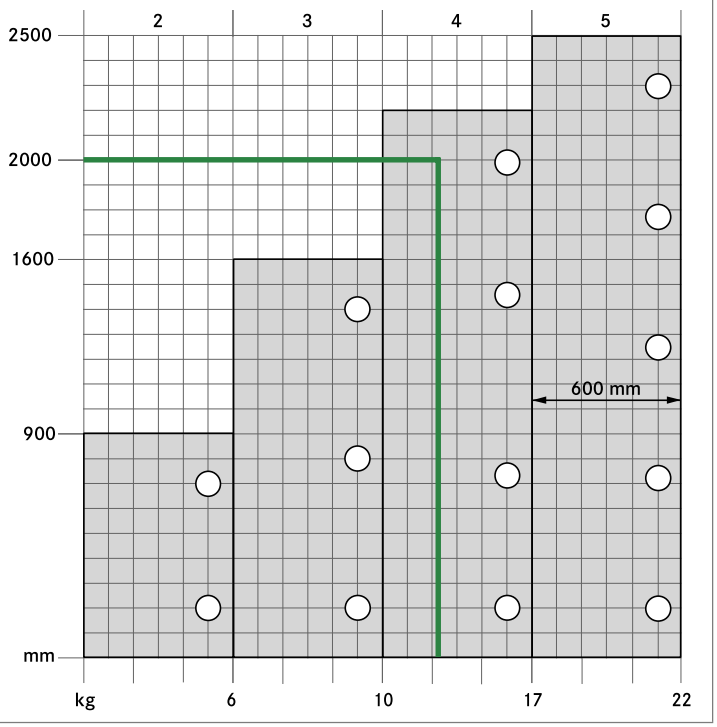
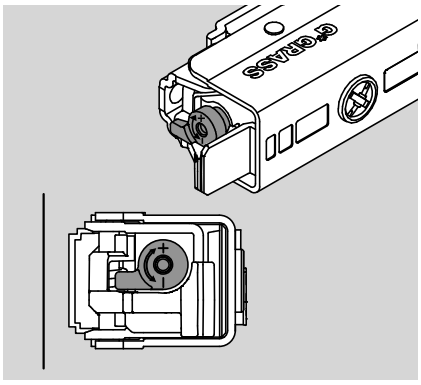
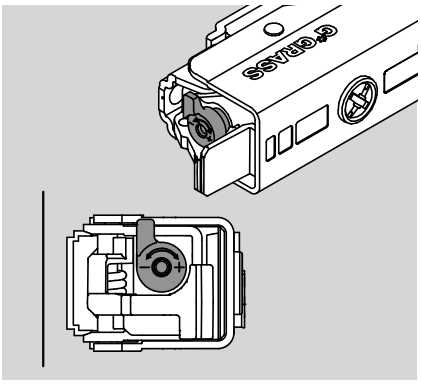
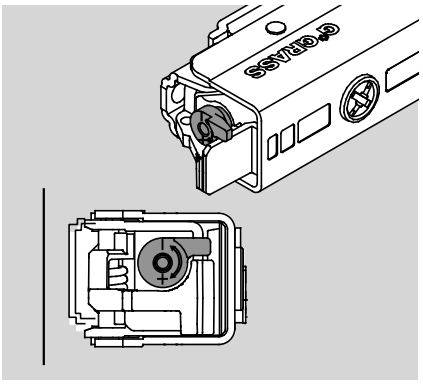
NUMBER OF HINGES PER DOOR

Description
The number of hinges is determined by the door height, door weight, quality of the material and the fixing of the cup and mounting plate. The load and height data refer to 600 mm standard door widths. In case of doubt, the number of hinges should be determined with a trial fitting. Example: For doors measuring 2000 x 600 mm and weighing 13 kg we recommend the installation of 4 hinges. The table refers to hinges with and without integrated damper.

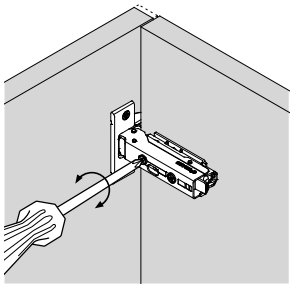
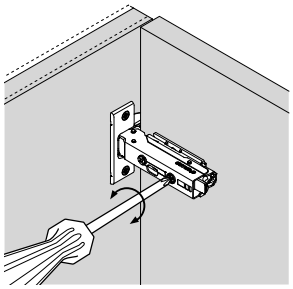
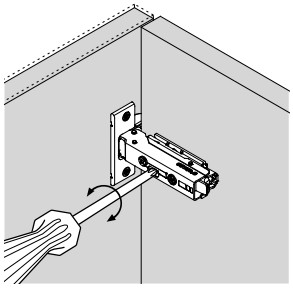


TOOL-FREE DAMPER ADJUSTMENT

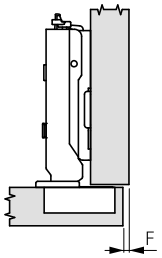
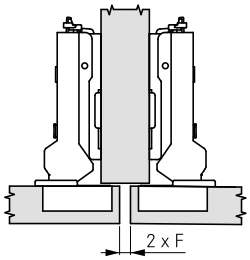
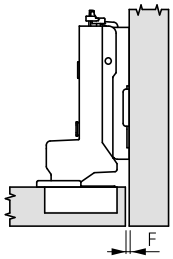
Low level	Medium level (factory setting)	High level
		
Adjustment lever points • towards cabinet wall Suitable for: • small, light-weight doors	Adjustment lever points • downwards when fitted on the left and upwards when fitted on the right Suitable for: • standard doors	Adjustment lever points • into the cabinet Suitable for: • large, heavy doors
The damping force of each hinge can be set individually. A simple lever adjustment is all that is required to increase or reduce the damping force as required.		

Packaging units are not covered in this brochure; please enquire with your supplier

DOOR ADJUSTMENTS (APPLIES TO ALL TIOMOS HINGES)

Description	Side adjustment with limit stop +/- 2mm	Convenient depth adjustment via worm gear +3/-2 mm	Height adjustment with mounting plate +/- 2 mm
The height adjustment option depends on the type of mounting plate. All adjustments can be carried out independently of each other. When using a **-2** mounting plate height, side adjustment is restricted.			

DOOR REVEAL AND MINIMUM REVEAL

Description	Full overlay / overlay door	Half overlay door	Inset door
The reveal is the distance between two doors or between the door and the cabinet side wall. **The minimum reveal (F)** is the clearance required between two doors or between door and side wall so that the door can open without hindrance.			

Minimum reveal table

The width of reveal required depends on the thickness of the door.

Example:
For a **19 mm thick door** and a **cup distance** of **6 mm**, the **minimum reveal** required is **0.9 mm**.

Important
Reveals were calculated for doors with a radius of 1 mm!
We recommend a trial fitting.

Door thickness	Cup distance 3	4	5	**6**	7
24	2.4	2.1	2.1	2.1	2.0
22	1.6	1.6	1.6	1.5	1.5
21	1.4	1.3	1.3	1.3	1.3
20	1.1	1.1	1.1	1.5	1.1
19	0.9	0.9	0.9	**0.9**	0.9
18	0.7	0.7	0.7	0.7	0.7
17	0.6	0.6	0.6	0.6	0.6
16	0.6	0.6	0.6	0.6	0.6

Minimum reveal (F)

Achievable reveal with inset door

The table shows the achievable reveal width for inset doors, depending on the cup distance and mounting plate height.

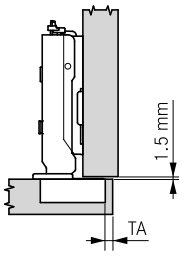
Example:
For a **cup distance** of **6 mm** and a **mounting plate height** of **3 mm** the **reveal** is **1 mm**. This is also called a negative overlay.

Door reveal	Cup distance 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				

Mounting plate height

MINIMUM GAP

Description	Example:
The minimum gap is the clearance required between the front edge of the cabinet and the closed door so that the door can open without hindrance. The factory setting of the gap is 1.5 mm. The cup distance (TA) is the distance between the edge of the door and the edge of the cup hole.	For a 17 mm thick door and a cup distance of 6 mm, the minimum gap is 1.0 mm.

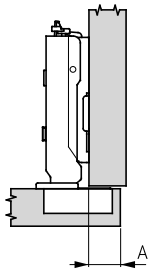


Door thickness	Cup distance 3	4	5	**6**	7
24	1.0	1.0	1.0	1.2	2.1
22	1.0	1.0	1.0	1.0	1.5
21	1.0	1.0	1.0	1.0	1.2
20	1.0	1.0	1.0	1.0	1.0
19	1.0	1.0	1.0	1.0	1.0
18	1.0	1.0	1.0	1.0	1.0
17	1.0	1.0	1.0	**1.0**	1.0
16	1.0	1.0	1.0	1.0	1.0

Minimum gap

DOOR OVERLAY

Description	Example:
The door overlay (A) is that part of the side wall or frame which is covered by the door.	For a hinge with cranking 3, a mounting plate height 2 and a cup distance of 4 mm, the door overlay is 14 mm.

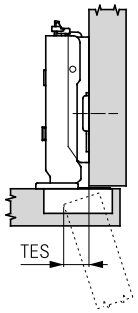


Door overlay	Cup distance 3	**4**	5	6	7
19.0					0
18.0				0	
17.0			0		2
16.5					
16.0		0		2	3
15.5					3.5
15.0	0		2	3	
14.5				3.5	
14.0		**2**	3		
13.5			3.5		
13.0	2	3			
12.5		3.5			
12.0	3				
11.5	3.5				

Mounting plate height

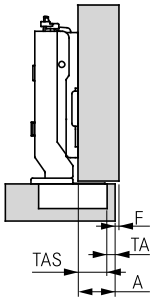
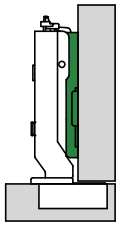
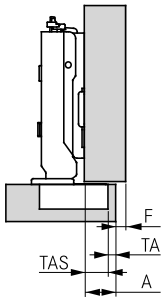
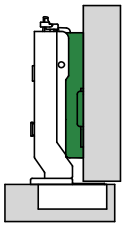
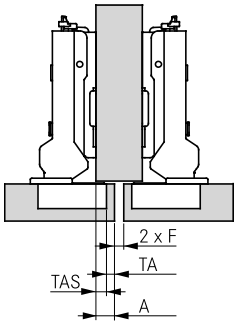
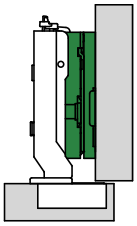
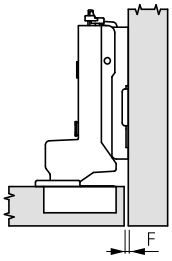
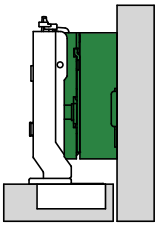
DOOR PROTRUSION

Description
Door protrusion (TES) occurs when the door is opened and varies depending on the type of hinge and method of application. It is shown on each catalogue page and refers to the factory setting with the respective mounting plate shown. It can be altered by using a different mounting plate height and by changing the side adjustment.



Packaging units are not covered in this brochure; please enquire with your supplier

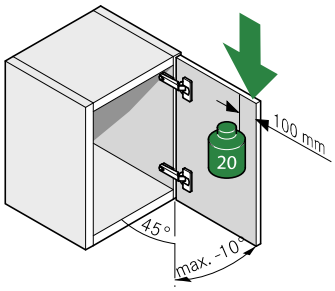
OPTIONS FOR CHANGING THE DOOR OVERLAY

By selecting the cranking		By using a mounting plate with a different height	
Full overlay (cranking 0)		Full overlay	
The cup overlay (TAS/ factory setting) plus **cup distance (TA)** is the **door overlay (A)**. The dimensions are shown in a table on the respective catalogue page.		Use a hinge with cranking 0 and mounting plate height 0.	
Overlay (cranking 3)		overlay	
The cup overlay (TAS/ factory setting) plus **cup distance (TA)** is the **door overlay (A)**. The dimensions are shown in a table on the respective catalogue page.		Use a hinge with cranking 0 and mounting plate height 3.	
Half overlay (cranking 9.5)		Half overlay	
The cup overlay (TAS/ factory setting) plus **cup distance (TA)** is the **door overlay (A)**. The dimensions are shown in a table on the respective catalogue page.		Use a hinge with cranking 0 and mounting plate height 9.5.	
Inset (cranking 19)		Inset	
There is no door overlay. **The minimum reveal (F)** between the cabinet side and door depends on the mounting plate height and the cup distance. The dimensions are shown in a table on the respective catalogue page.		Use a hinge with cranking 0 and mounting plate height 21.	

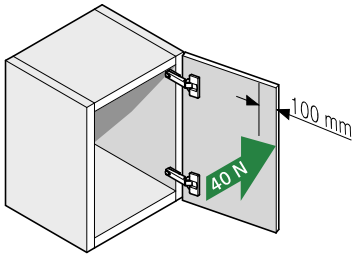
TEST CRITERIA FOR HINGES

Functional test

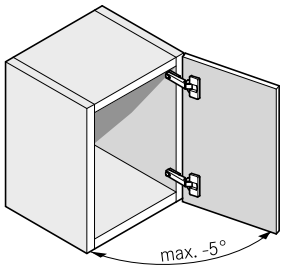
Static load – vertical
Additional load: 20 kg
Opening angle: max. -10°
Number: 10



Static load – horizontal
Force: 40 N
Number: 10

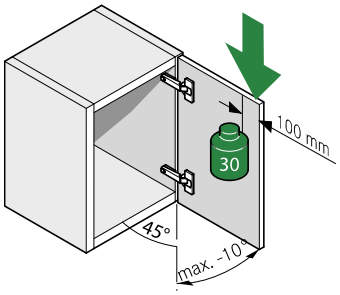


Endurance test
Opening angle: max. -5°
Open and close movements: 100,000

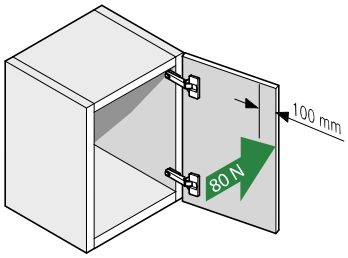


Overload testing

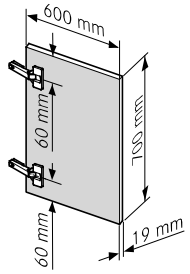
Vertical
Additional load: 30 kg
Opening angle: max. -10°
Number: 10



Horizontal
Force: 80 N
Number: 10

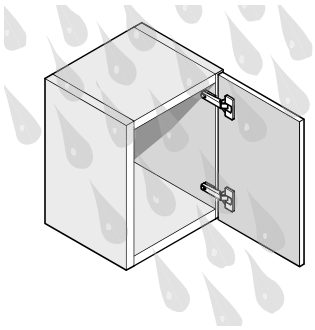


Test door
Weight approx. 5.2 kg



Salt spray and humidity test

Based on DIN ISO 9227 and DIN 6270-2



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