

Veosys 105° hinge
- 105° opening angle



Mounting plates
- For Veosys



Accessories
- For Veosys

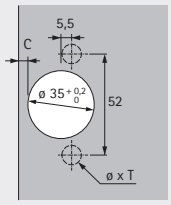
Fast assembly concealed hinge

- **Veosys 105° hinge**
- **105° opening angle, drilling pattern TH 52 x 5.5 mm**

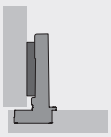


- Concealed hinge with clip on installation and integrated Silent System
- Quality classification under EN 15570, Level 2
- Corrosion proof, 120h NSS (neutral salt spray test) to DIN EN ISO 9227
- For door thickness of 14 - 22 mm
- Cup diameter 35 mm
- Cup depth 11.5 mm
- Integrated overlay adjustment + 2.5 mm / - 2.5 mm
- Integrated depth adjustment + 2 mm / - 1.5 mm
- Height adjustment at mounting plate
- Stainless steel

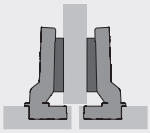
Drilling pattern



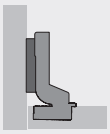
full overlay
(Base B 11.5 mm)



half overlay
(Base B 3 mm)



inset
(Base B -6.5 mm)



With integrated Silent System, with self closing feature

Cup assembly	Mounting hole ø x T mm	**full overlay** **200 ea.**	**half overlay** **200 ea.**	**inset** **200 ea.**
for screwing on	-	**9 289 590**	**9 289 592**	**9 289 595**

Fast assembly concealed hinge

- **Veosys 105° hinge**
- **105° opening angle**

Minimum reveal per door

Door thickness	Cup distance C mm				
mm	3.0	4.0	5.0	6.0	7.0
14	0.3	0.3	0.2	0.2	0.2
15	0.5	0.5	0.4	0.4	0.4
16	0.7	0.7	0.6	0.6	0.5
17	0.9	0.9	0.9	0.8	0.8
18	1.2	1.1	1.1	1.1	1.0
19	1.5	1.4	1.4	1.3	1.3
20	1.8	1.8	1.7	1.6	1.6
21	2.2	2.1	2.0	2.0	1.9
22	2.6	2.5	2.4	2.4	2.3

Note:

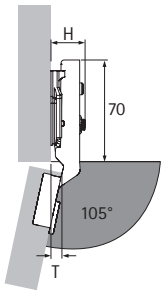
The values in the table refer to doors with an edge radius of 1 mm.

On doors with other radii, the minimum reveal changes as follows:

Radius 0 mm:
Values in table + 0.4 mm

Radius 3 mm:
Values in table - 0.6 mm

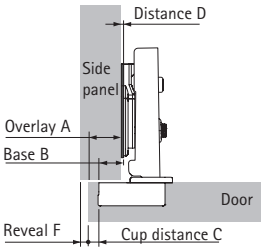
Protrusions / installed depth



Hinge protrusion H / door protrusion T for distance D = 0 mm and cup distance C = 3 mm

Door mounting option	H mm	T mm
full overlay	20.0	7.5
half overlay	30.0	17.0
inset	37.0	24.0

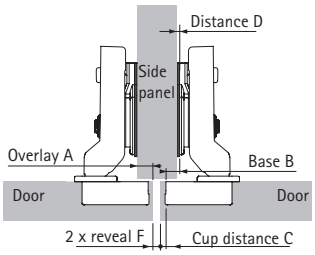
full overlay



Distance D = C + B - A
= cup distance C + 11.5 mm - overlay A

Overlay	Cup distance C mm				
mm	3.0	4.0	5.0	6.0	7.0
	Distance D mm				
10	4.5	5.5	6.5	7.5	8.5
11	3.5	4.5	5.5	6.5	7.5
12	2.5	3.5	4.5	5.5	6.5
13	1.5	2.5	3.5	4.5	5.5
14	0.5	1.5	2.5	3.5	4.5
15		0.5	1.5	2.5	3.5
16			0.5	1.5	2.5
17				0.5	1.5
18					0.5

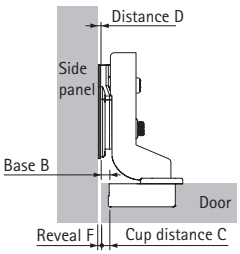
half overlay



Distance D = C + B - A
= cup distance C + 3 mm - overlay A

Overlay	Cup distance C mm				
mm	3.0	4.0	5.0	6.0	7.0
	Distance D mm				
0.5	5.5	6.5	7.5	8.5	9.5
1.5	4.5	5.5	6.5	7.5	8.5
2.5	3.5	4.5	5.5	6.5	7.5
3.5	2.5	3.5	4.5	5.5	6.5
4.5	1.5	2.5	3.5	4.5	5.5
5.5	0.5	1.5	2.5	3.5	4.5
6.5		0.5	1.5	2.5	3.5
7.5			0.5	1.5	2.5
8.5				0.5	1.5
9.5					0.5

inset



Distance D = C + B + F
= cup distance C - 6.5 mm + reveal F

Door thickness	Cup distance C mm				
mm	3.0	4.0	5.0	6.0	7.0
	Distance D mm				
14					0.7
15					0.9
16				0.1	1.0
17				0.3	1.3
18				0.6	1.5
19				0.8	1.8
20			0.2	1.1	2.1
21			0.5	1.5	2.4
22		0.0	0.9	1.9	2.8

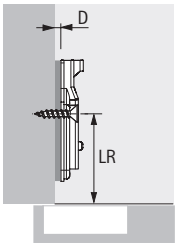
Advice

- For mounting plates and accessories, see page XXX
- For mounting options, assembly information, installation instructions and quality criteria, see page XXX

hettich.com/short/897c49

Cross mounting plate for screwing on





- For 4.5 mm ø x 16 mm countersunk screws
- Quality classification under EN 15570, Level 2
- Hole spacing 32 mm
- Oblong hole height adjustment ± 3 mm
- Stainless steel

Hole line distance LR mm	Order no. / Distance D mm		PU
	0.0	2.0	
37	**9 289 598**	**9 289 609**	200 ea.

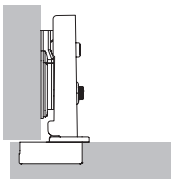
Cover cap for Veosys hinge arm



- Suitable for use with Veosys
- Stainless steel

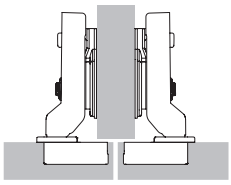
Version	Order no.
embossed with Hettich logo	**9 289 610**
neutral	**9 289 611**

Full overlay door



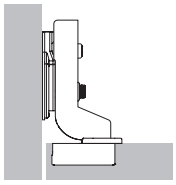
The door is in front of the cabinet side and only a small gap remains at the side within which the door can open reliably. Alternatively, the door can also be fully overlaid, In this case sufficient space must be allowed at the side for the required minimum reveal. Straight hinges are used.

Half overlay door



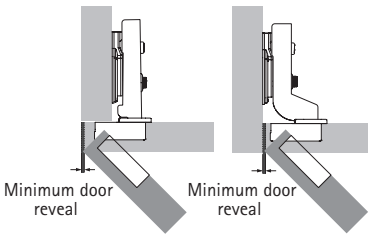
This is where two doors are positioned in front of a cabinet centre panel, with the required overall reveal between them (at least 2 x minimum reveal). In other words, each door has a smaller overlay and cranked hinges are therefore used.

Inset door



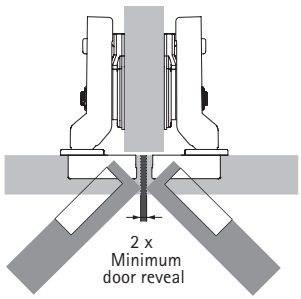
The door is positioned inside the cabinet body, i.e. next to the cabinet body side. Here too, a gap is needed so that the door can open reliably. Highly cranked hinges are used here. For an inset door, the mounting plate must be set back by the thickness of the door + 1 mm as well as by any chosen door offset.

Minimum reveal



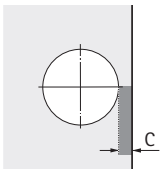
For overlay and inset door
The minimum reveal (also known as the door clearance or minimum clearance) is the space required at the side for opening the door. The size of the minimum reveal depends on the cup distance C, the door thickness and the type of hinge selected. Radii on the door edges reduce the door clearance.
The minimum reveal is shown in the table for the respective hinge types.

Minimum reveal



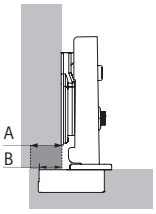
For half overlay doors
The total reveal selected between the doors must be at least twice the door clearance. Both doors can then be opened at the same time.

Cup distance C



Cup distance C is the distance between door edge and the edge of the cup drilling. The greater the distance selected for cup distance C, the smaller door clearance will be, i.e. the minimum reveal required.

Overlay / Base

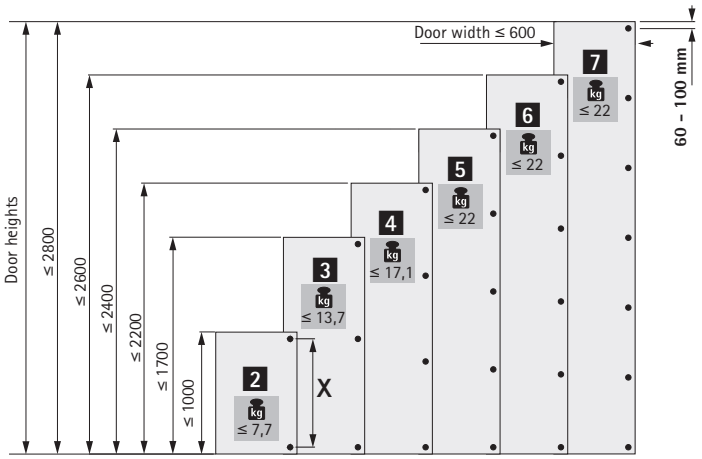


Overlay refers to the projection of the door in front of the cabinet body side. Base refers to the projection of the cup in front of the cabinet body side for a mounting plate distance of 0 mm.

Number of hinges per door

Door width, height and weight as well as the material quality of the door are decisive factors determining the number of hinges required.

The factors encountered in practice differ widely from case to case. For this reason, the number of hinges specified in the diagram must be understood as a guide only. If in doubt, it is recommended to carry out a trial mounting and adjust the number of hinges as necessary. For reasons of stability, space X between the hinges must always be made as large as possible. Distance X must be at least 280 mm.



General calculation of distances

Mounting plates are available in various distances. The effective height of the mounting plate is defined by distance D. Distance D is embossed on the top of each mounting plate. A larger distance D reduces the overlay for full and half overlay applications. On inset doors, a larger distance D increases the door reveal. Before determining the required distance, check whether the desired reveal is equal to or greater than the required minimum reveal. If the desired reveal is less than the required minimum reveal, the required minimum reveal can be reduced by increasing cup distance C or by producing radii on the door edges.

Calculation of distances

For overlay and half overlay doors
The required distance D can be determined after checking the minimum reveal. Ideally, door overlay and cup distance should be selected to produce distance D that is available as mounting plate.

Example: Distance determined using the table
Overlay = 14 mm and cup distance C = 4.5 mm yield a distance of 3.0 mm.

Example: Distance determined using the calculation formula
Hinge for overlay door, basis B = 12.5 mm
Distance D = Cup distance C + Basis B - Overlay A
Distance D = 4.5 mm + 12.5 mm - 14 mm = 3.0 mm

Intermediate distances not available as mounting plate distances are achieved by adjusting the hinge overlay.

Overlay	Cup distance C mm					
mm	3,0	4,0	4,5	5,0	6,0	7,0
	Distance D mm					
10	5,5	6,5	7,0	7,5	8,5	9,5
11	4,5	5,5	6,0	6,5	7,5	8,5
12	3,5	4,5	5,0	5,5	6,5	7,5
13	2,5	3,5	4,0	4,5	5,5	6,5
14	1,5	2,5	3,0	3,5	4,5	5,5
15	0,5	1,5	2,0	2,5	3,5	4,5
16		0,5	1,0	1,5	2,5	3,5
17			0,0	0,5	1,5	2,5
18					0,5	1,5
19						0,5

Calculation of distances

For inset doors
When calculating the mounting plate distance using the table for inset doors, allowance is automatically made for the reveal that is shown as the minimum reveal produced by cup distance C and door thickness in the table of minimum reveals. If a reveal
is to be produced that is larger than this minimum reveal, select a mounting plate distance of the appropriate size.

Example: Distance determined using the table
From the table, a door thickness = 20 mm and cup distance C = 4.5 mm produces a mounting plate distance of 1.5 mm. This creates the required minimum reveal of 1 mm, for example. If a reveal of 2.5 mm is required instead, select a mounting plate distance 1.5 mm larger. In this example, that means a distance of 3 mm instead of 1.5 mm.

Example: Distance determined using the calculation formula
Hinge for inset application, basis B = - 4 mm
Distance D = cup distance C + basis B + reveal F
Distance D = 4.5 mm - 4 mm + 1 mm = 1.5 mm

Intermediate values not available as mounting plate distances are achieved by adjusting the hinge overlay.

Door thickness	Cup distance C mm					
mm	3,0	4,0	4,5	5,0	6,0	7,0
	Distance D mm					
15		0,2	0,7	1,2	2,2	3,2
16		0,3	0,8	1,3	2,3	3,3
17		0,4	0,9	1,4	2,4	3,4
18		0,6	1,1	1,6	2,6	3,5
19		0,8	1,3	1,8	2,7	3,7
20	0,1	1,0	1,5	2,0	3,0	3,9
21	0,4	1,3	1,8	2,3	3,2	4,2
22	1,2	1,8	2,2	2,6	3,6	4,5

Quality that meets all the demands

Quality that meets all the demands
The quality of hinges is subject to a process of continuous monitoring. Hettich fittings comply with the national and international quality standards of the markets our customers operate in. The diagrams below show examples of the principles behind some of the testing processes.

Application
Hettich hinges can be used in living room, kitchen, bathroom and office furniture.

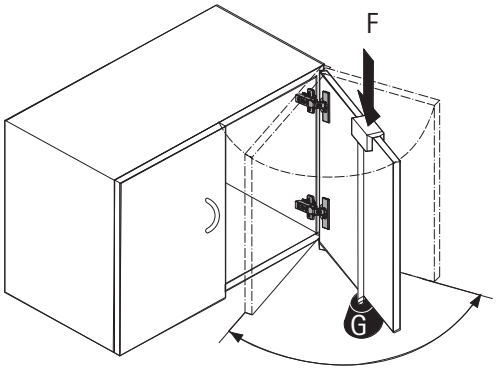
Load capacity
The quality levels indicated on products comply with the requirements of EN 15570 and satisfy the overload tests at the specified level. We will be pleased to provide any further information you may require.

Corrosion test
Hettich Veosys hinges satisfy the corrosion requirements under DIN EN ISO 9227-2012 in accordance with the 120 h neutral salt spray test (NSS) as well as DIN EN ISO 6270-2-2012 in accordance with the 120 h alternating condensation water climate test with alternating humidity and temperature (AHT).

Quality assurance
The processes for assuring the quality of Hettich hinges are certified under EN ISO 9001, Cert. No. DE8000209.

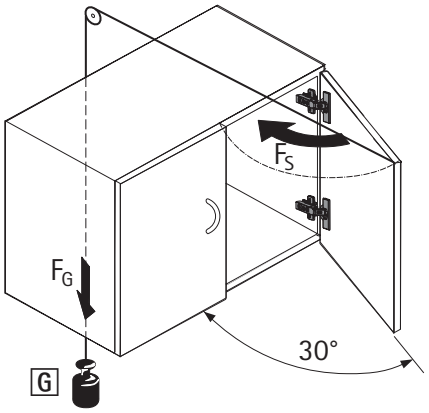
Endurance test

The door is subjected to a specific number of opening and closing cycles.



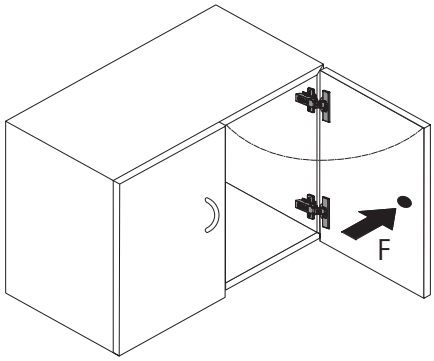
Closing test

The door is opened by 30° and pushed closed from this position by means of a pulley and falling weight.



Horizontal test

The door is over opened with a defined test force F. (This test only applies to hinges with an opening angle < 135°.)



Vertical test

The door is subjected to a specific number of opening and closing cycles under a defined additional load G.

