Hinge with perfect damping and fine design.

sensys.

Technik für Möbel

Hettich

sensys.
Perfect design and perfect action

Unique closing experience with emotional appeal

sensys marks the latest generation in hinge technology: The damping element is integrated invisibly into the hinge – an innovation that meets the highest criteria for convenience and functionality. Just a light touch – and the door closes smoothly and silently. The unique pull-in function closes the door gently and automatically as soon as the open angle is less than 35°. sensys delivers an exclusive closing experience loaded with emotional appeal. Doors will never stand open again.

Clean, elegant design

sensys has an elegant, contemporary look and meets all customer expectations for outstanding design and quality. The simple and harmonious lines of the design – from the cup and the arm cover cap to the mounting plate – give the hinge its perfectly modern look. All edges and radii contribute to the perfect harmony of hinge and mounting plate. Silent System damping is integrated invisibly in the hinge, as is the unlatch tab.

reddot design award
winner 2008

product design award 2009

sensys.
Engineered for easy use

Engineered for easy use

With its shallow cup depth, sensys is a versatile solution for many applications, for example, with thinner doors or bigger outside radii. The sensys hinge design also permits minimal visible reveals currently popular even with thick doors. The direct adjustment feature makes it easy to set door depth. A special guard prevents accidental disengagement of the overlay adjustment screw. Cam screws in the mounting plate allow fast door height adjustment.

sensys is a low, slimline design; it leaves ample space for inside drawers, so that only very narrow gaps need be planned between the side panels and drawers.

sensys stands for tested quality, compliance with all current standards, excellent damping performance, durability and high stability. sensys meets the highest design criteria and is sure to be a long-time favourite.

Toolless assembly

sensys hinges are mounted and removed quickly and easily. No tools are required. It is unlatched from the hinge arm in one smooth, ergonomic movement by lightly pressing the concealed latch.

sensys.
Versatile for different applications

Wide product range

The sensys hinge family includes products for all popular door mounting options, so that sensys hinges can be used in a wide variety of cabinet designs. Designed-in compatibility means that sensys mounting plates can also be combined with hinges from the Intermat range.

sensys cups and mounting plates can be mounted using any of the commonly accepted methods. The cup can be secured in place by screws, knock-in sockets or by toolless Fix fast assembly.

Mounting plates are available for securing with screws, press-in or expanding sockets, pre-mounted Euro screws or with the patented Hettich Direkt system.

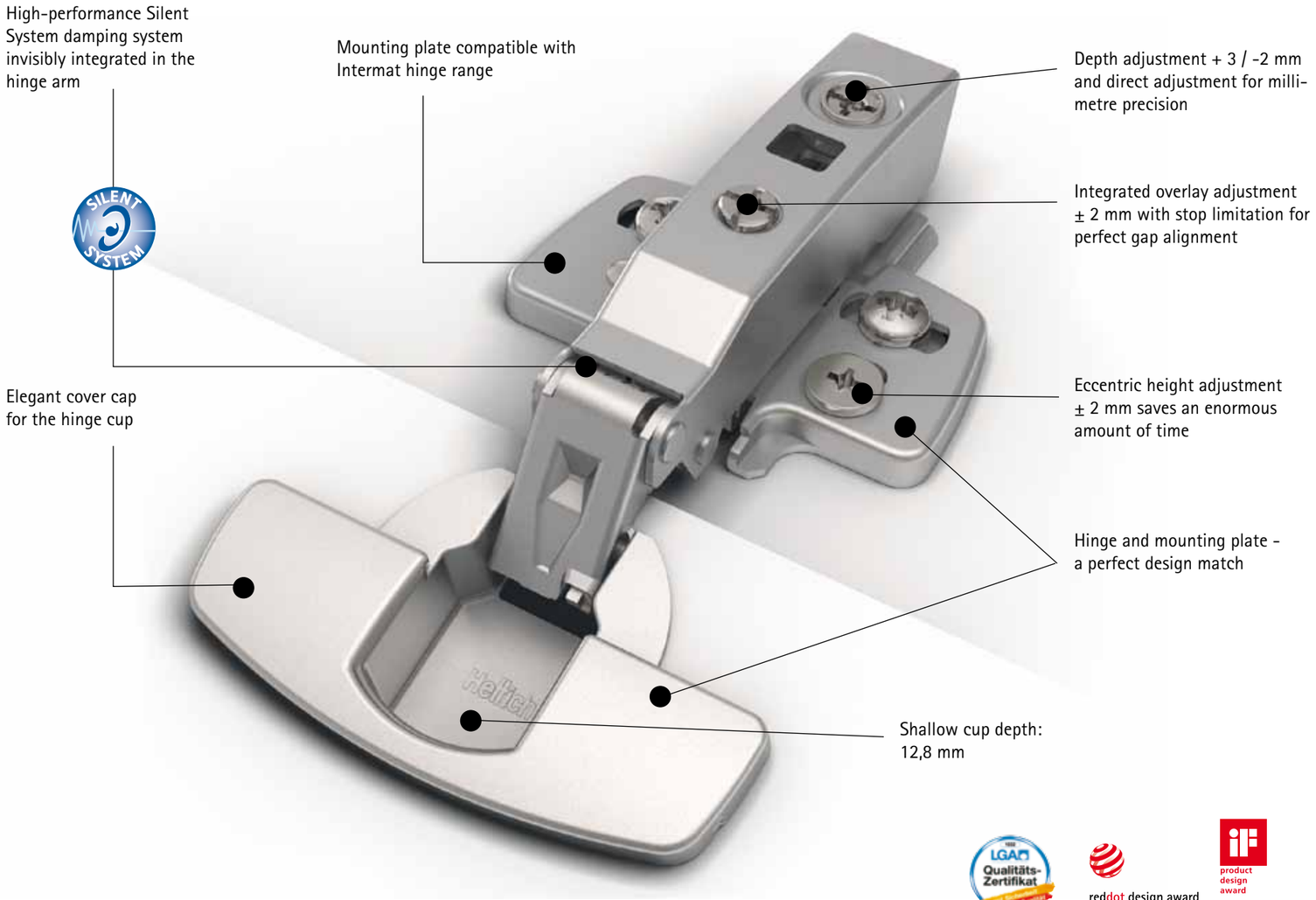








sensys.
A glance at the benefits



reddot design award winner 2008

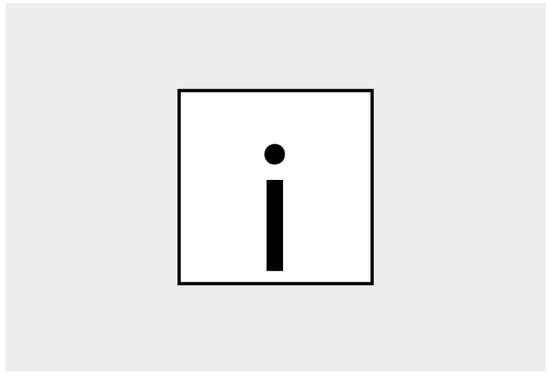
Concealed release latch
Simple, safe, reliable

Toolless assembly
Press gently and the hinge arm engages securely in the mounting plate

Minimum door protrusion
Narrow gaps maximize space available for inside drawers

Unique self-closing angle
Gentle, smooth closing from an opening angle of 35°

Narrow reveals
Only 4 mm for 22 mm door thickness



Technical information

sensys 8645i

Opening angle 110°
for door thickness up to 22 mm

sensys 8639i

Opening angle 95°
for door thickness up to 28 mm

sensys 8639i W30

Opening angle 95°
for cabinet face angle 30°

sensys 8639i W45

Opening angle 95°
for cabinet face angle 45°

sensys 8639i W90

Opening angle 95°
for cabinets with blind panels 90°

sensys 8638i

Opening angle 95°
for aluminium frame doors

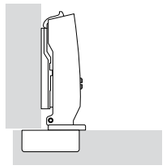
Intermat 9956

Opening angle 165°

Mounting plate system 8099

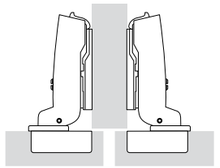
for sensys and Intermat hinges

Mounting options



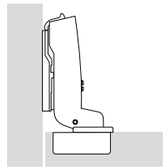
Full overlay

The door is in front of the cabinet side panel providing a small reveal at the side allowing the door to open correctly. Alternatively, the door can be overlaid fully (max. 19 mm), in which case sufficient space must be allowed at the side for the required minimum reveal. Use straight hinges. ie, no cranking, (Base B = 12,5 mm).



Half overlay

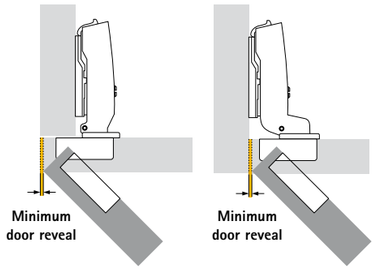
In this case, there are two doors in front of a centre panel, with the required overall reveal between them. In other words, each door has a smaller overlay and cranked hinges (Base B = 3 mm) are therefore used.



Inset

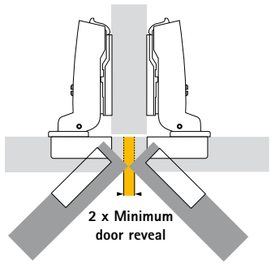
The door is mounted inside the frame formed by the cabinet side and top/ bottom panels. Here too, a reveal is needed so that the door can open reliably. Heavily cranked hinges (Base B = - 4 mm) are used here.

Minimum door reveal



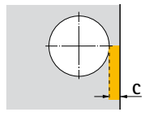
The minimum reveal (also known as the minimum clearance) is the space required at the side so that the door can open.
The size of the minimum reveal depends on the cup distance C, the door thickness and the type of hinge selected.
Radii on the door edges reduce the minimum clearance.
The required minimum reveal for each hinge type is shown in the table for the different hinge types.

Minimum door reveal for half overlay



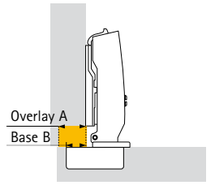
For half overlay designs, the total reveal between the doors must be chosen to correspond to twice the door reveal. Both doors can then be opened at the same time.

Cup distance C



The cup distance C is the distance between the edge of the door and the edge of the cup hole.
The larger the cup distance, the smaller the required minimum reveal.

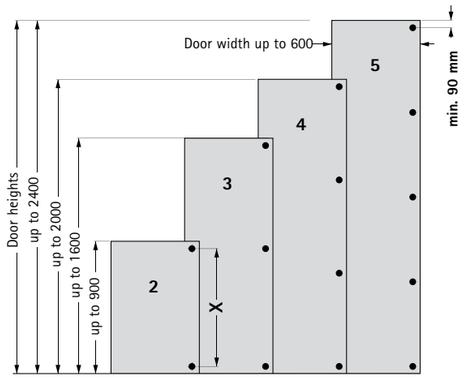
Overlay (door overlay) / Base



The overlay (A) is the distance by which the door projects over the side panel. The Base (B) is the distance by which the hinge cup extends over the side panel when MPL distance is 0.

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 each individual case in practice differ enormously. For this reason, the number of hinges shown in the diagram should only be taken as a guide.
If in doubt, it is advisable to produce a trial mounting or to increase the number of hinges.
For reasons of stability, distance X between the hinges must always be made as large as possible.



(Guide values for 19 mm chipboard panels with a density of 750 kg/m3)

General method for calculating distances

Mounting plates are available in different distances (0/1,5/3 and 5 mm). The height of the mounting plate is defined by distance D. Distance D is shown on the top of each mounting plate. A larger distance D reduces the overlay for corner and centre stops. In the case of inset doors, a larger distance D increases the door reveal. To calculate the required distance, the minimum reveal must first be determined from the table of minimum door reveals for the type of hinge concerned. The minimum reveal depends on the cup distance C and the door thickness. Minimum reveals can be reduced by increasing the cup distance C and/or affixing radii to the door edges. The table of minimum door reveals also shows the possible combinations of door thickness and cup distance C.

Calculating distance for overlay doors

Once the minimum reveal has been defined, the specific distance D can be read off in the table for the required door overlay and the specific cup distance C.
Ideally, the door overlay and value C should be selected to yield a distance D which is available as a mounting plate.

Example: Overlay = 16 mm and cup distance C = 5 mm yield a distance D equal to 1,5 mm. This distance is available as a mounting plate.

If the calculated distance D differs from the distances available as mounting plates, the difference is compensated by means of the overlay adjustment screw on the hinge arm.

Example: Door overlay = 16 mm and cup distance C = 4 mm yield a distance of 0,5 mm. Using a mounting plate with distance 0 mm the overlay has to be adjusted by - 0,5 mm.

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

Calculating distance for inset doors

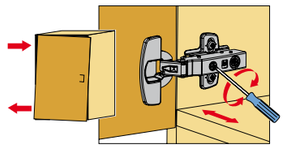
The mounting plate distance shown in the table for inset doors automatically allows for the reveal. This minimum reveal is dependent on the cup distance C and the door thickness; minimum reveals are shown in a table. If a bigger visible reveal is preferred, then a greater mounting plate distance must be selected.

Example:
Door thickness = 19 mm and cup distance C = 6 mm,

The mounting plate distance read off from the table is 3 mm. This will produce the required minimum reveal of 1 mm. If instead the design requires, e.g. a visible reveal of 3 mm, then the mounting plate distance should be selected to be 2 mm greater. In the example, this would mean a distance of 5 mm instead of 3 mm. Intermediate distances not available as standard mounting plate distances are achieved via the hinge overlay adjustment.

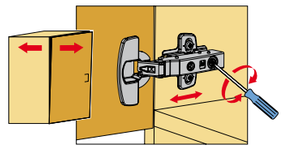
Cup distance C mm	Door thickness mm							
	15	16	17	18	**19**	20	21	22
	Distance D mm							
3					0,1	0,4	0,9	1,6
4	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,3
5	1,3	1,4	1,6	1,8	2,0	2,3	2,6	3,1
6	2,3	2,4	2,6	2,8	**3,0**	3,2	3,6	3,9

Overlay adjustment



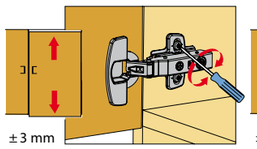
Turn screw clockwise:
Door overlay decreases (-).
Turn screw anticlockwise:
Door overlay increases (+).

Depth adjustment

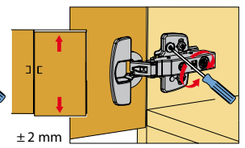


Direct, infinitely variable depth adjustment

Height adjustment

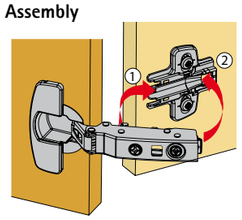


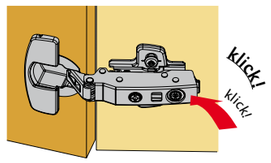
Using height-adjustable mounting plates makes it possible to align the exact door height.



Direct, stepless height adjustment with eccentric screw

Assembly

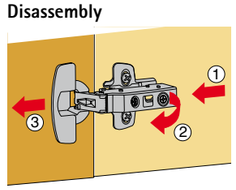




Characteristic for sensys hinges is the ergonomical snap-on assembly. First, slide all the hinges, from the front, onto the mounting plates (1) then press lightly on each successive hinge until the arm latches onto the mounting plate ② with an audible click. The hinge arm is now securely clamped, via five points, with zero play. Doors are clipped on zipper style from top to bottom.

Disassembly is carried out in the opposite direction from bottom to top. The hinge is unlatched by pressing lightly on latch ① which is hidden under the side arm for safety reasons. In one movement, the hinge arm is lifted off the mounting plate ② and the door is removed from the cabinet ③.

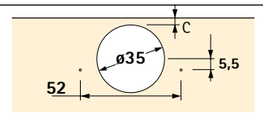
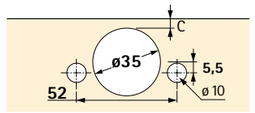
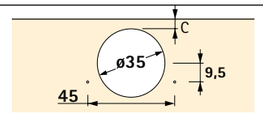
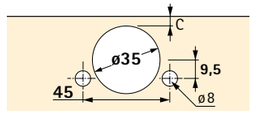
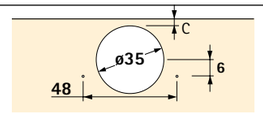
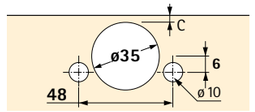
Disassembly



Fast-assembly concealed hinge with integrated damping sensys 8645i
Opening angle 110°

Fast-assembly concealed hinge with integrated damping sensys 8645i
Opening angle 110°

- Concealed hinge for snap-on attachment
- For door thicknesses of 15 - 22 mm
- Cup diameter 35 mm
- Integrated overlay adjustment ± 2 mm
- Integrated depth adjustment + 3 mm / – 2 mm
- Height adjustment at mounting plate
- Cup depth 12,8 mm
- "FIX" toolless assembly version on request

Cup assembly		Full overlay	Half overlay	Inset	PU
Screw-on: **TH 52**		**907 120 5**	**907 120 6**	**907 120 7**	200
Press-in: **TH 53**		**907 120 8**	**907 120 9**	**907 121 0**	200
Screw-on: **TB 52**		**907 122 3**	**907 122 4**	**907 122 5**	200
Press-in: **TB 53**		**907 122 6**	**907 122 7**	**907 122 8**	200
Screw-on: **TS 52**		**907 124 1**	**907 124 2**	**907 124 3**	200
Press-in: **TS 53**		**907 124 4**	**907 124 5**	**907 124 6**	200

Hinge-arm cover cap

- Nickel-plated steel

Version	Order no.	PU
without Hettich logo	**908 261 2**	200
with Hettich logo	**908 277 4**	200

Hinge cup cover cap

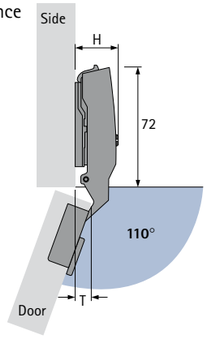
- Nickel-plated steel

Cup version	X mm	Y mm	Order no.	PU
TH 52 / TH 53 / TS 52 / TS 53	68,2	4,5	**908 261 4**	200
TB52 / TB53	61,4	4,5	**908 492 4**	200

Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22
	Minimum reveal per door – allow for in distance calculation Table entries apply to doors with 0 mm radius							
3	0,3	0,5	0,6	0,8	1,1	1,4	1,9	2,6
4	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,3
4,5	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,2
5	0,3	0,4	0,6	0,8	1,0	1,3	1,6	2,1
6	0,3	0,4	0,6	0,8	1,0	1,2	1,6	1,9

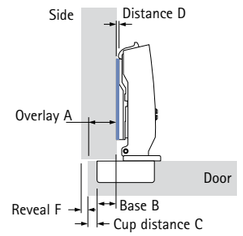
The minimum reveal is reduced for a door thickness of, for example, 22 mm with radii:
1 mm radius: table entry – 0,4 mm
3 mm radius: table entry – 1,0 mm

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



Mounting options	H mm	T mm
Full overlay	25,0	8,5
Half overlay	31,0	18,0
Inset door	38,0	25,0

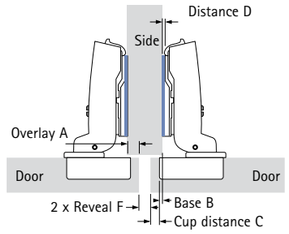
Full overlay



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

Distance D = C + B – A = cup distance C + 12,5 mm – overlay A

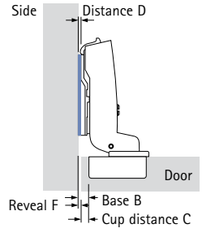
Half overlay



Cup distance C mm	Overlay mm 0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5
	Distance D mm								
3	5,5	4,5	3,5	2,5	1,5	0,5			
4	6,5	5,5	4,5	3,5	2,5	1,5	0,5		
4,5	7,0	6,0	5,0	4,0	3,0	2,0	1,0		
5	7,5	6,5	5,5	4,5	3,5	2,5	1,5	0,5	
6	8,5	7,5	6,5	5,5	4,5	3,5	2,5	1,5	0,5

Distance D = C + B – A = cup distance C + 3,0 mm – overlay A

Inset



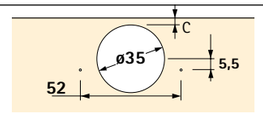
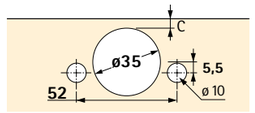
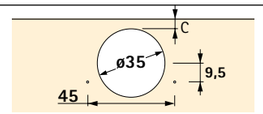
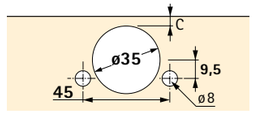
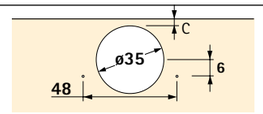
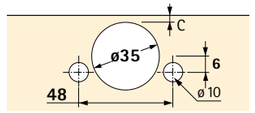
Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22
	Distance D mm							
3					0,1	0,4	0,9	1,6
4	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,3
4,5	0,8	1,0	1,1	1,3	1,5	1,8	2,2	2,7
5	1,3	1,4	1,6	1,8	2,0	2,3	2,6	3,1
6	2,3	2,4	2,6	2,8	3,0	3,2	3,6	3,9

Distance D = C + B + F = cup distance C – 4,0 mm + reveal F

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

Fast-assembly concealed hinge with integrated damping sensys 8639i
Opening angle 95°

- Concealed hinge for snap-on attachment, with integrated damping
- For door thicknesses of 15 - 28 mm
- Cup diameter 35 mm
- Integrated overlay adjustment ± 2 mm
- Integrated depth adjustment + 3 mm / – 2 mm
- Height adjustment at mounting plate
- Cup depth 12,8 mm
- "FIX" toolless assembly version on request

Cup assembly		Full overlay	Half overlay	Inset	PU
Screw-on: **TH 52**		**908 499 5**	**908 499 6**	**908 499 7**	200
Press-in: **TH 53**		**908 499 8**	**908 499 9**	**908 500 0**	200
Screw-on: **TB 52**		**908 501 0**	**908 501 1**	**908 501 2**	200
Press-in: **TB 53**		**908 501 3**	**908 501 4**	**908 501 5**	200
Screw-on: **TS 52**		**908 508 5**	**908 508 6**	**908 508 7**	200
Press-in: **TS 53**		**908 508 8**	**908 508 9**	**908 509 0**	200

Hinge-arm cover cap

- Nickel-plated steel

Version	Order no.	PU
without Hettich logo	**908 261 2**	200
with Hettich logo	**908 277 4**	200

Hinge cup cover cap

- Nickel-plated steel

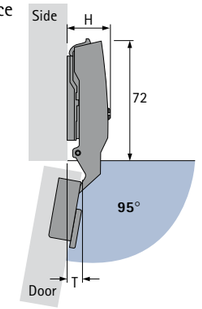
Cup version	X mm	Y mm	Order no.	PU
TH 52 / TH 53 / TS 52 / TS 53	68,2	4,5	**908 261 4**	200
TB52 / TB53	61,4	4,5	**908 492 4**	200

Fast-assembly concealed hinge with integrated damping sensys 8639i
Opening angle 95°

Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Minimum reveal per door – allow for in distance calculation Table entries apply to doors with 0 mm radius													
3	0,3	0,5	0,6	0,8	1,1	1,4	1,9	2,6	3,4	4,3	5,2	6,1	7,0	7,9
4	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,3	3,0	3,8	4,7	5,5	6,4	7,3
4,5	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,2	2,9	3,6	4,5	5,3	6,2	7,0
5	0,3	0,4	0,6	0,8	1,0	1,3	1,6	2,1	2,7	3,4	4,2	5,0	5,9	6,7
6	0,3	0,4	0,6	0,8	1,0	1,2	1,6	1,9	2,4	3,1	3,8	4,6	5,4	6,3

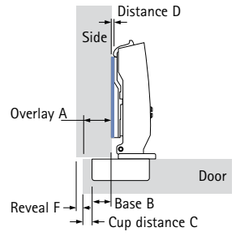
The minimum reveal is reduced for a door thickness of, for example, 22 mm with radii:
1 mm radius: table entry – 0,4 mm
3 mm radius: table entry – 1,0 mm

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



Mounting options	H mm	T mm
Full overlay	25,0	7,5
Half overlay	31,0	17,0
Inset door	38,0	24,0

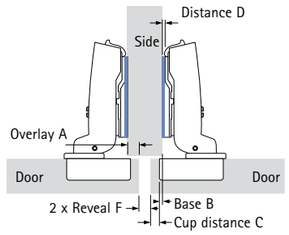
Full overlay



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

Distance D = C + B – A = cup distance C + 12,5 mm – overlay A

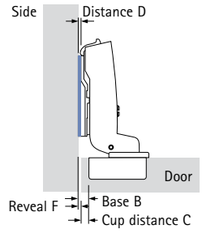
Half overlay



Cup distance C mm	Overlay mm 0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5
	Distance D mm								
3	5,5	4,5	3,5	2,5	1,5	0,5			
4	6,5	5,5	4,5	3,5	2,5	1,5	0,5		
4,5	7,0	6,0	5,0	4,0	3,0	2,0	1,0		
5	7,5	6,5	5,5	4,5	3,5	2,5	1,5	0,5	
6	8,5	7,5	6,5	5,5	4,5	3,5	2,5	1,5	0,5

Distance D = C + B – A = cup distance C + 3,0 mm – overlay A

Inset



Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Distance D mm													
3					0,1	0,4	0,9	1,6	2,4	3,3	4,2	5,1	6,0	6,9
4	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,3	3,0	3,8	4,7	5,5	6,4	7,3
4,5	0,8	1,0	1,1	1,3	1,5	1,8	2,2	2,7	3,4	4,1	5,0	5,8	6,7	7,5
5	1,3	1,4	1,6	1,8	2,0	2,3	2,6	3,1	3,7	4,4	5,2	6,0	6,9	7,7
6	2,3	2,4	2,6	2,8	3,0	3,2	3,6	3,9	4,4	5,1	5,8	6,6	7,4	8,3

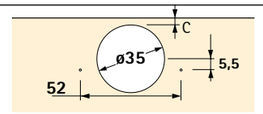
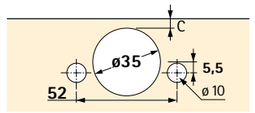
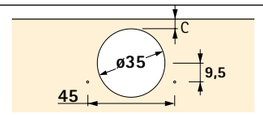
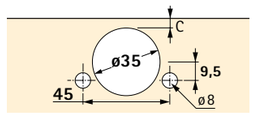
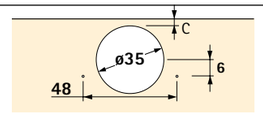
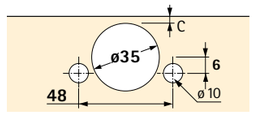
Distance D = C + B + F = cup distance C – 4,0 mm + reveal F

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

Fast-assembly concealed hinge with integrated damping sensys 8639i W30 for cabinets with 30° face angle, opening angle 95°

Fast-assembly concealed hinge with integrated damping sensys 8639i W30 for cabinets with 30° face angle, opening angle 95°

- Concealed hinge for snap-on attachment
- For cabinets with 30° face angle
- For door thicknesses of 15 - 28 mm
- Cup diameter 35 mm
- Integrated overlay adjustment ± 2 mm
- Integrated depth adjustment + 3 mm / – 2 mm
- Height adjustment at mounting plate
- Cup depth 12,8 mm
- "FIX" toolless assembly version on request

Cup assembly		Full overlay	Inset		PU
Screw-on: **TH 52**		**908 516 6**	**908 516 7**		200
Press-in: **TH 53**		**908 517 1**	**908 517 2**		200
Screw-on: **TB 52**		**908 519 1**	**908 519 2**		200
Press-in: **TB 53**		**908 519 6**	**908 519 7**		200
Screw-on: **TS 52**		**908 530 6**	**908 530 7**		200
Press-in: **TS 53**		**908 531 1**	**908 531 2**		200

Hinge-arm cover cap

- Nickel-plated steel

Version	Order no.	PU
without Hettich logo	**908 261 2**	200
with Hettich logo	**908 277 4**	200

Hinge cup cover cap

- Nickel-plated steel

Cup version	X mm	Y mm	Order no.	PU
TH 52 / TH 53 / TS 52 / TS 53	68,2	4,5	**908 261 4**	200
TB52 / TB53	61,4	4,5	**908 492 4**	200

Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Minimum reveal per door – allow for in distance calculation Table entries apply to doors with 0 mm radius													
3	1,2	1,4	1,6	1,8	2,1	2,3	2,6	2,9	3,2	3,5	3,8	4,1	4,5	4,8
4	1,1	1,3	1,5	1,7	1,9	2,1	2,4	2,6	2,9	3,2	3,5	3,8	4,2	4,5
4,5	1,0	1,2	1,4	1,6	1,8	2,0	2,3	2,5	2,8	3,1	3,4	3,7	4,1	4,4
5	0,9	1,1	1,3	1,5	1,7	1,9	2,2	2,4	2,7	3,0	3,3	3,6	3,9	4,2
6	0,8	1,0	1,2	1,4	1,6	1,8	2,0	2,2	2,5	2,7	3,0	3,3	3,6	3,9

The minimum reveal is reduced for a door thickness of, for example, 22 mm with radii:
1 mm radius: table entry – 0,4 mm
3 mm radius: table entry – 1,0 mm

Calculating distance

Overlay doors: Distance D = 0,87 x (C + B - A) = 0,87 x (cup distance C + 2 mm - overlay A)

Inset doors: Distance D = 0,87 x (C + B + F) = 0,87 x (cup distance C - 16 mm + reveal F)

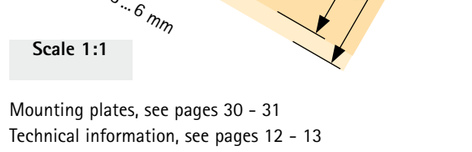
Note:
The drawings below are to full scale (1:1) and show the hinges and mounting plate distances.

By drawing in the required cup distance C (3 - 6 mm), the door overlay can be measured directly from the applicable distance line.

The distance from the cabinet front edge to X on the selected distance line is also equal to the hole line distance from the cabinet front edge.

For inset-mounted doors, the cup distance and door thickness must be taken into account when determining the minimum reveal!

Overlay doors



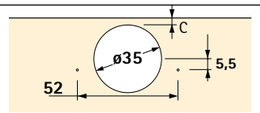
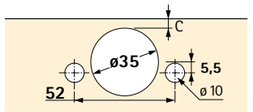
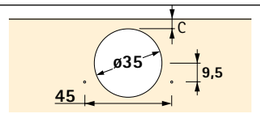
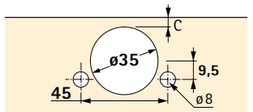
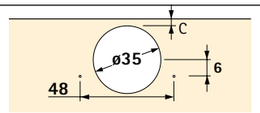
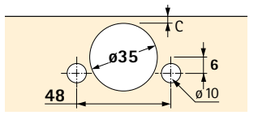
Scale 1:1

Inset doors

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

Fast-assembly concealed hinge with integrated damping sensys 8639i W45 for cabinets with 45° face angle, opening angle 95°

- Concealed hinge for snap-on attachment, with integrated damping
- For cabinets with 45° face angle
- For door thicknesses of 15 - 28 mm
- Cup diameter 35 mm
- Integrated overlay adjustment ± 2 mm
- Integrated depth adjustment + 3 mm / – 2 mm
- Height adjustment at mounting plate
- Cup depth 12,8 mm
- "FIX" toolless assembly version on request

Cup assembly		Full overlay	Inset		PU
Screw-on: **TH 52**		**908 516 8**	**908 516 9**		200
Press-in: **TH 53**		**908 517 3**	**908 517 4**		200
Screw-on: **TB 52**		**908 519 3**	**908 519 4**		200
Press-in: **TB 53**		**908 519 8**	**908 519 9**		200
Screw-on: **TS 52**		**908 530 8**	**908 530 9**		200
Press-in: **TS 53**		**908 531 3**	**908 531 4**		200

Hinge-arm cover cap

- Nickel-plated steel

Version	Order no.	PU
without Hettich logo	**908 261 2**	200
with Hettich logo	**908 277 4**	200

Hinge cup cover cap

- Nickel-plated steel

Cup version	X mm	Y mm	Order no.	PU
TH 52 / TH 53 / TS 52 / TS 53	68,2	4,5	**908 261 4**	200
TB52 / TB53	61,4	4,5	**908 492 4**	200

Fast-assembly concealed hinge with integrated damping sensys 8639i W45 for cabinets with 45° face angle, opening angle 95°

Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Minimum reveal per door – allow for in distance calculation Table entries apply to doors with 0 mm radius													
3	1,7	1,9	2,0	2,2	2,4	2,6	2,8	3,0	3,2	3,4	3,6	3,8	4,1	4,3
4	1,5	1,6	1,8	2,0	2,1	2,3	2,5	2,7	2,9	3,1	3,3	3,5	3,7	4,0
4,5	1,4	1,5	1,7	1,9	2,0	2,2	2,4	2,6	2,8	3,0	3,2	3,4	3,6	3,8
5	1,3	1,4	1,6	1,7	1,9	2,1	2,3	2,4	2,6	2,8	3,0	3,2	3,4	3,6
6	1,1	1,2	1,4	1,5	1,7	1,9	2,0	2,2	2,4	2,6	2,7	2,9	3,1	3,3

The minimum reveal is reduced for a door thickness of, for example, 22 mm with radii:
1 mm radius: table entry – 0,4 mm
3 mm radius: table entry – 1,0 mm

Calculating distance

Overlay doors: Distance D = 0,71 x (C + B - A) = 0,71 x (cup distance C - 2 mm - overlay A)

Inset doors: Distance D = 0,71 x (C + B + F) = 0,71 x (cup distance C - 25 mm + reveal F)

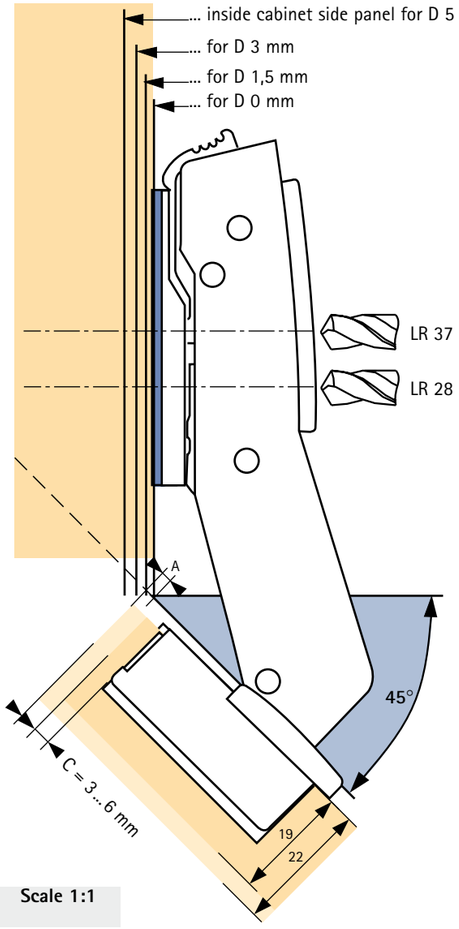
Note:
The drawings below are to full scale (1:1) and show the hinges and mounting plate distances.

By drawing in the required cup distance C (3 - 6 mm), the door overlay can be measured directly from the applicable distance line.

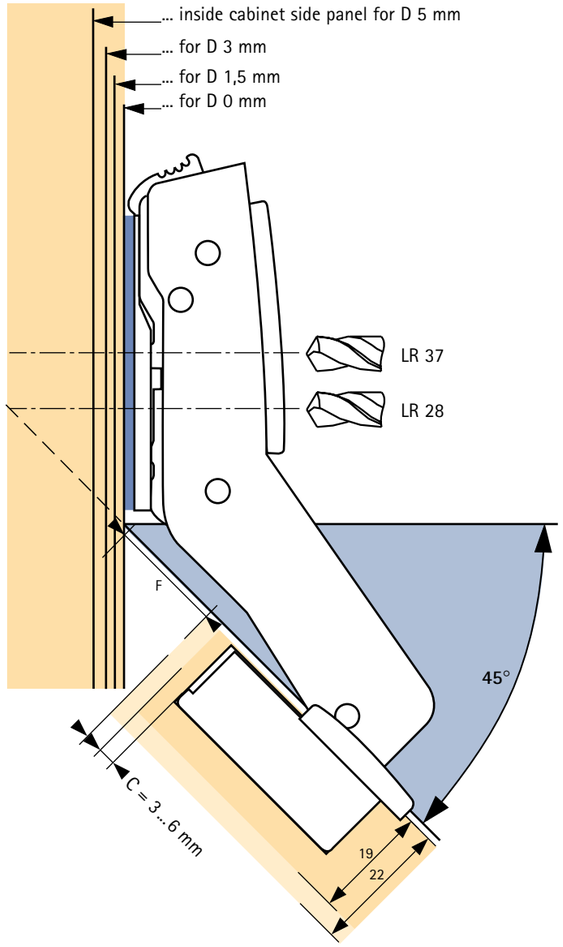
The distance from the cabinet front edge to X on the selected distance line is also equal to the hole line distance from the cabinet front edge.

For inset-mounted doors, the cup distance and door thickness must be taken into account when determining the minimum reveal!

Overlay doors



Inset doors

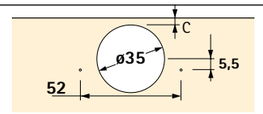
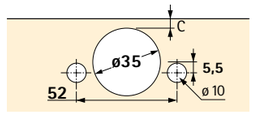
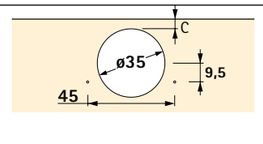
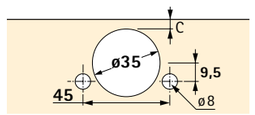
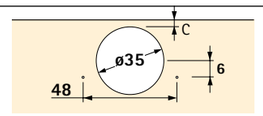
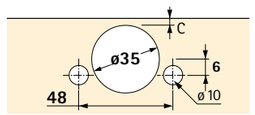


Scale 1:1

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

Fast-assembly concealed hinge with integrated damping
sensys 8639i W90
for cabinets with blind panels 90°, opening angle 95°

- Concealed hinge for snap-on attachment
- For blind panel cabinets 90°
- For door thicknesses 15 - 28 mm
- Cup diameter 35 mm
- Adjustment of door parallel offset +1,0/-2,0 mm
- Integrated reveal adjustment +3,0/-2,0 mm
- Height adjustment at mounting plate
- Cup depth 12,8 mm
- "FIX" toolless assembly version on request

Cup assembly		Inset			PU
Screw-on: **TH 52**		**908 517 0**			200
Press-in: **TH 53**		**908 517 5**			200
Screw-on: **TB 52**		**908 519 5**			200
Press-in: **TB 53**		**908 520 0**			200
Screw-on: **TS 52**		**908 531 0**			200
Press-in: **TS 53**		**908 531 5**			200

Hinge-arm cover cap

- Nickel-plated steel

Version	Order no.	PU
without Hettich logo	**908 261 2**	200
with Hettich logo	**908 277 4**	200

Hinge cup cover cap

- Nickel-plated steel

Cup version	X mm	Y mm	Order no.	PU
TH 52 / TH 53 / TS 52 / TS 53	68,2	4,5	**908 261 4**	200
TB 52 / TB 53	61,4	4,5	**908 492 4**	200

Fast-assembly concealed hinge with integrated damping
sensys 8639i W90
for cabinets with blind panels 90°, opening angle 95°

Cup distance C mm	Door thickness mm 15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Minimum reveal per door – allow for in distance calculation Table entries apply to doors with 0 mm radius													
3	0,3	0,5	0,6	0,8	1,1	1,4	1,9	2,6	3,4	4,3	5,2	6,1	7,0	7,9
4	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,3	3,0	3,8	4,7	5,5	6,4	7,3
4,5	0,3	0,5	0,6	0,8	1,0	1,3	1,7	2,2	2,9	3,6	4,5	5,3	6,2	7,0
5	0,3	0,4	0,6	0,8	1,0	1,3	1,6	2,1	2,7	3,4	4,2	5,0	5,9	6,7
6	0,3	0,4	0,6	0,8	1,0	1,2	1,6	1,9	2,4	3,1	3,8	4,6	5,4	6,3

The minimum reveal is reduced for a door thickness of, for example, 22 mm with radii:
1 mm radius: table entry – 0,4 mm
3 mm radius: table entry – 1,0 mm

Calculating mounting plate distance (D) and hole line distance (X):

The measurements can be taken from the drawing, once the door offset (T), the cup distance (C) and the reveal (F) have been specified.

Distance D = B - T = 4 mm - door offset T
(The recommended door offset is 1 mm)

The door offset can be adjusted if required using the setting screw.

Hole line distance X = 38,5 mm - cup distance C - reveal F
(for mounting plates with hole line LR 37)

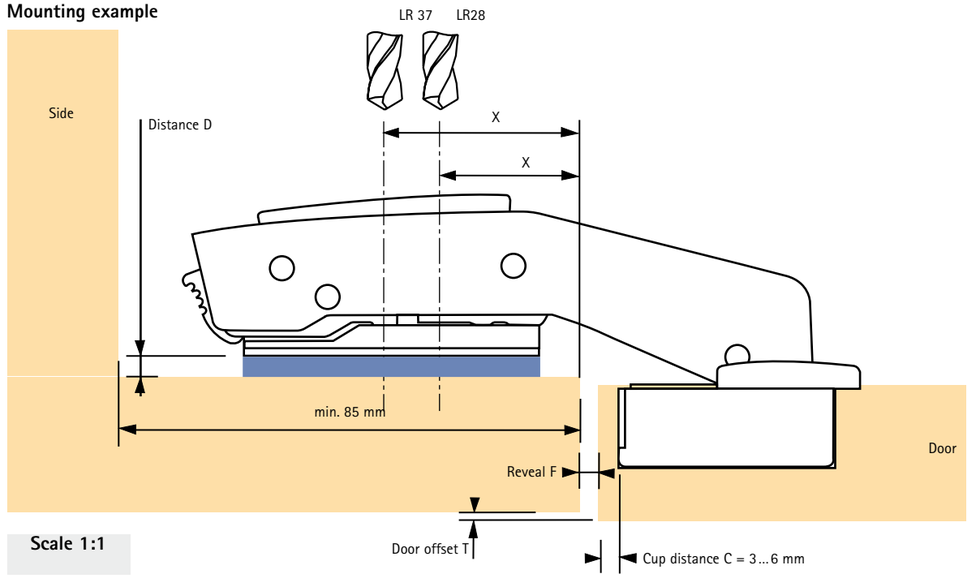
Hole line distance X = 29,5 mm - cup distance C - reveal F
(for mounting plates with hole line LR 28)

The reveal can be corrected if required via the adjusting element.

Calculating hole distance (X)

Cup distance C mm	Reveal mm 0,5	1,0	1,5	2,0	2,5	3,0	3,5	4,0
3	35,0	34,5	34,0	33,5	33,0	32,5	32,0	31,5
3,5	34,5	34,0	33,5	33,0	32,5	32,0	31,5	31,0
4	34,0	33,5	33,0	32,5	32,0	31,5	31,0	30,5
4,5	33,5	33,0	32,5	32,0	31,5	31,0	30,5	30,0
5	33,0	32,5	32,0	31,5	31,0	30,5	30,0	29,5
5,5	32,5	32,0	31,5	31,0	30,5	30,0	29,5	29,0
6	32,0	31,5	31,0	30,5	30,0	29,5	29,0	28,5

Mounting example



Scale 1:1

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

Fast-assembly concealed hinge with integrated damping sensys 8638i for aluminium-frame doors, opening angle 95°

- Concealed hinge for snap-on attachment, with integrated damping
- For 19 / 20 mm aluminium frame profiles
- Integrated overlay adjustment ± 2 mm
- Integrated depth adjustment + 3 mm / – 2 mm
- Height adjustment at mounting plate
- Includes 2 hinge cup fixing screws

Cup mounting	Full overlay	Half overlay	Inset mounted	PU
Screw-on: **T 32/26**	**907 142 1**	**907 142 2**	**907 142 3**	200

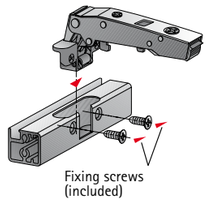
Hinge-arm cover cap

- Nickel-plated steel

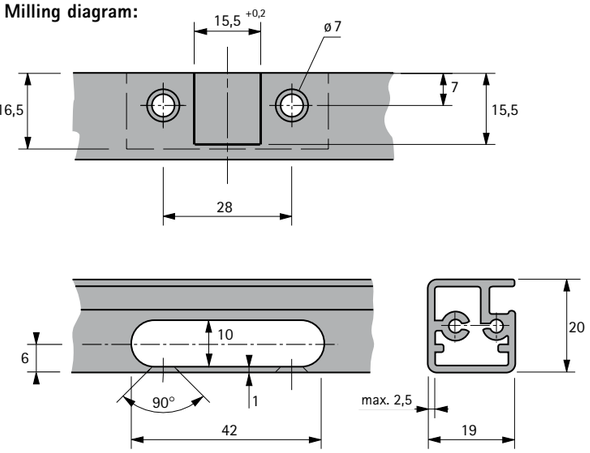
Version	Order no.	PU
without Hettich logo	**908 261 2**	200
with Hettich logo	**908 277 4**	200

Fast-assembly concealed hinge with integrated damping sensys 8638i for aluminium-frame doors, opening angle 95°

Assembly:

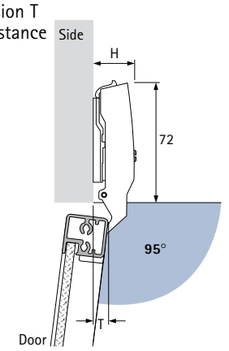


Milling diagram:



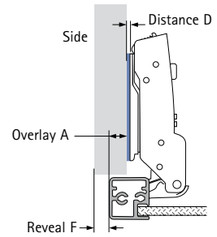
The minimum reveal for the profile we recommend is 1,6 mm (3,2 mm for half overlay version). Overlay for 0 mm distance = 17 mm

Hinge protrusion H/ door protrusion T for 0 mm distance



Mounting options	H mm	T mm
Full overlay	25,0	8,0
Half overlay	31,0	17,5
Inset door	38,0	24,5

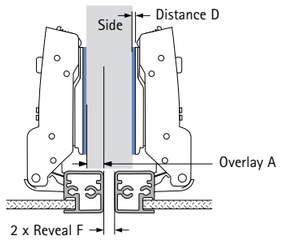
Full overlay



	Overlay mm 12	13	14	15	16	17
Distance D mm	5,0	4,0	3,0	2,0	1,0	0

Distance D = 4,5 + B – A = 4,5 + 12,5 mm – overlay A

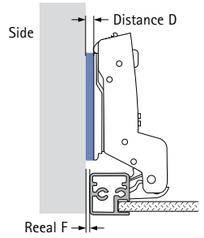
Half overlay



	Overlay mm 0	1	2	3	4	5
Distance D mm	7,5	6,5	5,5	4,5	3,5	2,5

Distance D = 4,5 + B – A = 4,5 + 3,0 mm – overlay A

Inset



	Reveal mm 1,6	2	3	4	5
Distance D mm	2,1	2,5	3,5	4,5	5,5

Distance D = 4,5 + B + F = 4,5 – 4,0 mm + reveal

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

The sensys mounting plate
multi-compatible

sensys with integrated
Silent System damping

Intermat with optional
Silent System damping

Intermat without damping

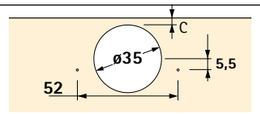
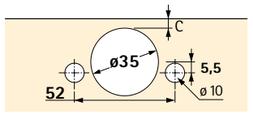
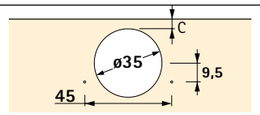
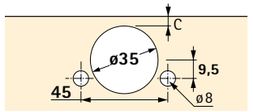
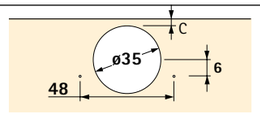
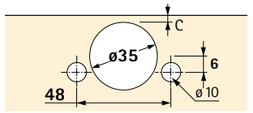
The compatibility advantage

sensys mounting plates can also be used with all Intermat fast-assembly hinges. For furniture manufacturers and especially kitchen manufacturers this means cost savings thanks to a leaner production process. The same mounting plate can be used for all the cabinets in different product ranges and price categories. Differentiation, through selecting hinges with different features, takes place only towards the end of the production process.

This represents a significant gain in flexibility for manufacturers. The new mounting plate makes it easier to offer optional, integrated or no damping in line with pricing policy for each product range. It's also easy to upgrade a product already in production at short notice, e.g., for special marketing campaigns. In addition, all of the mounting options in the Intermat hinge range can be used to expand the sensys hinge range.

Fast-assembly concealed hinge
Intermat 9956
Opening angle 165°

- Concealed hinge for snap-on attachment
- Silent System snap-on damping element must be ordered separately, see below
- Door thickness from 16 mm
- Cup diameter 35 mm
- Optimal reveals (hairline reveal)
- No door protrusion, ie, unobstructed interior space for pullouts
- Integrated overlay adjustment + 1 / - 2,5 mm
- Integrated depth adjustment 4 mm
- Height adjustment at mounting plate
- Cup depth 11,6 mm
- "FIX" toolless assembly version on request

Cup assembly		Full overlay	Half overlay		PU
Screw-on: **TH 52**		**908 469 7**	**908 469 8**		100
Press-in: **TH 53**		**908 470 1**	**908 470 2**		100
Screw-on: **TB 52**		**908 472 5**	**908 472 6**		100
Press-in: **TB 53**		**908 472 9**	**908 473 0**		100
Screw-on: **TS 52**		**908 474 5**	**908 474 6**		100
Press-in: **TS 53**		**908 474 9**	**908 475 0**		100

Clip-on Silent System damping element

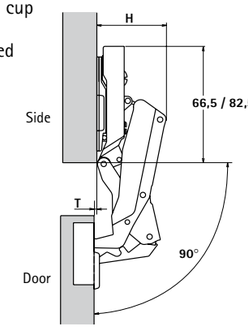
- Damping effect infinitely adjustable via setting wheel
- Toolless assembly / disassembly
- Easy to retrofit
- Only one damping element for 2 hinges

Order no.	PU
908 464 3	100

Fast-assembly concealed hinge
Intermat 9956
Opening angle 165°

Cup distance C mm	Door thickness mm 16	17	18	19	20	21	22	23	24
	Minimum reveal per door								
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
4,5	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	4,5

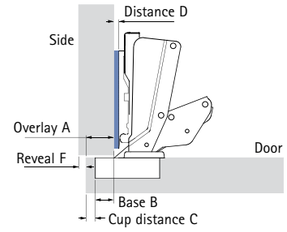
No door protrusion T for 0 mm distance and 3 mm cup distance, unrestricted space for pullouts



Mounting options	H (max.) mm	T (for 90°) mm
Full overlay	58,5/66,0*	-0,8
Half overlay	68,0/75,5*	8,7

*with damping

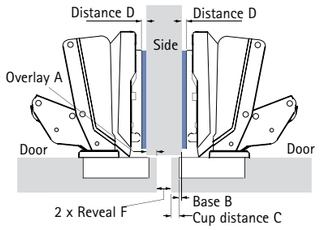
Overlay



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

Distance D = C + B - A = cup distance C + 12,5 mm - overlay A

Half overlay

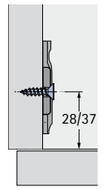
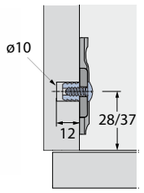
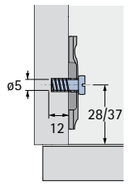
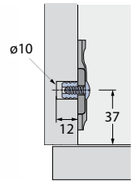
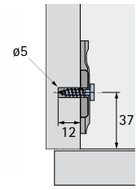
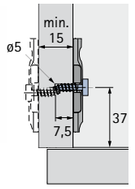


Cup distance C mm	Overlay mm 0	1	2	3	4	5	6	7	8
	Distance D mm								
3	6,0	5,0	4,0	3,0	2,0	1,0	0,0		
4	7,0	6,0	5,0	4,0	3,0	2,0	1,0	0,0	
4,5	7,5	6,5	5,5	4,5	3,5	2,5	1,5	0,5	
5	8,0	7,0	6,0	5,0	4,0	3,0	2,0	1,0	0,0
6	9,0	8,0	7,0	6,0	5,0	4,0	3,0	2,0	1,0

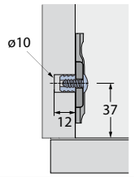
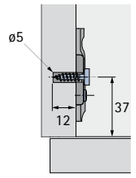
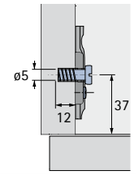
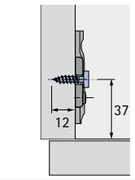
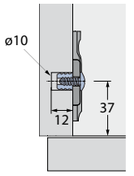
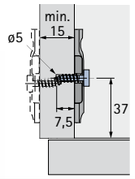
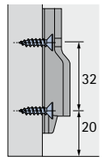
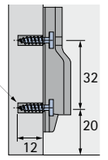
Distance D = C + B - A = cup distance C + 3,0 mm - overlay A

Mounting plates, see pages 30 - 31
Technical information, see pages 12 - 13

Mounting plate System 8099
for sensys and Intermat hinges

Mounting plate		Distance Hole line mm	Distance mm	Order no.	PU
Screw-on cross mounting plate • To fix with countersunk wood screws ø 4,5 x 16 mm • Hole distance 32 mm • Height adjustment ± 3 mm • Drill hole: ø 2,5 mm	 	28	0,0	**907 157 0**	200
			1,5	**907 157 1**	200
			3,0	**907 157 2**	200
			5,0	**907 157 3**	200
		37	0,0	**907 157 5**	200
			1,5	**907 157 6**	200
			3,0	**907 157 7**	200
			5,0	**907 157 8**	200
Cross mounting plate with expansion dowels • To fix with pre-mounted expansion dowels • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 10 x 12 mm	 	28	0,0	**907 160 0**	200
			1,5	**907 160 1**	200
			3,0	**907 160 2**	200
			5,0	**907 160 3**	200
		37	0,0	**907 160 5**	200
			1,5	**907 160 6**	200
			3,0	**907 160 7**	200
			5,0	**907 160 8**	200
Screw-on cross mounting plate • To fix with premounted Euroscrews • Hole distance 32 mm • Height adjustment ± 3 mm • Drill hole: ø 5 x 12 mm	 	28	0,0	**907 162 0**	200
			1,5	**907 162 1**	200
			3,0	**907 162 2**	200
			5,0	**907 162 3**	200
		37	0,0	**907 162 5**	200
			1,5	**907 162 6**	200
			3,0	**907 162 7**	200
			5,0	**907 162 8**	200
Press-in cross mounting plate • To fix with premounted press-in dowels • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 10 x 12 mm	 	37	0,0	**907 161 5**	200
			1,5	**907 161 6**	200
			3,0	**907 161 7**	200
			5,0	**907 161 8**	200
Cross mounting plate with expansion dowels • To fix with pre-mounted expansion dowels • Hole distance 32 mm • Height adjustment ± 2,5 mm • Drill hole: ø 5 x 12 mm	 	37	0,0	**907 159 5**	200
			1,5	**907 159 6**	200
			3,0	**907 159 7**	200
			5,0	**907 159 8**	200
"Hettich Direkt" cross mounting plate for centre panels • To fix with pre-mounted locating plugs and asymmetrically-positioned pre-mounted wood screws • Hole distance 32 mm • Height adjustment ± 2,5 mm • Drill hole: ø 5 x 7,5 mm	 	37	0,0	**907 158 5**	200
			1,5	**907 158 6**	200
			3,0	**907 158 7**	200
			5,0	**907 158 8**	200

Mounting plate System 8099
with eccentric height adjustment
for sensys and Intermat hinges

Mounting plate		Distance Hole line mm	Distance mm	Order no.	PU
Cross mounting plate with eccenter adjustment and expansion dowels • To fix with pre-mounted expansion dowels • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 10 x 12 mm	 	37	0,0	**907 166 0**	200
			1,5	**907 166 1**	200
			3,0	**907 166 2**	200
			5,0	**907 166 3**	200
Cross mounting plate with eccenter adjustment and expansion dowels • To fix with pre-mounted expansion dowels • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 5 x 12 mm	 	37	0,0	**907 165 5**	200
			1,5	**907 165 6**	200
			3,0	**907 165 7**	200
			5,0	**907 165 8**	200
Screw-on cross mounting plate with eccenter adjustment • To fix with premounted Euroscrews • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 5 x 12 mm	 	37	0,0	**907 166 5**	200
			1,5	**907 166 6**	200
			3,0	**907 166 7**	200
			5,0	**907 166 8**	200
Screw-on cross mounting plate with eccenter adjustment • To fix with premounted chipboard screws • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 2,5 mm	 	37	0,0	**907 167 0**	200
			1,5	**907 167 1**	200
			3,0	**907 167 2**	200
			5,0	**907 167 3**	200
Press-in cross mounting plate with eccenter adjustment • To fix with premounted press-in dowels • Hole distance 32 mm • Height adjustment ± 2 mm • Drill holes: ø 10 x 12 mm	 	37	0,0	**907 168 0**	200
			1,5	**907 168 1**	200
			3,0	**907 168 2**	200
			5,0	**907 168 3**	200
"Hettich Direkt" cross mounting plate with eccenter adjustment for centre panels • To fix with pre-mounted locating plugs and asymmetrically-positioned pre-mounted wood screws • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 5 x 7,5 mm	 	37	0,0	**907 165 0**	200
			1,5	**907 165 1**	200
			3,0	**907 165 2**	200
			5,0	**907 165 3**	200
Screw-on linear mounting plate with eccenter adjustment • To fix with countersunk wood screws ø 4,5 x 16 mm • Hole distance 32 mm • Height adjustment ± 2 mm • Drill hole: ø 2,5 mm	 	20	1,5	**907 168 7**	200
			3,0	**907 168 8**	200
			5,0	**907 168 9**	200
Press-in linear mounting plate with eccenter adjustment • To fix with premounted press-in dowels • Hole distance 32 mm • Height adjustment ± 2 mm • Drill holes: ø 10 x 12 mm	 	20	1,5	**907 169 7**	200
			3,0	**907 169 8**	200
			5,0	**907 169 9**	200

Hettich Marketing-
und Vertriebs GmbH & Co. KG
Vahrenkampstraße 12 - 16
32278 Kirchlengern
Germany

Telephone +49 5223 77-0
Fax +49 5223 77-1948
info@de.hettich.com
www.hettich.com

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