



Sensys 110° & 165° Clip On Free Swinging Hinges TECHNICAL SPECIFICATION

NEY Ltd (Head Office)
Stonebridge Trading Estate
Sibree Road
Coventry
CV3 4FD

t 024 7630 8100
f 024 7630 8101
e sales@ney.co.uk

NEY Ireland
Unit 22 Blaris Ind Estate
Altona Road
Lisburn
BT27 5QB

t 028 92 673 000
f 028 92 672 999
e ireland@ney.co.uk

NEY Scotland
Block 2 Units 1-2-3
Bandeath Ind Est
Throsk, Stirling
FK7 7

t 01786 814 814
f 01786 814 812
e scotland@ney.co.uk



Sensys 110° & 165° CLIP ON FREE SWINGING HINGES



110°

FULL OVERLAY	0mm
Pack Qty: 200	
Description	Item No.
No Screw	277998

165°

FULL OVERLAY	0mm
Pack Qty: 50	
Description	Item No.
No Screw	277999

- Concealed hinge with clip on installation
- Quality classification under EN 15570, Level 3
- For door thickness 15 - 24mm 110°
- For door thickness 15 - 32mm 165°
- Cup diameter 35mm / Cup depth 11.6mm
- Integrated +/- 2mm overlay adjustment
- Integrated depth adjustment + 3mm / - 2mm
- Height adjustment at mounting plate
- Opening angle can be reduced with accessories
- Hinge arm & cup material: nickel plated steel

Push Open Mechanism: See page 13 for more information



Sensys 110° CLIP ON HINGE TECHNICAL INFORMATION

MINIMUM REVEAL PER DOOR

Door Thickness mm	Cup distance C mm					
	3.0	4.0	4.5	5.0	6.0	7.0
15	0.2	0.2	0.2	0.2	0.2	0.2
16	0.3	0.3	0.3	0.3	0.3	0.3
17	0.4	0.4	0.4	0.4	0.4	0.4
18	0.6	0.6	0.6	0.6	0.6	0.5
19	0.8	0.8	0.8	0.8	0.7	0.7
20	1.1	1.0	1.0	1.0	1.0	0.9
21	1.4	1.3	1.3	1.3	1.2	1.2
22	2.2	1.8	1.7	1.6	1.6	1.5
23	3.0	2.6	2.4	2.2	2.0	1.9
24	3.9	3.4	3.2	3.0	2.6	2.4

Please note:

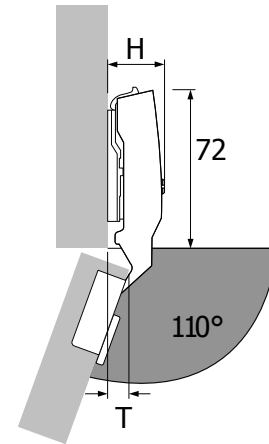
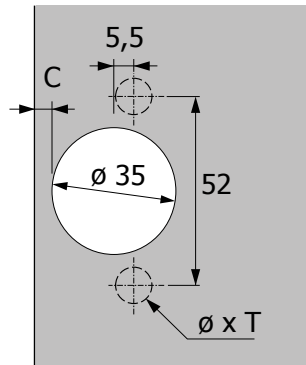
The table entries refer to doors with an edge radius of 1mm.

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

Radius 0 mm: Values shown in table + 0.4mm

Radius 3mm: Values shown in table - 0.6mm

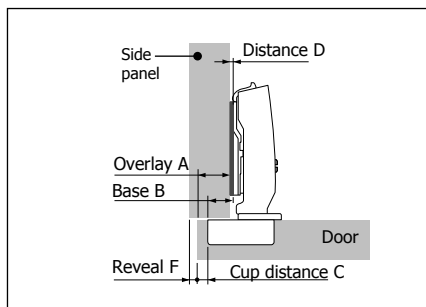
DRILLING PATTERN, PROTRUSIONS / INSTALLED DEPTH



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	25.0	8.5
Half Overlay	31.0	18.0
Inset	38.0	25.0

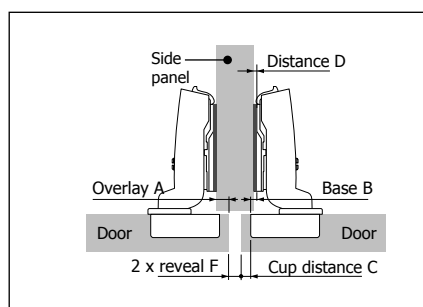
FULL OVERLAY



$$\text{Distance D} = C + B - A = \text{cup distance C} + 12.5\text{mm} - \text{overlay A}$$

Overlay mm	Cup distance C mm					
	3.0	4.0	4.5	5.0	6.0	7.0
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

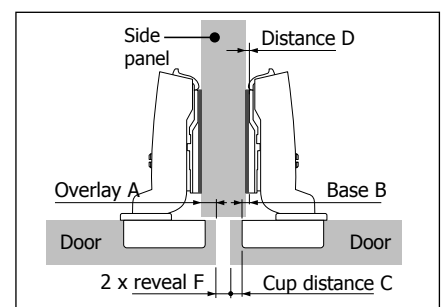
HALF OVERLAY



$$\text{Distance D} = C + B - A = \text{cup distance C} + 3\text{mm} - \text{overlay A}$$

Overlay mm	Cup distance C mm					
	3.0	4.0	4.5	5.0	6.0	7.0
0.5	5.5	6.5	7.0	7.5	8.5	9.5
1.5	4.5	5.5	6.0	6.5	7.5	8.5
2.5	3.5	4.5	5.0	5.5	6.5	7.5
3.5	2.5	3.5	4.0	4.5	5.5	6.5
4.5	1.5	2.5	3.0	3.5	4.5	5.5
5.5	0.5	1.5	2.0	2.5	3.5	4.5
6.5		0.5	1.0	1.5	2.5	3.5
7.5			0.0	0.5	1.5	2.5
8.5					0.5	1.5
9.5						0.5

INSET



$$\text{Distance D} = C + B + F = \text{cup distance C} - 4\text{mm} + \text{reveal F}$$

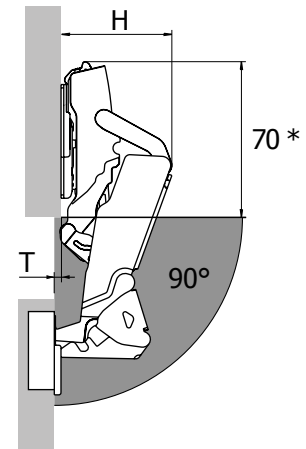
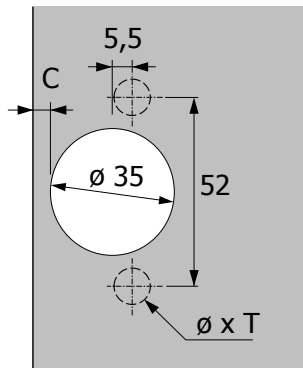
Door Thickness mm	Cup distance C mm					
	3.0	4.0	4.5	5.0	6.0	7.0
15		0.2	0.7	1.2	2.2	3.2
16		0.3	0.8	1.3	2.3	3.3
17		0.4	0.9	1.4	2.4	3.4
18		0.6	1.1	1.6	2.6	3.5
19		0.8	1.3	1.8	2.7	3.7
20	0.1	1.0	1.5	2.0	3.0	3.9
21	0.4	1.3	1.8	2.3	3.2	4.2
22	1.2	1.8	2.2	2.6	3.6	4.5
23	2.0	2.6	2.9	3.2	4.0	4.9
24	2.9	3.4	3.7	4.0	4.6	5.4

Sensys 165° CLIP ON HINGE TECHNICAL INFORMATION

MINIMUM REVEAL PER DOOR

Door Thickness mm	Cup distance C mm					
	3.0	4.0	4.5	5.0	6.0	7.0
15	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0
17	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
19	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
21	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
23	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
25	0.0	0.0	0.0	0.0	0.0	0.0
26	0.1	0.1	0.1	0.1	0.1	0.1
27	0.1	0.1	0.1	0.1	0.1	0.1
28	0.2	0.2	0.2	0.2	0.2	0.3
29*	0.4	0.4	0.4	0.4	0.5	0.6
30**	0.7	0.7	0.8	0.8	1.0	1.1
31**	1.1	1.2	1.3	1.4	1.6	
32**	1.7	1.9	2.0	2.2		

DRILLING PATTERN, PROTRUSIONS / INSTALLED DEPTH



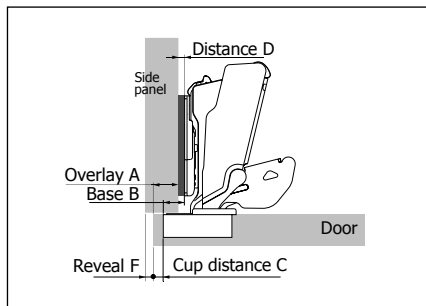
Please note:

*when using the opening angle limiter at 120°
 **when using the opening angle limiter at 105°

No door protrusion T up to distance D = 3, unobstructed interior for pull-outs.
 *Hinge closed: 80 mm

Door mounting option	H mm (max at 30°)	T mm (90°, D0)
Full Overlay	66	-3
Half Overlay	75.5	6.5

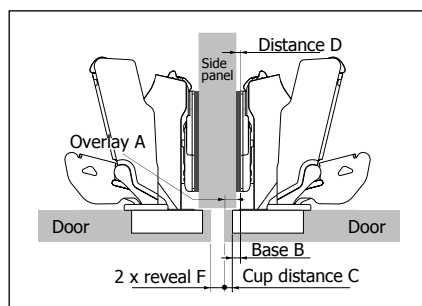
FULL OVERLAY



Distance D = C + B - A =
 cup distance C + 12.5mm - overlay A

Overlay mm	Cup distance C 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

HALF OVERLAY



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

Overlay mm	Cup distance C mm					
	3.0	4.0	4.5	5.0	6.0	7.0
	Distance D mm					
-2	8.0	9.0	9.5	10.0	11.0	12.0
-1	7.0	8.0	8.5	9.0	10.0	11.0
0	6.0	7.0	7.5	8.0	9.0	10.0
1	5.0	6.0	6.5	7.0	8.0	9.0
2	4.0	5.0	5.5	6.0	7.0	8.0
3	3.0	4.0	4.5	5.0	6.0	7.0
4	2.0	3.0	3.5	4.0	5.0	6.0
5	1.0	2.0	2.5	3.0	4.0	5.0
6	0.0	1.0	1.5	2.0	3.0	4.0
7		0.0	0.5	1.0	2.0	3.0
8				0.0	1.0	2.0
9					0.0	1.0
10						0.0