

SAMSUNG FURNITURE FITTINGS





As a much more reliable business partner for you

We, SAMSUNG Precision Ind. corp., are one of the leading manufacturers of functional furniture hardware.

Our main items cover all hardware parts for kitchen and furniture, such as door hinge, door damper, drawer damper drawer runner & slide, soft-closing system, system furniture, roller system for window and so on.

SAMSUNG provides fine products that are engineered and manufactured with the high quality standards and will give years of satisfying service, certified with ISO 9001, FIRA, LGA, KSA, United States Testing Company, etc. It means that you are assured of consistent quality in every SAMSUNG's products.

For the last over 35 years, SAMSUNG has accumulated a

massive technical and manufacture know-how, allowed to develop new solutions to fulfill the requirements of market place with its patented irex system

We, over 400 employees in Samsung Precision Ind. have come together in mind and body to put forth all efforts into making Samsung irex brand. as the better hardware company, And we are even now striving for achieving the more reliable business partner for you.

Please be kindly aware that our goal is not the best

company but to be the much more reliable business partner for you.

We expect that the information here gives you a better idea of the scope and scale of your business operations.

And we thank you for your reliable partnership and your sincere support.





QUALITY GUARANTEE

We provide fine products that are engineered and manufactured with the high quality standards and will give years of satisfying service. SAMSUNG stands behinds its products and warrants them to be free from Defects in material and workmanship.

SAMSUNG, therefore, guarantees the replacement of any defective product Subject to this warranty.



CONTENTS





Company Outline _ 04

Damper Hinge _ 06

Hinge _ 32

Damper _ 68

Drawer _ 72

Damping Under Rail _ 79

Ball Bearing Slide _ 82

Gas Shock Absorber _ 84

Damping Gas Shock Absorber _ 86

COMPANY OVERVIEW

We are dedicated to ourselves to make human-friendly and environment-friendly products, integrating digital technology on traditional furniture hardware.

Company	Samsung Precision Ind. Co., Ltd
CEO	Chul-Soo Pyo, Jin-Ho Pyo
Head office/plant	178-47 Gajwa-dong Seo-gu Incheon Korea
Capital	7.8 billion Won
Main Item	Furniture Hardware, Windows & Doors' Roller System, System Furniture

HISTORY

1970~1980	02.1979	Established Samsung Precision Ind.
19/0~1980	12.1986	Moving the head office to Incheon
	07.1987	Selected as "The prospected small and medium enterprises"
	04.1988	Switchover the incorporation to Samsung Precision Ind. Co., Ltd
1000	11.1991	Exporting HINGE PLANT to Hebeisheng in China
1990	05.1992	Exporting DRAWER RUNNER PLANT to Shanghai in China
	11.1993	Awarded a commendation by the minister of trade and industry
	02.1994	On a TV program "A small enterprise, big economy" on KBS
	11.1994	Certified by FILA in U.K and ANSI/BHMA in U.S.A
	01.1995	Launched a brand name "IREX"
	03.1998	Selected as "The coming Venture Business"
	03.1999	Awarded a presidential commendation (Export part)
	08.1999	Assignment as a federal supporting enterprise (Export part)
	12.1999	Certified by Korean Standards Association (KSA/ISO 9001)
	12.1999	Authorizing an institute of Samsung Precision Ind. Co., Ltd
0000	09.2000	An increase in the capital
2000	11.2000	Certified by KSA (KS-Cup hinge part)
	06.2001	Certified by KSA (KS-Sash roller part)
	06.2002	Certified by KSA (The Best Product-Hinge part)
	07.2003	Certified by KSA (The Best Product-Wardrobe part)
	08.2003	An overseas investment : Tianjin irex Samsung Precision Ind. Co., Ltd in China
	03.2004	Patent for eccentric screw of kitchen furniture's hinge (Patent No. 426408)
		(Holding 36 of national and international patents)
	06.2004	Moving the head office to Gajwa-dong, Incheon
	11.2004	Tianjin irex certified by KSA (Hinge and Sash roller part)
	02.2005	Selected as "The INNO-BIZ (Innovation Business)" by the Small and Medium Business
		Administration
	12.2005	Overseas Investment : Tianjin, China factory(2nd amount invested: USD 2,000,000)
	02.2006	Official Commendation from small & medium business special committe directly
		responsible to the President
	12.2008	Winning a prize for exporting USD 3,000,000
	08.2009	ISO 14001 Certificate acquired
	11.2010	Winning a prize for exporting USD 5,000,000

CERTIFICATE



U.S.A industrial standard ANSI/BIFMA



Korean industrial standard KS



ISO 9001



U.K industrial standard FIRA



Research institute



LGA Report (Door Damper)















Korean industrial standard



INNO-BIZ



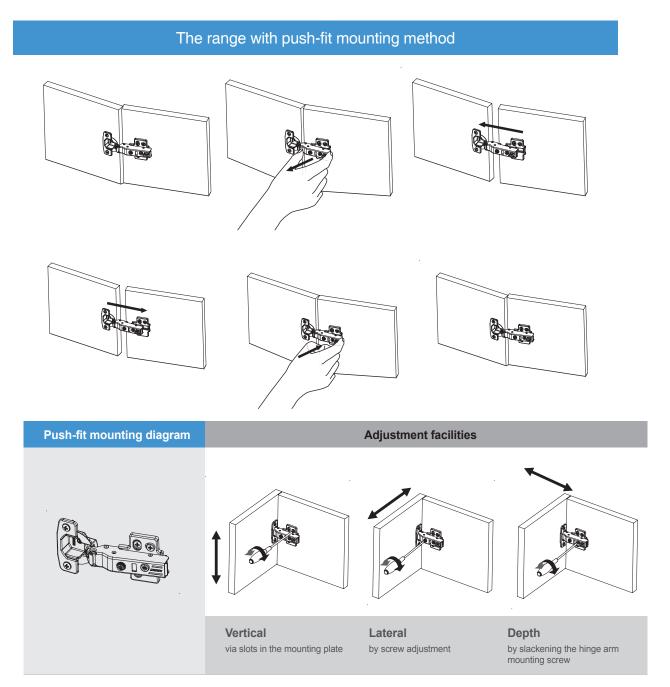
NEW SOFT-CLOSING HINGE



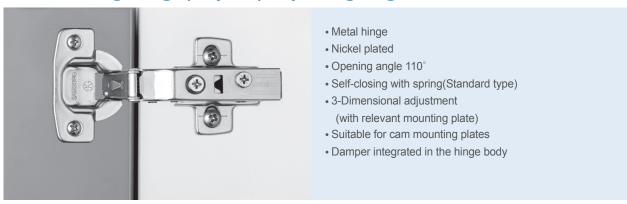
New Soft-Closing Hinge Clip on system

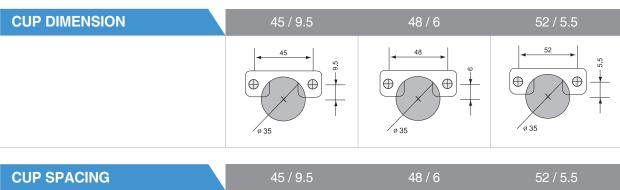
Door is assembled on the cabinet side easily by sticking the two hooks under the hinge body on the outer part of the mounting plate and pressing smoothly on the rear part of the hinge body.

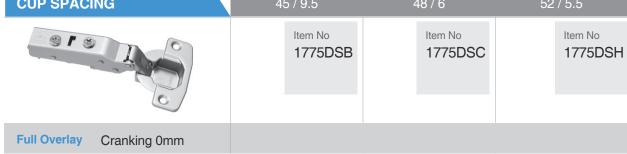
For disassembly, the button on the rear of the hinge body has to be pressed.



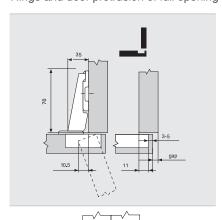
Soft-Closing Hinge(Clip on), Opening angle 110°







Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle

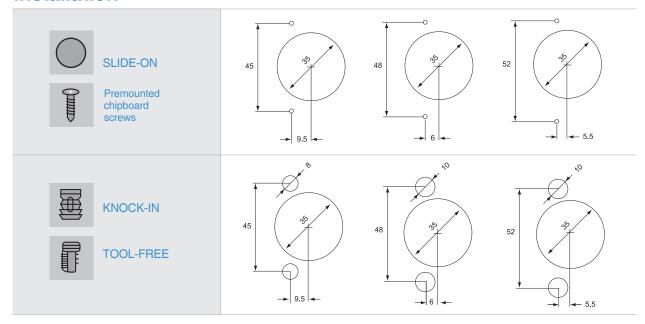




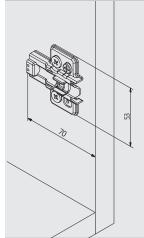
The above figures are based on doors with radiused edges (R=1mm)

			F	ull	Ov	erla	ay					Half Overlay											Inset					
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H: Mounting plate height

Installation



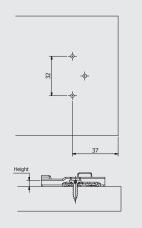
Mounting Plate for Soft-Closing Hinge(Clip on type)

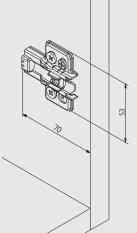


- Material : steel
- Finish : nickel
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.0mm	0SD
3mm	7.5mm	3SD

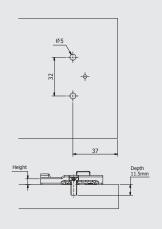


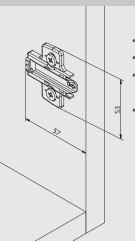


- Material : steel
- Fnish : nickel
- Fixing with pre-mounted system screws φ 6mm
- With height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.0mm	0SDE
3mm	7.5mm	3SDE



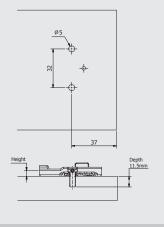


- Material : steel
- Fnish : nickel
- Fixing with pre-mounted system screws∮6mm
- With height adjustment

±2mm



Spacing	Height	Item No.
0mm	5.0mm	0SCE
3mm	7.5mm	3SCE
5mm	9.5mm	5SCE

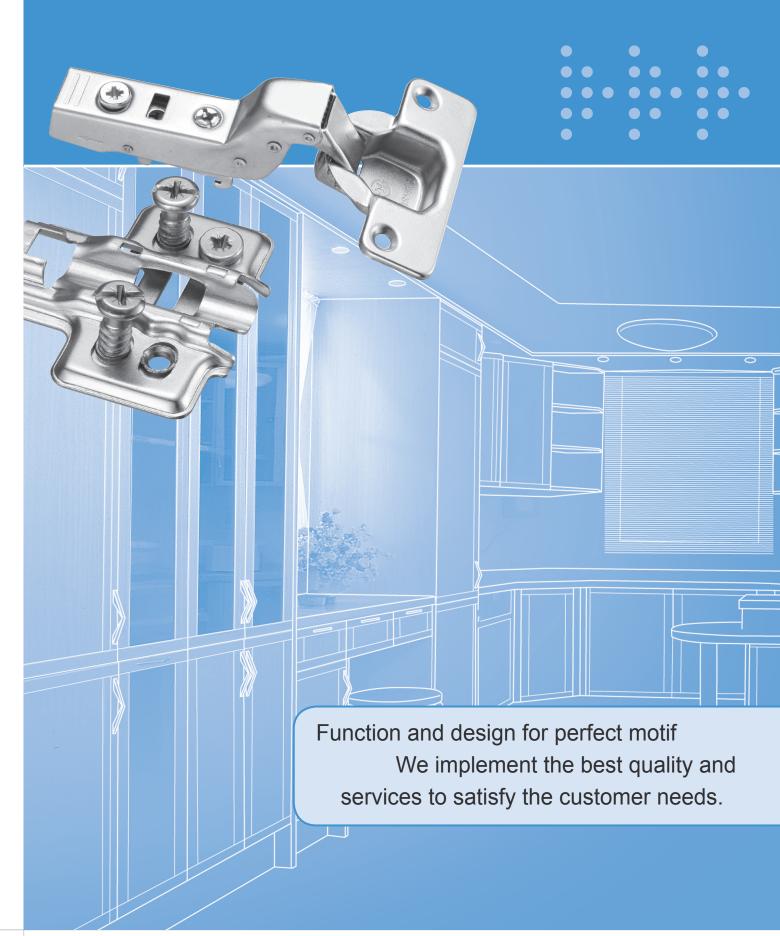


Mounting Plate for Soft-Closing Hinge(Clip on type)





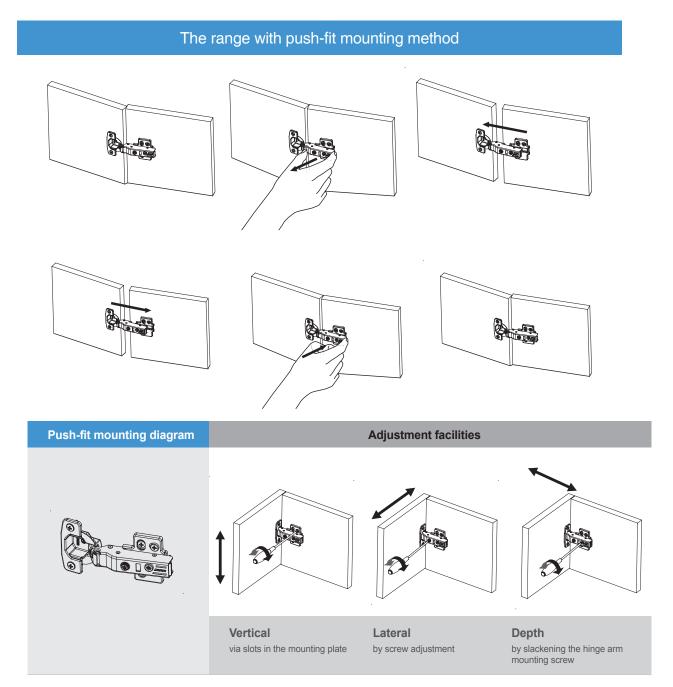
SOFT-CLOSING HINGE



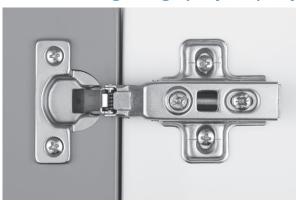
Soft-Closing Hinge Clip on system

Door is assembled on the cabinet side easily by sticking the two hooks under the hinge body on the outer part of the mounting plate and pressing smoothly on the rear part of the hinge body.

For disassembly, the button on the rear of the hinge body has to be pressed.



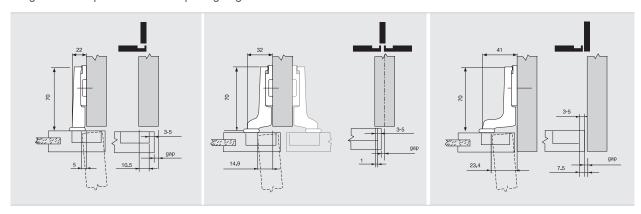
Soft-Closing Hinge(Clip on), Opening angle 94°



- Metal hinge
- Nickel plated
- \bullet Opening angle 94°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)
- Damper integrated in the hinge body

CUP SPACING	38 / 8.0	
	Item No 265DSB	
Full Overlay Cranking 0mm		
	Item No 266DSB	
Half Overlay Cranking 10mm		
	Item No 267DSB	
Inset Cranking 18mm		

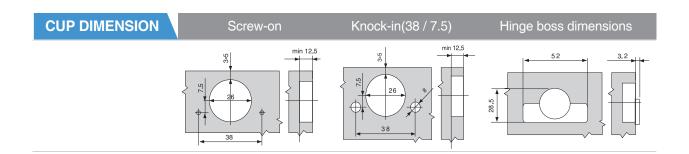
Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0mm) Hinge and door protrusion of full opening angle





The above figures are based on doors with radiused edges (R=1mm)

			F	ull	Οv	erla	ay				Half Overlay							ay	у					Inset				et
Α											Α											Α						
	9.5	10.5	11.5	12.5	13.5	14.5	16.5	17.5	18.5	Н		1	2	3	4	5	6	7	8	9	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H: Mounting plate height



Soft-Closing Hinge(Slide on), Opening angle 110°

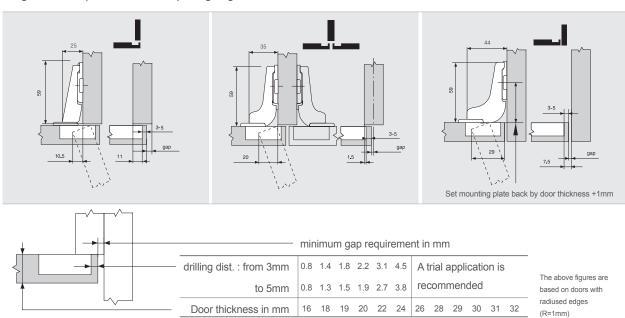


- Metal hinge
- Nickel plated
- \bullet Opening angle 110 $^{\circ}$
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Damper integrated in the hinge body

CUP DIMENSION	45 / 9.5	48 / 6	52 / 5.5
	45 ⊕ 45 ⊕ 35	48 ⊕ 0 35	52 w 35

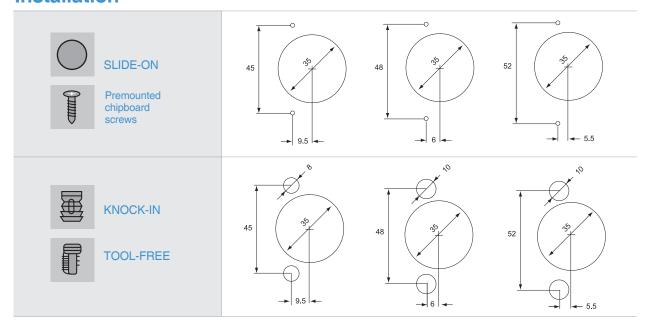
CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 555DSB	Item No 555DSC	Item No 555DSH
Full Overlay Cranking 0mm			
Oraning on in			
210	Item No 556DSB	Item No 556DSC	Item No 556DSH
Half Overlay Cranking 10mm			
	Item No 557DSB	Item No 557DSC	Item No 557DSH
Inset Cranking 18mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle

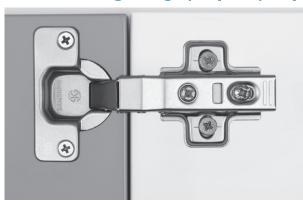


			F	ull	Ov	erl	ay							Half Overlay Inset							et							
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height

Installation



Soft-Closing Hinge(Clip on), Opening angle 110°

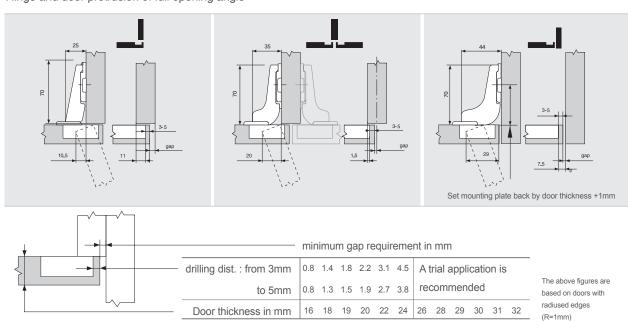


- Metal hinge
- Nickel plated
- \bullet Opening angle 110 $^{\circ}$
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Damper integrated in the hinge body

CUP DIMENSION	45 / 9.5	48 / 6	52 / 5.5
	45	48 ⊕ 0 35	52 \$\begin{align*} \text{\$\frac{1}{2} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\

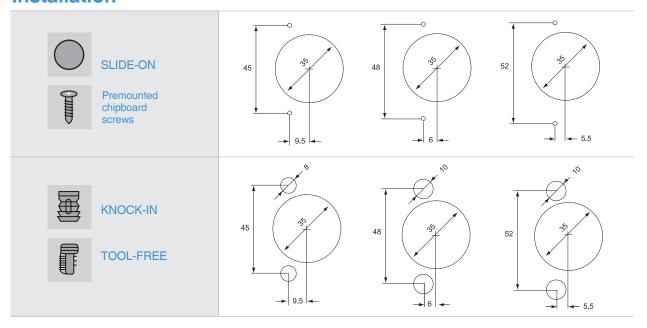
CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 575DSB	Item No 575DSC	Item No 575DSH
Full Overlay Cranking 0mm			
	Item No 576DSB	Item No 576DSC	Item No 576DSH
Half Overlay Cranking 10mm			
TO I SO	Item No 577DSB	Item No 577DSC	Item No 577DSH
~			
Inset Cranking 18mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



Full Overlay							Half Overlay									Inset												
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H: Mounting plate height

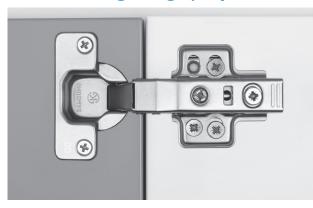
Installation



CUP DIMENSION

Soft-Closing Hinge(Clip on with Cam), 110° opening Angle

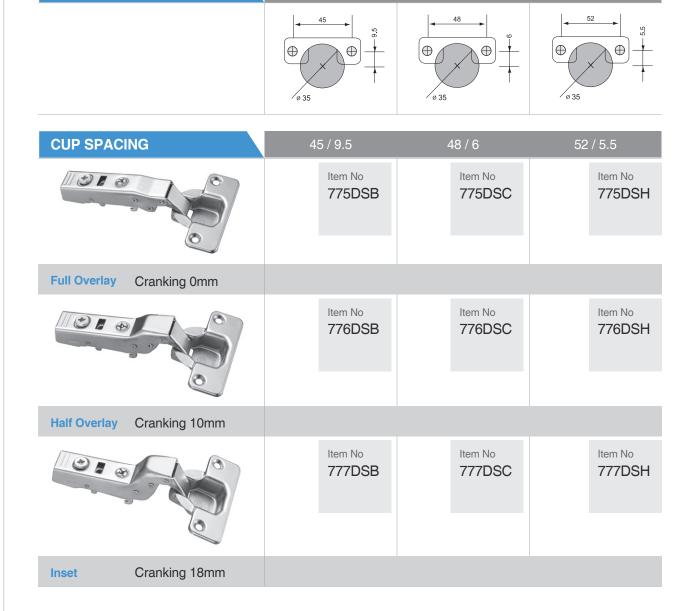
45 / 9.5



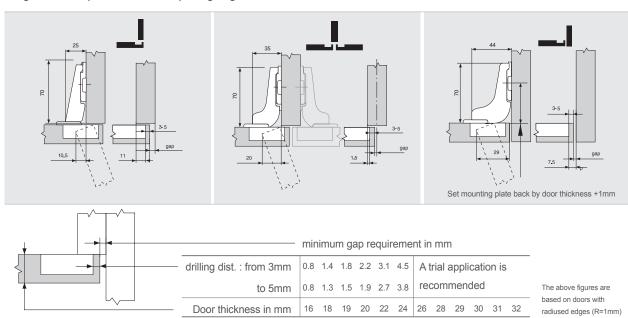
- Metal hinge
- Nickel plated
- Opening angle 110°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Suitable for cam mounting plates
- Damper integrated in the hinge body

48 / 6

52 / 5.5

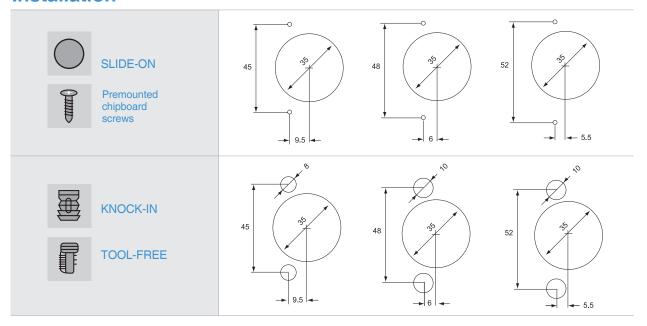


Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle

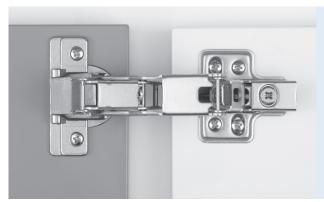


Full Overlay							Half Overlay										Inset											
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height

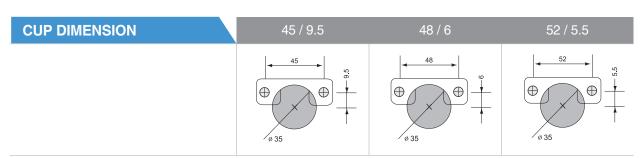
Installation



Soft-Closing Hinge(Clip on), Opening angle 165°

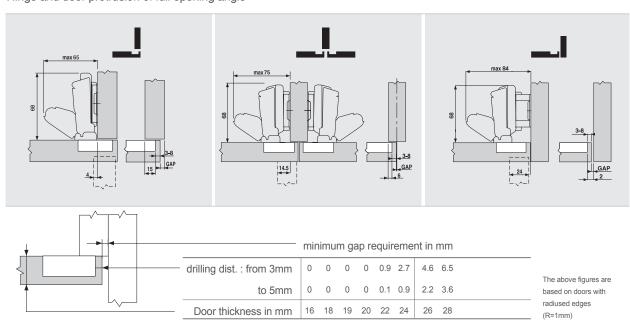


- Metal hinge
- Nickel plated
- Opening angle 165°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Damper integrated in the hinge body



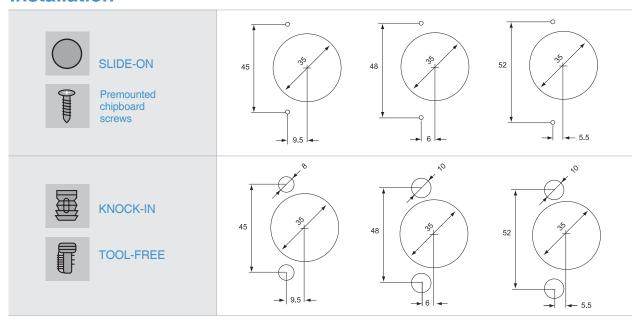
CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 855DSB	Item No 855DSC	Item No 855DSH
Full Overlay Cranking 0mm			
	Item No 856DSB	Item No 856DSC	Item No 856DSH
Half Overlay Cranking 10mm			
	Item No 857DSB	Item No 857DSC	Item No 857DSH
Inset Cranking 18mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



Full Overlay						Half Overlay									Inset													
Α											Α											Α						
	13	14	15	16	17	18	19	20	21	Н		4	5	6	7	8	9	10	11	12	Н		-2	-1	0	1	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height

Installation

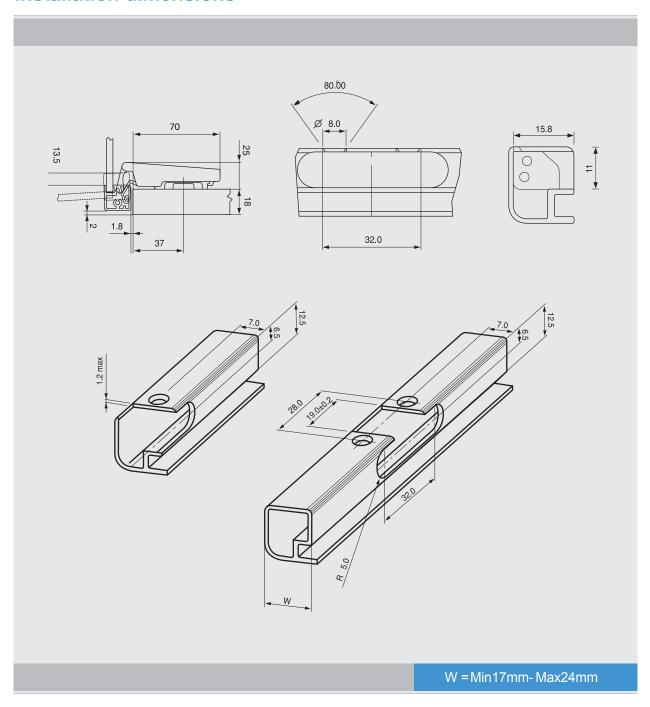


Clip on hinge for aluminium profiles, Opening angle 110°



- Metal hinge
- Nickel plated
- Opening angle 110°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Damper integrated in the hinge body

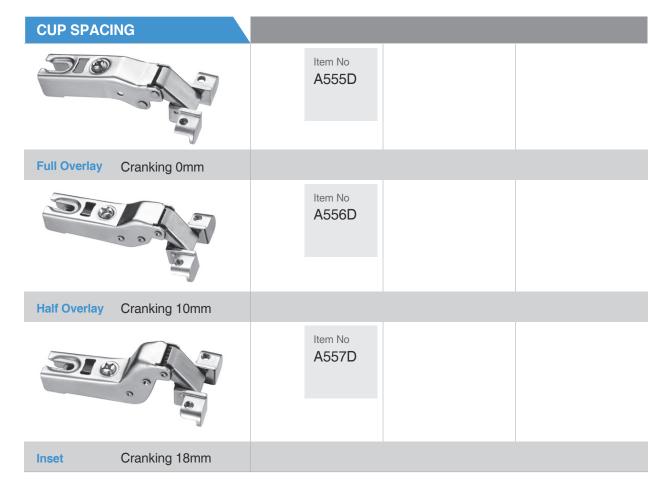


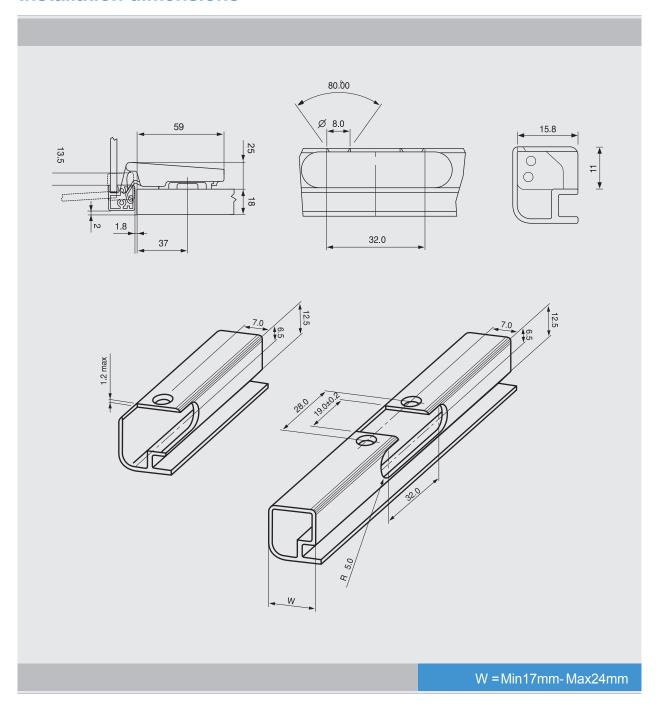


Clip on hinge for aluminium profiles, Opening angle 110°

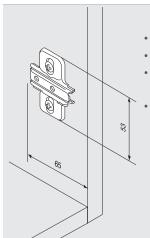


- Metal hinge
- Nickel plated
- Opening angle 110°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Damper integrated in the hinge body





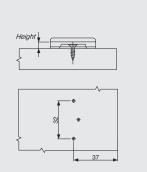
Mounting Plate for Soft-Closing Hinge(Clip on type)

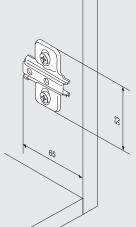


- Material : steel
- Nickel plated
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5mm	0SC
3mm	7mm	3SC
5mm	9mm	5SC

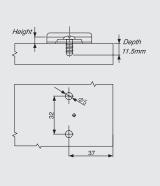


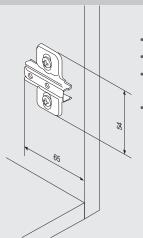


- Material : steel
- Nickel plated
- Fixing with pre-mounted system screws\(\phi \)6mm
- With height adjustment ±2mm



Spacing	Height	Item No.
0mm	5mm	0SCE
3mm	7mm	3SCE
5mm	9mm	5SCE

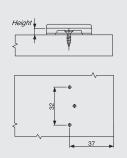




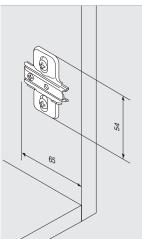
- Material : steel
- Nickel plated
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5mm	0SD
3mm	7mm	3SD



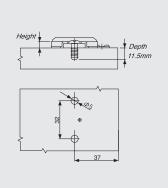
Mounting Plate for Soft-Closing Hinge(Clip on type)

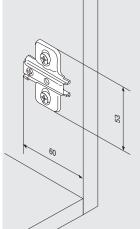


- Material : steel
- Nickel plated
- Fixing with pre-mounted system screws \$ 6mm
- With height adjustment ±2mm



Spacing	Height	Item No.
0mm	5mm	0SDE
3mm	7mm	3SDE

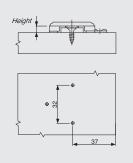


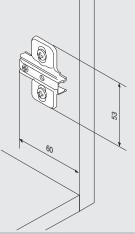


- Material : steel
- Nickel plated
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm
- Application item code : 265, 855



Spacing	Height	Item No.
0mm	5mm	0SC
3mm	7mm	3SC
5mm	9mm	5SC

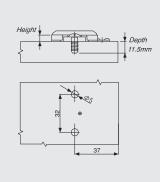




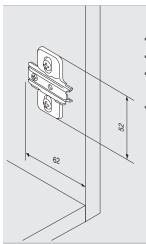
- Material : steel
- Nickel plated
- Fixing with pre-mounted system screws\(\phi \)6mm
- With height adjustment ±2mm
- Application item code : 265, 855



Spacing	Height	Item No.
0mm	5mm	0SCE
3mm	7mm	3SCE
5mm	9mm	5SCE



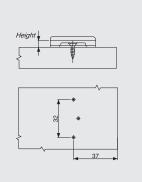
Mounting Plate for Soft-Closing Hinge(Slide on type)

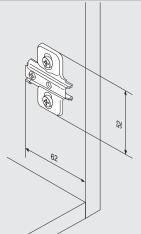


- Material : steel
- Nickel plated
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5mm	0SA
3mm	7mm	3SA
5mm	9mm	5SA

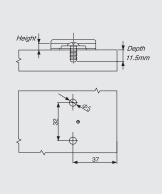




- Material : steel
- Nickel plated
- Fixing with pre-mounted system screws \$ 6mm
- With height adjustment ±2mm



Spacing	Height	Item No.
0mm	5mm	0SAE
3mm	7mm	3SAE
5mm	9mm	5SAE







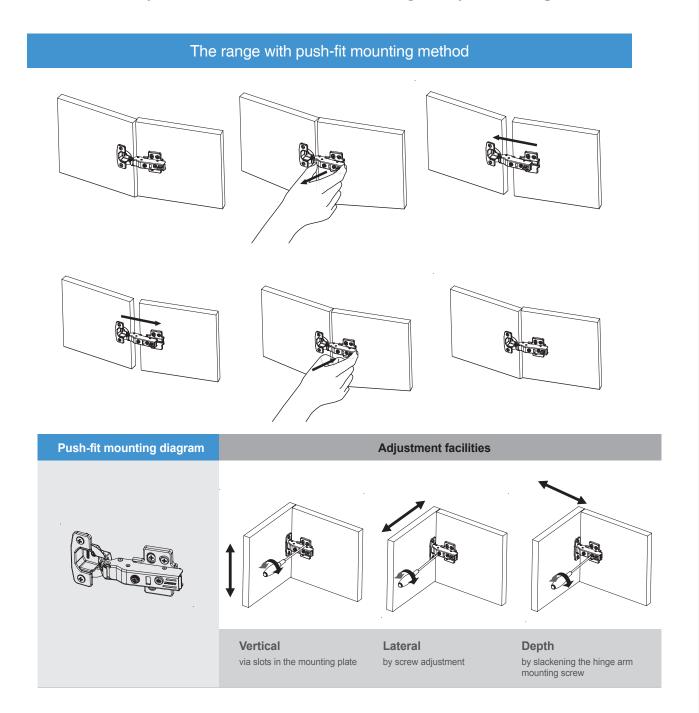




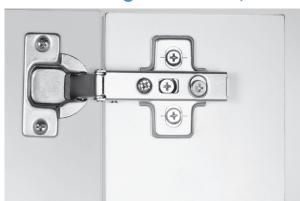
Clip on system

Door is assembled on the cabinet side easily by sticking the two hooks under the hinge body on the outer part of the mounting plate and pressing smoothly on the rear part of the hinge body.

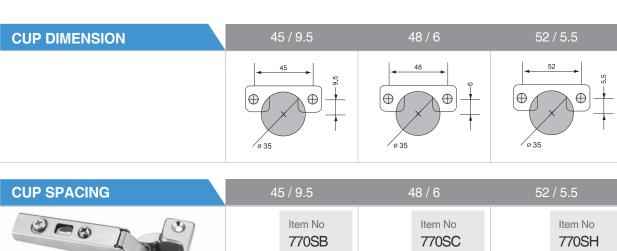
For disassembly, the button on the rear of the hinge body has to be pressed.



CLIP ON hinge with Cam, 110° opening Angle

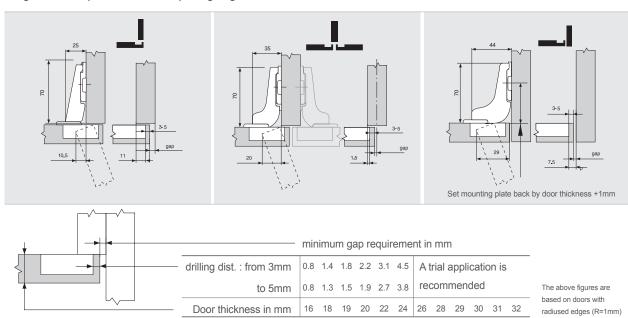


- Material : steel
- Nickel plated
- Opening angle 110°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- Suitable for cam mounting plates



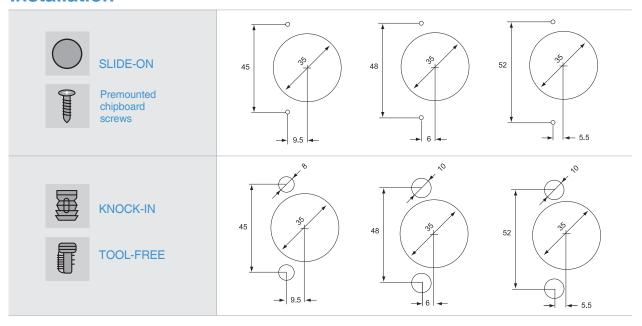
	Item No 770SB	Item No 770SC	Item No 770SH
Full Overlay Cranking 0mm			
	Item No 780SB	Item No 780SC	Item No 780SH
Half Overlay Cranking 10mm			
3-0-3	Item No 788SB	Item No 788SC	1tem No 788SH
Inset Cranking 18mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



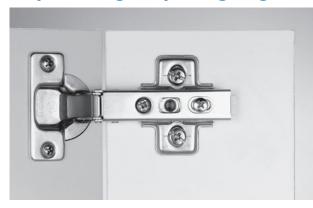
Full Overlay							Half Overlay									Inset												
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height

Installation



CUP DIMENSION

Clip on hinge, Opening angle 110°



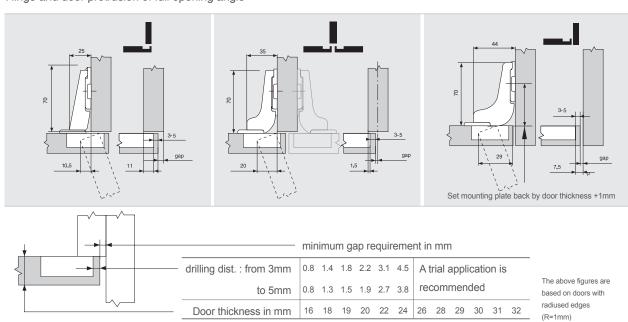
Cranking 18mm

- Material : steel
- Nickel plated
- Opening angle 110°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)

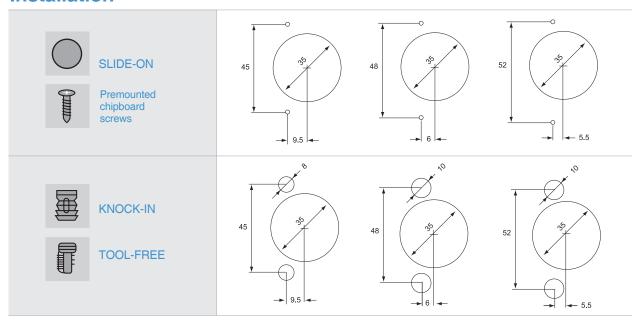
	45 using the second sec	48 Ø 35	52 9 35
CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 570SB	Item No 570SC	Item No 570SH
Full Overlay Cranking 0mm			
	Item No 580SB	Item No 580SC	Item No 580SH
Half Overlay Cranking 10mm			
	Item No 588SB	Item No 588SC	Item No 588SH

Inset

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



	Full Overlay								Half Overlay										Inset									
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height



Clip on hinge, Opening angle 85°

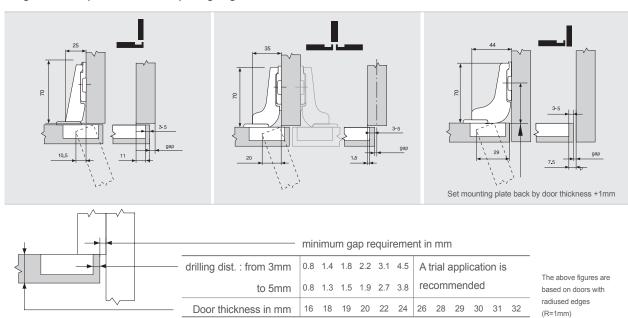


- Metal hinge
- Nickel plated
- Opening angle 85°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)

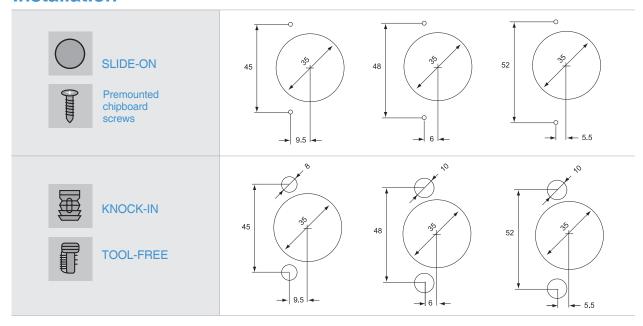
CUP DIMENSION	45 / 9.5	48 / 6	52 / 5.5
	45 w 35	48 ⊕ 35	52 © 35
CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No	Item No	Item No

CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 571SB	Item No 571SC	Item No 571SH
Full Overlay Cranking 0mm			
	Item No 581SB	Item No 581SB	Item No 581SB
Half Overlay Cranking 10mm			
	Item No 589SB	Item No 589SB	Item No 589SB
Inset Cranking 18mm			

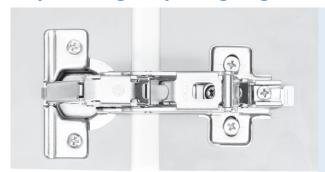
Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



	Full Overlay								Half Overlay										Inset									
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H: Mounting plate height



Clip on hinge, Opening angle 135°

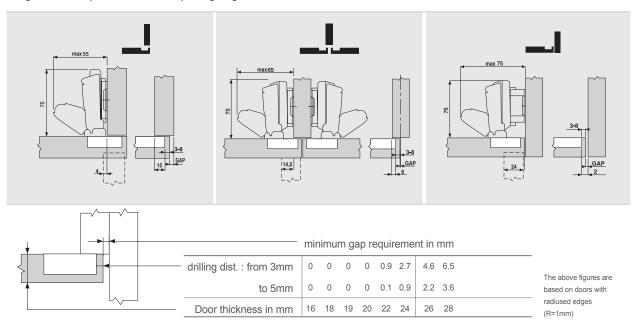


- Metal hinge with steel boss
- Nickel plated
- Opening angle 135°
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)

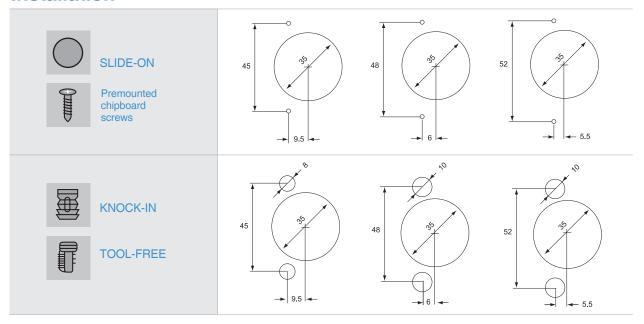
CUP DIMENSION	45 / 9.5	48 / 6	52 / 5.5
	45 9 35	48 © Ø 35	52 (2) (3) (3) (4) (5) (6) (7) (8) (9) (9) (9) (10) (

CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 970SB	Item No 970SC	Item No 970SH
Full Overlay Cranking 0mm			
	Item No 980SB	Item No 980SC	Item No 980SH
Half Overlay Cranking 10mm			

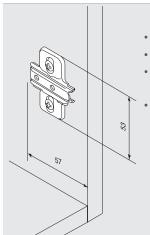
Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



Full Overlay							Half Overlay										Inset											
Α											Α											Α						
	13	14	15	16	17	18	19	20	21	Н		4	5	6	7	8	9	10	11	12	Н		-2	-1	0	1	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height



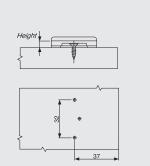
Mounting Plate for Clip On type

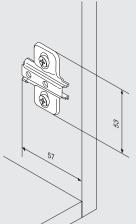


- Material : steel
- Nickel plated
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.5mm	0SC
3mm	8.5mm	3SC

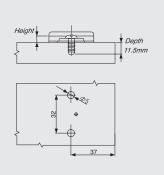


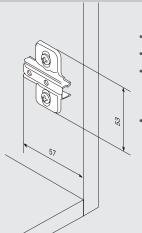


- Material : steel
- Nickel plated
- Fixing with pre-mounted system screws ϕ 6mm
- With height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.5mm	0SCE
3mm	8.5mm	3SCE

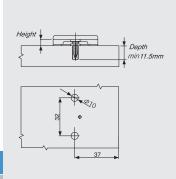




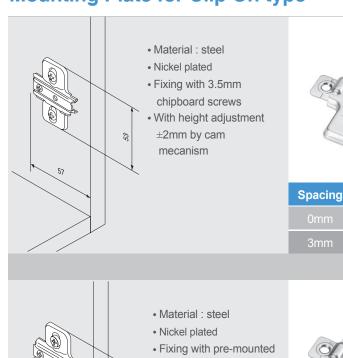
- Material : steel
- Nickel plated
- Knock-in assembly with premounted 10mm dowels
- With height adjustment +2mm



Spacing	Height	Item No.
0mm	5.5mm	0SCK
3mm	8.5mm	3SCK

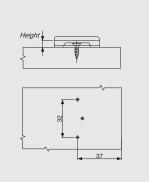


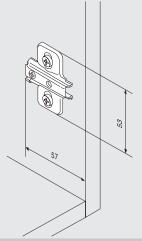
Mounting Plate for Clip On type





Spacing	Height	Item No.
0mm	5.5mm	0SD
3mm	8.5mm	3SD



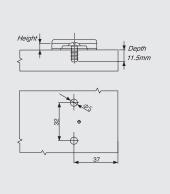


- system screws

 6mm
- With height adjustment ± 2 mm by cam mecanism



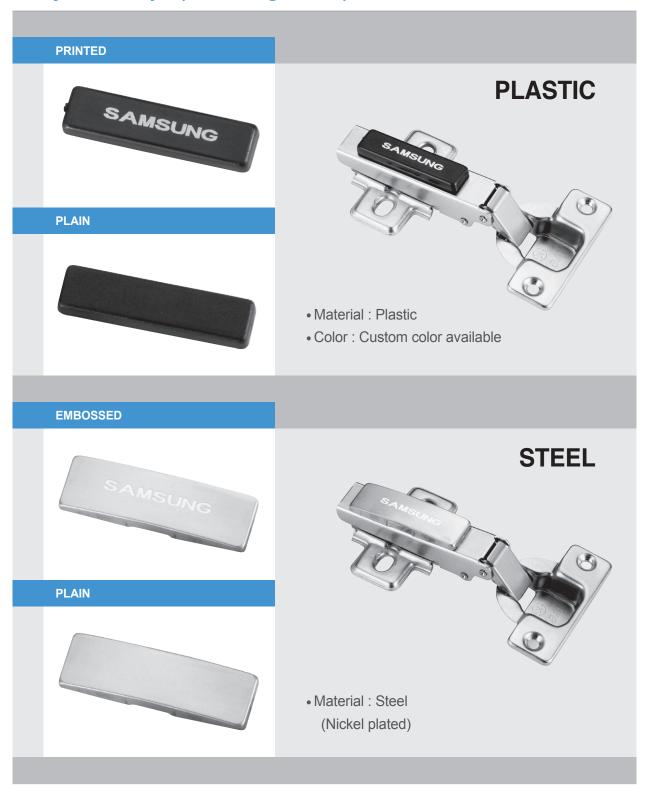
Spacing	Height	Item No.
0mm	5.5mm	0SDE
3mm	8.5mm	3SDE





MEMO

Body cover caps (For Straight Arm)

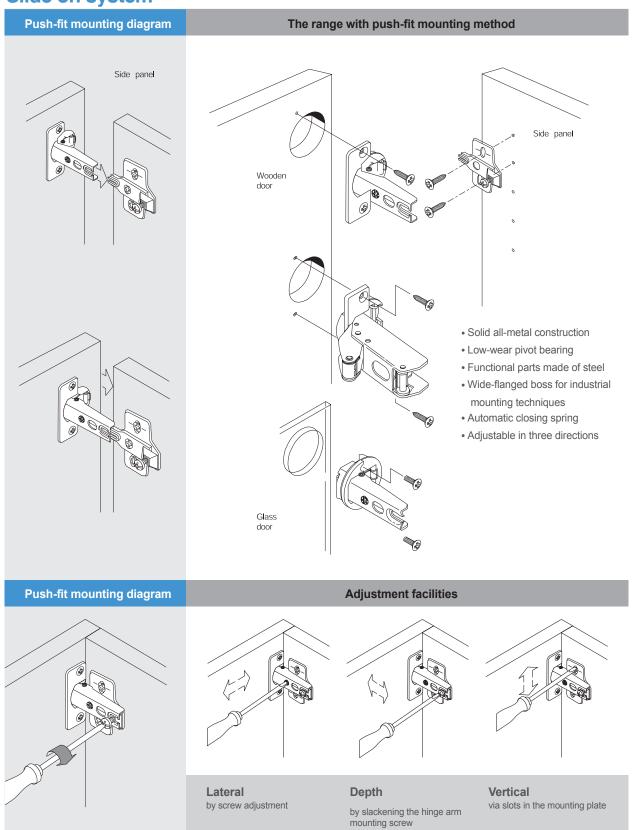


SLIDE ON SYSTEM

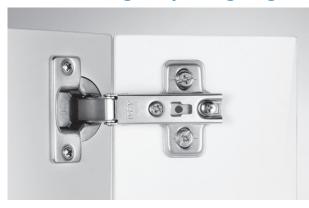


- ► 3-dimensional adjustment for precise door alignment
- ► Economic, Functional and long lasting

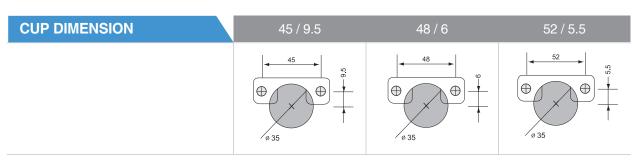
Slide on system



Slide on hinge, Opening angle 110°

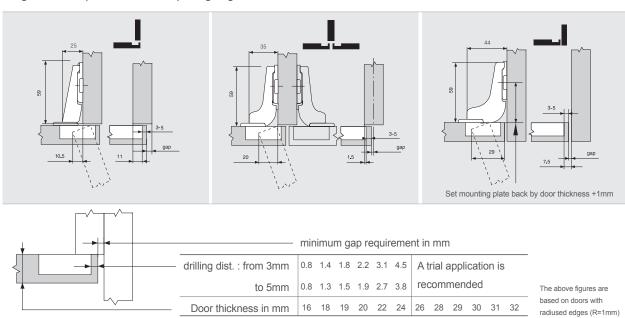


- Metal hinge
- Nickel plated
- Opening angle 110°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)
- spring type : strong spring (N & W-type)

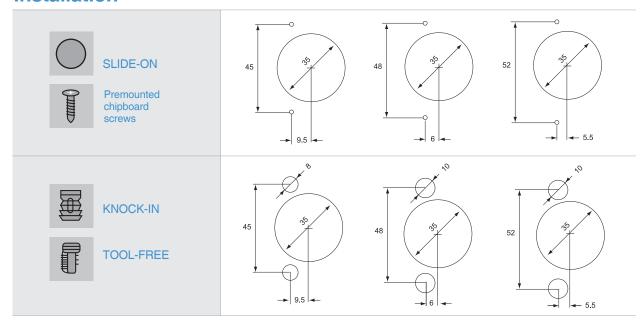


CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 550SBN	Item No 550SCN	Item No 550SHN
Full Overlay Cranking 0mm			
	Item No 560SBN	Item No 560SCN	Item No 560SHN
Half Overlay Cranking 10mm			
	Item No 568SBN	Item No 568SCN	Item No 568SHN
Inset Cranking 18mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



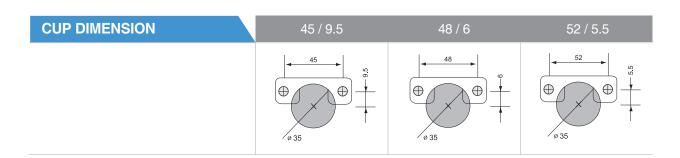
			F	ull	Ov	erl	ay							Н	alf	Ov	erl	ay								lr	ารย	et
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height



Slide on hinge, Opening angle 135°

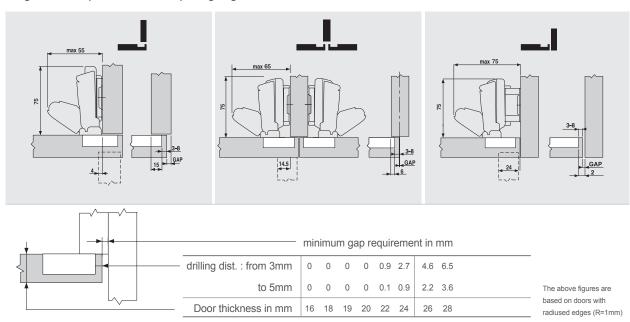


- Metal hinge
- Nickel plated
- Opening angle 135°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)

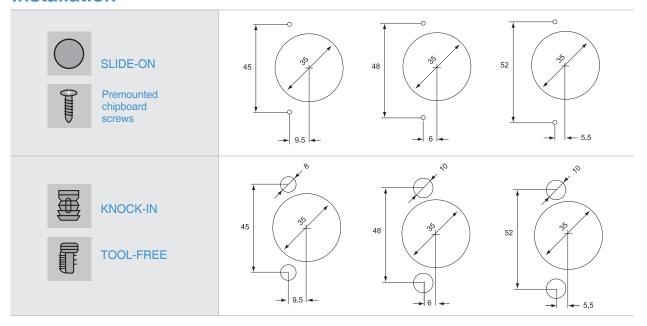


CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 950SB	Item No 950SC	Item No 950SH
Full Overlay Cranking 0mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



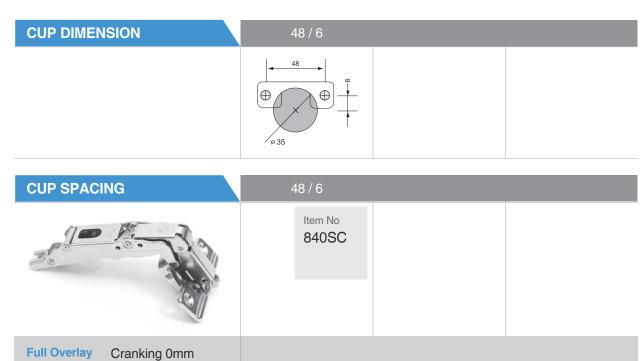
			F	ull	Ov	erl	ay							Н	alf	Ov	erl	ay								l	nse	et
Α											Α											Α						
	13	14	15	16	17	18	19	20	21	Н		4	5	6	7	8	9	10	11	12	Н		-2	-1	0	1	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height



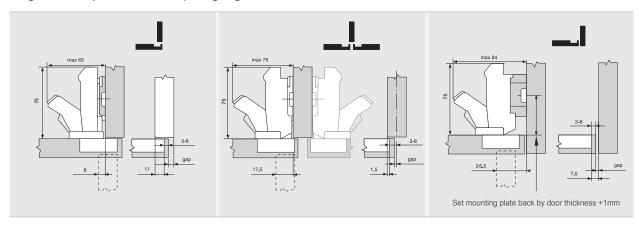
Slide on hinge, Opening angle 170°



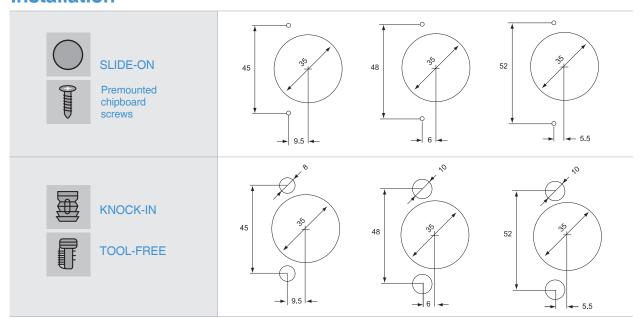
- Metal hinge with steel boss
- Nickel plated
- Opening angle 170°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)
- For Inset application : use hinge for half overlay application and 9mm space mounting plate
- Half over lay can be available by adjusting mounting plate



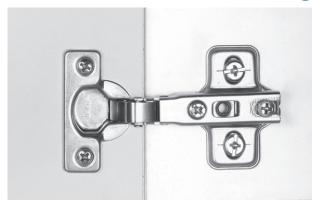
Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



			F	ull	Ov	erla	ay							Н	alf	Ov	erl	ay								lı	ıse	et
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H: Mounting plate height



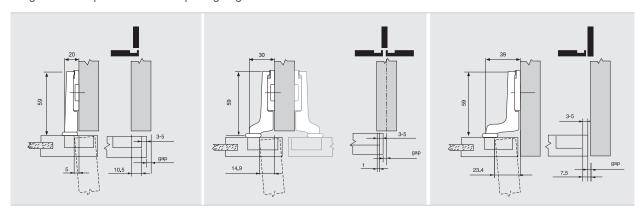
Slide on bathroom cabinet hinge, Opening angle 94°



- Metal hinge
- Nickel plated
- Steel boss with spring
- Opening angle 94°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)

CUP SPACING	38 / 7.5
	Item No 260 SB
Full Overlay Cranking 0mm	
,	Item No
	270 SB
Half Overlay Cranking 10mm	
	Item No 278 SB
Inset Cranking 18mm	

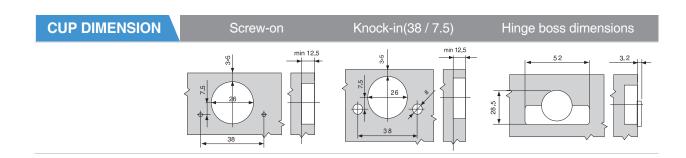
Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0mm) Hinge and door protrusion of full opening angle





The above figures are based on doors with radiused edges (R=1mm)

			F	ull	Ov	erl	ay							Н	alf	Οv	erl	ay								l	ารย	et
Α											Α											Α						
	9.5	10.5	11.5	12.5	13.5	14.5	16.5	17.5	18.5	Н		1	2	3	4	5	6	7	8	9	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H: Mounting plate height



Slide on Glass door hinge, Opening angle 94°



- Nickel plated
- Glass door hinge all metal with nylon boss
- \bullet Opening angle 94°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)

CUP SPACING	38 / 7.5	
	Item No 260GB	
Full Overlay Cranking 0mm		
Clarking Offin		
	Item No 270GB	
Half Overlay Cranking 10mm		
	Item No 278GB	
Inset Cranking 18mm		

radiused edges

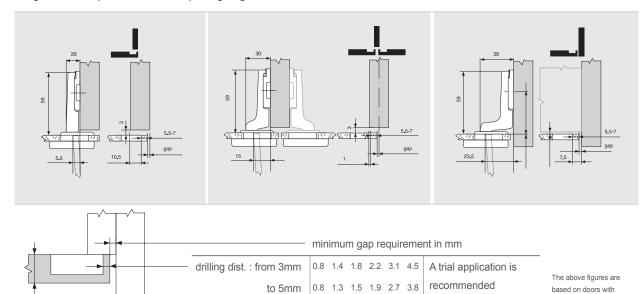
(R=1mm)

26 28 29 30 31 32

Installation dimensions

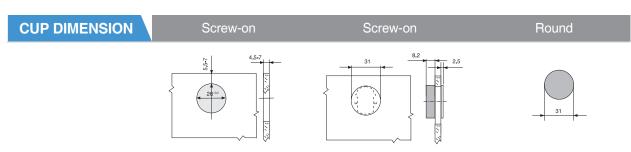
Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle

Door thickness in mm



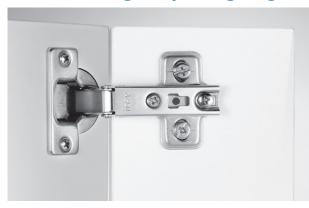


16 18 19 20 22 24

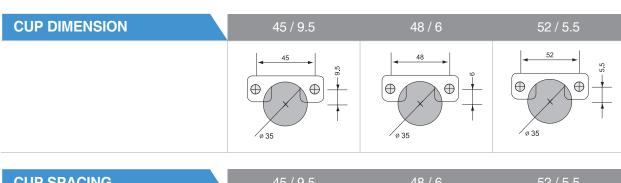




Slide on hinge, Opening angle 110°

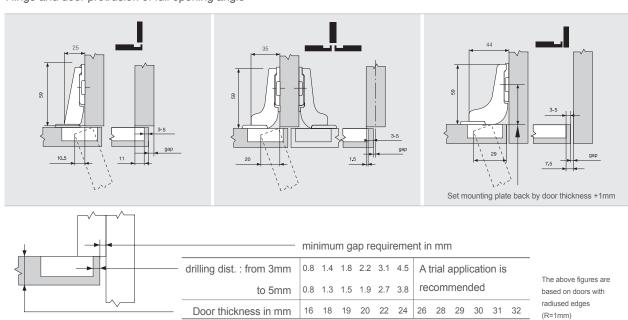


- Metal hinge
- Nickel plated
- \bullet Opening angle 110 $^{\circ}$
- Self-closing with spring(Standard type)
- 3-Dimensional adjustment (with relevant mounting plate)
- spring type : strong spring(W-type)

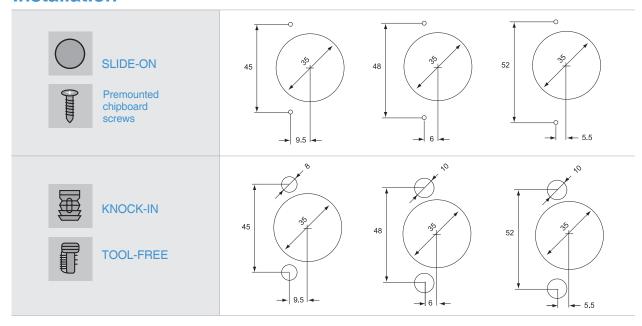


CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 550SBW	Item No 550SCW	Item No 550SHW
Full Overlay Cranking 0mm			

Hinge dimensions and gap calculation based on factory setting(mounting plate spacing= 0-9mm) Hinge and door protrusion of full opening angle



			F	ull	Ov	erl	ay							Н	alf	Ov	erl	ay								lı	ารย	et
Α											Α											Α						
	11	12	13	14	15	16	17	18	19	Н		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	Н		-2.5	-1.5	-0.5	0.5	Н	
						3	4	5	6	0							3	4	5	6	0		3	4	5	6	0	A : Door overlay
В			3	4	5	6				3	В			3	4	5	6				3	В						B : Drilling distance
	3	4	5	6						5		3	4	5	6						5							H : Mounting plate height



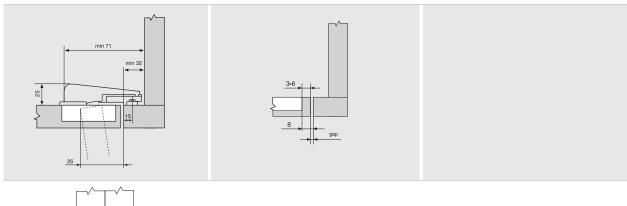
Blind corner hinge for wooden doors



- Metal hinge
- Nickel plated
- Steel boss with spring
- Opening angle 94°
- Self-closing with spring
- 3-Dimensional adjustment (with relevant mounting plate)
- For blind corner application

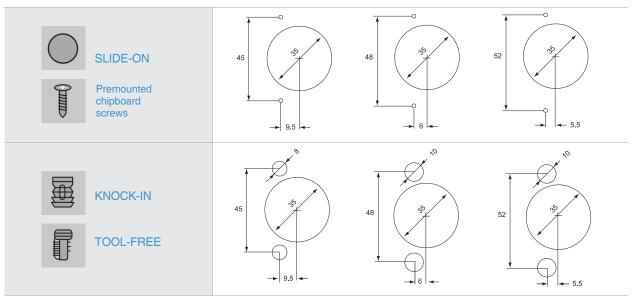
CUP DIMENSION	45 / 9.5	48 / 6	52 / 5.5
	45 9 35	48	52 \$\omega\$ 35

CUP SPACING	45 / 9.5	48 / 6	52 / 5.5
	Item No 590SB	Item No 590SC	Item No 590SH
Full Overlay			



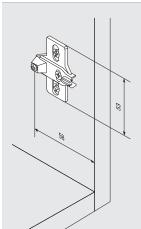


The above figures are based on doors with radiused edges (R=1mm)





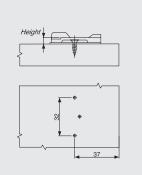
Mounting Plate for Slide on type

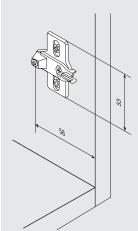


- Material : steel
- Nickel plated
- Fixing with 3.5mm chipboard screws
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.5mm	0SA
3mm	8.5mm	3SA

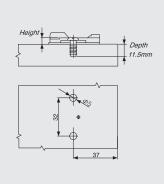


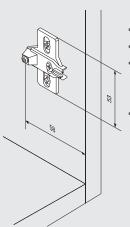


- Material : steel
- Fixing with pre-mounted \$\phi6mm\$ system screws
- With height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.5mm	0SAE
3mm	8.5mm	3SAE

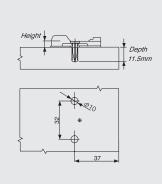




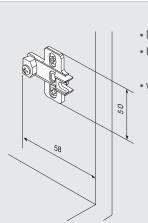
- Material : steel
- Nickel plated
- Knock-in assembly with premounted 10mm dowels
- with height adjustment ±2mm



Spacing	Height	Item No.
0mm	5.5mm	0SAK
3mm	8.5mm	3SAK



Mounting Plate for Slide on type

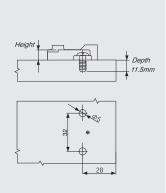


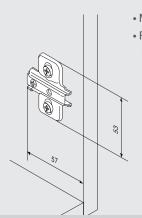
- Material : zinc
- Fixing with pre-mounted ø6mm system screws
- with height adjustment ±2mm



Spacing Height Item No.

18mm 22.5mm 18DB

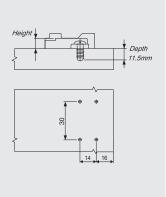


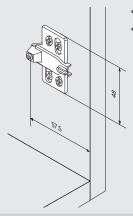


- Material : steel
- Fixing with 3.5mm chipboard screws



Spacing	Height	Item No.
2mm	7.0mm	2SB
3mm	8.5mm	3SB
5mm	10.5mm	5SB

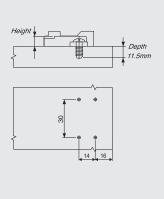




- Material : steel
- Fixing with 3.5mm chipboard screws

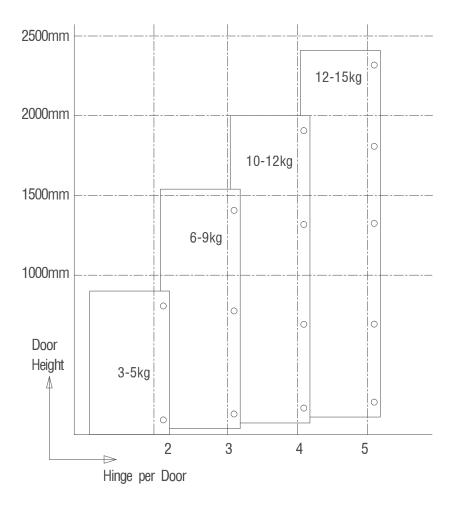


Spacing	Height	Item No.
2mm	7.0mm	2SB
3mm	8.5mm	3SB
5mm	10.5mm	5SB





Hinge Application Table



Item No. Table

	Hinge body										
D				Door Type				Door Type			
Do	or-O	pening Degree	Overlay	Half		Do	or-U	pening Degree	Overlay	Half	Inset
S	2	90°	60	70	78	С	_	85°	71	81	89
L	_	85°	51	61	69	L 5		110°	70	00	88
D E	5	110°	50	60	68	P	7	110°	70	80	88
	8	170°	40			0	8	165°	50		
O N	9	135°	50			N	9	135°	70	80	
S	pecit	fic application	М	aterial of Cup Spacing				A	dded Option		
	D	DAMPER HINGE	D	Dieca	asting	eting B 45mm		imm	J	*Split Dowel -	- SUS Screw
	Α	Aluminium Profile	S	St	eel	C 48mm		K	*Dowel		
			G	GLASS DO	OOR HINGE	H 52mm		Α	*Anchor Dow	el	

*Dowel

Knock-in Bolt

:Cam type (3 Dimensional adjustments)

*Ex)

550SBA(Hinge body of Slide on type, 110°∆opening degree, Overlay door type, Steel cup, 45mm cup spacing, N-type spring and Anchor bolt)

Mounting Plate							
*Spacing		Material		Type Added Option			
0	D	Diecasting	Α	A type(37MM)	Е	Euro Screw (6×13.5)	
3	s	Steel	В	B type(28MM)	J	* Dowel +SUS Screw	
5			С	Clip type	К	* Dowel	
8			D	Double Clip + *Cam Type			
9			F	4 Hole Type			
18			W	*Double Type			

*Spacing Refer to the M/P parts in the book
*Cam Type 3 Dimensional adjustment

*Double Type Two-plated type *Dowel Knock-in Bolt

*Ex) 0SCWE(Mounting plate of 0mm spacing, Steel material, Clip

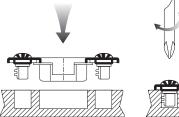
Double type and Euro screw)

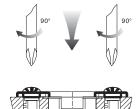
Thchnical information

1. Tool free system











The cup and dowels of easyfit hinges are simply positioned in pre-bored holes by gentle hand pressure and simply turn the screw 90° deg, clockwise.

Dowels are permanently installed in solid wood and MDF.No components remain in the door after removal.

3. Quality control at Laboratory



- **1.** Product observation as well as wear and fatigue testing (30N/80,000 cycles)
- 2. Loading test (200N/20 cycles)
- 3. Safety test (300N/5 cycles)
- 4. Slam open/close test (100N/5 cycles)

4. General conditions of sales and delivery

The technical presentations and dimensions in illustrations and drawings are non-binding. We reserve the right to make changes to specifications at any time.

We do not accept any responsibility for any errors which may occur in production of this catalogue.

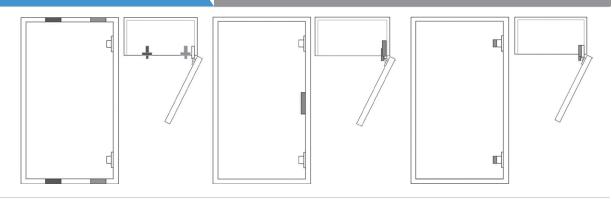
All deliveries and services are based on the general conditions of sales which Are available upon request.



Attachment positions Damper for door

	Door	Door	Door	Door	Common Damper			SIDE Damper	Attachment-Type Damper
Category	Width				MODEL NO 4000	MODEL NO 6000	MODEL NO 9000	MODEL NO 9000	MODEL NO 9000
Small Door (Kitchen)	400 450	X 750 X 750 X 750 X 750	X 18 X 18 X 18 X 18	3.0Kg 4.0Kg 4.5Kg 5.0Kg	1EA 1EA 1EA 1EA		1EA 1EA 1EA 1EA	1EA 1EA 1EA 1EA	1EA 1EA 1EA 1EA
Big Door (Furniture)	400 × 400 × 450 × 450 ×	< 2200	X 18 X 18 X 18 X 18	10.0Kg 11.0Kg 11.0Kg 12.5Kg		1EA 1EA 1EA 1EA	2EA 2EA 2EA 2EA	2EA 2EA 2EA 2EA	2EA 2EA 2EA 2EA

INSTALLALTION





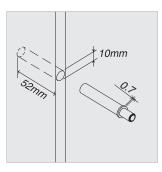
Soft-close Damper for door

Inset Damper

Inset Damper into the cabinet side opposite to the hinges.

For an optimal performance, we suggest that the Damper is positioned at the center of the side panel.

Regardless of wide door can be suitable and also any speed of door bring the movement close

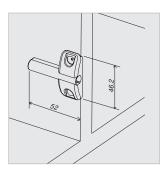




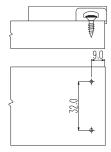
- Material : Plastic
- · Colour : grey, cherry, white, oak

Damper with Adapter

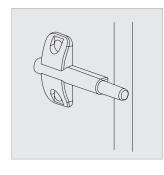
Damper with adapter can be installed and adapter to be screwed under the top or on the base panel of the cabinet. Regardless of wide door can be suitable and also any speed of door bring the movement close



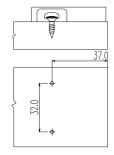




- Material : Plastic
- Colour : grey, cherry, white, oak
- Fixing withφ3.5mm or φ4mm chipboard screws





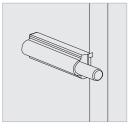


- Material : Plastic
- Colour : grey, cherry, white, oak
- Fixing with φ3.5mm or φ4mm chipboard screws

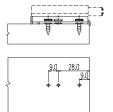
Soft-close Damper for door

Damper with Adapter

Damper with adapter can be installed and adapter to be screwed under the top or on the base panel of the cabinet. Regardless of wide door can be suitable and also any speed of door bring the movement close

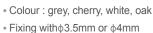


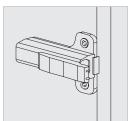




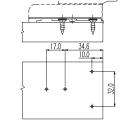


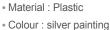
chipboard screws



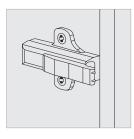




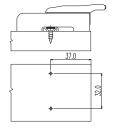




• Fixing with φ3.5mm or φ4mm chipboard screws





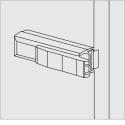




Ni Plated

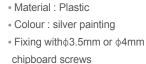
 \bullet Fixing with $\varphi 3.5mm$ or $\varphi 4mm$ chipboard screws

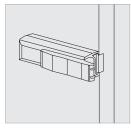
• adjustable range 0mm ~ -4mm



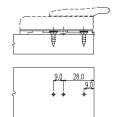












Material : Plastic
Colour : silver painting
Fixing with φ3.5mm or φ4mm chipboard screws

Soft-closing Damper for hinge

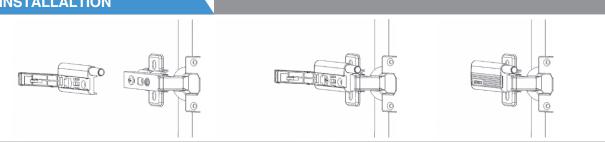


DESCRIPTION

- Plastic
- Application item code : 770, 570, 550
- Finish : Painting

MODEL	APPLIED HINGE					
	Item No 550	Item No 570	Item No 770			
Item No.EDH 9000						
Full Overlay Cranking 0mm						
	Item No 560	Item No 580	Item No 780			
Item No.HDH 9000						
Half Overlay Cranking 10mm						
	Item No 540					
Item No.LDH 540						
Half Overlay Cranking 10mm						

INSTALLALTION



IREX SYSTEM

In Box (IR BOX-IN)



Specifications

Damping

Loading capacity: 40kg

• Adjustment range : top/bottom +/- 2mm, left right +/-1.5mm

Back plate height: 70mm

Color : Metalic Silver

Drawer(IR BOX-NS)



Specifications

Damping

Loading capacity: 40kg

• Adjustment range: top/bottom +/- 2mm, left right +/-1.5mm

Back plate height: 70mm

Color : Metalic Silver

Gallery (IR BOX-GA)



Specifications

Damping

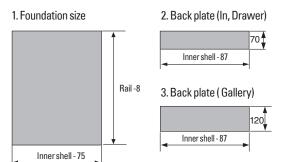
Loading capacity: 40kg

• Adjustment range : top/bottom +/- 2mm, left right +/-1.5mm

Back plate height: 120mm

Color : Metal Silver

Cutting



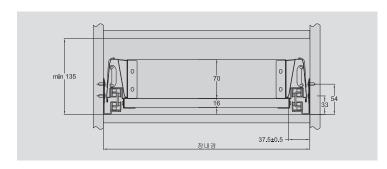
* Front plate for In box: Inner	shell - 85

Item na	ame	Cutting Di (basis :500mm , c	imension outer dimension)
Technic in the second s		600mm	1000mm
Base plate (15	T standard)	495(W) x 492(D)	895(W) x 492(D)
Back plate (15 T	Drawer	483(W) x 70(D)	883(W) x 70(D)
Back plate (15 T standard)	Gallery	483(W) x 120(D)	883(W) x 120(D)

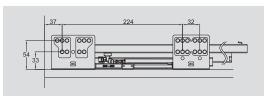
^{**} Install the drawer on the rail from 1mm higher position.



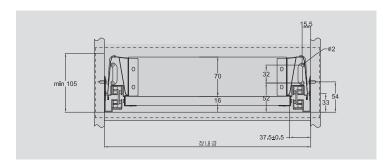
Drawer's diagram



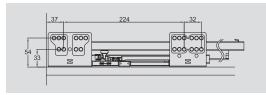
Location of side plate mounting (In box)



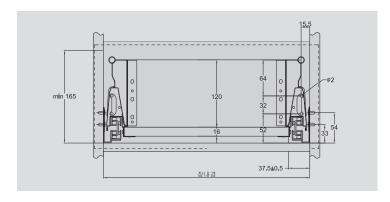
Drawer's diagram



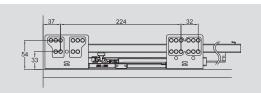
Location of side plate mounting (Drawer)



Drawer's diagram



Location of side plate mounting (Gallery)



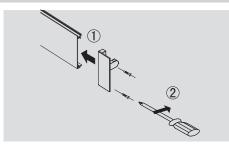


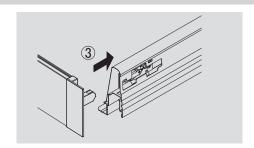
 $\textit{IREX BOX}^{\circ} \mid \max \text{ loading capacity}$



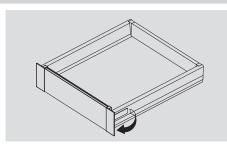
 $\textit{IREX BOX}^{\circ} \mid \text{Use various space in the drawer}$

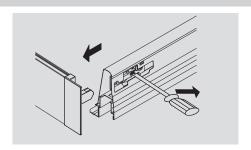
Front panel bracket installation



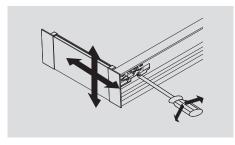


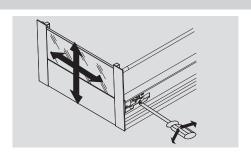
Front panel assemble and disassemble method



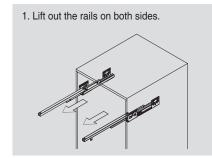


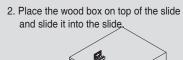
Front panel adjustment up/down +/- 2mm , L/R +/- 2mm

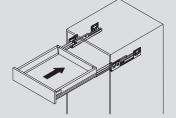


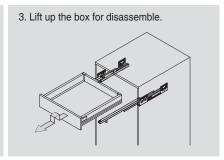


IREX BOX installation and decomposition method











IREX SMART SYSTEM

In Box (SM BOX-IN)



Specifications

Damping

Loading capacity: 40kg

• Adjustment range : top/bottom +/- 2mm, left right +/-1.5mm

Back plate height : 66mm

Color : Metalic silver

Drawer (SM BOX-NS)



Specifications

Damping

Loading capacity: 40kg

• Adjustment range: top/bottom +/- 2mm, left right +/-1.5mm

Back plate height : 66mm

Color : Metalic silver

Gallery (SM BOX-GA)



Specifications

Damping

Loading capacity: 40kg

• Adjustment range : top/bottom +/- 2mm, left right +/-1.5mm

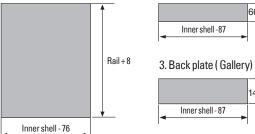
• Back plate height: 144mm

• Color : metalic silver

Foundation size







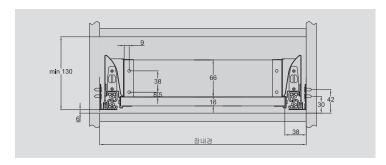
	•	, .
ı		
ı		

*	Front plate for In box : Inner shell -	80

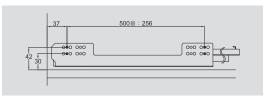
Item name		Tailor's measure / 500mm	drawer / Outer reference
		600mm	1000mm
Base plate (15	T standard)	494(W) x 508(D)	894(W) x 508(D)
Back plate	Drawer	483(W) x 66(D)	883(W) x 66(D)
(15 T standard)	Gallery	483(W) x 145(D)	883(W) x 145(D)

^{**} Install the drawer on the rail from 1mm higher position.

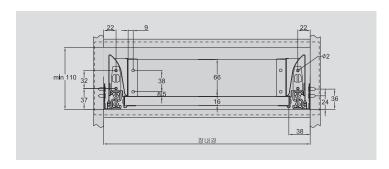
Drawer's diagram



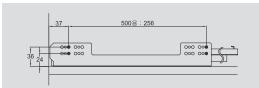
Location of side plate mounting (In box)



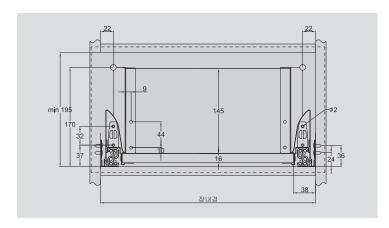
Drawer's diagram



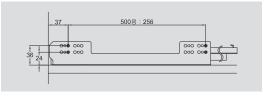
Location of side plate mounting (Drawer)



Drawer's diagram



Location of side plate mounting (Gallery)



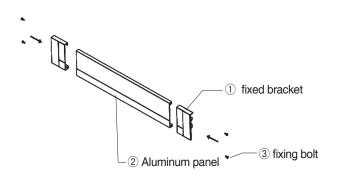


 $\textit{SMARTBOX}^{\circ} \mid \text{max loading capacity 30kg}$



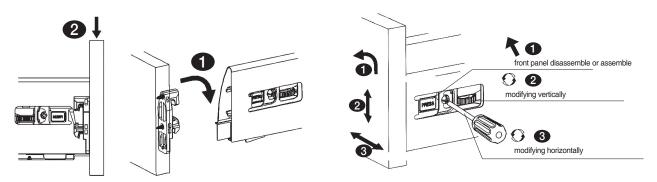
 $\textit{SMARTBOX}^{\circ} \mid \text{Use various space in the drawer}$

IN Box installation method



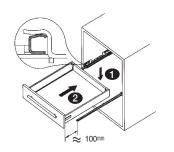
Front panel adjustment range

How to install the front panel in a drawer



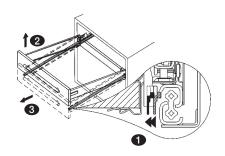
Gallery Drawer (SM Box-GA)

Assemble case



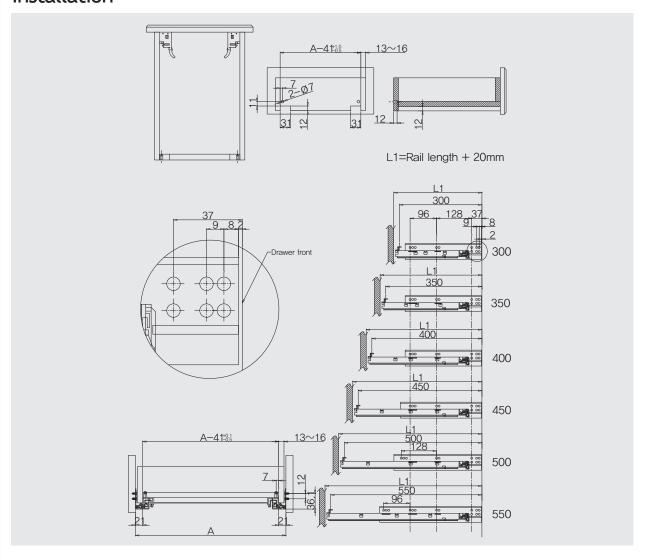


Disassmble case



IREX-UD RAIL

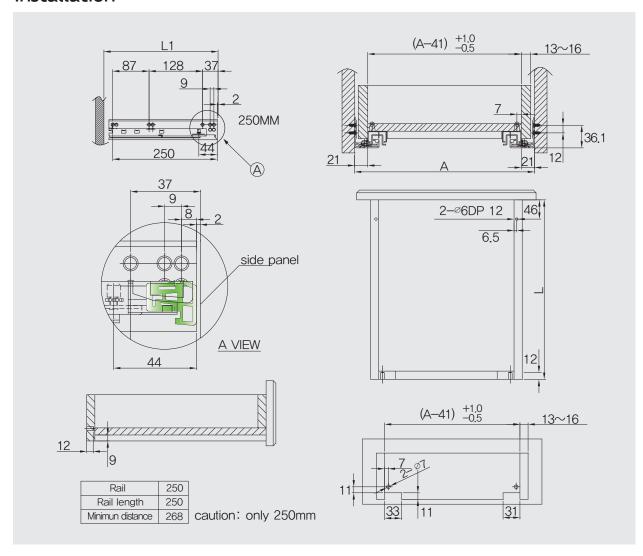




IREX-UD RAIL(250mm only)





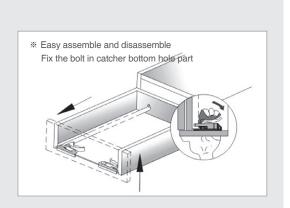


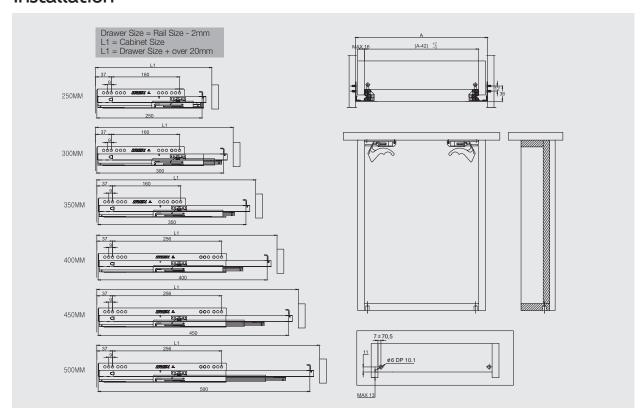
Damping Under Ra

IR-UD RAIL



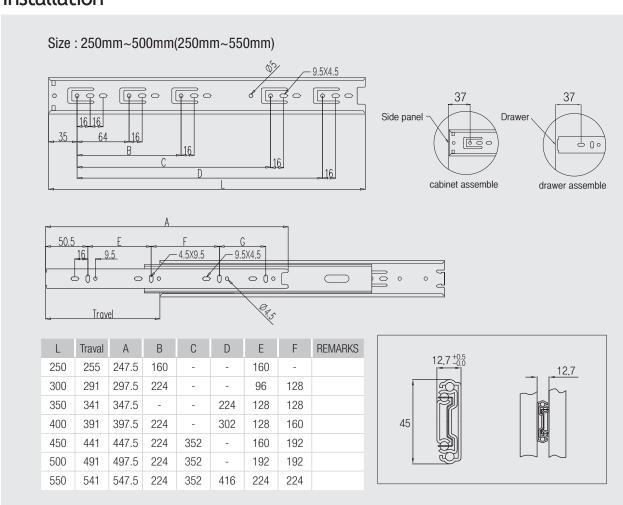
Model	Rail	Max loading Capacity	Cabinet length
IR-UD 250	250	30kg	L+20mm
IR-UD 300	300	30kg	L+20mm
IR-UD 350	350	40kg	L+20mm
IR-UD 400	400	40kg	L+20mm
IR-UD 450	450	40kg	L+20mm
IR-UD 500	500	40kg	L+20mm





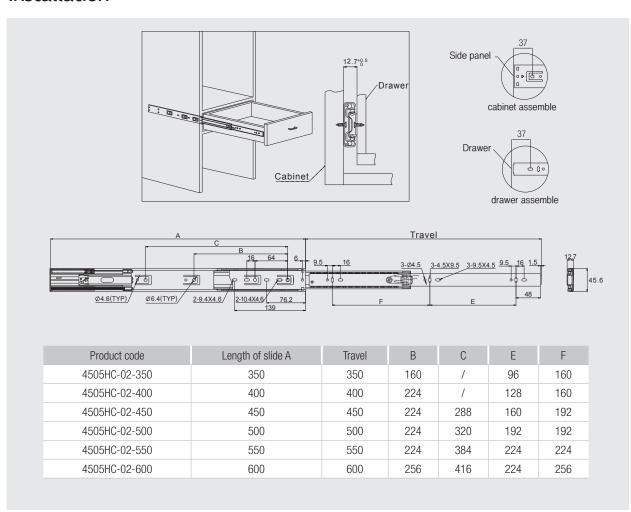
IREX-BR





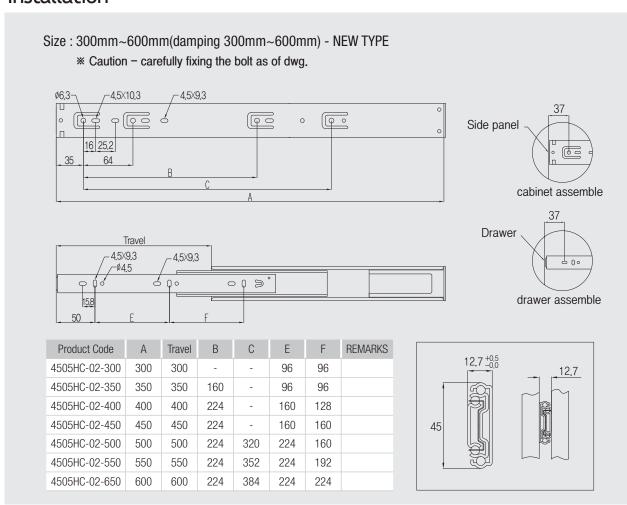
IREX-DB





NEW IREX-DB





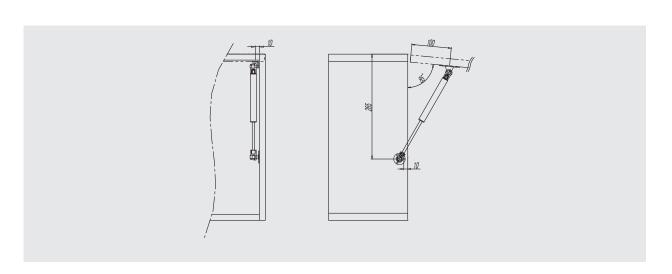


DOOR MDF 18T(S/T)

HW	400	500	600	700	800	900	1000
400	40	40	40	40	60	60	80
500	40	40	40	60	60	80	80

GLASS DOOR 5T(S/T)

HW	400	500	600	700	800	900	1000
400	40	40	40	60	60	80	80
500	40	40	60	60	80	80	80



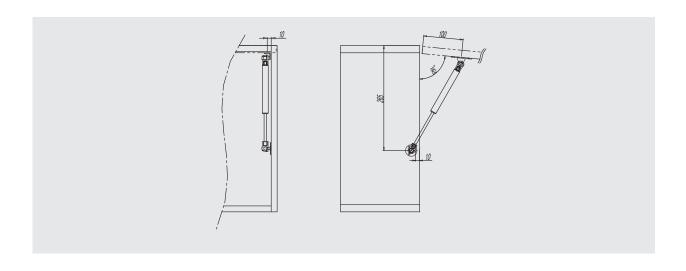


DOOR MDF 18T

HW	400	500	600	700	800	900	1000
400	40	40	40	40	60	60	80
500	40	40	40	60	60	80	80

GLASS DOOR 5T

Н	W	400	500	600	700	800	900	1000
4	400	40	40	40	60	60	80	80
į	500	40	40	60	60	80	80	80





DOOR MDF 18T

HW	400	500	600	700	800	900	1000
400	40	40	40	40	60	60	80
500	40	40	40	60	60	80	80

DOOR MDF 18T(S/T)

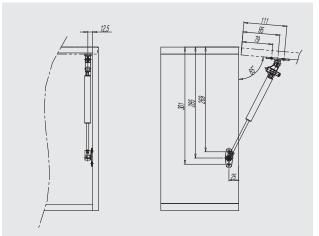
HW	400	500	600	700	800	900	1000
400	40	40	40	40	60	60	80
500	40	40	40	60	60	80	80

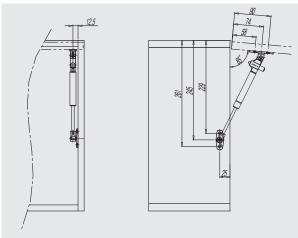
GLASS DOOR 5T

H W	400	500	600	700	800	900	1000
400	40	40	40	60	60	80	80
500	40	40	60	60	80	80	80

GLASS DOOR 5T(S/T)

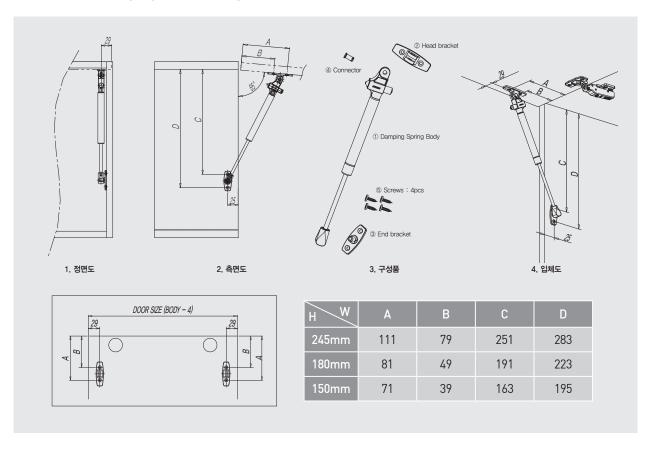
H W	400	500	600	700	800	900	1000
400	40	40	40	60	60	80	80
500	40	40	60	60	80	80	80



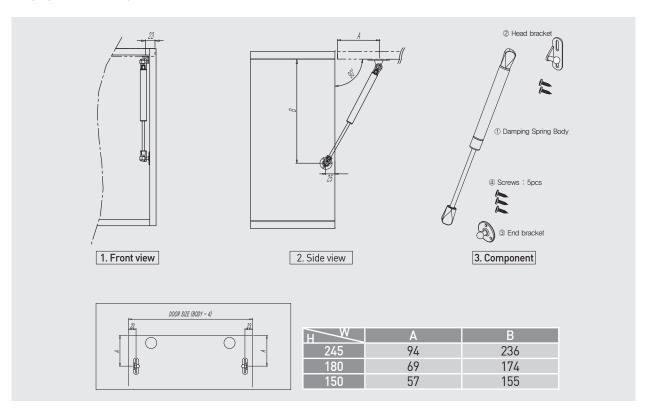


245mm 180mm

DAMPING GAS SRPING INSTALLATION MANUAL



GAS SPRING INSTALLATION MANUAL



Gas Spring Table

DOOR MDF 18T

HW	400	500	600	700	800	900	1000	1100	1200
400	40	40	40	60	60	80	80	100	100
500	40	40	60	60	80	80	100	100	120

DOOR MDF 18T (S/T)

HW	400	500	600	700	800	900	1000	1100	1200
400	40	40	40	60	60	80	80	100	120
500	40	40	60	60	80	80	100	120	120

GLASS DOOR 5T

Н	W	400	500	600	700	800	900	1000	1100	1200
	400	40	40	60	60	80	80	100	100	100
	500	40	60	60	80	80	100	100	100	120

GLASS DOOR 5T (S/T)

HW	400	500	600	700	800	900	1000	1100	1200
400	40	40	60	60	80	80	100	100	120
500	40	60	60	80	80	100	100	120	120

DOOR 무게별 조견표

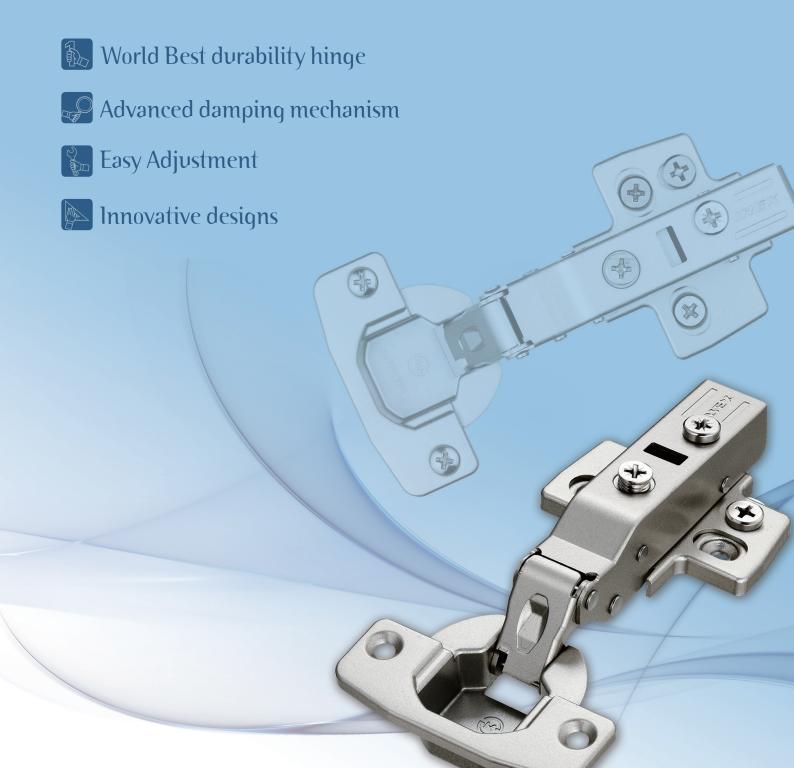
H Kg	2Kg	2.5Kg	3Kg	3.5Kg	4Kg	4.5Kg	5Kg	5.5Kg	6Kg
400	40	40	60	60	80	80	100	100	120
500	40	60	60	80	80	100	100	120	120

- ※ ST / 일반 공용의 조견표 입니다.
- ※ DOOR의 재질(무게), 제조공법에 따라 차이가 날 수 있습니다.

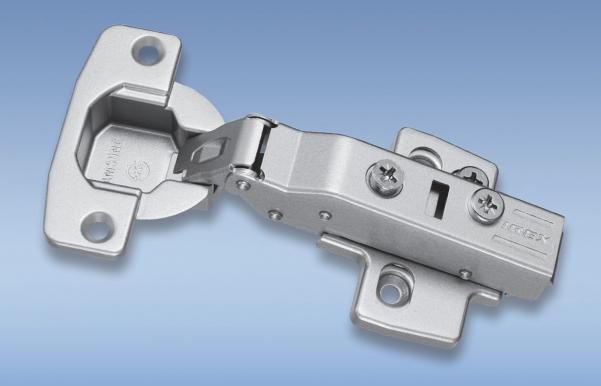


MEMO

1775D CONCEALED HINGE



SAMSUNG HARDWARE





SAMSUNG PRECISION IND. CO., LTD.

http://www.irex.co.kr

Head office & Factory: 167, Bongsu-daero, Seo-gu, Incheon, Korea

TEL: +82-32-814-9200 FAX: +82-32-577-3366

E-mail: Overseas: jhonkim@irex.co.kr E-mail: Domestic: irex@irex.co.kr