



HINGES & DOOR ACCESSORIES

3 WAY ADJUSTABLE CONCEALED HINGES

2 WAY ADJUSTABLE PIVOT HINGES

LIFT-OFF HINGES

BUTT HINGES

SPRING HINGES

GLASS HINGES

DOOR ACCESSORIES

DOOR STOPPERS

3-WAY ADJUSTABLE CONCEALED HINGES

Item No.	Max. Door Height	Min. Door Thickness	Max. Door Weight	3-way Adjustment	Leaf Separable	Page
 HES3D-120	2400 (94-1/2")	29 (1-1/8")	30 kg / 2 pcs (66 lbs)	YES	YES	182
			40 kg / 3 pcs (88 lbs)			
 HES3D-V135LGR-2	2400 (94-1/2")	30 (1-3/16")	40 kg / 2 pcs (88 lbs)	YES	YES	185
			55 kg / 3 pcs (122 lbs)			
 HES3D-E160	2400 (94-1/2")	36 (1-3/8")	55 kg / 2 pcs (121 lbs)	YES	YES	183
			70 kg / 3 pcs (154 lbs)			
 HES3D-E190	2400 (94-1/2")	38 (1-1/2")	100 kg / 2 pcs (220 lbs)	YES	YES	184
			125 kg / 3 pcs (275 lbs)			
 HES3D-W190 For Door Molding	2440 (96-1/16")	Min. 42 (1-5/8")	100 kg / 2 pcs (220 lbs)	YES	YES	186
			125 kg / 3 pcs (275 lbs)			
 HES-3030BR	2000 (78-3/4")	Min. 36 (1-7/16")	55 kg / 3 pcs (110 lbs)	NO	NO	186
 HES-3038BK	2000 (78-3/4")	Min. 36 (1-7/16")	45 kg / 3 pcs (99 lbs)	NO	NO	187

2-WAY ADJUSTABLE PIVOT HINGES

Picture	Item No.	Max. Door Weight (lbs)	Page
	PH-01	77 / pair	188

LIFT-OFF HINGES

Picture	Item No.	Max. Door Weight (lbs)	Page
	ZL-1701	 88-110 lbs / pair	189
	HG-CV127	 220 lbs / pair	189
	S-6166-2	 88 lbs / pair	190
	S-6166-6	 198 lbs / pair	190
	S-6173-2	 88 lbs / pair	191
	S-6173-5	 110 lbs / pair	191

BUTT HINGES

Picture	Item No.	Max. Door Weight (lbs)	Page
	3535/SS  	55 lbs / pair	192
	4040/SS  	88 lbs / pair	192
	4545B/SS  	99 lbs / pair	192
	HG-FH-128 	90 lbs / pair	193

SPRING HINGES

Picture	Item No.	Door Weight (lbs)	Page
	JSA  	44~88 / 2 pcs 66~132 / 3 pcs	194
	JST-150S 	88 / 2 pcs 132 / 3 pcs	194
	JDA  	-	195
	JDAW 	-	196

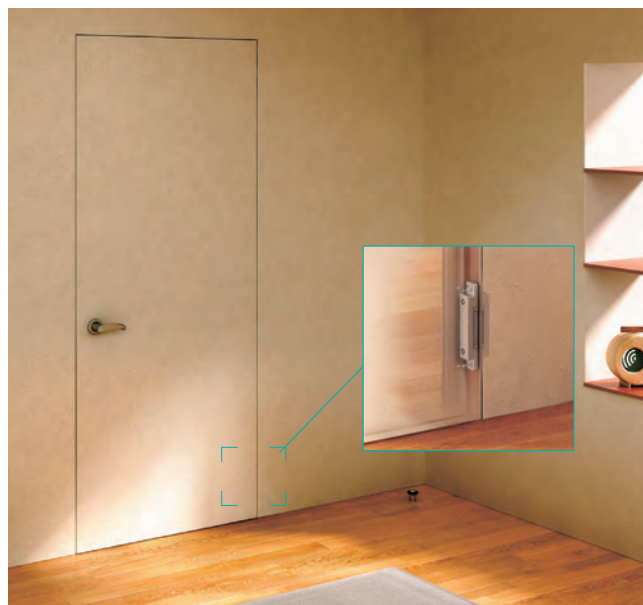
GLASS HINGES

Picture	Item No.	Max. Door Weight (lbs)	Page
	ZL-1702 	110 lbs / pair	197
	ZL-1703 	143 lbs / pair	197
	GH-G02	99.2 lbs / pair	198
	GH-G07	99.2 lbs / pair	199

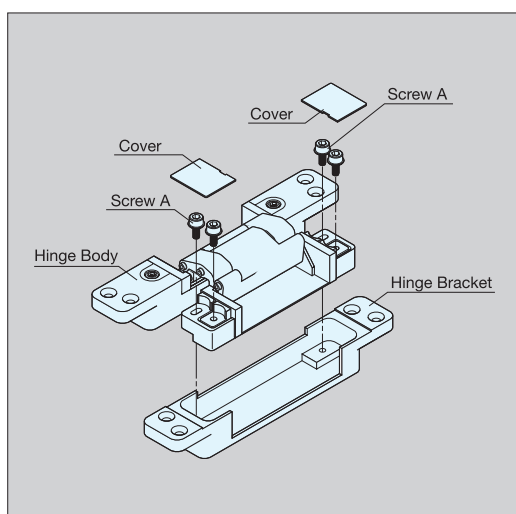
DOOR ACCESSORIES

Picture	Item No.	Max. Door Weight (lbs)	Page
	LDD-S 	33~88 lbs	200
	LDD-S-P	-	201
	LDD-V 	33~88 lbs	202
	LDD-V100 (HEAVY DUTY TYPE) 	88~220 lbs	204
	ZL-1801  	-	206
	ZL-1802  	-	206
	ZL-1803  	-	206
	HT-32P  	-	207
	DSD  	-	207
	SMDH	30.8 lbs Magnetic Force	208
	KMDH	26.4 lbs Magnetic Force	208
	SODH	-	208
	JFR	176 lbs	209

HES3D HINGE SERIES



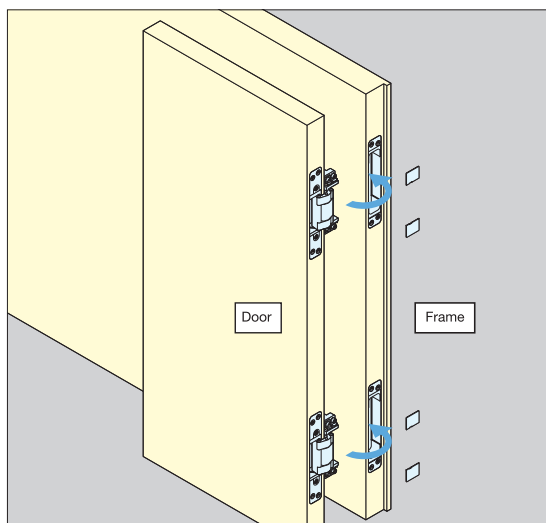
a. Detailed View



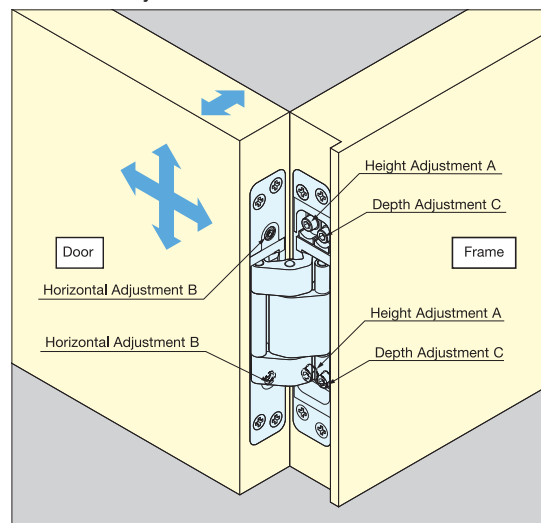
For Easy Installation

1. Separate parts as shown in picture "a".
2. Screw on the Hinge Body to door, and Hinge Bracket to door frame.
3. As shown in picture "b", insert Hinge Body straight into Hinge Bracket. Bracket will temporarily hold the Body for easy installation.
4. Use "Screw A" to fix Body on Bracket.
5. Adjust horizontally by turning "Screw B".
6. Loosen "Screw A" for vertical adjustment. Tighten "Screw A" after vertical adjustment completed.
7. For depth adjustment, loosen "Screw C" (one turn). Tighten "Screw C" after completed.
8. Snap on plastic covers after all above completed.

b. Installation



c. 3-WAY Adjustment

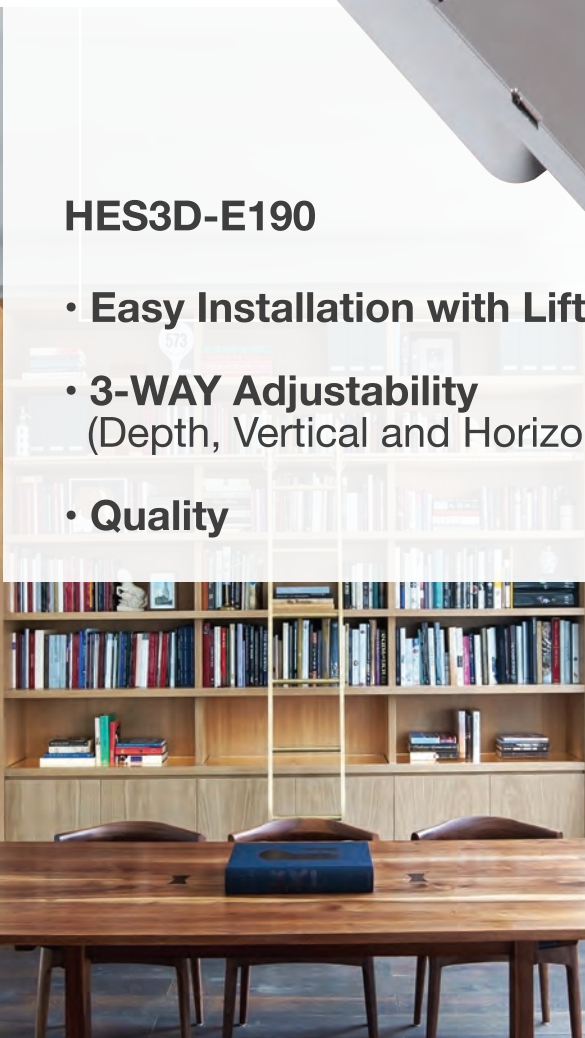


3-WAY Adjustable Concealed Hinge



HES3D-E190

- **Easy Installation with Lift-Off Feature**
- **3-WAY Adjustability**
(Depth, Vertical and Horizontal)
- **Quality**

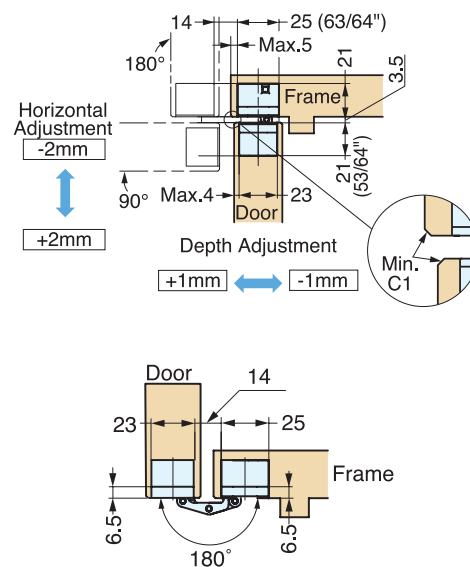
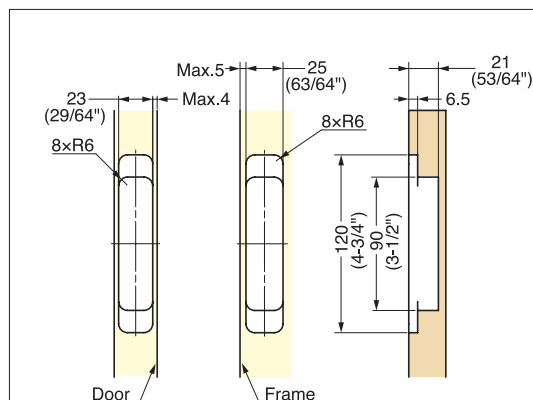
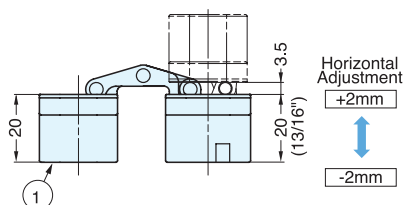




- 3-WAY adjustment function allows vertical, horizontal, and depth adjustment after hinge installed.
- Easy installation and adjustment.
- Successfully passed 300,000 open/close private cycle tests.
- Supplied with steel flat head screw.
- Covers hide all screw heads for clean appearance.
- Door weight: Max. 30 kg (66 lbs)/2 pcs, 40 kg (88 lbs)/3 pcs
- Door Thickness: Min. 29 mm (1-1/8")
- Max. Door Size: H 2400 mm × W 900 mm (H 94-1/2" × W 35-7/16")
- Bracket for sheet metal available.



HES3D-120BL



Bore Dimensions

No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Dull Chrome (DC)
②	Base Frame		Dull Nickel (DN)
③	Arm		Black (BL)
④	Pin	304 Stainless Steel	-
⑤	Cover	ABS	Dull Chrome (DC) Dull Nickel (DN) Black (BL)

3-WAY ADJUSTABLE CONCEALED HINGE



HES3D-E160



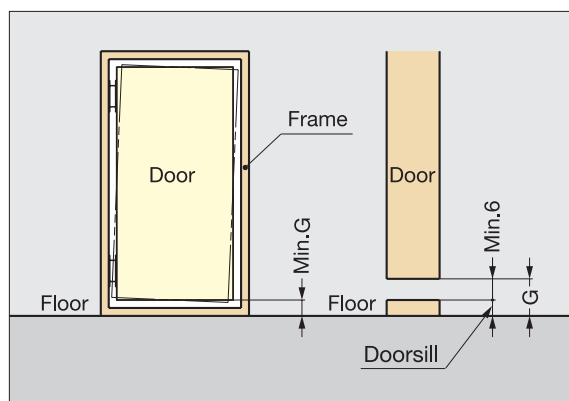
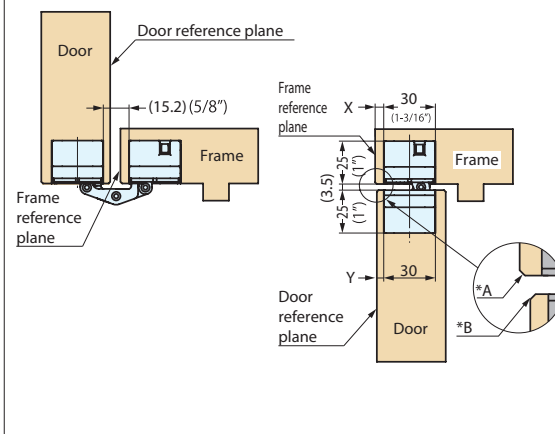
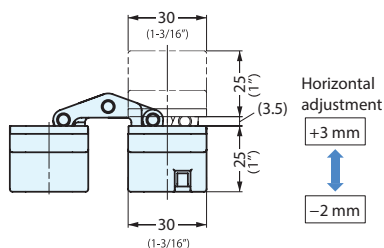
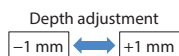
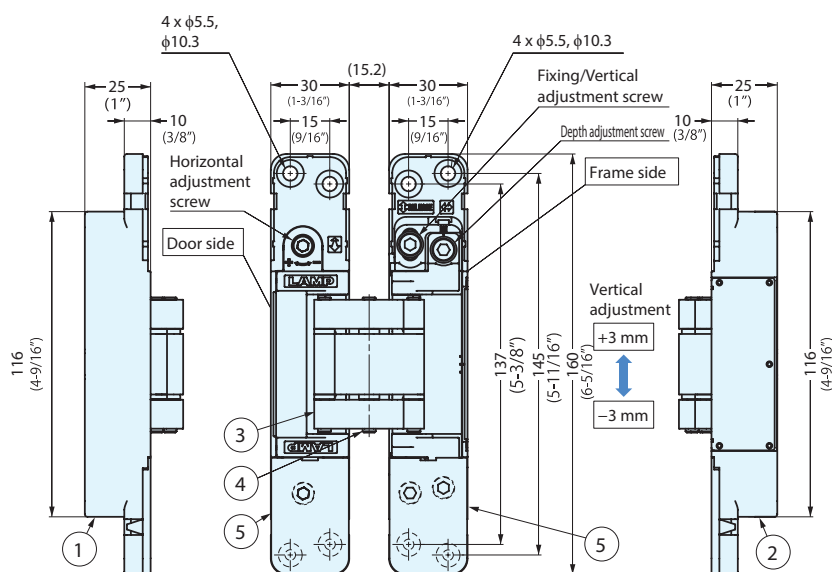
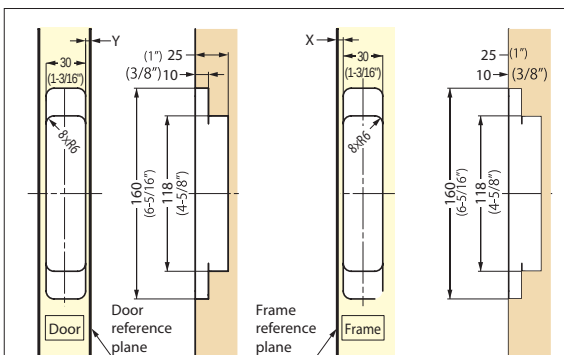
HES3D-E160DC

HES3D-E160DN

HES3D-E160BL

- Easy installation with symmetrical leaves and lift-off feature.
- 3-WAY adjustment function allows vertical, horizontal, and depth adjustment after hinge installed.
- Door Weight Capacity: Max. 55 kg (121 lbs)/2 pcs, 70 kg (154 lbs)/3 pcs
- Door Thickness: Min. 35 mm (1-3/8")
- Max. Door Dimensions: H 2400 mm x W 900 mm (H 94-1/2" x W 35-7/16")
- Successfully passed 300,000 open/ close private cycle tests.

Bore Dimensions



To determine the door and frame dimension, (G) must be taken into account.
G = Min. 6 mm + doorsill

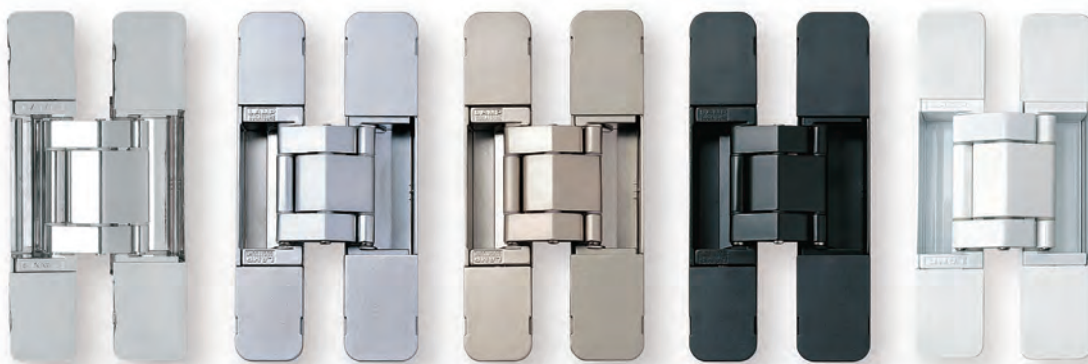
No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Dull Chrome (DC), Dull Nickel (DN), Black (BL)
②	Base Frame		
③	Arm	Aluminum	-
④	Pin	304 Stainless Steel	-
⑤	Cover	ABS	Dull Chrome (DC), Dull Nickel (DN), Black (BL)

Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Finish/Color
HES3D-E160DC	760	2	12	Dull Chrome
HES3D-E160DN				Dull Nickel
HES3D-E160BL				Black

3-WAY ADJUSTABLE CONCEALED HINGE



HES3D-E190



HES3D-E190PN-UL

HES3D-E190DC-UL

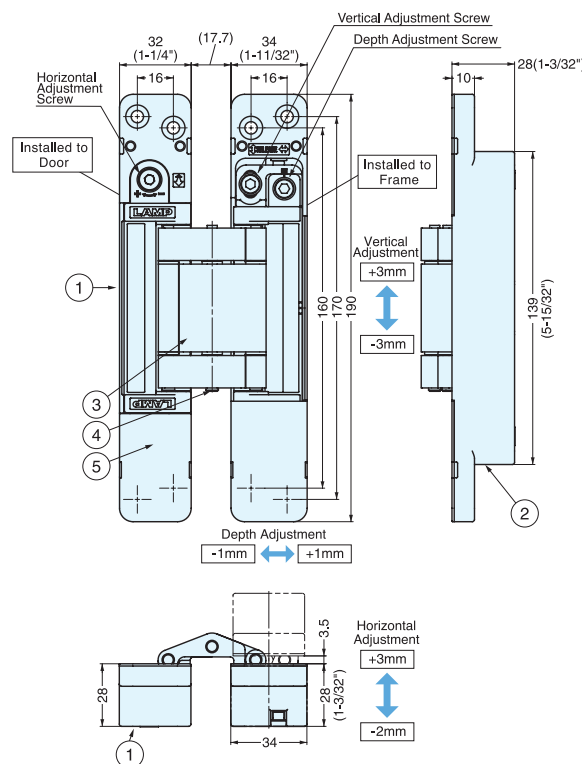
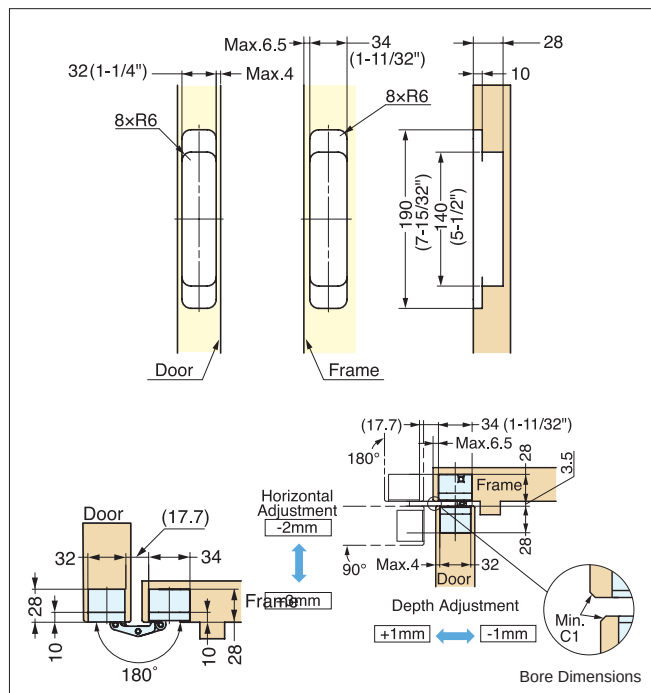
HES3D-E190DN-UL

HES3D-E190BL-UL

HES3D-E190WT-UL



- 3-WAY adjustment function allows vertical, horizontal, and depth adjustment after hinge installed.
- Easy installation with LIFT-OFF FEATURE: can be split into two parts (one for the frame and one for the flap), can temporarily be hung and hold position without being affixed with screws.
- Successfully passed 300,000 open/close private cycle tests.
- UL Rated, up to 3 Hours
- Supplied with steel flat head screw.
- Covers hide all screw heads for clean appearance.
- Door weight : Max. 100 kg (220 lbs)/2 pcs, 125 kg (275 lbs)/3 pcs.
- Door Thickness : Min. 38 mm (1-1/2").
- Max. Door Size : H 2400 mm (94-1/2") × W 900 mm (35-7/16").
- Bracket for sheet metal doors and frames available (sold separately).
- Metal cover plates available for Polished Nickel (PN) finish HES3D-E190PN-CM (sold separately).



No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Polished Nickel (PN) Dull Chrome (DC) Dull Nickel (DN) Matte Black (BL) White (WT)
②	Base Frame	Zinc Alloy	Polished Nickel (PN) Dull Chrome (DC) Dull Nickel (DN) Matte Black (BL) White (WT)
③	Arm	Aluminum Alloy	Polished Nickel (PN) Dull Chrome (DC) Dull Nickel (DN) Matte Black (BL) White (WT)
④	Pin	304 Stainless Steel	-
⑤	Cover	ABS	Polished Nickel (PN) Dull Chrome (DC) Dull Nickel (DN) Matte Black (BL) White (WT)

Item No.	Weight (g)	Box (pcs)	Carton (pcs)
HES3D-E190PN-UL	1050	2	12
HES3D-E190DC-UL			
HES3D-E190DN-UL			
HES3D-E190BL-UL			
HES3D-E190WT-UL			

3-WAY ADJUSTABLE CONCEALED HINGE



HES3D-V135LGR-2



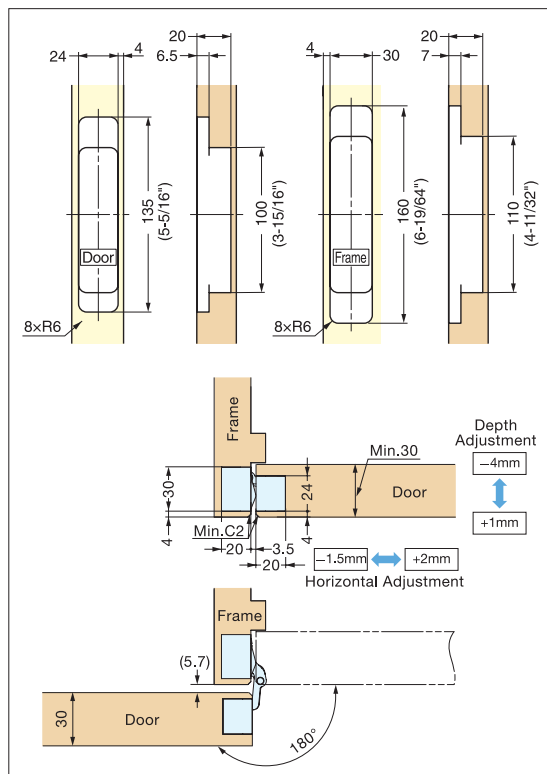
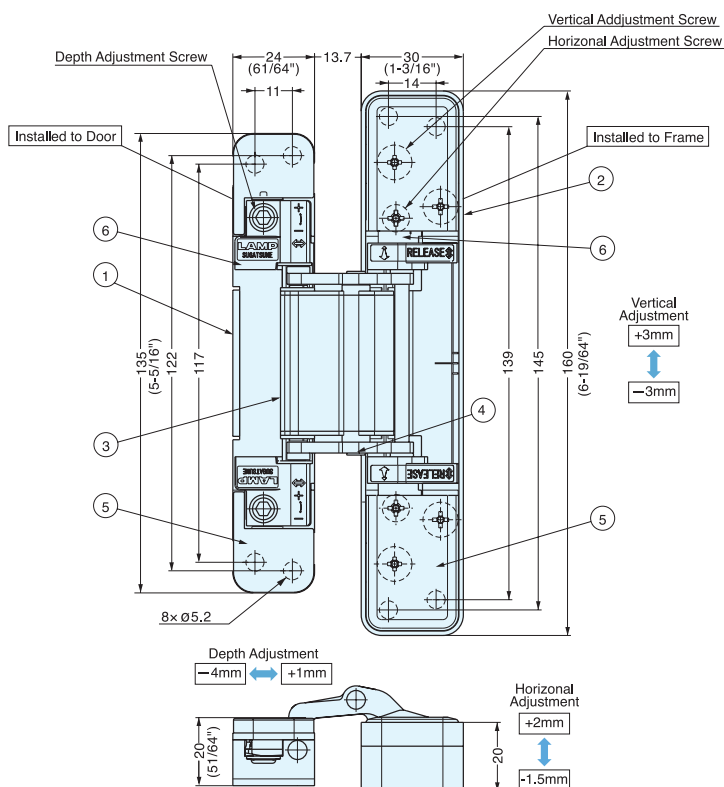
HES3D-V135LGR-2

- 3-WAY adjustment function allows vertical, horizontal, and depth adjustment after hinge installed.
- Easy installation and adjustment.
- Successfully passed 300,000 open/close private cycle tests.
- Supplied with steel button head screw.
- Door weight: Max. 40 kg (88 lbs)/2 pcs, 55 kg (122 lbs)/3 pcs
- Door Thickness: Min. 30 mm (1-3/16")
- Max. Door Size: H 2400 mm × W 900 mm (H 94-1/2" × W 35-7/16")

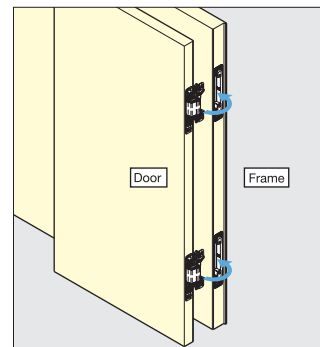
Item No.	Finish/Color
HES3D-V135LGR-2	Light Gray

Item No.	Weight (g)	Box (pcs)	Carton (pcs)
HES3D-V135LGR-2	400	2	24

No.	Part Name	Material	Finish/Color
①	Body	Steel	Nickel
②	Base Frame	Polyacetal	Light Grey
③	Arm	Aluminum	Anodized
④	Pin	Steel	Nickel
⑤	Cover	Polyacetal	Light Grey
⑥	Block	Zinc Alloy	Nickel



Bore Dimensions



Installation

3-WAY ADJUSTABLE CONCEALED HINGE For Door Moldings

**HES3D-W190**

HES3D-W190DC-UL



HES3D-W190DN-UL



HES3D-W190WT



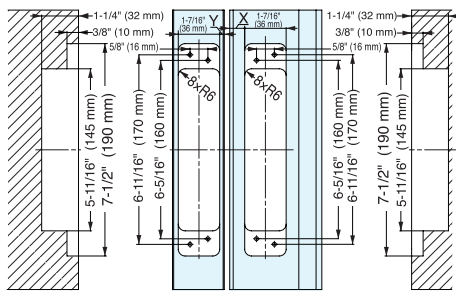
HES3D-W190BL-UL



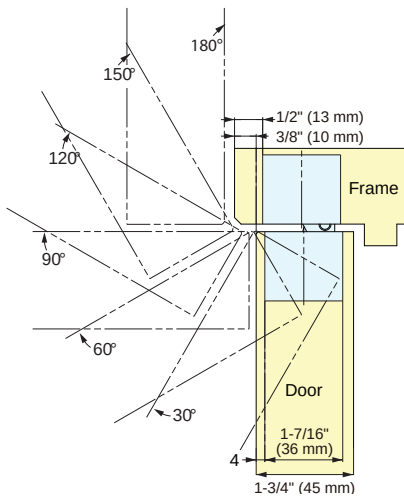
HES3D-W190PN

- Has a long arm for a wider throw, allowing 3/8" (10 mm) clearance for flush installation or 1/2" (13 mm) clearance for installation with a molding. Opens to 180°.
- Features 3-way adjustability (vertical, horizontal and depth).
- UL Rated, up to 3 Hours (DC, DN, and BL models only)
- Flanges come apart for the door to be provisionally hung for making adjustments. This provides a quick and easy installation when ready for fixing screws.
- Replacement screw covers available for all finishes.
- Only the HES3D-W190PN model includes metal cover plates*, all other models include plastic cover plates.

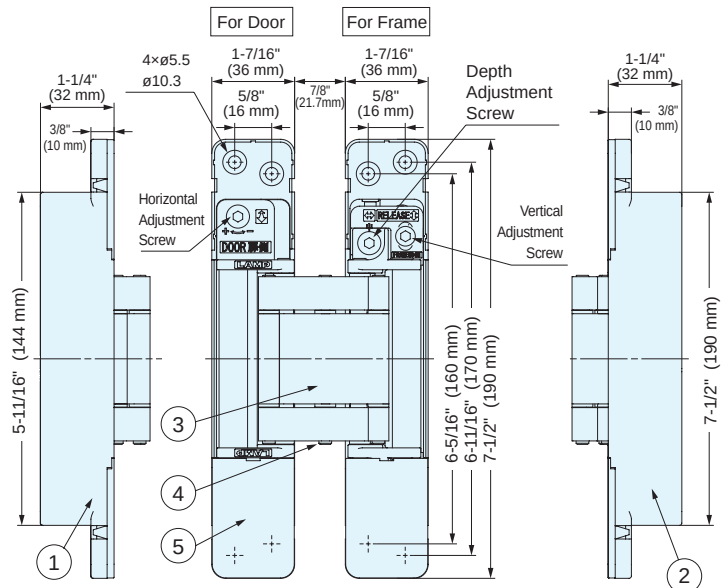
Cut Out Dimension



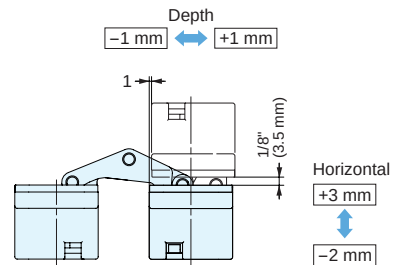
Please drill prepared holes for the tapping screws if the optional jig (HES3D-W190-TMP) is not used.



The example drawing shows the case that there is a step of 10 mm between the door and the frame.



Select models only



No.	Part Name	Material	Finish/Color					
			DC	DN	BL	PN	WT	PB
1	Body	Zinc Alloy (ZDC)	Satin	Nickel	Enamel Black	Nickel	Enamel White	Brass
2	Base Frame							
3	Arm	Aluminium Alloy						
4	Shaft	Stainless Steel	Plain	Plain	Plain	Plain	Plain	Plain
5	Screw Cover	ABS/Stainless Steel*	Silver	Dull Nickel	Black	Nickel	White	Brass

Item Name	Finish	Door Size			Door Weight		Opening Angle	Weight (g)	Box (pcs)	Carton (pcs)
		Width	Height	Thickness	2 pcs	3 pcs				
HES3D-W190DC-UL	Dull Chrome	Max. 36" (915 mm)	Max. 96-1/16" (2440 mm)	Min. 1-5/8" (42 mm)	Max. 220 lbs (100 kg)	Max. 275 lbs (125 kg)	180°	-	2	12
HES3D-W190DN-UL	Dull Nickel								2	12
HES3D-W190BL-UL	Black								2	12
HES3D-W190PN	Polished Nickel								2	12
HES3D-W190WT	White								2	12
HES3D-W190PB	Polished Brass								2	12

3-WAY ADJUSTABLE CONCEALED HINGE For Cladded Doors

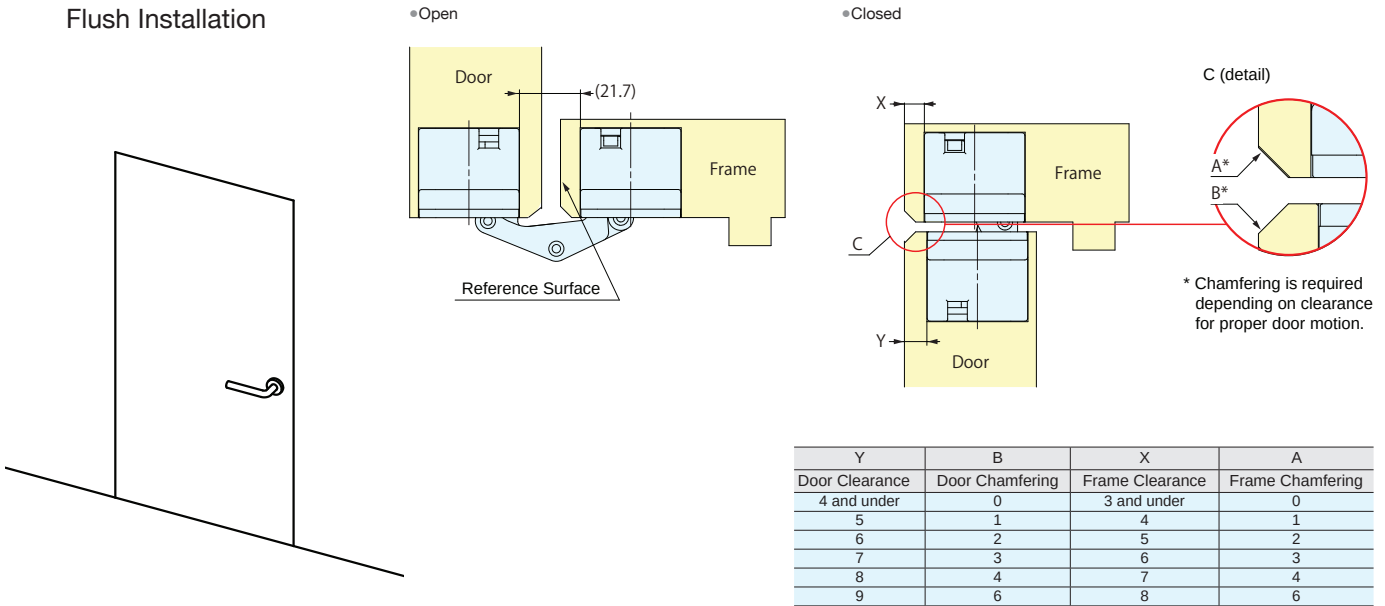


HES3D-W190

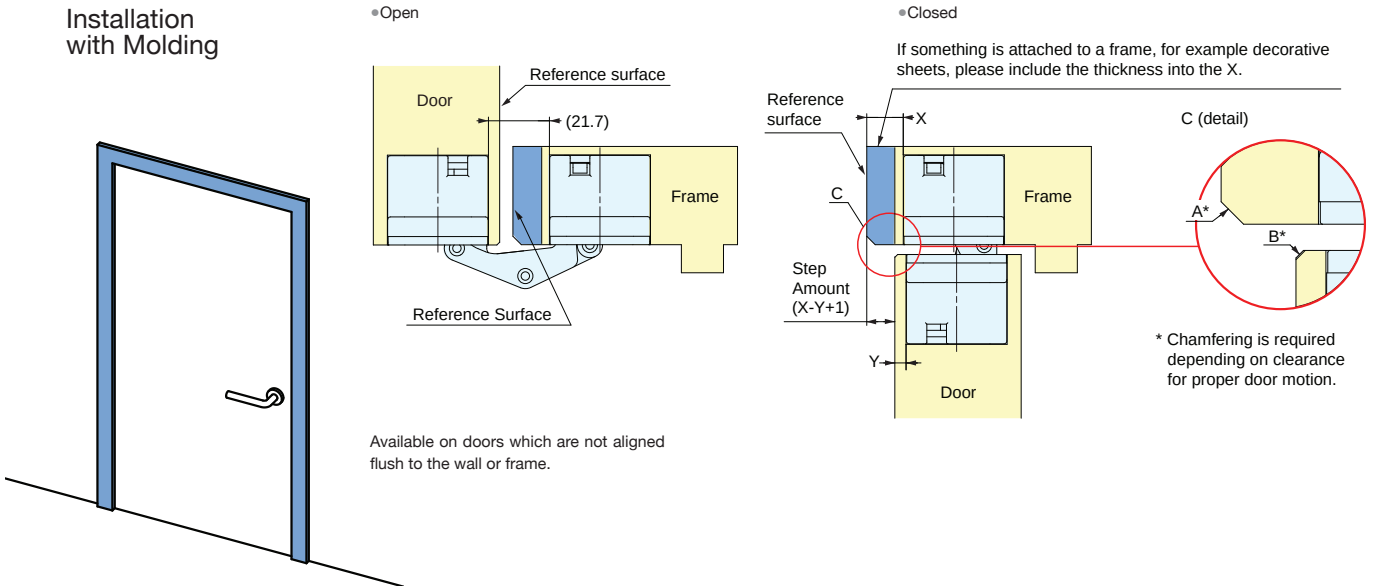
HINGES

3-WAY ADJUSTABLE CONCEALED HINGES

Flush Installation



Installation with Molding



Y	B	X	A	X-Y+1
Door Clearance	Door Chamfering	Frame Clearance	Frame Chamfering	Step Amount
3	0	3 to 12	0	1 to 10
		13	1	11
		14	2	12
		15	4	13
4	1	3 to 10	0	0 to 7
		11	1	8
		12	2	9
		13	3	10
5	2	14	4	11
		15	4	11
		3 to 6	0	-1 to 2
		7	1	3
	3	8	2	4
		9	3	5
		10	4	6
		11	4	7

Y	B	X	A	X-Y+1
Door Clearance	Door Chamfering	Frame Clearance	Frame Chamfering	Step Amount
6	3	3 to 6	0	-2 to 1
		7	1	2
		8	2	3
		9	3	4
7	4	10	4	5
		11	5	6
		12	6	7
		3 to 6	0	-3 to 0
8	5	7	1	1
		8	2	2
		9	3	3
		10	5	4
9	6	11	7	5
		3 to 6	0	-4 to -1
		7	1	0
		8	3	1

CONCEALED HINGE

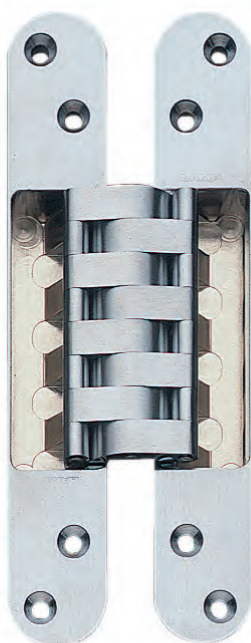
Meets  @ SPECS.

HES-3030BR

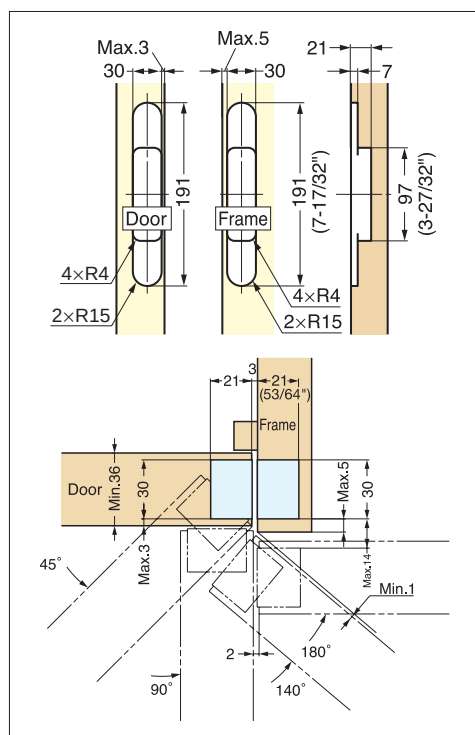
- Door weight: Max. 50 kg (110 lbs)/3 pcs
- Door thickness: Min. 36 mm (1-7/16")
- Suitable door size: H2000 mm × W900 mm (H78-3/4" × W35-7/16")
- Successfully passed 200,000 open/close private cycle tests.



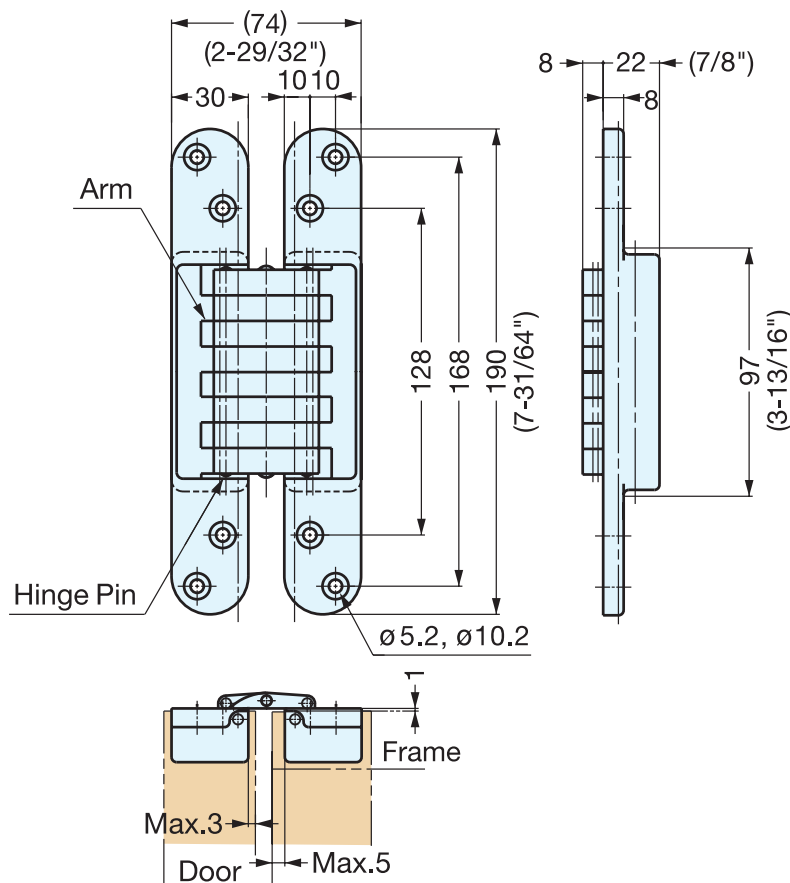
HES-3030BR/PB



HES-3030BR/SC



Bore Dimensions



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
HES-3030BR/PB	1030	2	20

Material	Finish/Color
Brass	Polished Brass (PB) Satin Chrome (SC)

CONCEALED HINGE



HES-3038BK

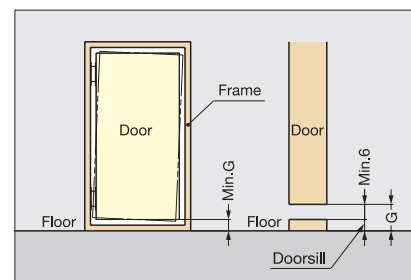
- Door weight: Max. 45 kg (99 lbs)/3 pcs
- Door thickness: Min. 36 mm (1-7/16")
- Suitable door size: H2000 mm × W900 mm (H78-3/4" × W35-7/16")
- Successfully passed 200,000 open/close private cycle tests.



HES-3038BK/PB



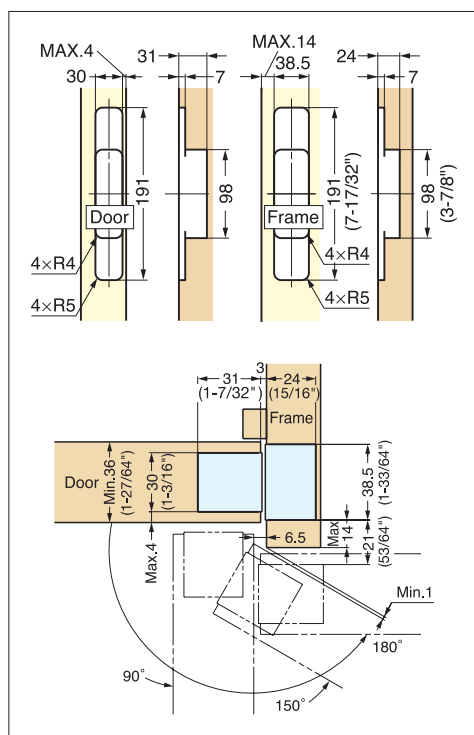
HES-3038BK/SC



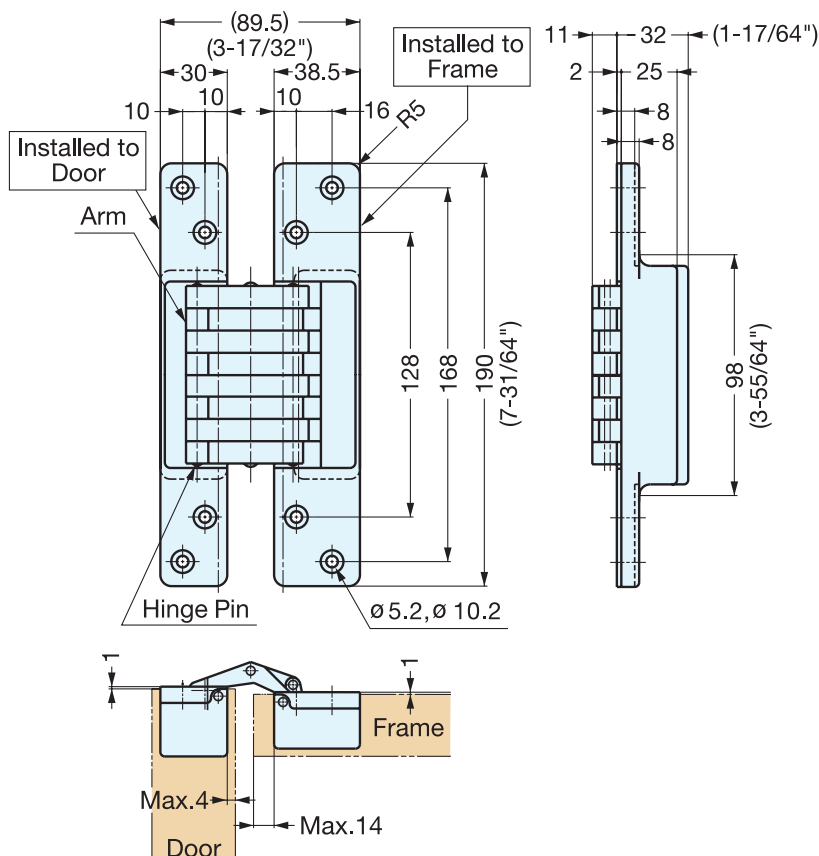
To determine the door and frame dimension, (G) must be taken into account.
G = Min. 6 mm + doorsill

HINGES

CONCEALED HINGES



Bore Dimensions



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
HES-3038BK/PB	1360	2	20

Material	Finish/Color
Brass	Polished Brass (PB) Satin Chrome (SC)

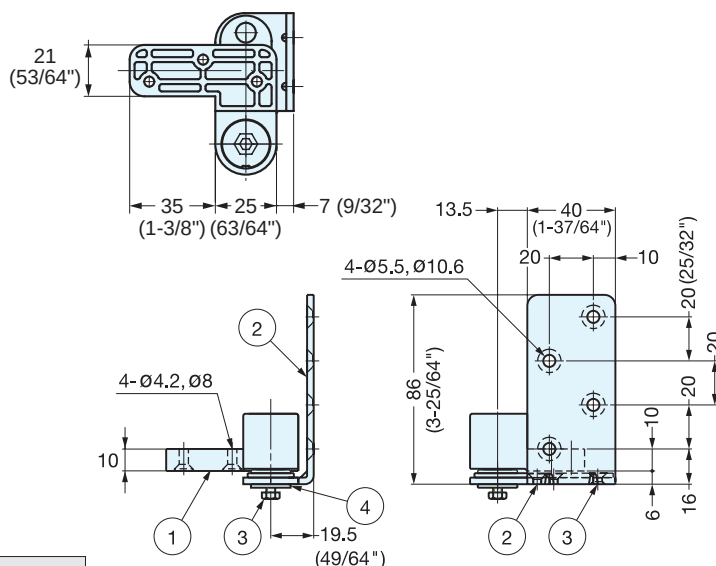
2-WAY ADJUSTABLE PIVOT HINGE



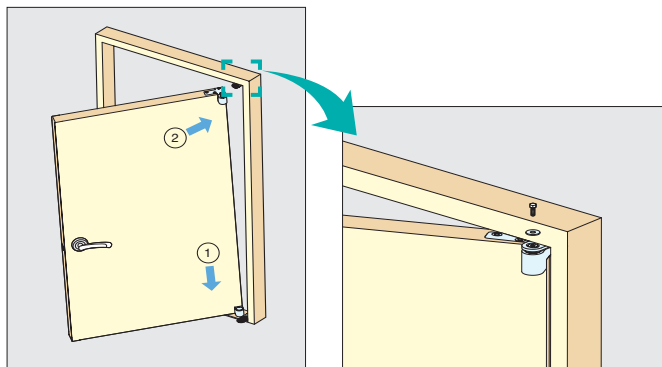
PH-01



- Vertically and laterally adjustable after installed.
- Sold in pairs (top and bottom), non-handed.
- Supplied with wood screw 4 × 30.
- Separate body and bracket for easy installation.
- Door Height: Max. 2300 mm (90-34/64")
- Door Width: Max. 850 mm (33-15/32")
- Door Weight: Max. 35 kg (77 lbs)/pair
- Door Thickness: 33~42 mm (1-19/64"~1-21/32")



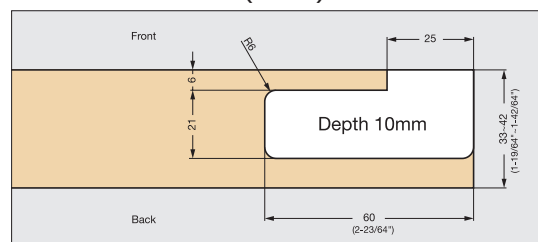
Door Installation



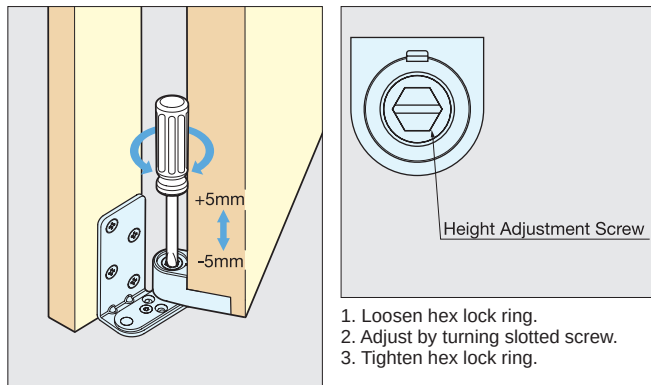
* Gap between door jamb and handle side of door:
4 mm (Door Thickness 33~42 mm)

- Install hinge bracket to door frame
- Bolt the door on with supplied screw

Bore Dimensions (Door)

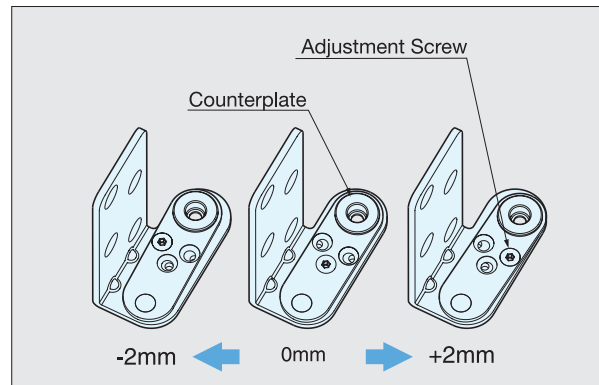


Vertical Adjustment



1. Loosen hex lock ring.
2. Adjust by turning slotted screw.
3. Tighten hex lock ring.

Lateral Adjustment



Item No.	Weight (g)	Box (set)	Carton (set)
PH-01	500	1	20

No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Matte Silver
②	Bracket	304 Stainless Steel	Plain
③	Hex Bolt		-
④	Washer		-
⑤	Cap	ABS	White

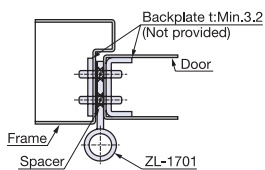
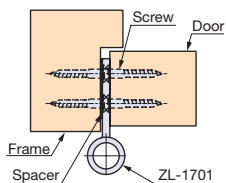
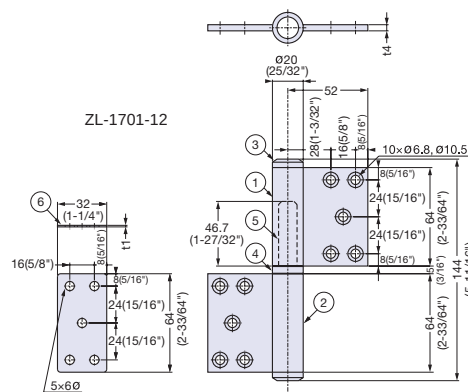
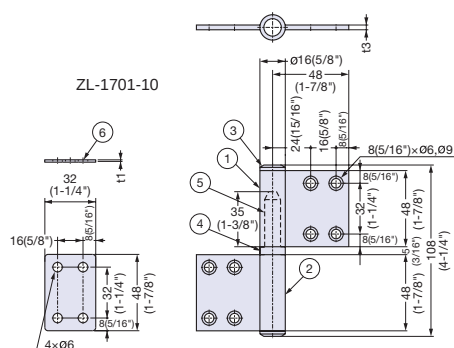
Zwei L Lift-Off Hinge



ZL-1701

HINGES

Zwei L LIFT-OFF HINGES



No.	Part Name	Material	Finish/Color
①	Door Side Hinge Plate	316 Stainless Steel	Zwei L
②	Frame Side Hinge Plate		
③	Head Cap		Satin
④	Washer		Plain
⑤	Pin		
⑥	Spacer		

ZL-1701-10: Supplied with stainless steel wood screws (4.1 × 38) and stainless steel screws (M5 × 16, ø8 Head)

ZL-1701-12: Supplied with stainless steel wood screws (4.8 × 38) and stainless steel screws (M5 × 16, ø9 Head)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)
ZL-1701-10	40(88 lbs)/2pcs	380	8
ZL-1701-12	50(110 lbs)/2pcs	430	

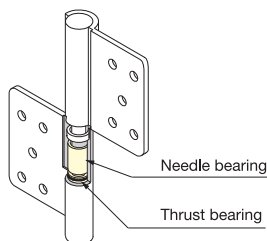
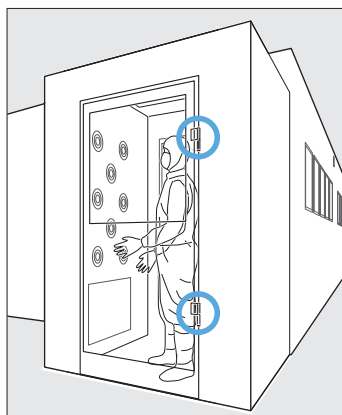
HEAVY DUTY CLEAN ROOM LIFT-OFF HINGE



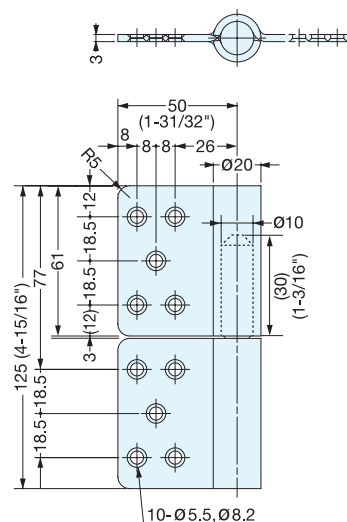
HG-CV127



HG-CV127/R



- No metal-to-metal contact.
- Special bearings minimize particles.
- Successfully passed 200,000 open cycle test at the following door size.
 - Door Weight: MAX. 100 kg/pair (220 lbs/pair)
 - Door Height: MAX. 2,000 mm (78-3/4")
 - Door Width: MAX. 900 mm (35-7/16")



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
HG-CV127/L	388	5	50
HG-CV127/R			

Material	Finish
304 Stainless Steel	Satin/Polished

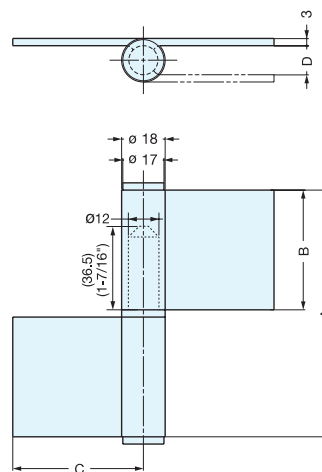
LIFT-OFF HINGE (WELD-ON)

**S-6166-2**

Right

Left

- Weld-on type stainless steel lift-off hinge.
- Left and Right handed available.
- Door weight: Max. 40 kg/pair (88 lbs/pair)



Material	Finish
304 Stainless Steel	Satin

Item No.		A	B	C	D	Weight (g)	Box (pcs)	Carton (pcs)
Left	Right							
S-6166-2-L	S-6166-2-R	102 (4-1/64")	49.5 (1-61/64")	55 (2-5/32")	12 (15/32")	300	12	60

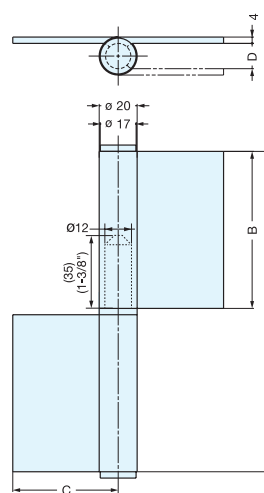
LIFT-OFF HINGE (WELD-ON)

**S-6166-6**

Right

Left

- Weld-on type stainless steel lift-off hinge.
- Left and Right handed available.
- Door weight: Max. 90 kg/pair (198 lbs/pair)



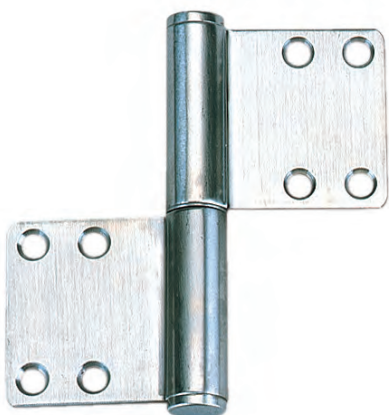
Material	Finish
304 Stainless Steel	Satin

Item No.		A	B	C	D	Weight (g)	Box (pcs)	Carton (pcs)
Left	Right							
S-6166-6-L	S-6166-6-R	152 (5-63/64")	74.5 (2-15/16")	55 (2-5/32")	12 (15/32")	570	8	40

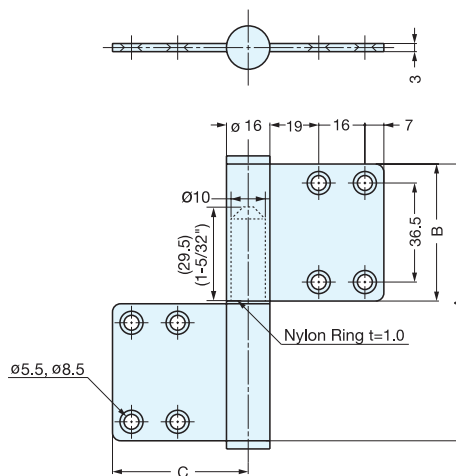
LIFT-OFF HINGE



S-6173-2



- Screw hole is countersunk from both sides.
- Non-handed.
- Door weight: Max. 40 kg/pair (88 lbs/pair)



Material	Finish
304 Stainless Steel	Satin

Item No.	A	B	C	Weight (g)	Box (pcs)	Carton (pcs)
S-6173-2	102 (4-1/64")	50.5 (1-63/64")	50 (1-31/32")	240	12	60

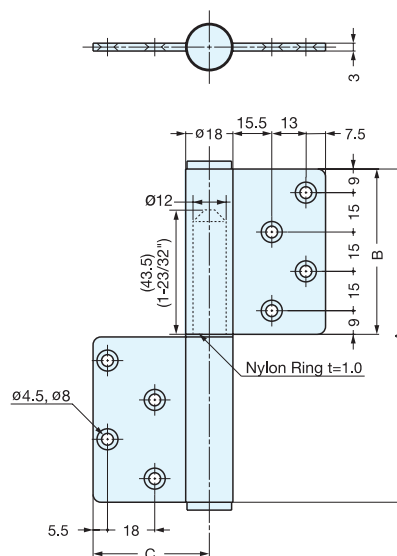
LIFT-OFF HINGE



S-6173-5



- Screw hole is countersunk from both sides.
- Non-handed.
- Door weight: Max. 50 kg/pair (110 lbs/pair)



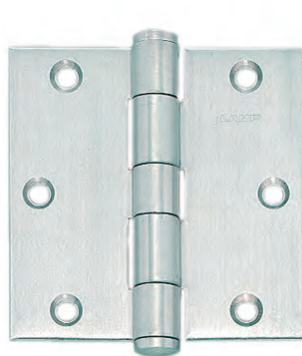
Material	Finish
304 Stainless Steel	Satin

Item No.	A	B	C	Weight (g)	Box (pcs)	Carton (pcs)
S-6173-5	127 (5")	63 (2-31/64")	45 (1-25/32")	330	8	40

BUTT HINGE



3535/SS, 4040/SS

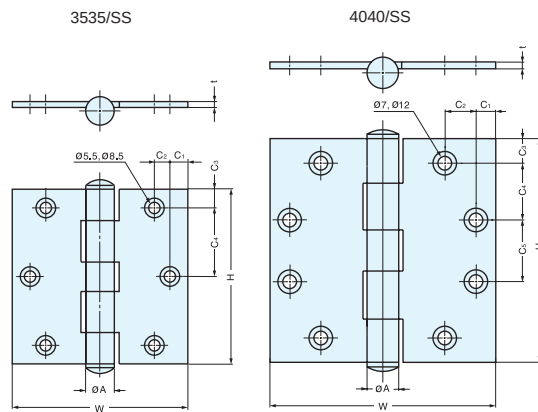


3535/SS



4040/SS

- Door weight:
3535/SS Max. 25 kg/pair (55 lbs/pair)
4040/SS Max. 40 kg/pair (88 lbs/pair)



Material	Finish
304 Stainless Steel	Satin

Item No.	H	W	C ₁	C ₂	C ₃	C ₄	C ₅	A	t	Weight (g)	Box (pcs)	Carton (pcs)
3535/SS	89.0 (3-1/2")	89.0 (3-1/2")	9.1	8.0	9.1	35.4	-	14.0	3.0	145	2	100
4040/SS	101.6 (4")	101.6 (4")	9.5	9.5	13.0	25.5	24.6	14.8	3.4	195		50

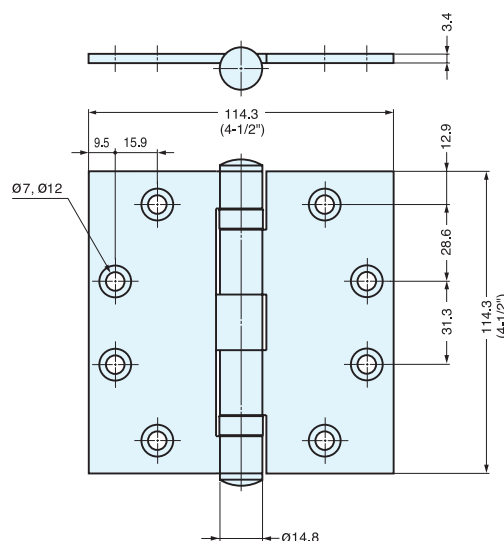
BUTT HINGE (W/BALL BEARING)



4545B/SS



- Ball bearing provides smooth movement.
- Door weight: Max. 45 kg/pair (99 lbs/pair)



Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
4545B/SS	420	2	50	304 Stainless Steel	Satin

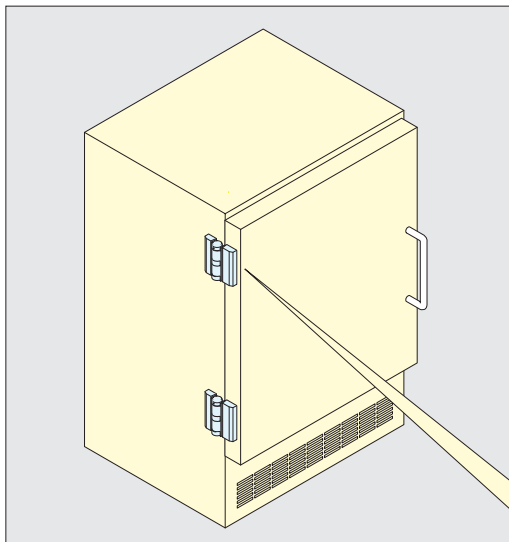
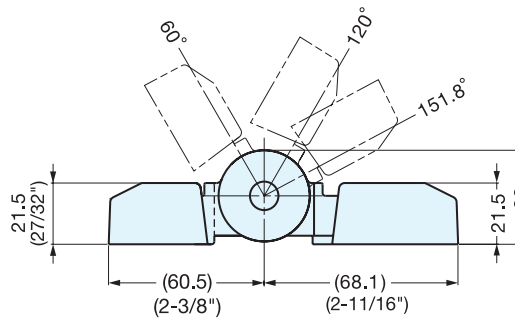
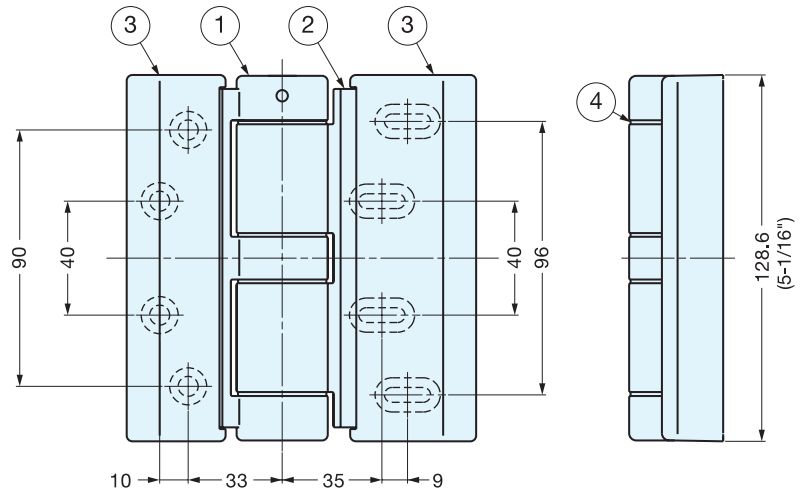
DETENT HINGE



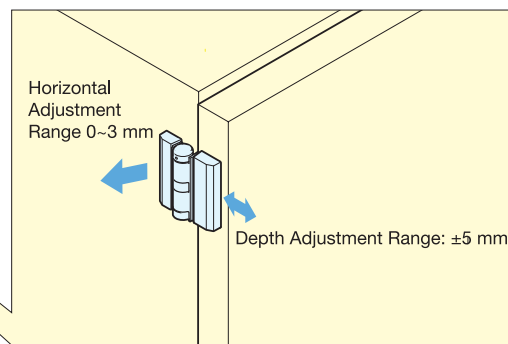
HG-FH-128



- Ideal for doors which need to be compressed.
- Horizontally adjustable for better compression.
- Holds doors at 60° and 120°
Max. Open: 152°
- Plastic washer provides smooth movement.
- Recommended door specification:
Width: 600~900 mm (24~36")
Height: 900~1200 mm (36~48")
Weight: maximum 40 kg (88 lbs) for 2 hinges
• Retaining Force: 102 kgf·cm (88.5 lbs·in)



Installation



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
HG-FH-128	1500	2	10

No.	Part Name	Material	Finish
①	Body A	Zinc Alloy	Nickel
②	Body B		
③	Cover A, B	AES	Silver
④	Washer	Fluoroplastic	-

SPRING HINGE



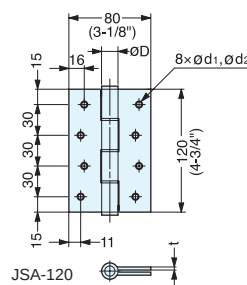
JSA



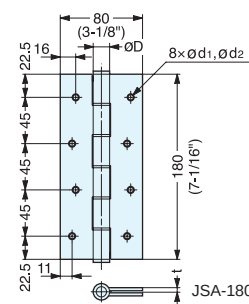
JSA-120A

JSA-180S

- Spring loaded for self closing.
- Adjustable spring tension.
- Successfully passed 500,000 open/close private cycle tests.

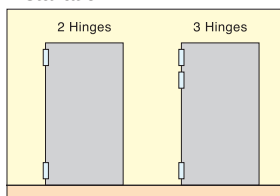


JSA-120

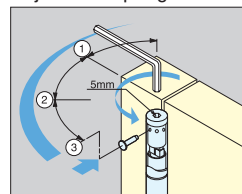


JSA-180

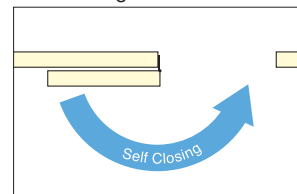
Installation



Adjustable Spring Tension



Self Closing



Item No.	D	t	d ₁	d ₂	Load Capacity (kg)		Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
					2 Hinges	3 Hinges					
JSA-120A	16	4.0	5.0	8	20 (44 lbs)	30 (66 lbs)	175	2	20	Aluminum	Anodized
JSA-180A					40 (88 lbs)	60 (132 lbs)	260			304 Stainless Steel	Satin
JSA-120S	17	2.5	5.5	9	20 (44 lbs)	30 (66 lbs)	303				
JSA-180S	18	3.0			40 (88 lbs)	60 (132 lbs)	526				

SPRING HINGE



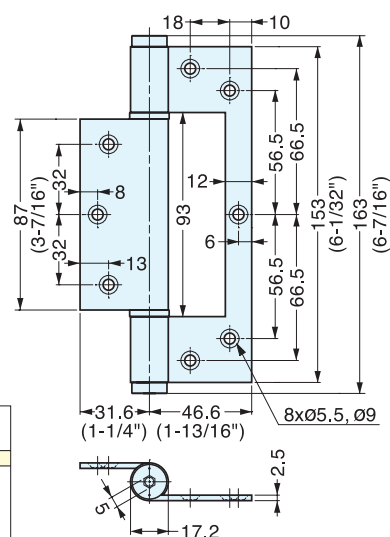
JST-150S



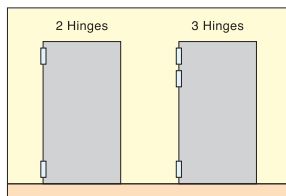
JST-150S



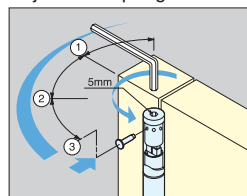
- Spring loaded for self closing.
- Adjustable spring tension.
- Successfully passed 500,000 open/close private cycle tests.



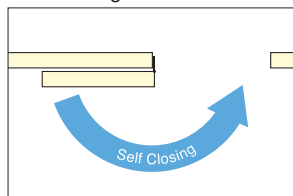
Installation



Adjustable Spring Tension



Self Closing

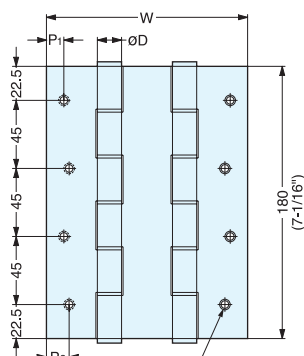
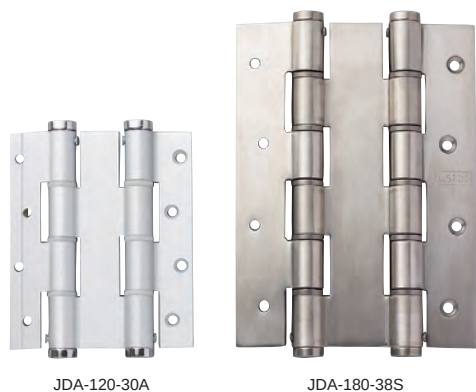


Item No.	Load capacity (kg)		Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
	2 Hinges	3 Hinges					
JST-150S	40 (88 lbs)	60 (132 lbs)	336	2	20	304 Stainless Steel	Satin

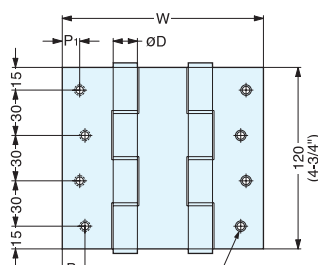
DOUBLE ACTION SPRING HINGE



JDA

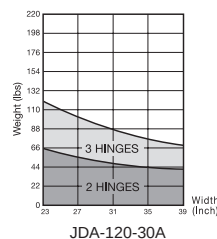


JDA-180

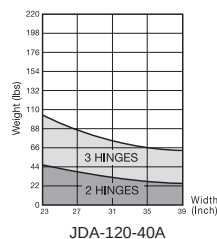


JDA-120

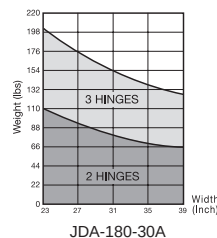
- Spring loaded for self closing.
- Adjustable spring tension.
- Successfully passed 500,000 open/close private cycle tests.



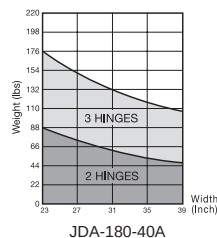
JDA-120-30A



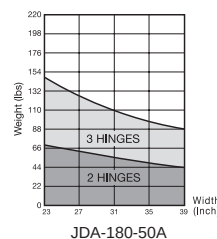
JDA-120-40A
JDA-120-36S



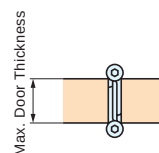
JDA-180-30A



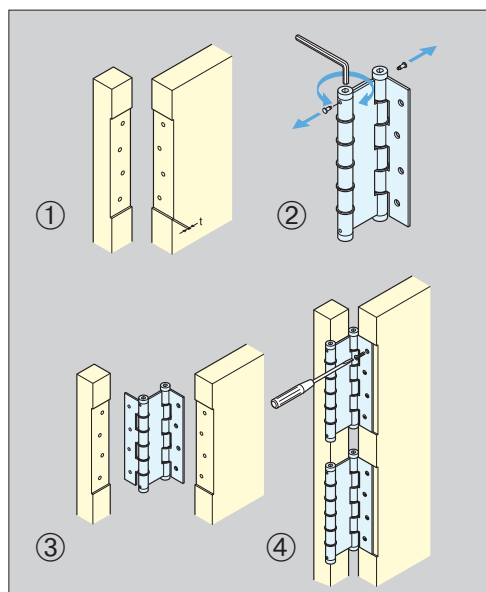
JDA-180-40A
JDA-180-38S



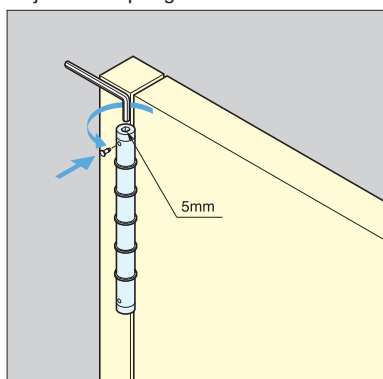
JDA-180-50A



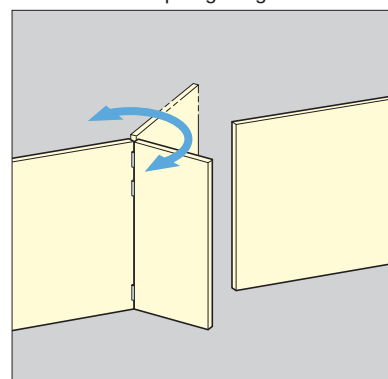
Installation



Adjustable Spring Tension



Double Action Spring Hinges



Item No.	W	W ₁	W ₂	P ₁	P ₂	D	t	d ₁	d ₂	Max. Door Thickness (mm)	Weight (g)	Material	Finish	Box (pcs)	Carton (pcs)
JDA-120-30A	101 (4")	29.5	42	6.5	11.5					30 (1-3/16")	275	Aluminum	Anodized	2	20
JDA-120-40A	133 (5-1/4")	40.0	53	11.0	16.0					40 (1-9/16")	320				
JDA-180-30A	101 (4")	29.5	42	6.5	11.5	16	4.0	5.0	8	30 (1-3/16")	407				
JDA-180-40A	133 (5-1/4")	40.0	53	11.0	16.0					40 (1-9/16")	466				
JDA-180-50A	157 (6-3/16")	48.5	60	19.5	24.5					50 (1-31/32")	510	304 Stainless Steel	Satin	2	20
JDA-120-36S						17	2.5	5.5	9	36 (1-13/32")	555				
JDA-180-38S	133 (5-1/4")	40.0	53	11.0	16.0	18	3.0			38 (1-1/2")	947				

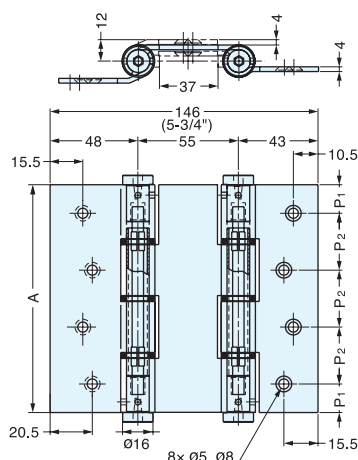
DOUBLE ACTION SPRING HINGE



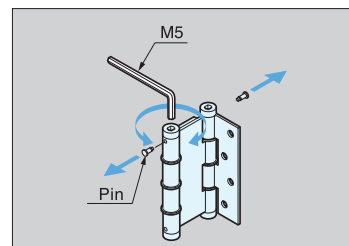
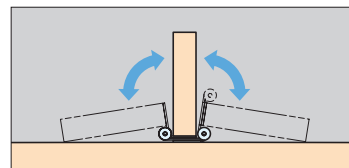
JDAW



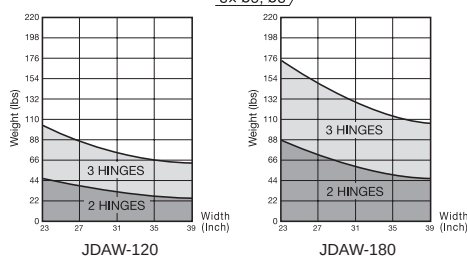
JDAW-120-35A



- Spring loaded for self closing.
- Adjustable spring tension.
- Requires 8 #8 flathead countersunk screws, 3/4" or longer. (not included)



Spring Adjustment



Item No.	A	P ₁	P ₂	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
JDAW-120-35A	120 (4-3/4")	15.0	30	35 mm (1-3/8")	350	2	20	Aluminum	Anodized
JDAW-180-35A	180 (7-1/16")	22.5	45						

OTHER SPRING HINGES FOR SMALL DOORS AND CABINETRY



HG-SH P. 225



HG-SHL P. 225



HG-PV60AC P. 227



HG-BF3 P. 227

Zwei L Glass Door Hinge



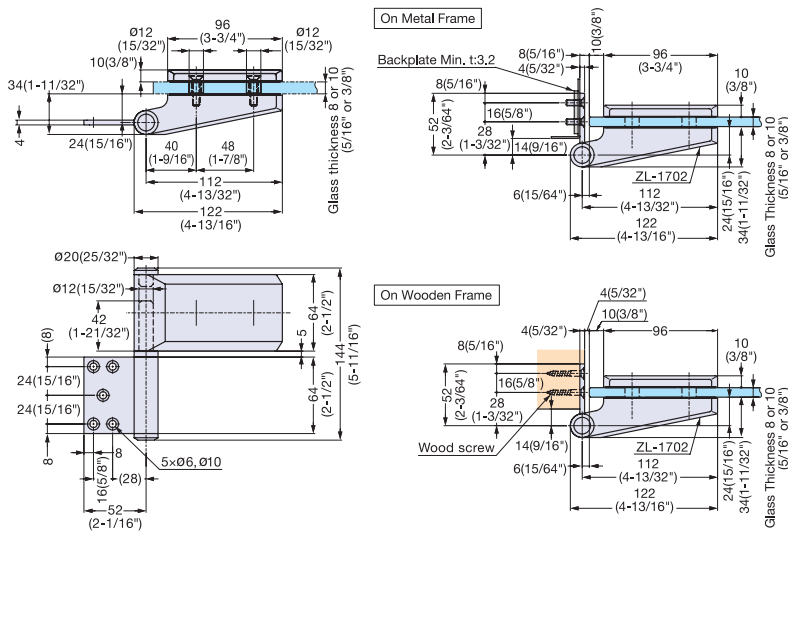
ZL-1702

HINGES

Zwei L GLASS DOOR HINGES



- Supplied with stainless steel wood screw (4.8 × 32) and stainless steel screw (M5 × 16).



Item No.	Material	Finish/Color	Glass Thickness (mm)	Load Capacity (kg)/pair	Max Door Size (mm)	Weight (g)	Box (pcs)
ZL-1702	316 Stainless Steel	Zwei L	8~10 (5/16"~3/8")	50 (110 lbs)	H2500 × W900 (H98-7/16" × W35-7/16")	806	2

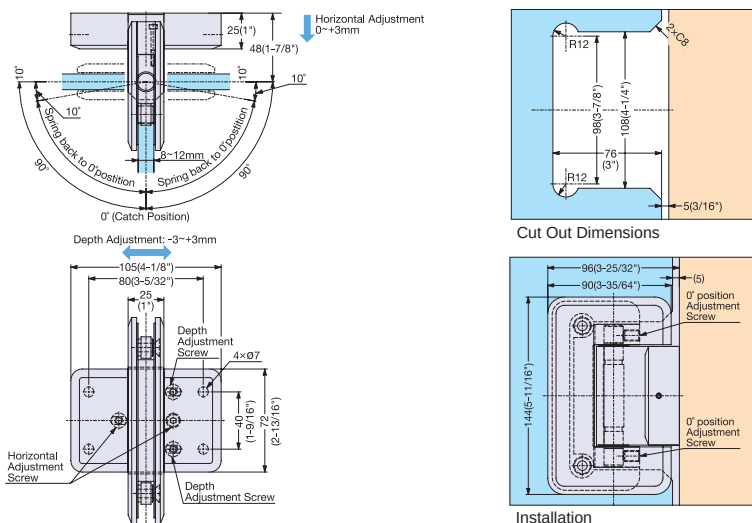
Zwei L Glass Door Hinge



ZL-1703



- Supplied with stainless steel screws (6.2 × 56), anchor plug and two allen keys (2.5 and 4 mm).



Item No.	Glass Thickness (mm)	Load Capacity (kg)/pair	Max Door Size (mm)	Weight (g)	Box (pcs)
ZL-1703	8~12 (5/16"~15/32")	65 (143 lbs)	H2500 × W1000 (H98-7/16" × W39-3/8")	-	1

Part Name	Material	Finish/Color
Bracket	316 Stainless Steel	Zwei L
Face Plate		
Bracket Cover		
Gasket	Synthetic Rubber	Black

STAINLESS STEEL GRAVITY HINGE FOR GLASS DOOR

GH-G02

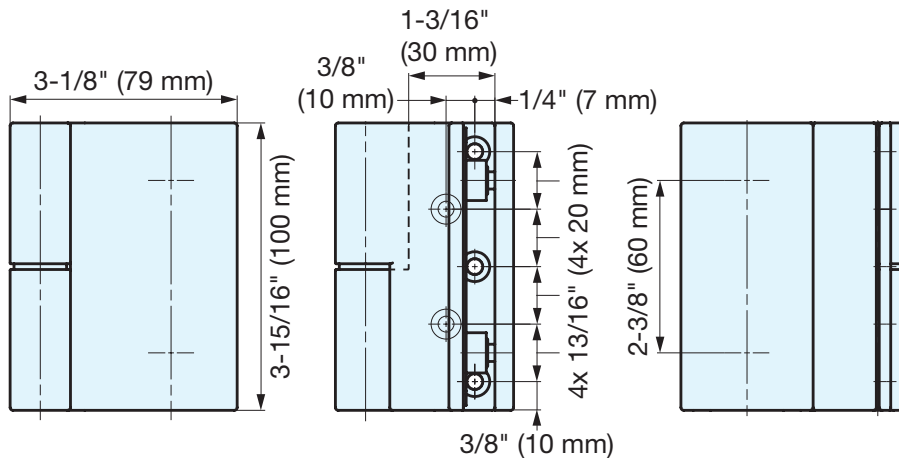
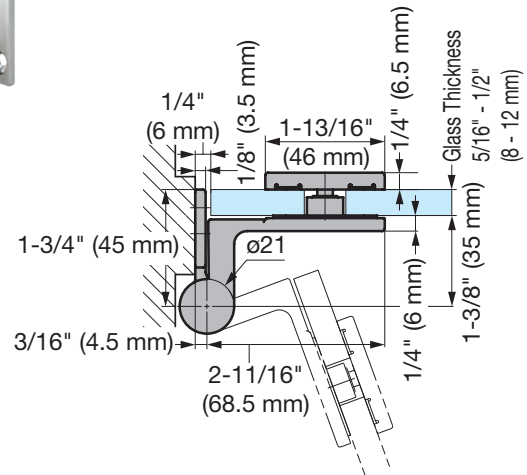


GH-G02-L

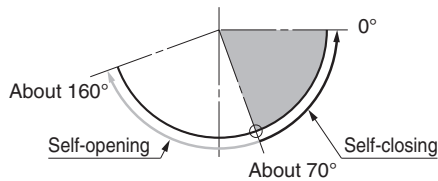
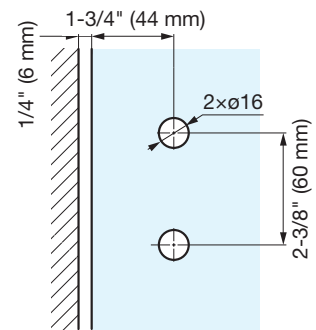


Reverse side

- Can be used in areas where water is used.
- Hinge self-closes between 0° and 70°.
- Hinge self-opens between 70° and 160°. Use door stopper to achieve desired max opening angle.
- A rise of 1/8" (3 mm) occurs when open 70°.



Glass Dimensions



Glass Thickness	Load Capacity		Opening Angle
5/16" - 1/2" (8 - 12 mm)	99.2 lbs/2 pcs (45 kg/2 pcs)	110.2 lbs/3 pcs (50 kg/3 pcs)	160°

Item No.	Type	Material	Finish	Door Specs			
				Width/2 pcs	Height/2 pcs	Width/3 pcs	Height/3 pcs
GH-G02-R	Right Side	Stainless Steel	Mirror	31-1/2" (Max. 800 mm)	82-11/16" (Max. 2100 mm)	33-7/16" (Max. 850 mm)	94-1/2" (Max. 2400 mm)
GH-G02-L	Left Side						

STAINLESS STEEL GRAVITY HINGE FOR GLASS DOOR

GH-G07

DOOR ACCESSORIES

GLASS DOOR GRAVITY HINGE FOR GLASS DOOR

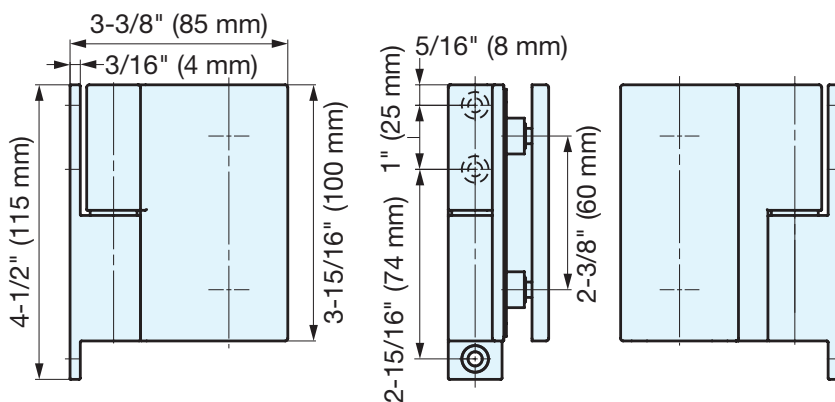
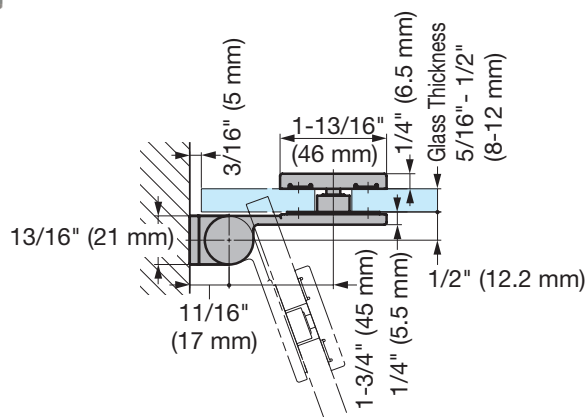


GH-G07-L

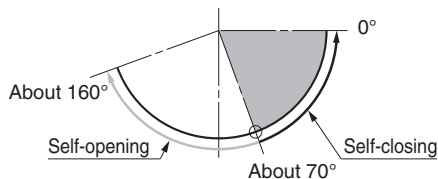
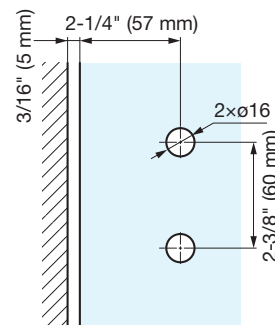


Reverse side

- Can be used in areas where water is used.
- Hinge self-closes between 0° and 70°.
- Hinge self-opens between 70° and 160°. Use door stopper to achieve desired max opening angle.
- A rise of 1/8" (3 mm) occurs when open 70°.



Glass Dimensions



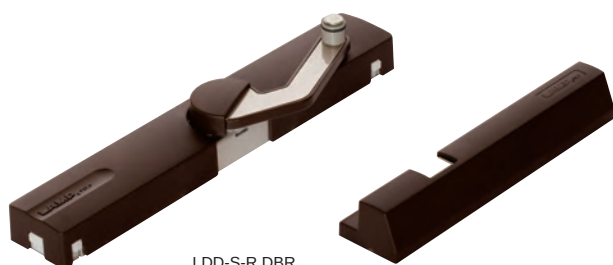
Glass Thickness	Load Capacity		Opening Angle
5/16" - 1/2" (8 - 12 mm)	99.2 lbs/2 pcs (45 kg/2 pcs)	110.2 lbs/3 pcs (50 kg/3 pcs)	160°

Item No.	Type	Material	Finish	Door Specs			
				Width/2 pcs	Height/2 pcs	Width/3 pcs	Height/3 pcs
GH-G07-R	Right Side	Stainless Steel	Mirror	31-1/2"	82-11/16"	33-7/16"	94-1/2"
GH-G07-L	Left Side			(Max. 800 mm)	(Max. 2100 mm)	(Max. 850 mm)	(Max. 2400 mm)

LAPCON DOOR DAMPER (SURFACE MOUNT TYPE)



LDD-S

LDD-S-R DBR
(Right - handed)

- Door damper unit for interior, swinging doors.
- Grips door at final 15° and softly, self-closes doors more gently compared to other door closers, putting less stress on the hinges.
- Surface mounting allows hardware to be added to existing doors.
- Recommended Door Specifications:
Width: Max. 914 mm (3' 0")
Weight: 15~40 kg (33~88 lbs)
- Can be adjusted for door weight after installation. Damper function can also be switched off.
- Slim, unobtrusive design: damper unit is just 3/4" high, easily fitting most door frames.
- Available in 4 colors to match your door, specify White (WT), Light Grey (LGR), Light Brown (LBR), or Dark Brown (DBR).
- Can be used with HES hinges (P.180~189), sold separately.
- Includes screws for installation.



■ Available in the following colors:



White



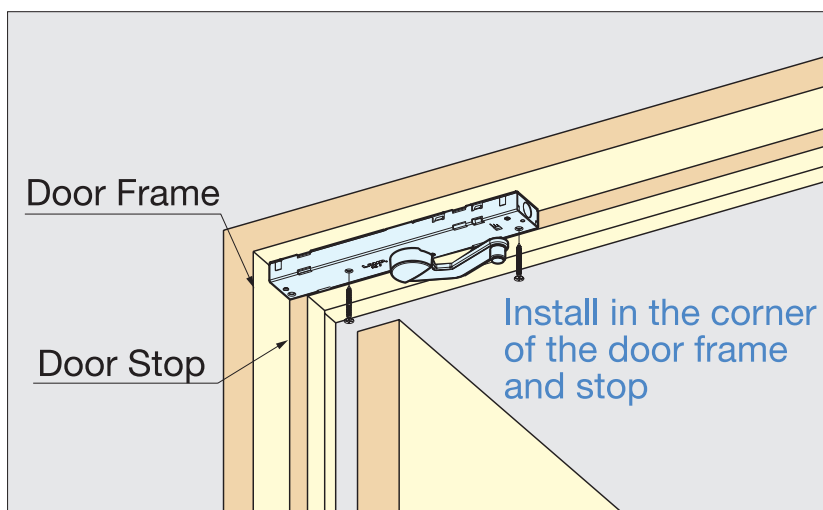
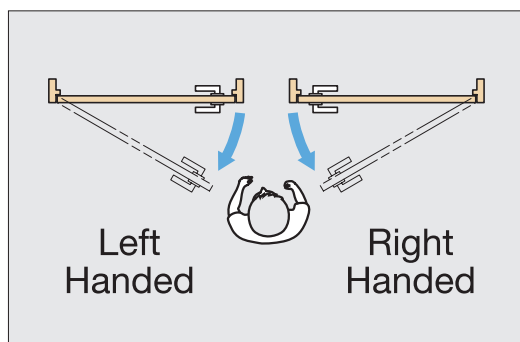
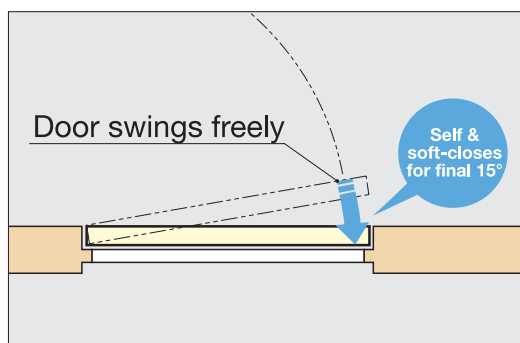
Light Gray



Light Brown



Dark Brown

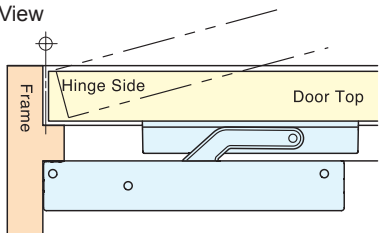


■ Installation & Adjustment

Item No.	Handing	Weight (kg)	Box (pc)	Carton (pcs)
LDD-S-L	Left	0.55	1	50
LDD-S-R	Right	(1.2 lbs)		

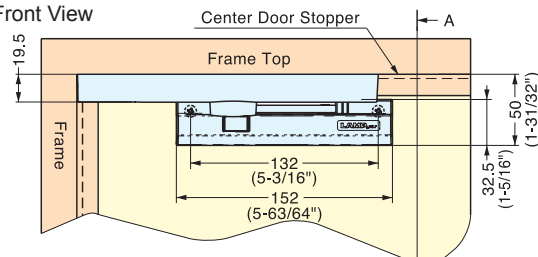
Component	Material	Finish/Color
Main Body	Steel, Zinc Alloy	Plain
Counter Plate		
Covers	ABS	White (WT), Light Grey (LGR), Light Brown (LBR), Dark Brown (DBR)

■ Top View

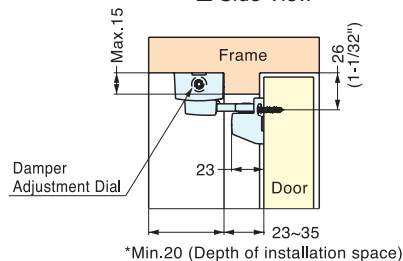


*Top view shows mounting position of hardware in case of depth of installation space is min. 25 mm (1").
If the dimension is between 20 mm and 25 mm, please move damper 25 mm away from hinge side. Then please use screw hole C and Extra hole to install damper instead of screw hole B.

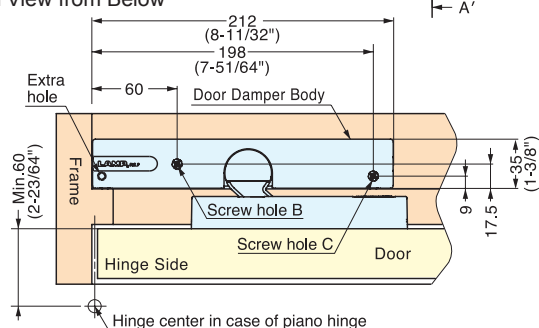
■ Front View



■ Side View



■ View from Below

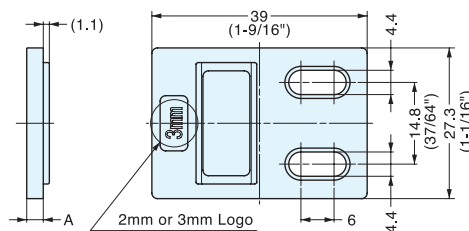


Please take the following precautions when considering this hardware for your application:

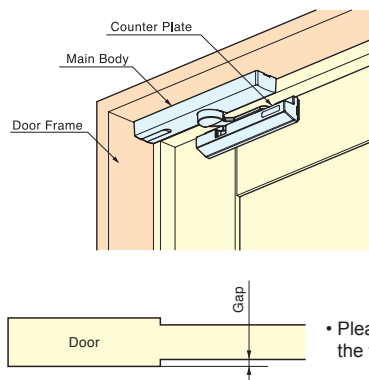
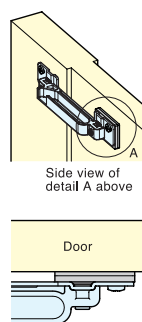
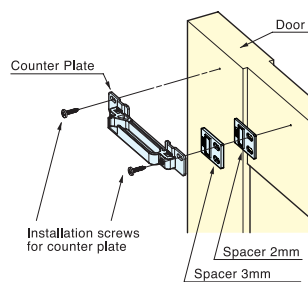
- For interior use at room temperature (32~104°F, 0~40°C) only-not intended for use under high winds, high temperature or humidity, or where the hardware may get wet.
- Effectiveness may decrease over time if door is slammed closed continuously.
- Closing performance may vary depending on door latch bolt.
- If being used at the entrance of a room where air cannot move freely (vault, cellar, etc.), the ambient air pressure may affect the closing speed and power of the hardware.
- Do not hang on/hang anything on the arm as it may damage the hardware.
- Please read the installation instructions included with the hardware fully before installation.
- After installation and during normal use, please check the fasteners and hardware on a regular basis.

SPACER FOR LDD-S

LDD-S-P



- Spacer to install LDD-S counter plate (P. 200, sold separately) on uneven door surfaces, such as those on panel doors.
- Available in 2 mm (1/16") and 3 mm (1/8") thicknesses. Mix and match spacers for varying thicknesses.
- Spacers still allow micro adjustments to be made for the main unit.



- Please confirm difference between the face of the door panel, etc.

Item No.	A	Weight (g)	Box (pcs)	Carton (pcs)
LDD-S-P2 BL	2 mm (1/16")	1.8	100	1000
LDD-S-P3 BL	3 mm (1/8")	2.8		

Material	Color
ABS	Black

LAPCON DOOR DAMPER (RECESSED TYPE)

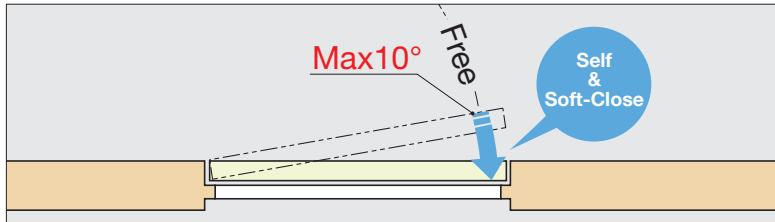


LDD-V

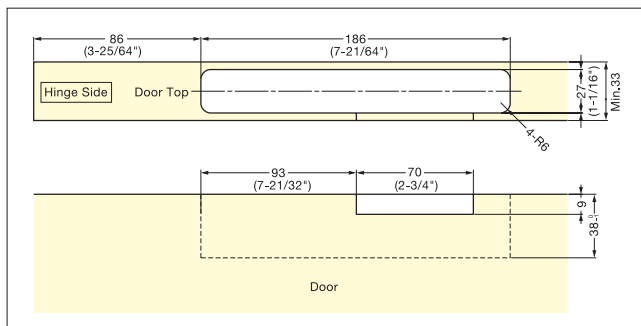
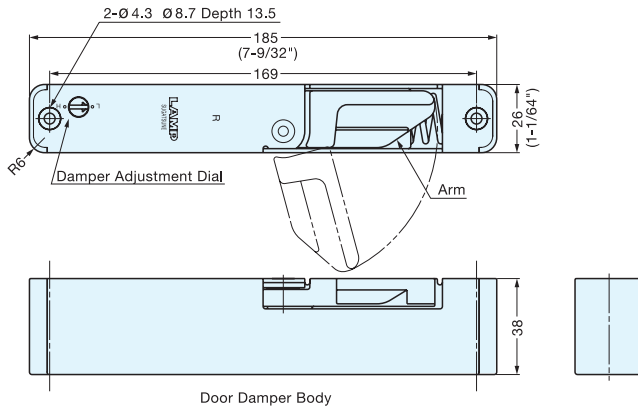


- Door damper unit for interior, swinging doors.
- Grips door at final 10° and softly, self-closes doors more gently compared to other door closers, putting less stress on the hinges.
- "Invisible" design minimizes visibility of the hardware.
- Recommended Door Specifications:
Thickness: minimum 33 mm (1-5/16")
Width: maximum 914 mm (3' 0")
Weight: 15~40 kg (33~88 lbs)
- Can be adjusted for door weight after installation. Counterplate position can be easily adjusted by removing cover and turning micro-adjustment screws.
- Can be used with HES hinges (P.180~189), sold separately.
- Includes screws and paper template for installation.

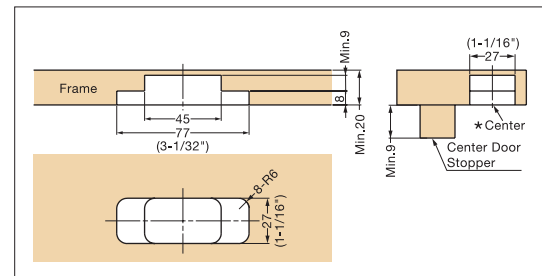
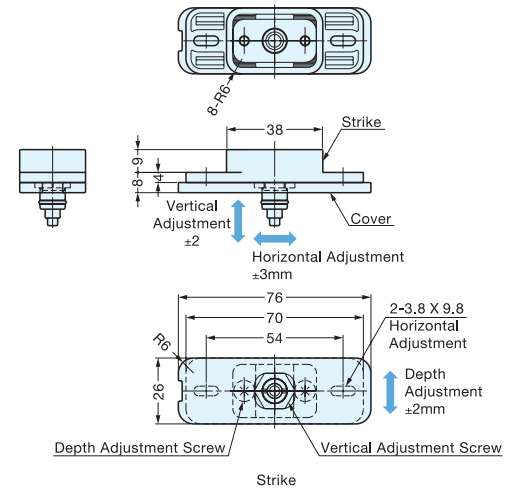
LDD-V-R is shown



LDD-V-R is shown



Bore Dimensions (Door)

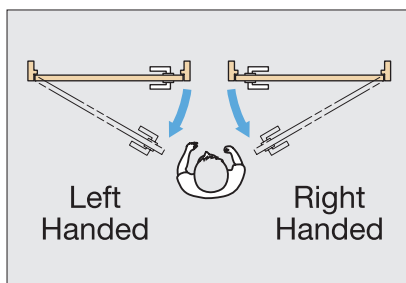
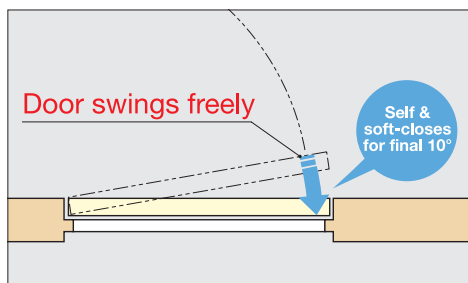
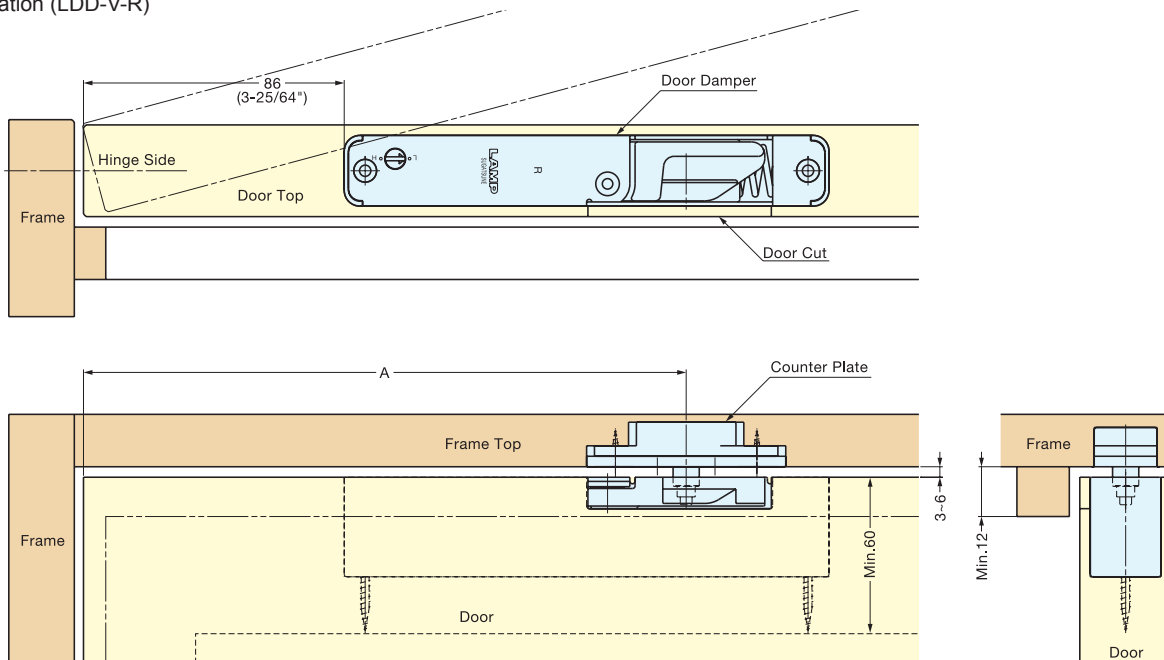


Bore Dimensions (Frame)

Part Name	Material	Finish/Color
Main Body	Steel/Polyacetal/PBT	Chromate/Grey
Counter Plate	Steel/Polyacetal	Nickel/Grey

Item No.	Type	Door Weight	Door Width (mm)	Door Thickness (mm)	Box (pc)	Carton (pcs)
LDD-V-R	Right	15~40 kg (33~88 lbs)	Max. 914 (3' 0")	Min. 33 (1-19/64")	1	24
LDD-V-L	Left					

Installation (LDD-V-R)



Hinge	A
HES3D-120	219
HES3D-V135LGR	217
HES3D-160	220
HES3D-E190	220
3535/SS	223

*Dimension A depends on type of hinge used

Please take the following precautions when considering this hardware for your application:

- For interior use at room temperature (32~104°F, 0~40°C) only-not intended for use under high winds, high temperature or humidity, or where the hardware may get wet.
- Effectiveness may decrease over time if door is slammed closed continuously.
- Closing performance may vary depending on door latch bolt.
- If being used at the entrance of a room where air cannot move freely (vault, cellar, etc.), the ambient air pressure may affect the closing speed and power of the hardware.
- Do not hang on/hang anything on the arm as it may damage the hardware.
- Please read the installation instructions included with the hardware fully before installation.
- After installation and during normal use, please check the fasteners and hardware on a regular basis.



LAPCON DOOR DAMPER (RECESSED TYPE)



LDD-V100



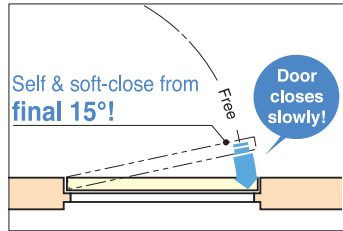
LDD-V100-NI-L shown.

- Door damper unit for interior, swinging doors.
- Grips door at final 15° and softly, self-closes doors more gently compared to other door closers, putting less stress on the hinges.
- Heavy Duty: Holds up to 220 lbs doors (100 kg).
- "Invisible" design minimizes visibility of the hardware.
- Recommended Door Specifications:
Thickness: minimum 40 mm~60 mm (1-9/16"~2-3/8")
Width: maximum 900 mm (35-7/16")
Weight: 40~100 kg (88~220 lbs)
- Can be adjusted for door weight after installation. Counterplate position can be easily adjusted by removing cover and turning micro-adjustment screws.
- Can be used with HES3D-E190 and HES3D-160.
- Includes screws and paper template for installation.



Counter plate cover (Nickel/Dark brown)

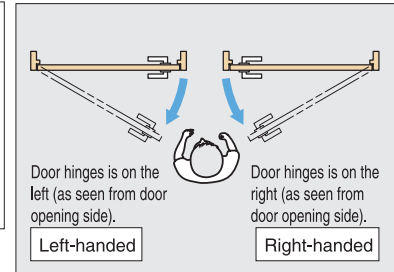
[Door Movement]



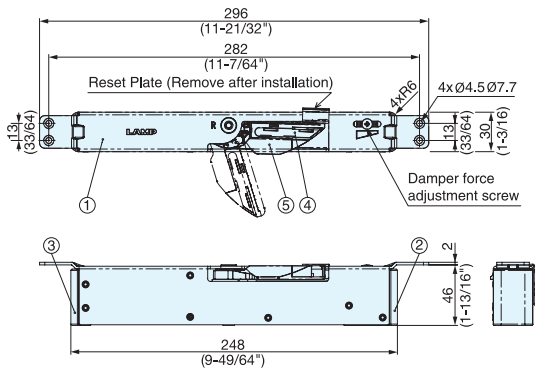
Right-handed type shown.

Left-handed type is symmetrical.

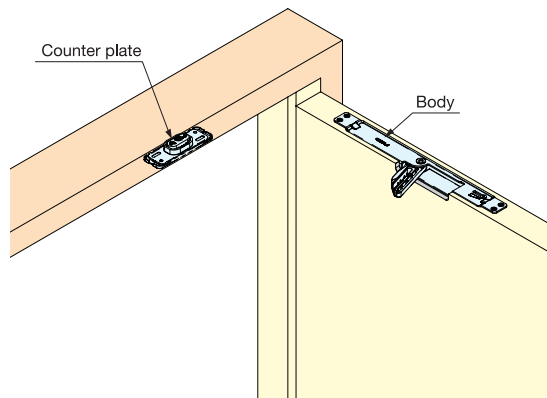
[Door Hinge Side]



[Body]

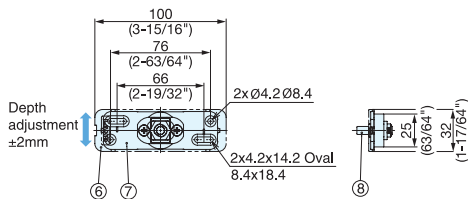
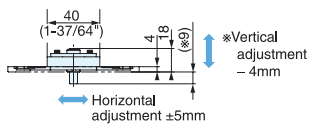


Below drawing shows right-handed type. Left-handed type is symmetrical.



Installation

[Counter Plate]

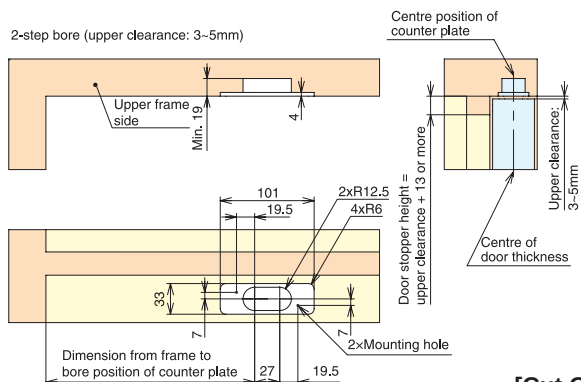
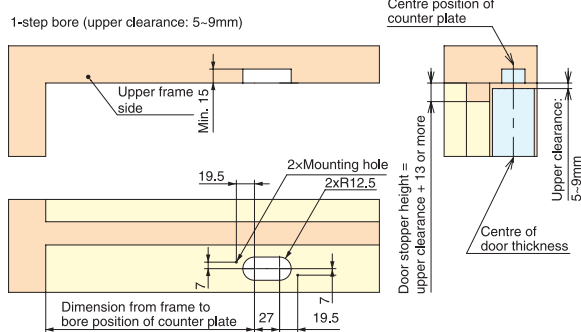


No.	Part Name	Material	Finish/Color
①	Case	Steel (SPCC)	Nickel
②	Damper Base	POM	Grey
③	Spring Base	POM	Grey
④	Arm Cover	POM	Grey
⑤	Arm	Zinc Alloy (ZDC)	Nickel
⑥	Counter Plate Cover	ABS	Dark Brown/Nickel
⑦	Counter Plate Base	Zinc Alloy (ZDC)	—
⑧	Counter Plate Shaft	Steel (SUM)	Nickel

Item No.	Finish/Color	Type	Door Weight (kg)	Door Width (mm)	Door Thickness (mm)	Box (pc)	Carton (pcs)
LDD-V100-DBR-R	Dark Brown	Right	88 lbs~220 lbs (40~100 kg)	Max. 35-7/16" (900)	1-9/16"~2-3/8" (40~60 mm)	1	10
LDD-V100-DBR-L		Left					
LDD-V100-NI-R	Nickel	Right					
LDD-V100-NI-L		Left					

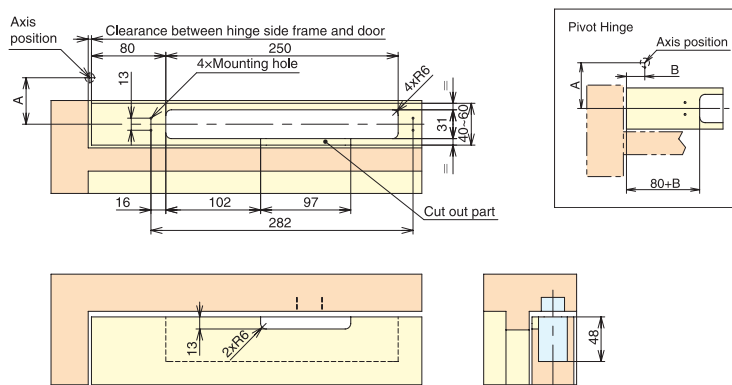
[Cut Out Dimensions for Frame]

LDD-V100-R (right-handed) shown. LDD-V100-L (left-handed) is symmetrical.



[Cut Out Dimensions for Door]

LDD-V100-R (right-handed) shown. LDD-V100-L (left-handed) is symmetrical.



Dimension from frame to bore position of counter plate (mm)

Door Hinge	Clearance Between Hinge Side Frame and Door (mm)				
	1	2	3	4	5
HES3D-160, E190	217	218	219	220	221
Butt Hinge	A=20~35	220	221	222	223
	A=35~50	223	224	225	226
Pivot Hinge	A=20~35	220+B	221+B	222+B	223+B
	A=35~50	223+B	224+B	225+B	226+B

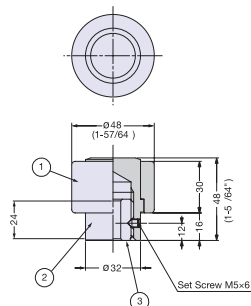
If clearance between hinge side frame and door is beyond the range in the table above, calculate as per the table below.

Door Hinge	Dimension from Frame to Bore Position of Counter Plate (mm)	
HES3D-160, E190	216 + Clearance Between Hinge Side Frame and Door	
Butt Hinge	A=20~35	219 + Clearance Between Hinge Side Frame and Door
	A=35~50	222 + Clearance Between Hinge Side Frame and Door
Pivot Hinge	A=20~35	219 + B + Clearance Between Hinge Side Frame and Door
	A=35~50	222 + B + Clearance Between Hinge Side Frame and Door

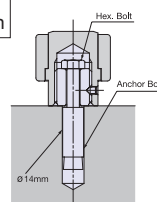
Zwei L Door Stopper



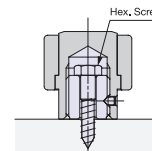
ZL-1801



- Supplied with stainless steel hex. bolt (M8 × 75), concrete anchor (for M8, ø14 mm hole), stainless steel carriage bolt (M8 × 50) and allen key.

Concrete, Tile,
Brick Floor Installation

Wood Floor Installation



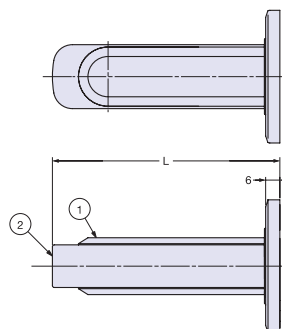
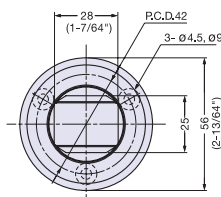
Item No.	Weight (g)	Box (pc)
ZL-1801	381	1

No.	Part Name	Material	Finish
①	Body	316 Stainless Steel	Zwei L
②	Bumper	Synthetic Rubber	Black
③	Base	316 Stainless Steel	Plain

Zwei L Door Stopper



ZL-1802



- Supplied with stainless steel wood screws (4.1 × 32) and concrete anchor (for wood screw 4.1, ø6 mm hole).

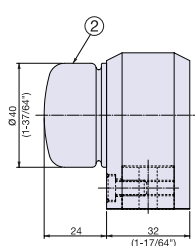
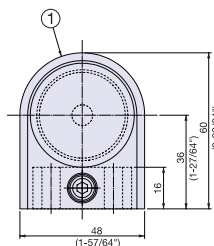
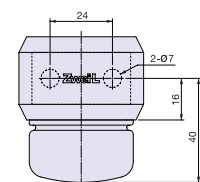
Item No.	L	Weight (g)	Box (pc)
ZL-1802-72	72 (2-53/64")	360	1
ZL-1802-96	96 (3-25/32")	474	

No.	Part Name	Material	Finish/Color
①	Body	316 Stainless Steel	Zwei L
②	Bumper	Synthetic Rubber	Black

Zwei L Door Stopper



ZL-1803



- Supplied with stainless steel wood screw (6.2 × 56), anchor plug and 4 mm allen key.

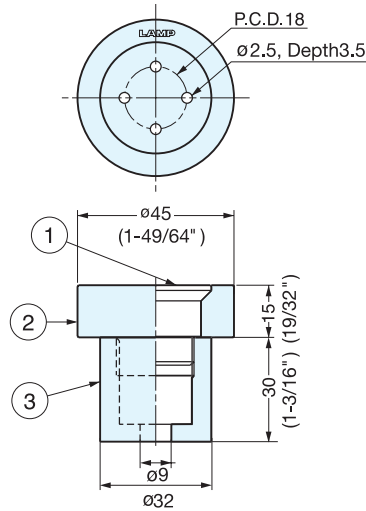
Item No.	Weight (g)	Box (pcs)
ZL-1803	-	1

No.	Part Name	Material	Finish
①	Body	316 Stainless Steel	Zwei L
②	Bumper	EPDM	Grey

DOOR STOPPER



HT-32P



- Door stopper with a clear acrylic bumper.
- Supplied with stainless steel screw 8 × 50, anchor plug and special wrench.

Item No.	Weight (g)	Box (pc)	Carton (pcs)
HT-32P	320	1	30

No.	Part Name	Material	Finish
①	Face Plate	304 Stainless Steel	Satin
②	Bumper	Soft Acrylic	Clear
③	Post	304 Stainless Steel	Satin

DOOR STOPPER



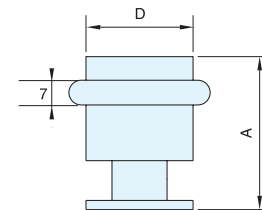
DSD



DSD-02 (Floor-Mount Type)

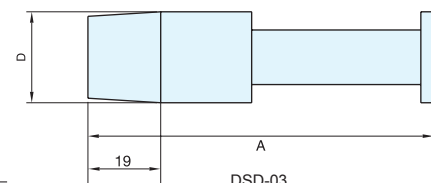


DSD-03 (Wall-Mount Type)



DSD-02

- Supplied with screw and expansion anchor.



DSD-03

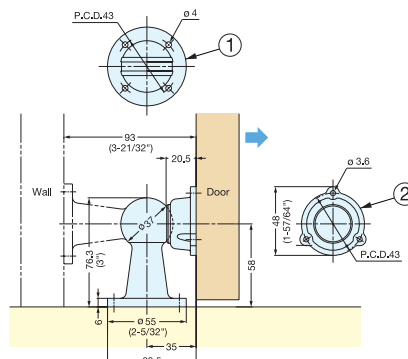
Item No.	D	A	Weight (g)	Box (pcs)	Carton (pcs)
DSD-02/S	20 (25/32")	35 (1-3/8")	68	25	250
DSD-02/L	35 (1-3/8")	50 (1-31/32")	281	10	100
DSD-03/S	25 (63/64")	65 (2-9/16")	147		
DSD-03/M		95 (3-47/64")	187		
DSD-03/L		125 (4-39/64")	229		

Material	Finish
303/304 Stainless Steel	Satin

DOOR STOP & HOLDER



SMDH



- Holds door in opened position with strong magnet.
- Can be mounted on either floor or wall.

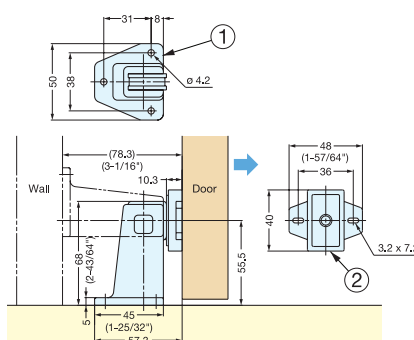
Item No.	Magnetic Force	Weight (g)	Box (pcs)	Carton (pcs)
SMDH/IVY	14 (30.8 lbs)	140	10	100
SMDH/BRN				

No.	Material	Color
①	Polycarbonate	Brown (BRN), Ivory (IVY)
②	ABS	

DOOR STOP & HOLDER



KMDH



- Holds door in opened position with strong magnet.
- Can be mounted on either floor or wall.

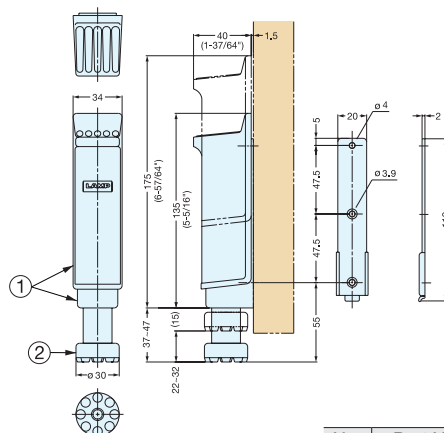
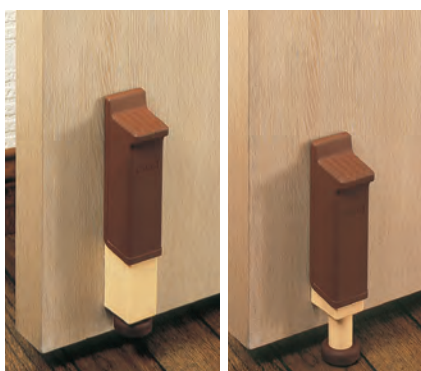
Item No.	Magnetic Force	Weight (g)	Box (pcs)	Carton (pcs)
KMDH/IVY	12 (26.4 lbs)	100	10	100
KMDH/BRN				

No.	Material	Color
①	Polyamide	Brown (BRN), Ivory (IVY)
②		

STEP-ON DOOR HOLDER



SODH



- Holds door in any position.
- Easy to operate. Simply step on the top to hold or release the door.
- Easy installation, mount the bracket and slide-in the body.

Item No.	Weight (g)	Box (pc)	Carton (pcs)
SODH	215	10	50

No.	Part Name	Material	Color
①	Body	Plastic	Brown, Ivory
②	Bottom	Rubber	Brown

DOOR CLOSER



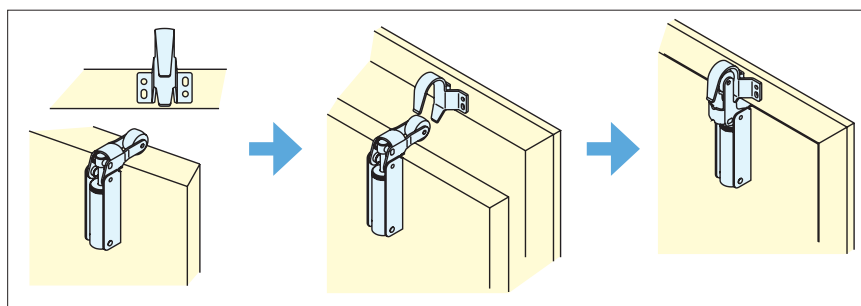
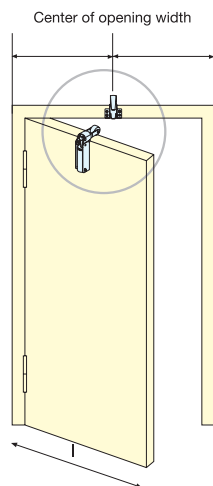
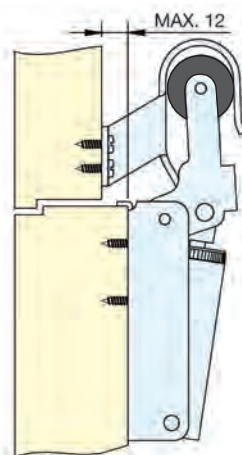
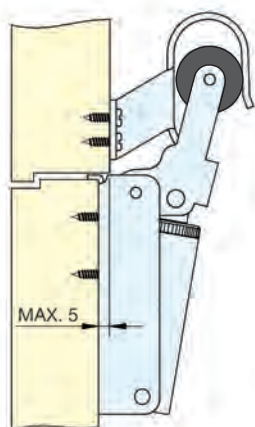
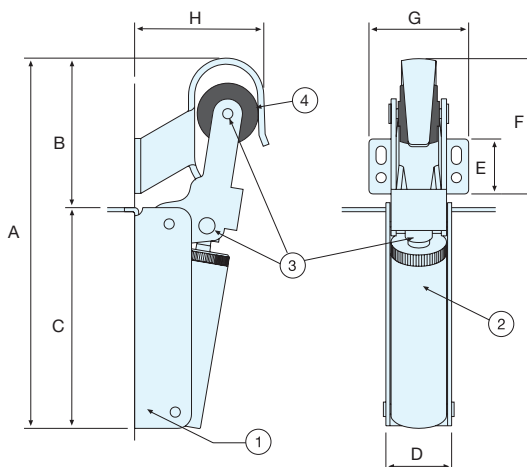
JFR

DOOR ACCESSORIES

DOOR CLOSERS



- Stainless steel hydraulic door closer.
- Bracket arm will catch the roller for self closing at about 10°.
- Silent operation.
- Hydraulic cylinder absorbs shock, preventing the door from slamming shut.
- Easy surface-mount installation, ideal for retro-fit.



No.	Part Name	Material	Finish/Color
①	Body	304 Stainless Steel	Polished
②	Cylinder	Aluminum	Silver
③	Pin/Shaft	Steel	Plain
④	Roller	Nitrile Butadiene Rubber	Black

Item No.	A	B	C	D	E	F	G	H	I	Door Weight (kg)	Weight (g)	Box (pcs)	Carton (pcs)
JFR-021205	200 (7-7/8")	75	125 (4-59/64")	36	27	66.5	49 (1-15/16")	64	1100 (43-5/16")	Max.80 (176 lbs)	598	1	24