

GLASS SHOWCASE



About Us

The name Sugatsune and LAMP brand products have long been associated with Quality, Innovation, and Service. In 1982, Sugatsune America, Inc. was established to Inspire architects, designers and industrial engineers in North America to Invent new solutions with a line-up of precision engineered hardware which today, totals more than 6,000 products.

In September 2016, Canada, Inc. was established in Montreal, Quebec to provide an even higher level of service and local support to Canadian customers.



Specifications, features, illustrations, certifications and materials shown in this catalog are based upon the latest available information at the time of publication. Although descriptions are believed to be correct, accuracy cannot be guaranteed. Sugatsune reserves the right to make changes at any time, without notice or obligation, in finishes, materials, sizes, specifications and availability and disclaims any and all liability for typographical, printing or production errors or changes affecting the products and/or specifications contained herein.

Actual performance of products may vary based upon many factors and may be less than stated. Differences in construction and build materials, designs or configurations may affect product performance and therefore, the customer is solely responsible for making the final selection of the product(s) to be used and to assure that all performance, safety and warning requirements of the application are satisfied.





North American Offices

North American Headquarters



In August 1982, Sugatsune America, Inc. established its headquarters in Carson, California. Just minutes away from Los Angeles, the Carson facility continues to be at the core of the U.S. operations serving as home to U.S. management, customer service, purchasing, marketing and warehouse distribution. To minimize distribution lead-times and provide the best service to our customers, a second distribution center was established just outside of Chicago in Addison, IL.

Premiere Showroom

In June 2011, Sugatsune America, Inc. unveiled its first North American showroom located in the heart of Chicago, IL. Our mission is to provide a comfortable environment for local architects, designers and clients to learn about and experience our products first hand. Conveniently located across from the Design Mart, our Chicago showroom is a place to drop by and see many product applications to inspire ideas for the A&D community.









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J95

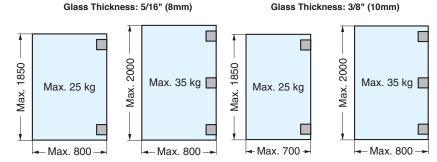
Max. Door Weight: 55 lbs (25kg)/2pcs, 77 lbs (35kg)/3pcs

You can reduce installation time as fewer hinges are required.

Number of hinges required, based on door specifications:

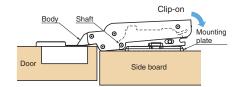
Normal Concealed Hinges
Using 5 hinges
Using 2 hinges

Easy
Installation!

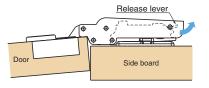


One-touch Installation and Release

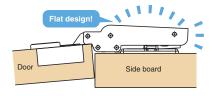
· How to Install



· How to Release

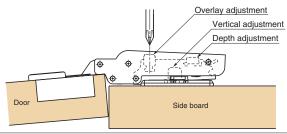


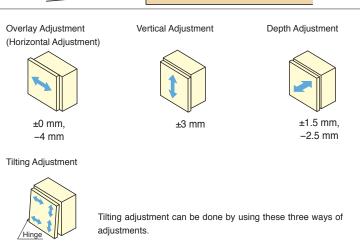
Flat Design



Easy and Fast Adjustment

· Door can be adjusted by turning adjustment screws.

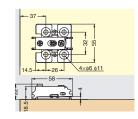




MOUNTING PLATE

J95-P6T





- Depth adjustment : + 1.5 -2.5 mm (1/16 -1/8")
- Vertical adjustment : ± 3 mm (±1/8")
- Overlay adjustment : + 0, 4 mm (±5/32")
- Recommended screw size M5 (US#10)

İ	J95-P6T	Steel/Zinc Alloy	Nickel	94	100 pcs
l	Item Name	Material	Finish	Weight(g)	Carton



Toll Free: 800-562-5267



J95

95° Opening

1" (25 mm) Overlay

Overlay 13/16" (21 - 25 mm) (When Bore Distance is 8 mm) Door Thickness 5/16"~3/16" (8~10mm)

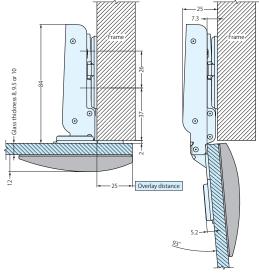
Mounting Plate J95-P6T (P.4)



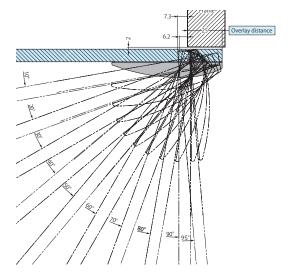
Item Name	Description	Material	Finish	vveignt(g)	
J95-24/25T	w/o Catch	Steel	Nickel	131	
J95-C24/25T	w/ Catch	Sieei	Nickei	131	

Picture above is the combination of concealed hinge and mounting plate.

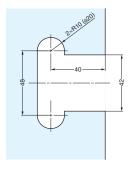




· Locus chart



Door Bore Dimensions



Door Dimensions and Number of HingesRefer to page 4.



J95

95° Opening

5/6" (16 mm) Overlay

Overlay 1/2"~5/8" (12 ~ 16 mm) (When Bore Distance 5/16" is 8 mm)

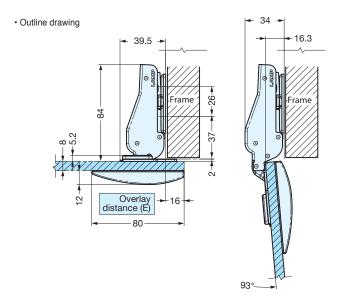
Door Thickness 5/16"~3/16" (8~10mm)

Mounting Plate J95-P6T (P.4)

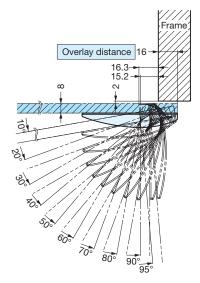


Item Name	Description	Material	Finish	Weight(g)
J95-24/16T	w/o Catch	Steel	Nickel	131
J95-C24/16T	w/ Catch	3000	INICKEI	131

Picture above is the combination of concealed hinge and mounting plate.

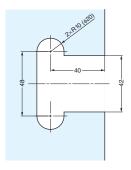


· Locus chart



Drawing above is Bore Distance 8 mm, Door Thickness 8 mm, Side Board Thickness 8 mm and 16 mm Overlay.

Door Bore Dimensions



Door Dimensions and Number of Hinges Refer to page 4.



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J95

93° Opening

Inset

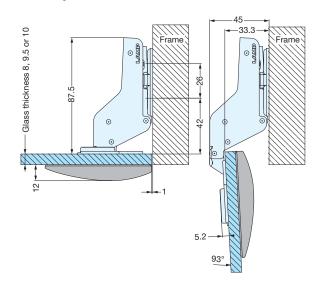
Overlay -4 - 0 mm (When Bore Edge Distance is 8 mm) Door Thickness 5/16"~3/16" (8~10mm) Mounting Plate J95-P6T (P.4)

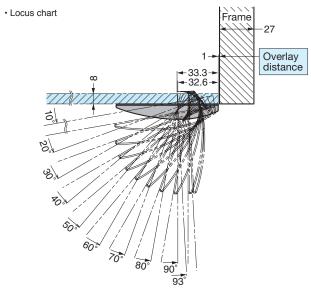


Item Name	Description	Material	Finish	Weight(g)
J95-24/0T	w/o Catch	Steel	Nickel	148
J95-C24/0T	w/ Catch	Sieei	INICKCI	160

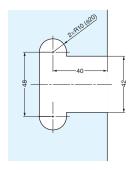
Picture above is the combination of concealed hinge and mounting plate.

· Outline drawing





Door Bore Dimensions



Door Dimensions and Number of HingesRefer to page 4.

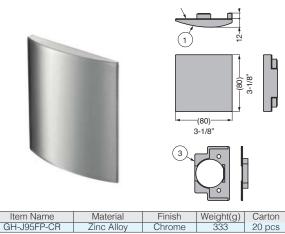




FACE PLATE FOR GLASS DOOR

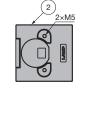


GH-J95FP-CR



Chrome

Zinc Alloy



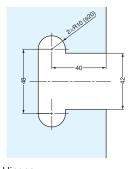


No.	Part Name	Material	Finish	
1	Face Plate	Zinc Alloy	Chrome	
2	Face Plate Spacer	Polyacetal	Black	
3	Socket Spacer	Folyacetal	DIACK	



• Opening Clearance Hinge side = 0 mm Handle side = 0 mm

Cut Out Dimensions



• Door Dimensions and Number of Hinges Glass thickness: 5/16" (8 mm) Glass thickness: 3/8" (10 mm)



For detailed information and our full product line, visit us at www.sugatsune.com









GH-J95FP-Q1-GL Gold

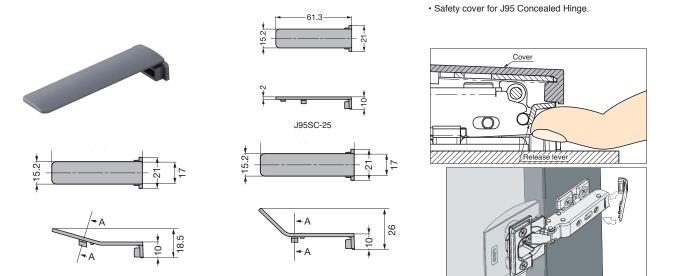


GH-J95FP-Q1-BR Antique Bronze

Custom Design Available as Special Order

SAFETY COVER

J95SC



J95SC-0

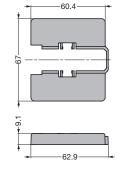
Item Name		Use With	Material	Finish/Color	Weight(g)	Carton
J95SC-25GR	J95SC-25NI	J95-(C)24/25		Grey, Nickel		
J95SC-16GR	J95SC-16NI	J95-(C)24/16	ABS		3	1000 pcs
J95SC-0GR	J95SC-0NI	J95-(C)24/0			Nickel	

J95 MOUNTING PLATE COVER

J95ZC



J95SC-16



Item Name	Use With	Material	Finish	Weight(g)	Carton
J95ZC-GR	J95-P6T	ABS Grey		a	1000 pcs
J95ZC-NI	J95-P6T	703	Nickel	9	1000 pcs









GH-450



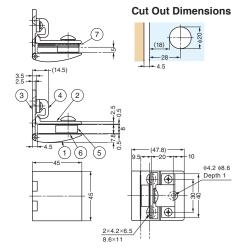




Satin Nickel	Chrome	Gold
(SN)	(CR)	(GC)

No.	Part Name	Material	Finish
1	Front Plate		Ontin Nintral Observa
2	Fixing Plate	Brass	Satin Nickel, Chrome, Gold
3	Hinge Plate		Gold
4	Catch	Polyamide	
(5)	Glass Adjustment Block	Folyamide	Black
6	Pad	Chloroprene Rubber	Diack
7	Spacer	Polypropylene	

- · Glass hinge with catch.
- · For inset use.
- · Suitable for showcases.
- Mounting position adjustable: Vertically -1/16" (-2 mm) Horizontally -1/8" (-2.5 mm)
- Spacer included to accommodate different glass thickness.



	Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
	GH-450/SN				10/04 5/10	Satin Nickel
	GH-450/CR	Max. 23-5/8"		Max. 33lbs/2pcs (15kg/2pcs)	13/64~5/16" (5~8)	Chrome
ĺ	GH-450/GC	(600)	(1200)			Gold

INSET GLASS DOOR HINGE (GLASS FRAME TYPE)

GH-450G







Satin Nickel (SN)

Part Name

Front Plate

Fixing Plate

No.

1

2

Chrome (CR)

Gold (GC)

Finish

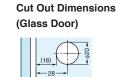
Satin Nickel, Chrome,

Gold

• Mounting position adjustable: Vertically -1/16" (-2 mm)

· Spacer included to accommodate different glass thickness.

· For glass frame use. · Suitable for showcases.



Horizontally -1/8" (-2.5 mm)

Cut Out Dimensions

2.5	(Side Panel)
6 3 2	8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
12 45 45	(47.8)
1	

						G010 1	
3	Hinge Plate		Brass	1		aoia	
4	Side Plate						
(5)	Glass Adjustment E	Block	Polyami	de			
6	Pad A		Chloroprene	Dubbor	Black		
7	Pad B		Ciliolopiene	nubbei			
8	Spacer		Polypropy	lene			
	Item Name	Doc	or Width(mm)	Door He	eight(mm)	Door Weight(Ī

Material

Brass

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-450G/SN	May 00 F/0"	Max. 47-1/4"	Max. 32lbs	3/16"~5/16"	Satin Nickel
GH-450G/CR	Max.23-5/8" (600)	(1200)	(15/2pcs)	(5~8)	Chrome
GH-450G/GC		(1200)	(13/2008)	(5~6)	Gold



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HALF OVERLAY GLASS DOOR HINGE (W/CATCH)

GH-456C

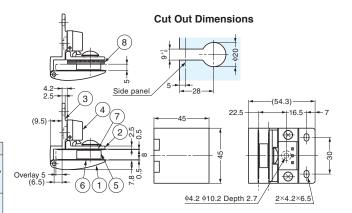






Chrome Gold (CR) (GC)

- · Glass hinge with catch.
- · For overlay use.
- · Suitable for showcases.
- Mounting position adjustable: Vertically -1/16" (-2 mm)
 Horizontally -1/8" (-2.5 mm)



(SN) Recommended Screws

Satin Nickel

Size 4 countersunk head screw

No.	Part Name	Material	Finish	
1	Front Plate		Catin Niekal Chroma	
2	Fixing Plate	Brass	Satin Nickel, Chrome, Gold	
3	Hinge Plate	Diass	dold	
4	Catch			
5	Glass Adjustment Block	Polyamide		
6	Pad A	Polyvinyl Chloride	Black	
7	Pad B	Resin		
8	Spacer	Polypropylene		

Item I	Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-45	6C/SN					Satin Nickel
GH-45	6C/CR	Max. 23-5/8" (600)	Max. 47-1/4" (1200)	Max. 33lbs (15/2pcs)	3/16~5/16" (5~8)	Chrome
GH-45	6C/GC					Gold

HALF OVERLAY GLASS DOOR HINGE (W/O CATCH)

GH-456N







Satin Nickel (SN)

Chrome (CR)

Gold (GC)

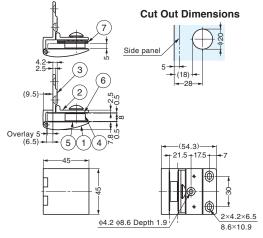
- For overlay use.
- · Suitable for showcases.
- Mounting position adjustable: Vertically -1/16" (-2 mm)

 Horizontally -1/8" (-2.5 mm)

Recommended Screws

Size 4 countersunk head screw

No.	Part Name	Material	Finish	
1	Front Plate		Ontin Nintel Ohmon	
2	Fixing Plate	Brass	Satin Nickel, Chrome, Gold	
3	Hinge Plate	DIASS	dolu	
4	Catch			
(5)	Glass Adjustment Block	Polyamide		
6	Pad A	Polyvinyl Chloride	Black	
7	Pad B	Resin		
8	Spacer	Polypropylene		



Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-456N/SN	Max.23-5/8" (600)	Max. 47-1/4" (1200)	Max. 33lbs (15/2pcs)	3/16~5/16" (5~8)	Satin Nickel
GH-456N/CR					Chrome
GH-456N/GC					Gold





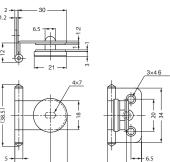
GH-34/0/S-P



No.	Part Name	Material	Finish
1	Body	304 Stainless Steel	
2	Arm	304 Stairiless Steel	Plain
3	Shaft	Stainless Steel	
4	Plate	Aluminum Alloy	Anodized
5	Washer	Polyvinyl Chloride Resin	Clear
6	Screw	Stainless Steel	Plain

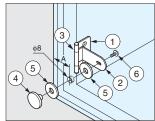
 Hinge for 	glass	acrylic/	doors
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- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).



Cut Out Dimensions





Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-34/0/S-P	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Plain Stainless Steel

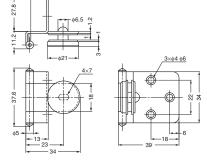
HALF OVERLAY GLASS DOOR HINGE

GH-34/8/S-P



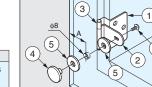
No.	Part Name	Material	Finish
1	Body	304 Stainless Steel	
2	Arm	304 Stairliess Steel	Plain
3	Shaft	Stainless Steel	
4	Plate	Aluminum Alloy	Anodized
5	Washer	Polyvinyl Chloride Resin	Clear
6	Screw	Stainless Steel	Plain

- Hinge for glass/acrylic doors.
- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).



Cut Out Dimensions





Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-34/8/S-P	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Plain Stainless Steel





GH-34/0



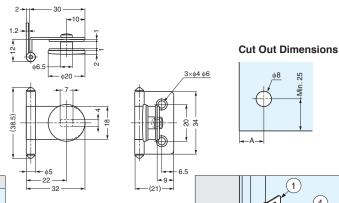


GH34-0CR

GH34-0BL

· Hinge for glass/acrylic doors.

- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).



No.	Part Name	Material	Finish
1	Body	Steel	Chrome, Black
2	Plate	Brass	Cilionie, black
3 Washer		Polyvinyl Chloride Resin	Clear
4	Screw	Steel	Nickel, Black

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-34/0	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Chrome, Black

HALF OVERLAY GLASS DOOR HINGE

GH-34/8

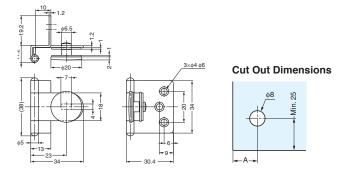




GH34-8CR

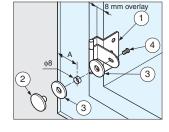
GH34-8BL

- · Hinge for glass/acrylic doors.
- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).



No.	Part Name	Material	Finish	
1	Body	Steel	Chrome, Black	
2	Plate	Brass	Cilionie, black	
3	Washer	Polyvinyl Chloride Resin	Clear	
4	Screw	Steel	Nickel, Black	

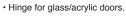
Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-34/8	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Chrome, Black







GH-34-0CR-K



- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).



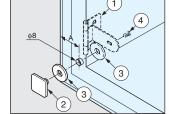
No.	Part Name	Material	Finish	
1	Body	Steel	Chrome	
2	Plate	Zinc Alloy	Officiale	
3	Washer	Polyvinyl Chloride Resin	Clear	
4	Screw	Steel	Nickel, Black	

1.2	
29 77 77 88 88 95 95 95 95 95 95 95 95 95 95 95 95 95	3x\psi 4\psi 6.5
g) Glass Thickness(mm)	Finish

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-34-0CR-K	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Chrome

Cut Out Dimensions



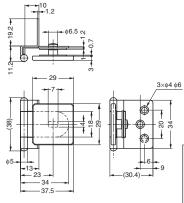


HALF OVERLAY GLASS DOOR HINGE

GH-34-8CR-K



- Half overlay.
- · Hinge for glass/acrylic doors.
- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).

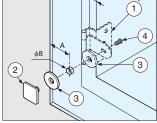






No.	Part Name	Material	Finish	
1	Body	Steel	Chrome	
2	Plate	Zinc Alloy		
3	Washer	Polyvinyl Chloride Resin	Clear	
4	Screw	Steel	Nickel, Black	

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GH-34-8CR-K	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Chrome







HALF OVERLAY GLASS DOOR HINGE (W/CATCH)

GHC-34-8CR-K



- Half overlay.
- Hinge for glass/acrylic doors.
- Door thickness: 3/16"~1/8" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).

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	No.	Part Name	Material	Finish	
ĺ	1	Body	Steel	Chrome	
ſ	2	Plate	Zinc Alloy	Cilionie	
	3	Washer	Polyvinyl Chloride Resin	Clear	
	4	Screw	Steel	Nickel, Black	
	5	Catch	Polyacetal	Black	

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GHC-34-8CR-K	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	3/16~1/8" (4~6)	Chrome, Black

HALF OVERLAY GLASS DOOR HINGE (W/CATCH)

GHC-34/8



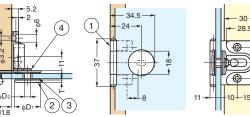
GHC-34/8CR

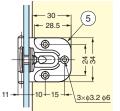




GHC-34/8G GHC-34/8B

- Half overlay.
- Hinge for glass/acrylic doors.
- Door thickness: 5/32"~1/4" (4~6mm)
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).





Cut Out Dimensions



No.	Part Name	Material		Finish
		GI 10-34/6/DER	304 Stainless Steel	Black
1	Body	GHC-34/8/CR	Steel	Chrome
		GHC-34/8/PB		Polished Brass
	Plate	GHC-34/8/BLK	Aluminum	Black
2		GHC-34/8/CR	Brass	Chrome
		GHC-34/8/PB	DIASS	Polished Brass
3	Washer	PVC		Clear
4	Screw	Steel		Nickel
(5)	Catch	Polvac	etal	Black

Item Name	Door Weight Max.	Glass Thickness(mm)
GHC-34/8/CR		
GHC-34/8/PB	8.8lbs/pair (4/pair)	3/16"~1/4" (4~6)
GHC-34/8/BLK		

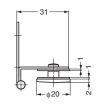




INSET GLASS LIFT-OFF HINGE

GH-36/NCR

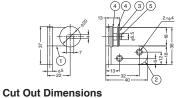




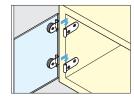
No.	Part Name	Material	Finish			
1	Pody	Steel				
2	Body	Sieei	Chrome			
3	Plate	Brass				
4	Washer	PVC	Clear			
⑤ Screw		Steel	Nickel			
Item Name Glass Thickness(mm) Finish						

Item Name	Glass Thickness(mm)	Finish
GH-36/NCR	3/16"~1/4" (4~6)	Polished Chrome

- · Lift-off hinge for glass/acrylic doors.
- Door size: Max: 17-3/4" x 27-9/16" (450 x 700).
- Door weight: Max 8.8lbs/pair (4kg/pair).
- · Recommended for use in pairs.



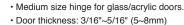
Installation Example





INSET GLASS DOOR HINGE

XL-GH03-48-0



- Door size: Max: 25-19/32" x 35-7/16" (650 x 900).
- · Door weight: Max. 26.4lbs/pair (12kg/pair).
- · Recommended for use in pairs.







XL-GH03-48-0GC

Max. 35-7/16"

(900)

Cut Out Dimensions



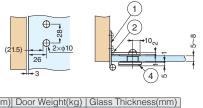
•	i iii igo i iato		
2	Arm	304 Stainless Steel	Mirror
3	Shaft		
4	Plate	Zinc Alloy	Chrome
(5)	Spacer	Polyethylene	Natural
6	Screw	304 Stainless Steel	Plain
	I4 N I	D = = :: \M/: = t = /	\ ID I I - 'l- +/
	item Name	L Door Wigth(m	ımı iboor Helantı

2	Arm	304 Stai	inless Steel		Mirror	
3	Shaft					
4	Plate	Zin	c Alloy		Chrome	
5	Spacer	Polye	ethylene		Natural	
6	Screw	304 Stai	inless Steel		Plain	
			B 14// 1/1 /	_		,
	Item Name		Door Width(m	ım)	Door Height	mr
XL-GH03-48-0CR			Max. 25-19/1	6"	Max. 35-7/	16"

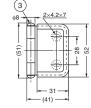


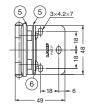
26.4lbs/set

(12/set)



3/16"~15/16" (5~8)





HALF OVERLAY GLASS DOOR HINGE

Max. 25-19/16"

(650)

XL-GH03-48-8





XL-GH03-48-8CR

XL-GH03-48-0GC

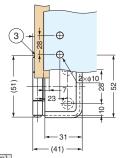
XL-GH03-48-8GC

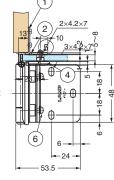
No.	Part Name	Material	Finish
1	Hinge Plate		
2	Arm	304 Stainless Steel	Mirror
3	Shaft		
4	Plate	Zinc Alloy	Chrome
5	Spacer	Polyethylene	Natural
6 Screw		304 Stainless Steel	Plain

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)
XL-GH03-48-8CR	Max. 25-9/16"	Max. 35-7/16"	26.4lbs/set	3/16"~5/16" (5~8)
XL-GH03-48-8GC	(650)	(900)	(12/set)	3/10 ~3/10 (3~6)

• Door thickness: 3/16"~5/16" (5~8mm) • Door size: Max: 25-19/32" x 35-7/16" (650 x 900). • Door weight: Max. 26.4lbs/pair (12kg/pair). · Recommended for use in pairs.

• Half overlay 5/16" (8mm) medium size hinge for glass/acrylic doors.





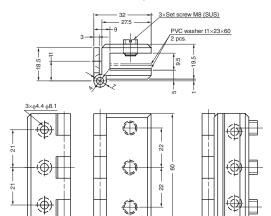




XL-GH01-600



- Pre-drilling on glass/acrylic not required.
- · 304 Stainless Steel.
- Door thicnkess: 5/32"~5/16" (4~6mm)
- Door size: Max: 17-3/4" x 51-3/16" (450 x 1300).
- · Door weight: Max: 24lbs/pair (11kg/pair).
- Please use 2 spacers for 4mm door thickness.



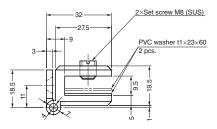
ſ	Item Name		Door Height(mm)		Glass Thickness(mm)	Finish
	XL-GH01-600	Max. 17-23/32" (450)	Max. 51-3/16" (1300)	24lbs/2pcs (11kg/2 pcs)	5/32"~5/16" (4~8)	Polished

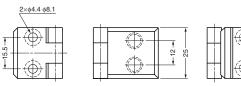
INSET GLASS DOOR HINGE

XL-GH01-250



- Pre-drilling on glass/acrylic not required.
- 304 Stainless Steel.
- Door thicnkess: 3/16~5/16" (4~6mm)
- Door size: Max: 15-3/4" x 23-5/8" (400 x 600).
- Door weight: Max: 10.5lbs/pair (4.8kg/pair).
- Please use 2 spacers for 4mm door thickness.





Item Name	Door Width(mm)			Glass Thickness(mm)	Finish
XL-GH01-250	Max. 17-3/4"	Max. 23-5/8"	10lbs/2pcs (4.8/2.pcs)	3/16"~5/16" (4~8)	Polished



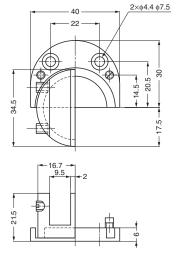


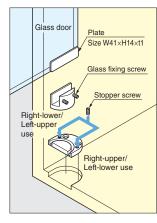
INSET GLASS DOOR PIVOT HINGE

GP-40



- Pressure fit hinge:pre-drilling glass not required.
- · Glass door hinge for inset use.
- · Pre-drilling on glass not required.
- · Recommended for use in pairs.

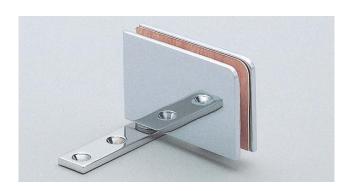




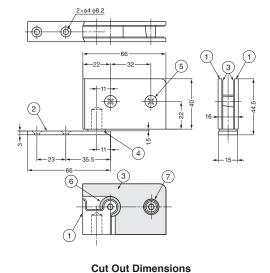
Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Material	Finish
GP-40	Max. 17-3/4" (450)	Max. 27-9/16" (700)	Max. 8.8lbs/pair (4/pair)	1/8~5/16" (3~8)	Brass	Satin Nickel

INSET GLASS DOOR PIVOT HINGE

GH-34-PSL40



- Rotates 360°
- Sold in pairs.



No.	Part Name	Material	Finish
1	Body	Brass	Chrome
2	Plate) Brace	Omomo
3	Spacer	Polyvinyl Chloride Resin	Clear
4	Washer	Polyamide	White
(5)	Screw	Brass	Chrome
6	Gasket	Polyvinyl Chloride Resin	Clear
(7)			

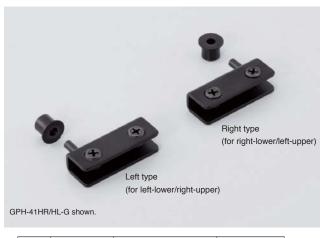
Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)
GH-34-PSL40	Max. 25-9/16" (650)	Max. 78-3/4" (2000)	44lbs/set (20/set)	5/16" (8)





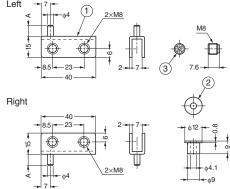
INSET GLASS DOOR PIVOT HINGE

GHP



Pre-drilling on g	lass/acrylic no	t required.
-------------------	-----------------	-------------

- · Left: For left-lower/right-upper.
- Right: For right-lower/left-upper.
- GPH-40R-G and GPH-40L-G should be used with the socket PHB4.



No.	Part Name	Material	Finish
1	Hinge	Steel	
2	Support	Polypropylene	Black
3	Screw	Steel	

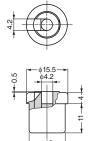
Item Name	Door Width(mm)	Door Height(mm)	Glass Thickness(mm)
GHP-40R-G			
GHP-40L-G	Max. 17-3/4"	Max. 27-9/16"	5/32~13/64" (4~5)
GHP-41HR-G	(450)	(700)	3/32~13/04 (4~3)
GHP-41HL-G			

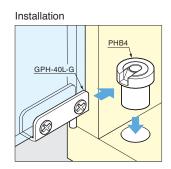
SOCKET FOR GPH40 PIVOT HINGE

PHB4

- Bottom socket for GHP-40 glass door hinge.
- Use GPH-41 hinge on upper side.
- Installation hole ≥ 9/16" (14mm), depth 1/2" (12mm)







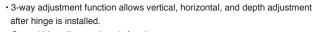
Item Name	Material	Finish
PHB4	Polyamide	Black





3-WAY ADJUSTABLE CONCEALED HINGE

HES3D-90



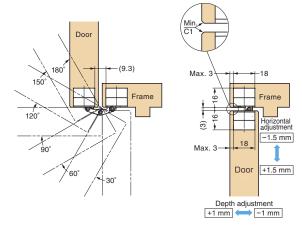
- · Cover hides all screw heads for clean appearance.
- Door Weight: Max. 26lbs (12kg)/2pcs or 35lbs (16kg)/3pcs.
- Door Thickness: 15/16" (23mm).
- Door Dimensions: Max 59-1/16" x 23-5/8" (1500 x 600mm).
- Finishes: Dull Chrome, Dull Nickel, Matte Black.

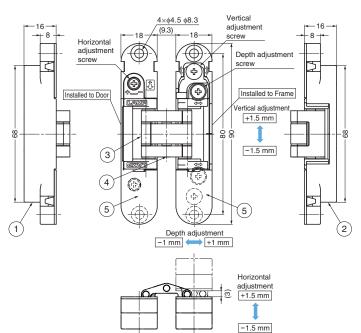




Dull Nickel (DN)

Black (BL)





No.	Part Name	Material	Finish	
1	Body			
2	Base Frame	Zinc Alloy	5 1101 5 11	
3	Arm		Dull Chrome, Dull Nickel, Matte Black	
4	Shaft	Stainless Steel	TVIOROI, Watto Black	
5	Cover	ABS		

Cut Out Dimensions Max. 3 Max. 3 Door Frame

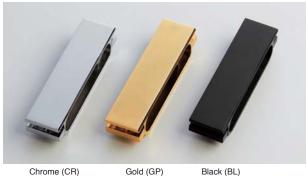
Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
HES3D-90DC					
HES3D-90DN	Max. 59-1/16"	Max. 23-5/8"	26lbs (12)/2pcs	Wood: Min.15/16" (23)	Dull Chrome, Dull
HES3D-90BL	(1500)	(600)	35lbs (16)/3pcs	Glass w/ Bracket: 1/4" (5~6mm)	Nickel, Matte Black





GLASS DOOR BRACKET

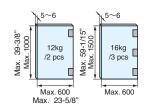
HES3D-G90BKT

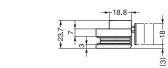


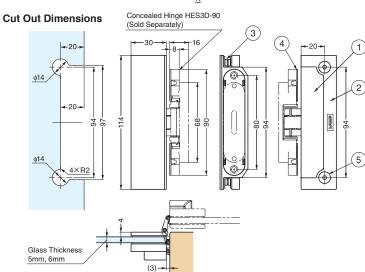
- Gold (GP)
- Black (BL)

- · Glass door bracket for HES3D-90 series.
- · Hinge is completely hidden when looking through the glass.
- Screw covers match the bracket with the hinge finish.
- Glass thickness: 1/4" (5~6mm)

Door Dimensions and Number of Hinges







No.	Part Name	Material	Finish	
1	Body	Zinc Alloy		
2	Back Plate	ZITIC Alloy		
3	Gasket	Chloroprene Rubber	Chrome, 24k Gold	
4	Screw Cover	ABS	Plating, Black	
(5)	Hexagon Socket Countersunk Head	Steel		

Item Name	Finish
HES3D-G90BKT-CR	Chrome
HES3D-G90BKT-GP	Gold
HES3D-G90BKT-BL	Black



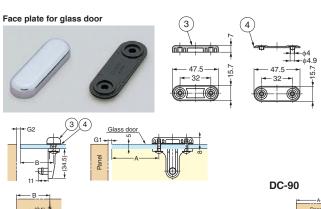


DAMPER CATCH (SOFT CLOSE)

DC SERIES

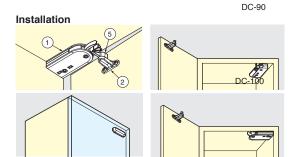


- · Keeps cabinet doors from slamming shut.
- Holds the door in closed position.
- · Available for glass and wood doors.
- Separate models for wood and glass doors.
- · Non-handed.
- Face plate (Only included in DC-90G, DC-100G)

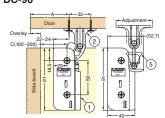


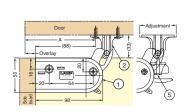
Cut Out Dimensions for Glass Door Door upper edge

Door edge



DC-100





Installation Position	А	В
Inset Door	C-G1+3	24-G2
Overlay Door	C+Overlay+3	Overlay+24

G1 is the gap between the door edge and the side board. G2 is the gap between the edge of the door and the top board.

Installation Position	Α	В
Inset Door	88-G1	24-G2
Overlay Door	Overlay+88	Overlay+24

No.	Part Name	Material	Finish
1	Body	Polyacetal/PBT	Dark Grey/Light Grey
2	Counter Plate	Polyacetal	Dark Grey
3	Face Plate	Zinc Alloy	Chrome
4	Spacer	ABS	Black
(5)	Jig	PBT	Light Grey

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)
DC-90G (glass)	17-3/4" (450)	23-5/8" (600)	8.8lbs (4)	13/16" (5)
DC-100G (glass)	23-5/8" (600)	31-1/2" (800)	15lbs (7)	10,10 (0)
DC-90 (wood)	17-3/4" (450)	23-5/8" (600)	8.8lbs (4)	_
DC-100 (wood)	23-5/8" (600)	31-1/2" (800)	15lbs (7)	



Toll Free: 800-562-5267



GLASS SHOWCASE SERIES

GS-G



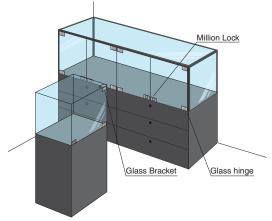
Glass Hinge (P.24) GS-GH5



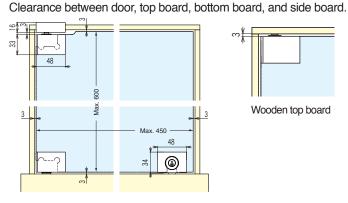
Glass Bracket (P.24) GS-GB5

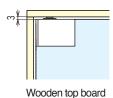


Glass Lock (P.25) GS-GL5



Flat Design Flat design hardware completely matches glass showcase.



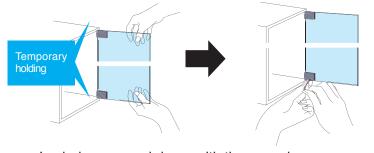


Temporary Hold for Easy Installation

The door can be installed easily by clip-on and temporary holding features.

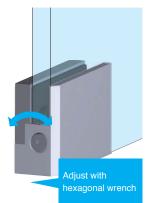


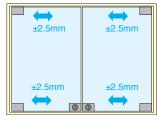




Easy adjustment after installation.

2.5mm adjustable by fixing adjustable screw on hinge side.

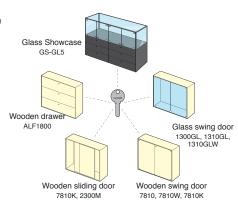




Lock drawers and doors with the same key.

Keys can be keyed to match other Million Lock Series products,

1 million key changes available (Million Lock Series).

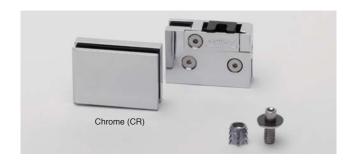






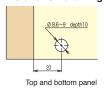
GLASS HINGE (INSET)

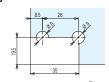
GS-GH5

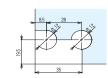


- · Hinge for inset glass door for glass showcase.
- Can be used together with glass bracket GS-GB5 (below) and lock GS-GL5.
- Temporary holding feature allows for easy installation of the door by one person.
- \bullet Sideways adjustment (±2.5mm) possible after installation of the door.
- Finishes: Chrome, Gold Plated
- Sold in pairs.

Installation drawings







Part Name	Material	Finish
Body	Zinc Alloy	Chrome, 24K Gold
Back Plate	Zilic Alloy	Plated
Washer	Chloroprene Rubber	Black
Axis	Stainless Steel	Plain

Axis Stainless Steel Plain Plastic Washer Polyamide Black Metal Plate Stainless Steel Plain	(3)	vvasner	Chloroprene Rubber	Віаск
Metal Plate Stainless Steel Plain	4	Axis	Stainless Steel	Plain
	(5)	Plastic Washer	Polyamide	Black
Report Time Alley	6	Metal Plate	Stainless Steel	Plain
(a) Insert Zinc Alloy	7	Insert	Zinc Alloy	

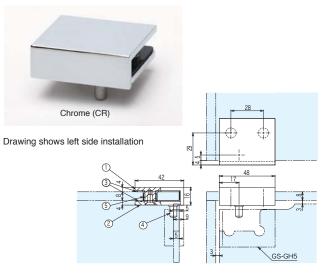
Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GS-GH5-CR	Max. 17-3/4""	Max. 23-5/8"	11lbs (5)/2pcs	Min 2/16 1/4" (E 6)	Chrome, Gold Plated
GS-GH5-GP	(450)	(600)	Tilbs (3)/2pcs	WIII.3/10~1/4 (3~0)	Chrome, Gold Flated

GLASS BRACKET

No.

① ②

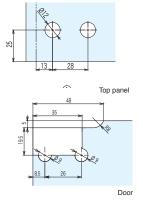
GS-GB5

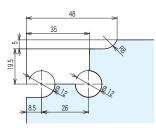


No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Chrome, 24K Gold
2	Back Plate	304 Stainless Steel	Plated
3	Washer	Chloroprene Rubber	Black
4	Axis	Stainless Steel	Plain
(5)	Tube	Polyvinyl Chloride	Clear

• Can be used together with glass hinge GS-GH5 (above) and lock GS-GL5.

Installation drawings





Door Tempered glass

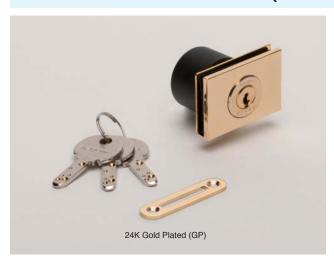
Item Name	Type	Glass Thickness(mm)	Finish
GS-GB5-R-CR	Right		Chrome
GS-GB5-L-CR	Left	15/16"	Chlome
GS-GB5-R-GP	Right	(8)	24K Gold Plated
GS-GB5-L-GP	Left		24K Gold Flated



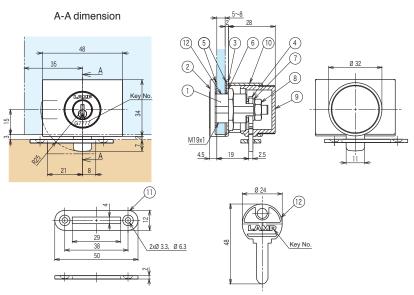


GLASS DOOR CAM LOCK (MILLION LOCK SERIES)

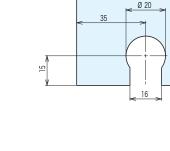
GS-GL5



- Cylinder lock for Glass swing door.
- Designed to match aesthetically with the GS-GH5 glass hinge and GS-GB5 bracket.
- Reversible key. Turn the key 90° to lock and unlock. Key can only be removed when locked.
- Dimple key with up to 1 million key changes. Master key system available at surcharge (Max. 2,520 key changes/master key.).
- Keys can be shared with other Million Lock Series.



Cut Out Dimensions



No.	Part Name	Material	Finish
1	Body	Brass	OAK Cold Distant
2	Front Plate	Zinc Alloy	24K Gold Plated, Chrome
3	Back Plate	Ziric Alloy	Ormonio
4	Lock Plate	304 Stainless Steel	Mirror
(5)	Rubber Washer	Chloroprene Rubber	Black
6	Hex Nut		
7	Washer	Steel	Silver
8	Hex Nut		
9	Cover	Polypropylene	Black
10	Ring	Folypropylerie	
	Strike	Steel	Chomee, 24K Plated Gold
	Key	Brass	Nickel

Item Name	Glass Thickness(mm)	Finish
GS-GL5-CR	3/16~5/16"	Chrome
GS-GL5-GP	(5~8)	Gold Plated





GLASS HINGE (INSET)

GS-GH20

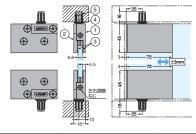


- Glass showcase hinge for inset door application.
- Can be used with the Million Lock Cylinder GS-GL20 to ensure unified design (lock, catch and hinge).
- \bullet Temporary hold function that enables a single person to install the door.
- Adjustments for up to \pm 3mm by simply turning the adjustment screw.



Black (BL)

No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Chrome, 24K Gold
2	Back Plate	Zille Alloy	Plated, Black
3	Washer	Chloroprene Rubber	Black
4	Axis	Stainless Steel	Stainless Steel
5	Tube	Polyvinyl Chloride	-





*	-20-	-32-	-	
←27 →	,	16	16	

Item Name	Door Width(mm)	Door Height(mm)	Door Weight(kg)	Glass Thickness(mm)	Finish
GS-GH20-CR	Max. 17-3/4""	Max. 23-5/8"			Chrome
GS-GH20-GP	(700)	(1600)	11lbs (5)/2pcs	Min.1/4~5/16" (6~8)	Gold Plated
GS-GH20-BL	(700)	(1000)			Black

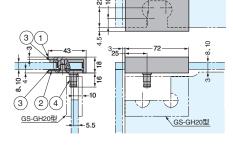
GLASS BRACKET

GS-GB20



Chrome (CR) Gold Plated (GP) Black (BL)

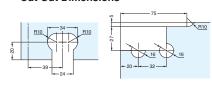
• Can be used together with glass hinge GS-GH20 (above) and lock GS-GL20.



No.	Part Name	Material	Finish	
1	Body	Body Zinc Alloy		
2	Back Plate	304 Stainless Steel	Plated, Black Painted	
3	Washer	Chloroprene Rubber	Black	
4	Rotating Axis	Stainless Steel	Stainless Steel	

Item Name	Туре	Glass Thickness(mm)	Finish
GS-GB20-R-CR	Right		Chrome Plated
GS-GB20-L-CR	Left		Cilionie Flated
GS-GB20-R-GP	Right	5/16~3/8"	24K Gold Plated
GS-GB20-L-GP	Left	(8~10)	24K Gold Flated
GS-GB20-R-BL	Right		Black Painted
GS-GB20-L-BL	Left		DIACK PAILITED









GLASS DOOR CAM LOCK

GS-GL20

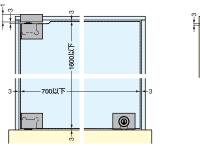


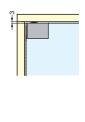


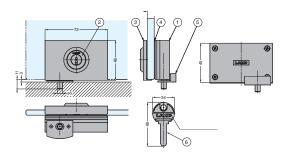


Gold Plated (GP) Black (BL)

- Cylinder lock for Glass swing door.
- Designed to match aesthetically with the GS-GH20 glass hinge.
- \bullet Reversible key. Turn the key 90°to lock and unlock. Key can only be removed when locked.
- Dimple key with up to 1 million key changes. Master key system available at surcharge (Max. 2,520 key changes/master key.).
- Keys can be shared with other Million Lock Series.







No.	Part Name	Material		Finish	
INO.	rait Name	ivialeriai	CR	GP	BL
1	Lock	Zinc Alloy		24K	
2	Cylinder	Brass	Chrome Plated	Gold	
3	Front Plate	Zinc Alloy		Plated	
4	Spacer	ABS	Blac		Black
(5)	Back Plate	Zinc Alloy	Chrome Plated	24K Gold Plated	
6	Key	Brass	Nickel F	lating	

Item Name	Glass Thickness(mm)	Finish
GS-GL20-CR	1/4~3/8"	Chrome
GS-GL20-GP	(6~10)	Gold Plated
GS-GL20-BL	(0~10)	Black



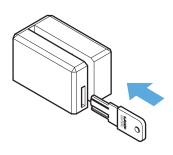


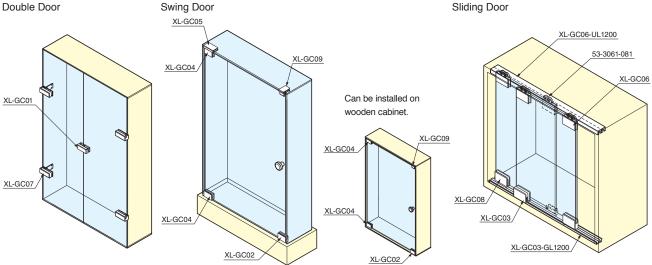
GLASS SHOWCASE HARDWARE SERIES

XL-GC



- Integrated designs of hinges, locks and sliding door hardware.
- Showcase doors can be operated with a single key.
- Key hole is located on the side for a clean appearance.
- · Insert key to unlock.
- · Locks when key is pulled out.





Locks				Hinges			Sliding Door Hardware				
Part Name	Item Name		Page	Part Name	Item Name		Page	Part Name	Item Name		Page
For Double Doors	XL- GC01	9		Inset Type	XL- GC04-CR			Upper Bracket	XL- GC06-CR		P.27
For Swing Doors	XL- GC02	ودو	P.26	Overlay Type	XL- GC07-CR	***	P.25	Bottom Guide Bracket	XL- GC08-CR	DD	P.27
								Catch			
For	XL-			Glass	XL-	<		Part Name	Item Name		Page
Sliding Doors	GC03	7		Bracket	GC05			Magnetic Catch	XL- GC09-CR	EL	P.27



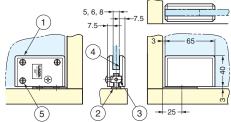


GLASS PIVOT HINGE (INSET)

XL-GC04-CR



- \bullet Inset-type hinge for glass cabinet.
- For use as a pair (top/bottom).
- Compatible with glass door lock XL-GC02 and bracket XL-GC05



(2)	3) -+-25 -+-
	Cut Out Dimensions

- 23		
C2	₹ %	
	- 46 €?	

No.	Part Name	Material	Finish
1)	Body	Zinc Alloy	Chrome
2	Back Plate	Steel	Officiale
3	Plate	304 Stainless Steel	Plain
4	Spacer	Polyvinyl Chloride Resin	Clear
(5)	Screw	304 Stainless Steel	Plain

Item Name	Door Width(mm)	Door Height(mm)	Load Capacity (kg)	Glass Thickness(mm)
XL-GC04-CR	Max. 19-11/16"	Max. 47-1/4"	26.5lbs (12)	3/16~5/16"
712 000 1 011	(500)	(1200)		(5~8)

GLASS BRACKET

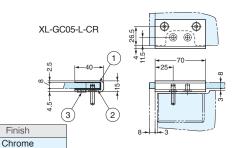
Part Name

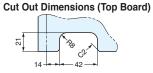
Body

XL-GC05

- Bracket for hinge XL-GC04 (sold separately).
- For use when top panel is glass.







Cut Out Dimensions (Glass Door)

•	Opacci	i diyviriyi dilildilde i lediri	Olcai		,
3	Screw	304 Stainless Steel	Plain		
	Item Name	Туре	Glass Thickness(mm)	Material	Finish
	XL-GC05-R-CR	Right	5/16"	Zinc Allov	Chrome
	XL-GC05-L-CB	Left	(8)	Ziric Alloy	Chilottie

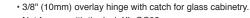
GLASS HINGE (OVERLAY, W/CATCH)

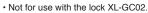
Material

Zinc Alloy

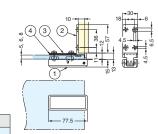
Polyvinyl Chloride Resin

XL-GC07









Cut Out Dimer	ision
31 27	19 Co

No.	Part Name	Material	Finish
1	Body	Zinc Alloy	
2	Hinge Plate	Ziric Alloy	Chrome
3	Back Plate	Steel	Officials
4	Spacer	Oleei	

Item Name	Door Width(mm)	Door Height(mm)	Glass Thickness(mm)	Door Weight(kg)
XL-GC07-CR	Max. 19-11/16"	Max. 47-1/4"	3/16~5/16"	Max. 26.4lbs/2pcs
	(500)	(1200)	(5~8)	(12/2pcs)





LOCK FOR DOUBLE SWINGING GLASS DOOR

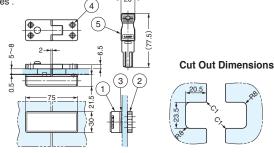
XL-GC01







- Non-handed. Key hole located on the right side for clean appearance and high security.
- · Key works as a knob in unlocked position.
- 24 key changes available.
- · Use with XL-GL Series .



Item Name	Glass Thickness(mm)
XL-GC01-C	3/16~5/16" (5~8)

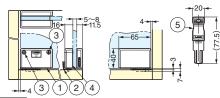
Installation

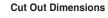
No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Chrome
2	Counterplate	ZITIC Alloy	Chiome
3	Spacer	Vinyl Chloride Resin	Clear
4	Screws	304 Stainless Steel	Plain
(5)	Key	Brass/ABS	Nickel/Black

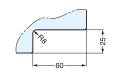
LOCK FOR INSET SWINGING GLASS DOOR

XL-GC02

- Locks are handed left or right. Key hole located on the side for a clean appearance.
- · Lock cam swings downwards into frame.
- · Includes two keys.
- Use with XL-GL Series







No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Chrome
2	Strike	304 Stainless Steel / Chloropene Rubber	Gloss Barrel/Black
3	Fixing Screw	304 Stainless Steel	Plain
4	Spacer	Rubber	Black
(5)	Key	Brass/ABS	Nickel/Black

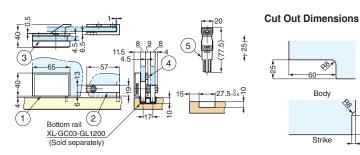
Item Name	Туре	Glass Thickness(mm)
XL-GC02-R-C	Right	3/16~5/16"
XL-GC02-L-C	Left	(5~8)

LOCK FOR SLIDING GLASS DOOR

XL-GC03

- For bypass sliding glass doors.
- Key hole located on the right side for a clean appearance.
- · Use with XL-GL Series .





No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Chrome
2	Strike	ZITIC Alloy	Chionie
3	Spacer	Rubber	Black
4	Fixing Screw	304 Stainless Steel	Plain
5	Key	Brass/ABS	Nickel/Black

Item Name	Glass Thickness(mm)
XI -GC03-C	5/16" (8)





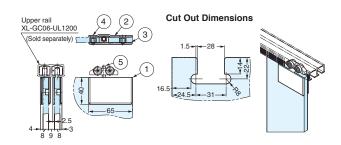
UPPER BRACKET

XL-GC06



No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Chrome
2	Backplate	Steel	Chrome
3	Spacer	Rubber	Natural
4	Screw	304 Stainless Steel	Plain
(5)	Bolt	Brass/ABS Steel	Nickel/Black

- 4 pcs per set.
- · Upper bracket for glass sliding door.



Item Name	Glass Thickness(mm)	Load Capacity(kg)
XL-GC06	E/16" (0)	26.4lbs/door
XL-GC06	5/16" (8)	(12kg/door)

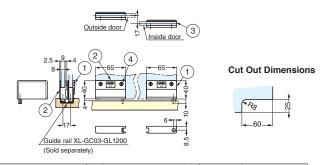
BOTTOM GUIDE BRACKET

XL-GC08



No.	Item Name	Material	Finish	
1	Body (Left)	Zina Allau	Chromo	
2	Body (Right)	Zinc Alloy	Chrome	
3	Spacer	Rubber	Black	
4	Screw	304 Stainless Steel	Plain	

- 1 pair (left/right) per set.
- Upper bracket for glass sliding door.



Item Name	Glass Thickness(mm)	Load Capacity(kg)
XL-GC08	5/16" (Q)	26.4lbs/door
AL-GC08	5/16" (8)	(12kg/door)

GLASS MAGNETIC CATCH

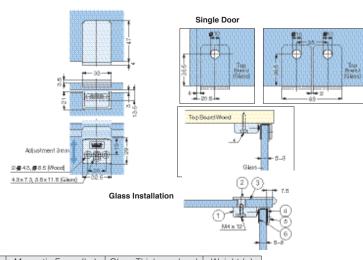
XL-GC09-CR





No.	Part Name	Material	Finish/Color	
1	Housing	Zinc Alloy	Chrome	
2	Plate	Ziric Alloy	Cilionie	
3	Spacer	Rubber	Black	
4	Counterplate	Steel	Chrome	
(5)	Face Plate	Zinc Alloy	Cilionie	
(B)	Pad	Rubber	Black	

- Magnetic catch for cabinet doors.
- Both for glass and wood ceiling board.



 Item No.
 Magnetic Force (kg)
 Glass Thickness(mm)
 Weight (g)

 XL-GC09-CR
 3.3lbs (1.5kg)
 3/16"~5/16" (5~8)
 110

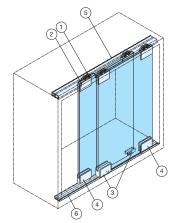




XL-GC SERIES (FOR SLIDING DOORS)



Door Width(mm)	Max. 19-11/16"(500)
Door Height(mm)	Max. 47-1/4"(1200)
Door Weight(kg)	Max. 26.5 lbs (12) / Per Door
Glass Thickness(mm)	5/16" (8)

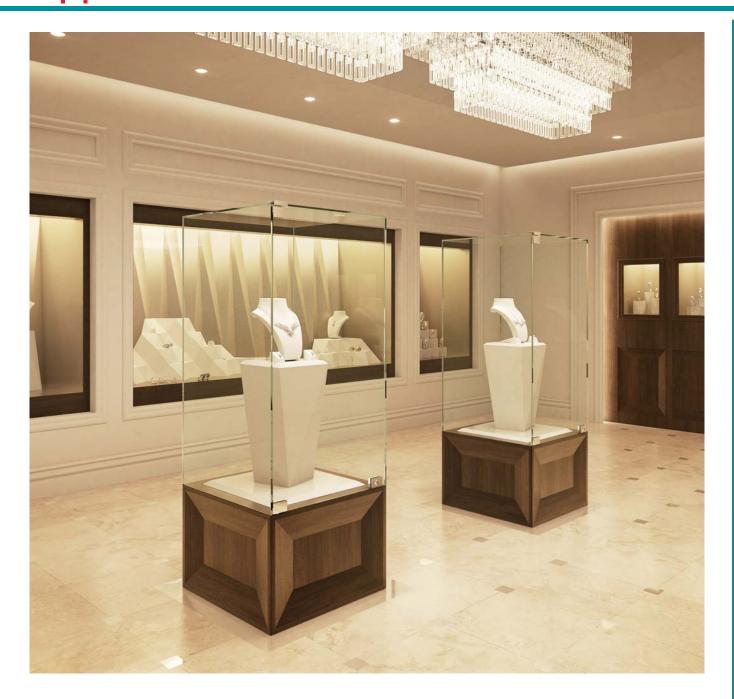


Part Details

Tait Details						
Order Quantity	No.	Item No.		Part Name	Dimensions	Description
4 ea	1	57-3149-071	Upper Roller		51 10 13 13 15 10 10 10 10 10 10 10 10 10 10	Material Zinc Alloy (Body) Polyacetal (Roller) Finish / Color Yellow Zinc Chromate (Body) White (Roller)
1 set	2	XL-GC06-C	Upper Bracket		See P.563	Material Zinc Alloy Finish / Color Chrome *4 pcs per set (for 2 glass doors)
1 ea	3	XL-GC03-C	Lock		See P.563	Material Zinc Alloy Finish / Color Chrome *24 key changes (2 keys Included)
1 pair	4	XL-GC08-C	Bottom Guide Bracket		See P.563	Material Zinc Alloy Finish / Color Chrome *1 pair (Left / Right) per set
1 ea	5	XL-GC06-UL1200	Upper Rail		(28.6) (10) (8.9) 7.9 (8.9) -24.7	Material Aluminum Finish / Color Plain *Length: 47-1/4" (1200 mm)
1 ea	6	XL-GC03-GL 1200	Bottom Rail		(28.6) 7.9 (6.9) 7.9 Q (24.7) Bore Dimension	Material ABS Finish / Color Black *Length: 47-1/4" (1200mm)







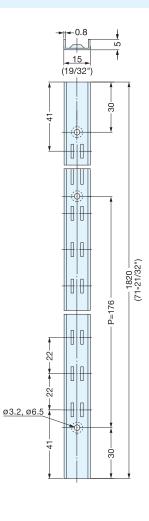




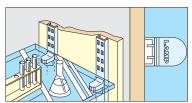
SHELF STANDARD

SPH-1820





- Easy height adjustment for changing shelf level.
- Shelf support options:
 SPH-5, SPH-15, SPH-20 (Shelf Supports) SP-18E (End Cap)



Surface Mount

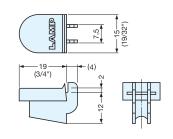
Item No.	Weight (g)	Carton (pcs)
SPH-1820	230	80

Ī	Material	Finish	
	304 Stainless Steel	Satin	

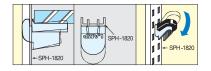
SHELF SUPPORT

SPH-20





- Shelf support for SPH-1820.
- Rubber pad provides a gripped surface to reduce slippage.



Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
SPH-20	286lbs (130)/4pcs	4.5	300	3000

Material	Finish/Color
304 Stainless Steel	Satin
Synthetic Rubber Pad	Black





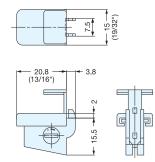
SHELF SUPPORT (W/HOLDER)

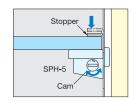
SPH-5



- Shelf support for SPH-1820. • Shelf support is friction retention.

 - Glass thickness: 4 \sim 8 mm (5/32" \sim 5/16") thickness
 - Rubber pad provides a gripped surface to reduce slippage.





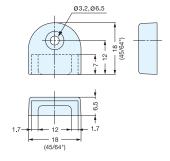
Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
SPH-5	286lbs (130)/4pcs	8	100	1000

Material	Finish/Color
304 Stainless Steel	Satin
Synthetic Rubber pad	Black

END CAP SPH-18E



• End cover cap for SPH, SM, SP shelf standards.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
SPH-18E/BLK	1.3	500	5000
SPH-18E/WHT	1.0	300	3000

Material	Color
ABS	Black (BLK)/White (WHT)

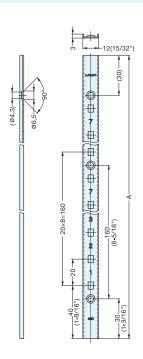




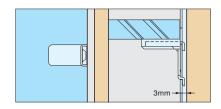
THIN SHELF STANDARD

SPE-1820





- 430 stainless steel shelf standard, available in plain, white or black finish.
- Use with SPE-FB20S and SPE-FC20 shelf supports and end caps (both sold separately).



Item No.	Length	Weight (g)	Box (pcs)
SPE-1820	71-5/8" (1820 mm)	156	100
SPF-1820WT	71-3/6 (162011111)	150	100

Material	Finish
430 Stainless Steel	Plain, White(WT), Black (BL)

SHELF SUPPORT/CAP

SPE-FB20S, SPE-FC20

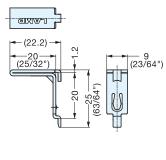


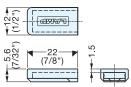




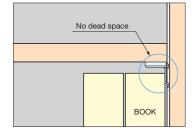


SPE-FC20





- SPE-FB20S available in Plain or White (WT) finish.
- Use with SPE-1820 shelf standards (sold separately).



Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)		Carton (pcs)		
SPE-FB20S	176 lbs (80)/4pcs	E	300		3000		
SPE-FB20SWT	176 ibs (60)/4pcs	5					
Item No.	Weight (g)	Box (p	cs) C		Carton (pcs)		
SPE-FC20	1	300	300		3000		

Finish		
Plain, White (WT)		
Finish		
Light Grey		



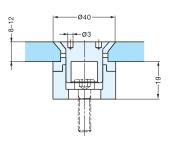


700VA

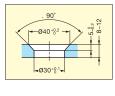


- · Recommended Screw Size: M8 bolt
- · Recommended for use with tempered glass.





Cut Out Dimension





Z058 * Special wrench Z058 required for installation. (Sold Separately)

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7000VA	8~12	167	4	40

Material	Finish
302 Stainless Steel/Aluminum	Satin

GLASS STANDOFF

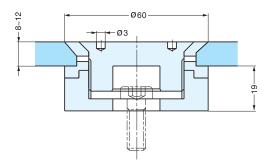
7010VA

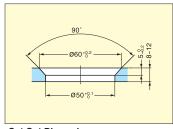


- Flush mount type glass standoff.
- Recommended Screw Size: M8 bolt
- Recommended for use with tempered glass.



Z058 * Special wrench Z058 required for installation. (Sold Separately)





Cut Out Dimension

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)	
7010VA	8~12	435	4	40	302 Stair

Material	Finish	
302 Stainless Steel/Aluminum	Satin	





7015VA

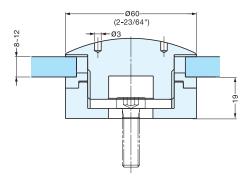


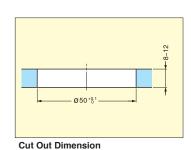
- · Glass standoff with round face plate.
- · Recommended Screw Size: M8 bolt
- · Recommended for use with tempered glass.



Z058

* Special wrench Z058 required for installation. (Sold Separately)





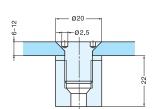
Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7015VA	8~12	520	4	40

Material	Finish
302 Stainless Steel/Aluminum	Satin

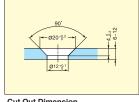
GLASS STANDOFF

7060ED





- · Flush mount type glass standoff.
- Recommended Screw Size: M5 bolt
- Recommended for use with tempered glass.





(Sold Separately)

Cut Out Dimension

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)	N
7060ED	6~12	23	10	100	Al

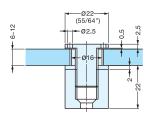
Material	Finish
Aluminum	Anodized



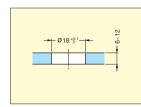


7061VA





- Glass standoff with flat face plate.Recommended Screw Size: M5 bolt
- Recommended for use with tempered glass.





* Special wrench Z059 required for installation. (Sold Separately)

Cut Out Dimension

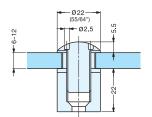
Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7061VA	6~12	69	10	100

Material	Finish
304 Stainless Steel	Satin

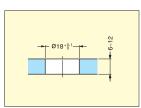
GLASS STANDOFF

7061VA





- Glass standoff with round face plate.
- Recommended Screw Size: M5 bolt
- Recommended for use with tempered glass.





required for installation. (Sold Separately)

Cut Out Dimension

84 1 1 1	F: : :

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7062VA	6~12	71	10	100

Material	Finish
304 Stainless Steel	Satin



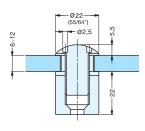


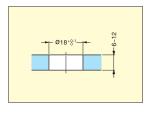
7062VA



- Recommended Screw Size: M5 bolt
- Recommended for use with tempered glass.









Cut Out Dimension

* Special wrench Z059 required for installation. (Sold Separately)

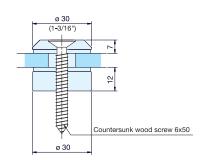
Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7062VA	6~12	71	10	100

Material	Finish
304 Stainless Steel	Satin

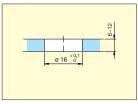
GLASS STANDOFF

7083VA





- · Glass standoff with round face plate.
- Recommended for use with tempered glass.



Cut Out Dimension

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7083VA	6~12	84	10	100

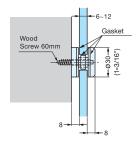
Material	Finish
304 Stainless Steel	Satin



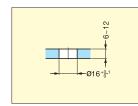


4872





- Glass standoff with plain flat face plate.
- Supplied with 60 mm length wood screw.
- Recommended for use with tempered glass.





Cut Out Dimension

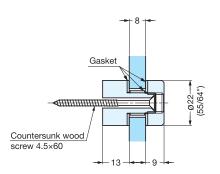
Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
4872ZN1	612	80	10	100
4872ZN5	6~12	80	10	100

Material	Finish	
Zinc Alloy	Matte Chrome	
	Chrome	

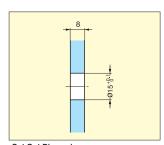
GLASS STANDOFF

7120VA





- Small stand off with cover cap.
- Supplied with flat head wood screw 4.5×60 .
- Recommended for use with tempered glass.



Cut Out Dimension

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7120VA	8	62	10	100

Material	Finish
304 Stainless Steel	Satin

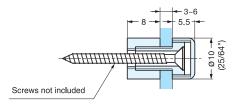


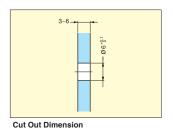


7140E1EV1



- Mini stand off with cover cap.
- · Screw not supplied.
- Recommended for use with tempered glass.
- Recommended screw size: M3





Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7140E1EV1	3~6	3	10	100

Material	Finish
Aluminum/Brass	Anodized/Nickel Plated

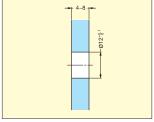
GLASS STANDOFF

7144E1EV1



Screws not included

- Small stand off with cover cap.
- · Screw not supplied.
- · Recommended for use with tempered glass.
- Recommended screw size: M4



Cut Out Dimension

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)	
7144E1EV1	4~8	5	10	100	

Material	Finish
Aluminum	Anodized









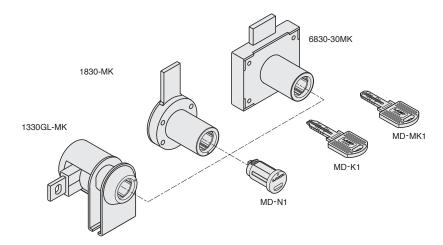


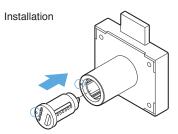




INTERCHANGEABLE LOCK SERIES

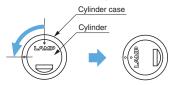
- Interchangeable system allows easy cylinder replacement in case key is lost.
- Master key for easy key management.
- 7,800 key changes available.
- Master key (sold separately) can manage different key numbers (max. 750 key changes).
- · Reversible key.





Place two dots in the same position and insert

How to Remove the Cylinder



Turn cylinder by using the Change Key (optional parts)

Place two dots in the same position

INTERCHANGEABLE CYLINDER

MD-N1



- For 6830-30MK, 1830-MK and 1330GL-MK.
- 7,800 key changes available (max. 750 key changes).

Item Name	Key Type	Material	Finish
MD-N1-B	Key Different	304 Stainless	Polished/ Yellow Zinc
MD-N1-D	Key Alike	Steel/Zinc Alloy	Chromate

MASTER KEY & CHANGE KEY

MD-MK1, MD-K1



- MD-MK1 Master Key for easy key management. • MD-K1 - Change Key to remove existing cylinder.

Item Name	Key Type	Material	Finish
MD-MK1	Master Key	Brass/ABS	Nickel/Black
MD-K1	Change Key		





GLASS DOOR CAM LOCK

1330GL-MK

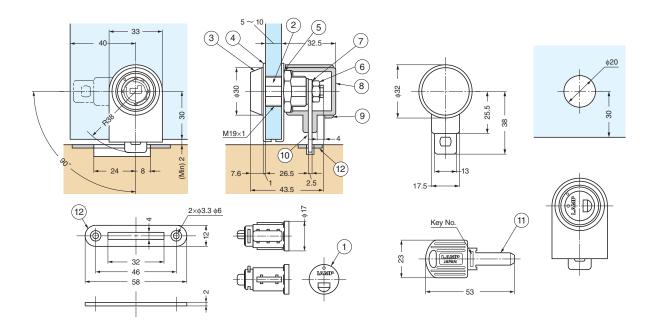


- · Glass door cam lock with interchangeable cylinder.
- Cylinder can be changed by using change key MD-K1.
- Easy to replace cylinder in case key is lost.
- Up to 7,800 key changes available.
- Key alike (KA) or Keyed Different (KD) available. Please specify when ordering.

1330GL-MKGA

1330GL-MKDN

*Cylinder and key are sold separately.



No.	Part Name	Material	Finish
1	Cylinder (Sold Separately)	304 Stainless Steel/ Zinc Alloy	Polished, Yellow Chromate
2	Housing	Zinc Alloy	
3	Ring	Brass	Gold, Paint/Clear, Satin Nickel
4	Front Plate	304 Stainless Steel	
(5)	Large Hex Nut		Yellow Zinc Chromate
6	Small Hex Nut	Steel	reliow Zinc Chromate
7	Washer		Clear Zinc Chromate
8	Cover	Polypropylene	Black
9	Ring	Folypropylerie	DIACK
(10)	Cam	304 Stainless Steel	Polished
	Key (Sold Separately)	Brass/ABS	Nickel/Black
	Strike	304 Stainless Steel	Polished

*Cylinder and Key are sold separately.

Item Name	Glass Thickness(mm)	Finish
1330GL-MKGA	3/16-3/8"	Gold (GA)
1330GL-MKDN	(5~10)	Dull Nickel (DN)



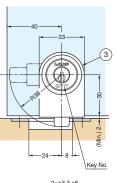


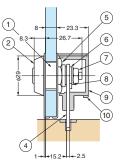
GLASS DOOR CAM LOCK (MILLION LOCK SERIES)

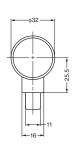
1300GL

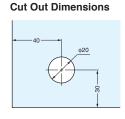


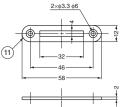
- · Dimple key lock series.
- · Ideal for showcase application.
- \bullet Reversible key. Lock and unlock to turn key 360° and cam turns 90°.
- Able to remove key when locked and unlocked.
- 1 million key changes available.
- Master Key system available at surcharge.
 (Max. 2,520 key changes/Master Key.)
- · Keys can be shared with other Million Lock Series.



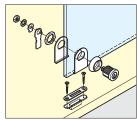




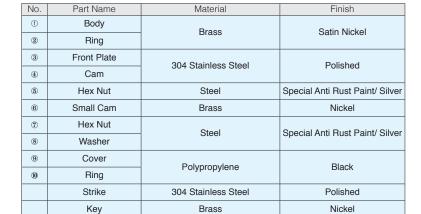






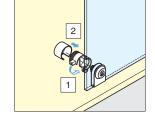


How to Install Cover & Ring



Item Name	Glass Thickness(mm)
1300GL	3/16~5/16"
	(5~8)







GLASS DOOR CAM LOCK (MILLION LOCK SERIES)

1310GL



Satin Nickel (SN)

1310GLGA

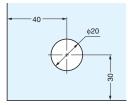
1310GL-BL

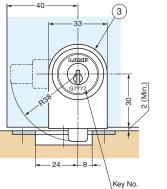
Chrome (CR)

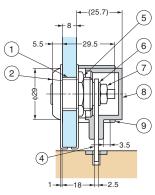
Gold (GA) Black (BL)

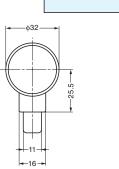
- Dimple key lock series. Ideal for showcase application.
- · High security reversible key. (3 keys supplied)
- · Key acts as a knob and can only be removed when locked.
- 1 million key changes available; please specify keyed alike or differently when ordering.
- · Master key system available at surcharge.

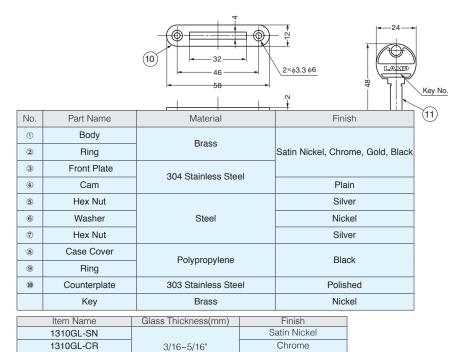














Gold

Black

(5~8)

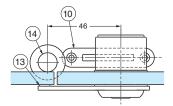


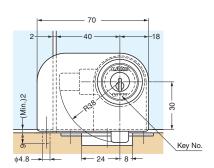
GLASS DOOR CAM LOCK (MILLION LOCK SERIES)

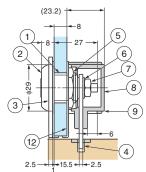
1310GLW

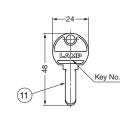


- For double door application.
- · Dimple key lock series. Ideal for showcase application.
- Reversible key can be removed when locked and turn 90° rotation clockwise.
- 1 million key changes available.
- Master Key system available at surcharge.
 (Max. 2,520 key changes/Master Key.)
- Keys can be shared with Million Lock Series.

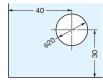




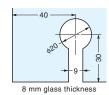




Cut Out Dimensions



5 or 6 mm glass thickness



No.	Part Name	Material	Finish
1	Body	Brass	Nickel
2	Ring		Nickei
3	Front Plate	304 Stainless Steel	Satin
4	Cam	304 Stairliess Steel	Plain
5	Hex Nut		
6	Washer	Steel	Silver
7	Hex Nut		
8	Cover	Polypropylene	Black
9	Ring		Diack
10	Counterplate	303 Stainless Steel	Polished
	Key	Brass	Nickel
	Backplate	304 Stainless Steel	Polished
	Stopper	Polyamide	Brown

Item Name	Glass Thickness(mm)
1310GLW	3/16"~5/16" (5~8)



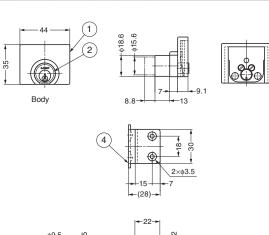


GLASS DOOR LOCK (2100 LOCK SERIES)

MKL-2100

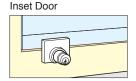


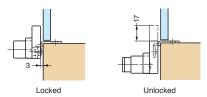
- Pre-drilling on glass not required.
- · For inset door.
- MKL-B mounting plate (option) is available for overlay.
- · Key different type possible as special order (12 key changes).
- · Keys can be shared with 2100 Lock Series.
- · Mounting plate for inset doors
- Flat head cross screws 3.1 × 1.6 (SUS)





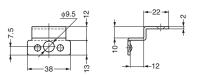
Strike for inset door (included)





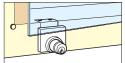


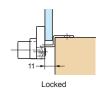


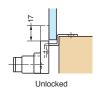


Strike for overlay door (sold separately)

Overlay Door







No.	Part Name	Material	Finish
1	Plate	Zinc Alloy	Nickel
2	Push Lock		Chrome
3	Key	Brass	Nickel
4	Counterplate for Inset Door	304 Stainless Steel	Polished

Item Name	Glass Thickness(mm)
MKL-2100	3/16~5/16"





GLASS DOOR CAM LOCK (W/INDICATOR)

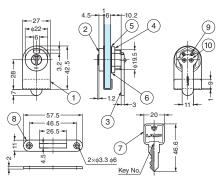
2200GL



- · With indicator: Unlocked Blue, Locked Red.
- · Ideal for application of showcase or audio rack.
- · Available for both right and left swing door.
- · Key can be removed when locked.
- · 12 key changes available. (Max. 300 key changes as special order)
- Master Key system (170 key changes) available at surcharge. (1 Master Key only.)
- · Keys can be shared with 2200 Lock Series.

No.	Part Name	Material	Finish
1	Front Plate	303 Stainless Steel	Polished
2	Body	Brass	
3	Cam	Steel	Nickel
4	Hex. Nut	Brass	
5	Plastic Washer	Polyamide	Natural
6	Washer	Steel	Chrome
7	Key	Brass	Nickel
8	Counterplate	Steel	Chrome
9	Pin	Brass	Plain
10	Screw	Steel	Nickel (M2.5x8)

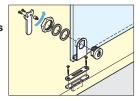
10	Screw	Steel	
	Item Name	Glass Thickness (mm)	
	2200GI	3/16"~1/4" (4~6)	



Installation

Cut Out Dimensions





GLASS DOOR CAM LOCK

2100GL

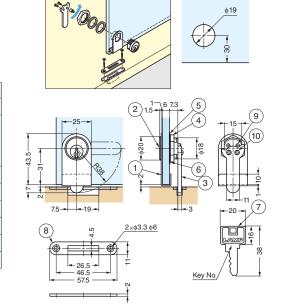
Cut Out Dimensions



- Brass cylinder glass door lock with 2 keys.
- Key acts as a knob and can only be removed when locked.
- · Master key NOT available.
- ${\boldsymbol \cdot}$ Keys can be shared with other 2100 series locks.
- 12 key changes available; please specify keyed alike or differently when ordering.

No.	Part Name	Material	Finish	
1	Front Plate	303 Stainless Steel	Polished	
2	Body	Brass		
3	Cam	Steel	Nickel	
4	Hex. Nut	Brass		
(5)	Plastic Washer	Polyamide	Natural	
6	Washer	Steel	Chrome	
7	Key	Brass	Nickel	
8	Counterplate	Steel	Chrome	
9	Pin	Brass	Plain	
10	Screw	Steel	Nickel (M2.5x8)	

Item Name	Glass Thickness (mm)
2100GL	5/32"~1/4" (4~6)



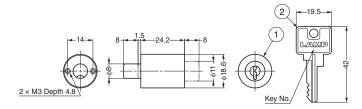




PUSH LOCK 2150B, 2160B



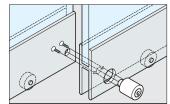
- Zinc alloy cylinder push lock for metal-framed glass door or sheet metal double sliding doors.
- Push cylinder to lock.
- Cylinder Diameter: 12/16" (18.6mm)
- 24 key changes available; Please specify keyed alike or differently when ordering.
- · Master key NOT available.



No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Nickel
2	Key	Brass	NICKEI

Item Name	Metal Frame Thickness(mm)
2150B, 2160B	15/16" (24)

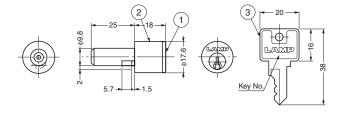


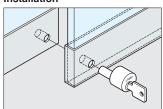


PUSH LOCK 6300



- Zinc alloy cylinder push lock for metal-framed glass door or sheet metal double sliding doors.
- Push cylinder to lock.
- Cylinder Diameter: 12/16" (18.6mm).
- 24 key changes available; Please specify keyed alike or differently when ordering.
- · Master key NOT available.





No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Satin Nickel
2	Cover	Brass	Saun Nickei
3	Key		Nickel

Item Name	Metal Frame Thickness(mm)	Cylinder Diameter(mm)	Key Changes
6300	3/4" (19)	11/16" (17.6)	96



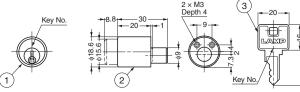


GLASS DOOR CAM LOCK (W/INDICATOR)

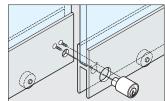
2100B



- Zinc alloy cylinder push lock for metal-framed glass door or sheet metal double sliding doors.
- · Key is required to lock and to unlock.
- To Lock: Insert key at turn 60° clockwise. Push in the cylinder and turn the key 60° back.
- · Cylinder Diameter: 3/4" (18.6mm)
- Keys can be shared with other 2100 series locks.
- 12 key changes available: Please specify keyed alike or differently when ordering.



Installation



No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Satin Nickel
2	Key	Brass	Nickel

Item Name	Metal Frame Thickness(mm)	Cylinder Diameter(mm)	Key Changes
2100B	25/32" (20)	3/4" (18.6)	12

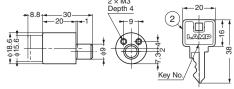
PUSH LOCK

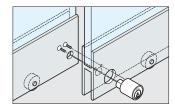
2110B



- · Zinc alloy cylinder push lock for metal-framed glass door or sheet metal double sliding doors.
- · Key is required to lock and unlock.
- To Lock: Insert key and turn 60° clockwise. Push-in the cylinder and turn the key 60° back.
- Cylinder Diameter: 3/4" (18.6mm)
- Keys can be shared with other 2100 series locks.
- 12 key changes available: Please specify keyed alike or differently when ordering.







No.	Part Name	Material	Finish
1	Body	Zinc Alloy	Satin Nickel
2	Key	Brass	Nickel

Item Name	Metal Frame Thickness(mm)	Cylinder Diameter(mm)	Key Changes
2110B	13/16" (20)	3/4" (18.6)	12



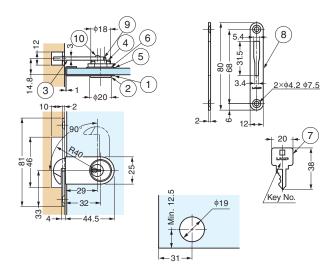


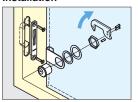
GLASS DOOR CAM LOCK

2100GLK



- For swinging glass doors with glass 5/32" to 1/4" (4-6mm) thick.
- Requires Ø23/32" (19mm) bore for installation.
- Non-handed, swinging cam can be mounted to swing left or right.
- Key acts as a knob and can only be removed when locked.
- 12 key changes are available; please specify keyed alike or differently when ordering.





No.	Part Name	Material	Finish	
1	Front Plate	304 Stainless Steel	Satin	
2	Body	Brass	Satin Nickel	
3	Cam	Steel	Nickel	
4	Hex. Nut	Brass	Nickei	
5	Plastic Washer	Polyamide	Natural	
6	Washer	Steel		
7	Key	Brass	Nickel	
8	Counterplate	Steel		
9	Pin	Brass	Plain	
10	Screw	Steel	Nickel	

Item Name	Glass Thickness(mm)	Key Changes
2100GLK	3/16"~1/4" (4~6)	12



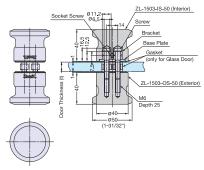




GLASS DOOR KNOB

ZL-1503





• Glass door thickness: 6~12 mm (1/4"~1/2")

	(FR
Min.40mm	•	 -14±0.5

Cut out dimensions

for Glass

 Item No.
 Type
 Material
 Finish/Color
 Weight (g)
 Box (pcs)

 ZL-1503-IS-50
 Interior Knob
 316
 Zwei L
 480
 1

 ZL-1503-OS-50
 Exterior Knob
 Stainless Steel
 Zwei L
 507
 1

 ZL-1503-WN-50*
 Back-to-Back Knob
 1000
 1

^{*}Back-to-Back type includes 2 knobs, screw set and allen key

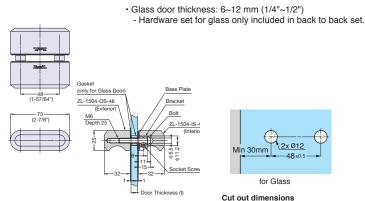




GLASS DOOR KNOB

ZL-1504





Min 30mm 2x Ø12 48 ± 0.5
for Glass

Cut out dimensions

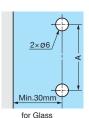
Item No.	Туре	Material	Finish/Color	Weight (g)	Box (pcs)
ZL-1504-IS-48	Interior Pull			432	
ZL-1504-OS-48	Exterior Pull	316 Stainless Steel	Zwei L	462	1
ZL-1504-WN-48*	Back-to-Back Pull			989	

^{*}Back-to-Back type includes 2 knobs, screw set and allen key

GLASS DOOR KNOB

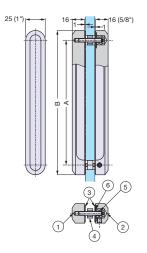
ZL-1505





Cut out dimensions

• Glass door thickness: 8~12 mm (5/16"~1/2")



item No.	Type	_ ^	ь	vveignt (g)	DOX (pcs)
ZL-1505-IS-160	Interior Pull	160 (6-19/64")	185 (7-9/32")	563	
ZL-1505-OS-160	Exterior Pull	160 (6-19/64")	185 (7-9/32")	580	1
ZL-1505-WN-160*	Back-to-Back Pull	160 (6-19/64")	185 (7-9/32")	1177	
Item No.	Type	A	В	Weight (g)	Box (pcs)
ZL-1505-IS-320	Interior Pull	320 (12-19/32")	345 (13-37/64")	1023	
ZL-1505-OS-320	Exterior Pull	320 (12-19/32")	345 (13-37/64")	1052	1

320 (12-19/32")

*Back-to-Back type includes 2	knobs, screw set and Allen key
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ZL-1505-WN-320* Back-to-Back Pull

No.	Part Name	Material		
1)	Main Body	316 Stainless Steel		
2	IVIAIII BOUY	316 Stainless Steel		
3	Gasket	Elastomer		
4	Rubber Ring	Chloroprene Rubber		
(5)	Bracket	316 Stainless Steel		
6	Washer	316 Stainless Steel		



345 (13-37/64")

2109



Inch to Metric Conversion table

Metric to Inch Conversion

		1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
0/0	0.0	25.4	50.8	76.2	101.6	127.0	152.4	177.8	203.2	228.6	254.0	279.4	304.8
1/64	0.4	25.8	51.2	76.6	102.0	127.4	152.8	178.2	203.6	229.0	254.4	279.8	305.2
1/32	0.8	26.2	51.6	77.0	102.4	127.8	153.2	178.6	204.0	229.4	254.8	280.2	305.6
3/64	1.2	26.6	52.0	77.4	102.8	128.2	153.6	179.0	204.4	229.8	255.2	280.6	306.0
1/16	1.6	27.0	52.4	77.8	103.2	128.6	154.0	179.4	204.8	230.2	255.6	281.0	306.4
5/64	2.0	27.4	52.8	78.2	103.6	129.0	154.4	179.8	205.2	230.6	256.0	281.4	306.8
3/32	2.4	27.8	53.2	78.6	104.0	129.4	154.8	180.2	205.6	231.0	256.4	281.8	307.2
7/64	2.8	28.2	53.6	79.0	104.4	129.8	155.2	180.6	206.0	231.4	256.8	282.2	307.6
1/8	3.2	28.6	54.0	79.4	104.8	130.2	155.6	181.0	206.4	231.8	257.2	282.6	308.0
9/64	3.6	29.0	54.4	79.8	105.2	130.6	156.0	181.4	206.8	232.2	257.6	283.0	308.4
5/32	4.0	29.4	54.8	80.2	105.6	131.0	156.4	181.8	207.2	232.6	258.0	283.4	308.8
11/64	4.4	29.8	55.2	80.6	106.0	131.4	156.8	182.2	207.6	233.0	258.4	283.8	309.2
3/16	4.8	30.2	55.6	81.0	106.4	131.8	157.2	182.6	208.0	233.4	258.8	284.2	309.6
13/64	5.2	30.6	56.0	81.4	106.8	132.2	157.6	183.0	208.4	233.8	259.2	284.6	310.0
7/32	5.6	31.0	56.4	81.8	107.2	132.6	158.0	183.4	208.8	234.2	259.6	285.0	310.4
15/64	6.0	31.4	56.8	82.2	107.6	133.0	158.4	183.8	209.2	234.6	260.0	285.4	310.8
1/4	6.4	31.8	57.2	82.5	108.0	133.4	158.8	184.2	209.6	235.0	260.4	285.8	311.2
17/64	6.7	32.1	57.5	82.9	108.3	133.7	159.1	184.5	209.9	235.3	260.7	286.1	311.5
9/32	7.1	32.5	57.9	83.3	108.7	134.1	159.5	184.9	210.3	235.7	261.1	286.5	311.9
19/64	7.5	32.9	58.3	83.7	109.1	134.5	159.9	185.3	210.7	236.1	261.5	286.9	312.3
5/16	7.9	33.3	58.7	84.1	109.5	134.9	160.3	185.7	211.1	236.5	261.9	287.3	312.7
21/64	8.3	33.7	59.1	84.5	109.9	135.3	160.7	186.1	211.5	236.9	262.3	287.7	313.1
11/32	8.7	34.1	59.5	84.9	110.3	135.7	161.1	186.5	211.9	237.3	262.7	288.1	313.5
23/64	9.1	34.5	59.9	85.3	110.7	136.1	161.5	186.9	212.3	237.7	263.1	288.5	313.9
3/8	9.5	34.9	60.3	85.7	111.1	136.5	161.9	187.3	212.7	238.1	263.5	288.9	314.3
25/64	9.9	35.3	60.7	86.1	111.5	136.9	162.3	187.7	213.1	238.5	263.9	289.3	314.7
13/32	10.3	35.7	61.1	86.5	111.9	137.3	162.7	188.1	213.5	238.9	264.3	289.7	315.1
27/64	10.7	36.1	61.5	86.9	112.3	137.7	163.1	188.5	213.9	239.3	264.7	290.1	315.5
7/16	11.1	36.5	61.9	87.3	112.7	138.1	163.5	188.9	214.3	239.7	265.1	290.5	315.9
29/64	11.5	36.9	62.3	87.7	113.1	138.5	163.9	189.3	214.7	240.1	265.5	290.9	316.3
15/32	11.9	37.3	62.7	88.1	113.5	138.9	164.3	189.7	215.1	240.5	265.9	291.3	316.7
31/64	12.3	37.7	63.1	88.5	113.9	139.3	164.7	190.1	215.5	240.9	266.3	291.7	317.1
1/2	12.7	38.1	63.5	88.9	114.3	139.7	165.1	190.5	215.9	241.3	266.7	292.1	317.5
33/64	13.1	38.5	63.9	89.3	114.7	140.1	165.5	190.9	216.3	241.7	267.1	292.5	317.9
17/32	13.5	38.9	64.3	89.7	115.1	140.5	165.9	191.3	216.7	242.1	267.5	292.9	318.3
35/64	13.9	39.3	64.7	90.1	115.5	140.9	166.3	191.7	217.1	242.5	267.9	293.3	318.7
9/16	14.3	39.7	65.1	90.5	115.9	141.3	166.7	192.1	217.5	242.9	268.3	293.7	319.1
37/64	14.7	40.1	65.5	90.9	116.3	141.7	167.1	192.5	217.9	243.3	268.7	294.1	319.5
19/32	15.1	40.5	65.9	91.3	116.7	142.1	167.5	192.9	218.3	243.7	269.1	294.5	319.9
39/64	15.5	40.9	66.3	91.7	117.1	142.5	167.9	193.3	218.7	244.1	269.5	294.9	320.3

mm	Inches
0.1	0.0039
0.2	0.0079
0.3	0.0118
0.4	0.0157
0.5	0.0197
0.6	0.0236
0.7	0.0276
0.8	0.0315
0.9	0.0354
1	0.0394
2	0.0787
3	0.1181
4	0.1575
5	0.1969
6	0.2362
7	0.2756
8	0.3150
9	0.3543
10	0.3937
11	0.4331
12	0.4724
13	0.5118
14	0.5512
15	0.5906
16	0.6299
17	0.6693
18	0.7087
19	0.7480
20	0.7874
21	0.8268
22	0.8661
23	0.9055
24	0.9449
25	0.9843
26	1.0236
27	1.0630
28	1.1024
29	1.1417
30	1.1811
31	1.2205



[Inch]

Measurement Conversions

LENGTH

cm	mm	inch	feet
1	10	0.394	0.0328
0.1	1	0.0394	0.00328
2.54	25.4	1	0.083
30.48	304.8	12	1

inch = mm \div 25.4 mm = inch x 25.4

WEIGHT

g	kg	oz	lb
1	0.001	0.0353	0.0022
1000	1	35.27	2.205
28.4	0.0284	1	0.0625
453.6	0.454	16	1

 $lb = kg \times 2.205$ $kg = lb \div 2.205$

FORCE

N	kgf	lbf
1	0.10197	0.225
9.807	1	2.205
4.448	0.454	1

= kgf x 2.205 N = kgf x 9.807kgf = lbf ÷ 2.205 $kgf = N \div 9.807$

MOMENT

N·m	kgf · cm	lbs·in
1	10.197	8.85
0.0981	1	0.868
0.113	1.152	1

 $lbs \cdot in = kgf \cdot cm \times 0.868$ $N \cdot n$ $kgf \cdot cm = lbs \cdot in \div 0.868$ $kgf \cdot$

 $N \cdot m = kgf \cdot cm \times 0.0981$ $kgf \cdot cm = N \cdot m \div 0.0981$

TEMPERATURE

°C	°F
0	32
-17.77	0

 $^{\circ}C = (^{\circ}F - 32) \times 5 \div 9$ $^{\circ}F = ^{\circ}C \div 5 \times 9 + 32$

[Metric]



^{*}All tools and figures are for reference only.