

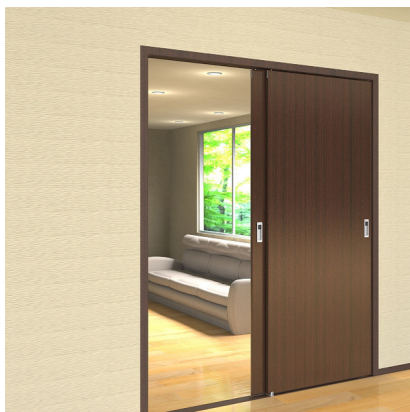


SLIDING & FOLDING DOOR HARDWARE

SLIDING DOOR HARDWARE
SWING DOOR HARDWARE
FOLDING DOOR HARDWARE
FLUSH SLIDING DOOR HARDWARE

SLIDING & FOLDING DOOR HARDWARE

FD SERIES / SOFT CLOSE OPTION



P.492~499

Max. Door Weight 66 lbs

FD30

P.500~503

Max. Door Weight 110 lbs

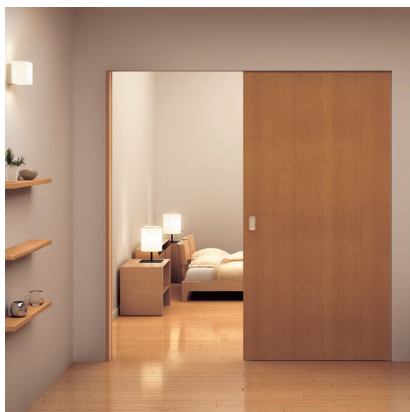
FD50

P.504~507

Max. Door Weight 176 lbs

FD80

SLIDING & FOLDING DOOR HARDWARE



P.508~510

Max. Door Weight 187 lbs, 275 lbs

KS-85, 125

P.532~535

Self and Soft Close Folding Door

SFD

P.536~541

Slidable Folding Door

FD30-F

SPECIALITY DOOR HARDWARE



P.512~513

Self Closing Door

LM-80

P.514~515

Lateral Opening Door

FAD-54/54L

P.516~517

Flush Closing Door

MFU

ALUMINUM FRAME DOOR HARDWARE



P.518~520
Swing Open

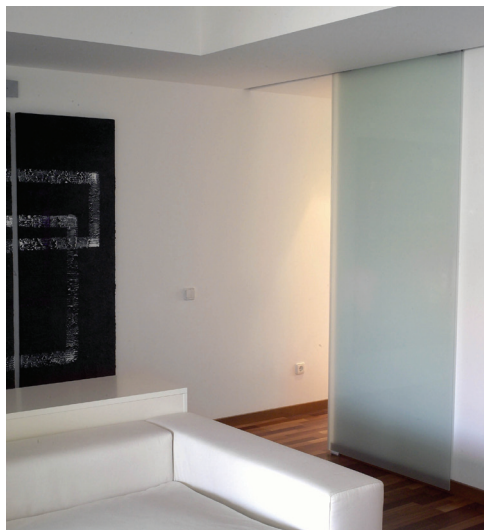
AF-25D



P.522~525
Sliding Door / Soft Close Option

FD80-AF

GLASS SLIDING DOOR HARDWARE



P.526~527
Max. Glass Door Weight 286 lbs

KSPG



P.528~529
Max. Glass Door Weight 132 lbs, 198 lbs

KSUG



P.530~531
Self Closing

LM-80G

FD SLIDING DOOR SYSTEM - Overview



FD30



FD50



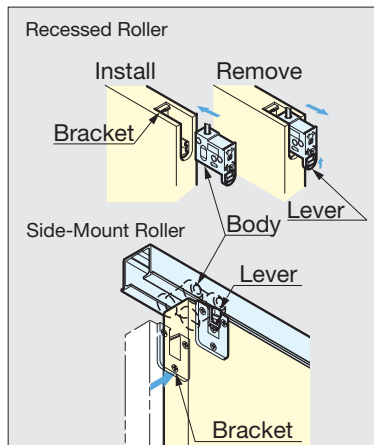
FD80

Door	Type	FD30				FD50				FD80			
		Standard Sliding		One-way Soft Close	Two-way Soft Close	Standard Sliding		Two-way Soft Close		Standard Sliding		Two-way Soft Close	
	Roller	Recessed	Side Mount	Recessed	Recessed	Recessed	Top Surface	Recessed	Top Surface	Top Recessed	Top Surface	Top Recessed	Top Surface
	Weight	Max. 66 lbs (30 kg)				Max. 110 lbs (50 kg)				Max. 176 lbs (80 kg)			
Thickness (Min.)	1"	1-1/8"	1"		1"	1-3/16"	1"	1-3/16"	1-3/8"	1-1/4"	1-3/8"	1-1/4"	
Width	Max. 39-3/8"		20"-39-3/8"	23-1/4"-39-3/8"	Max. 59"-1/16"		26-3/4"~59-1/16"		Max. 59-1/16"		30-7/8"~59-1/16"		
Height	Max. 2400 (94-1/2")				Max. 2400 (94-1/2")				Max. 2500 (98-7/16")				

UPPER ROLLER SELECTION GUIDE

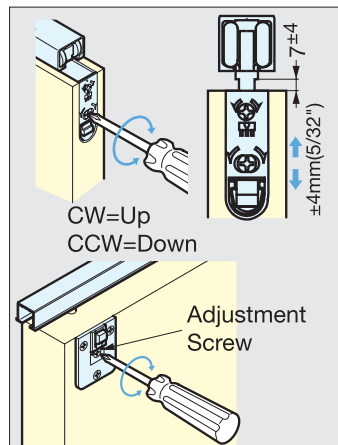
	Type	Installation	Advantage
RECESSED 	FD30 FD50	Snap-In	• Easy door installation and adjustment • Adjustment by phillips head screwdriver • Small gap between door and upper track
SIDE MOUNT 	FD30	Snap-In	• Easy door installation and adjustment • Adjustment by phillips head screwdriver • Small gap between door and upper track
TOP SURFACE 	FD50 FD80	Easy Hang No tool required	• Easy door installation and adjustment • No door boring required
TOP RECESSED 	FD80	Easy Hang No tool required	• Easy door installation and adjustment • Small gap between door and upper track

■ Door Installation



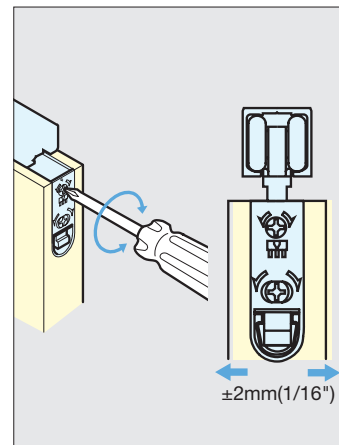
Insert Bracket to hang door.
To remove door, click the lever
and pull out the Bracket.

■ Height Adjustment



Simply turn the adjustment
screw with a screwdriver.
±4mm (5/32") adjustable.

■ Side Adjustment



Simply turn the adjustment
screw with a screwdriver.
±2mm (1/16") adjustable.

■ Soft Closer Mechanism

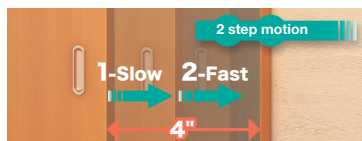
Soft Close Unit



2 Step sequential soft close motion

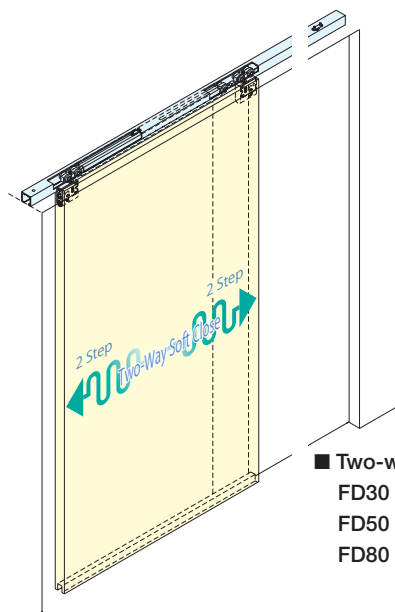
- Soft closer mechanism integrated in upper roller
- One-Way or Two-Way soft closer unit in single unit

Long soft close stroke (4")

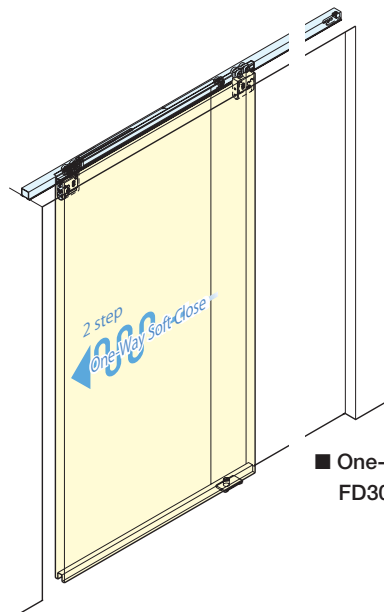


Soft close option

- 2 step sequential motion
First stage - Damper catches and slows the door
Second stage - Damper soft closes the door



■ Two-way soft close
FD30
FD50
FD80



■ One-way soft close
FD30

SLIDING DOOR SYSTEM (Door Weight 66 lbs)

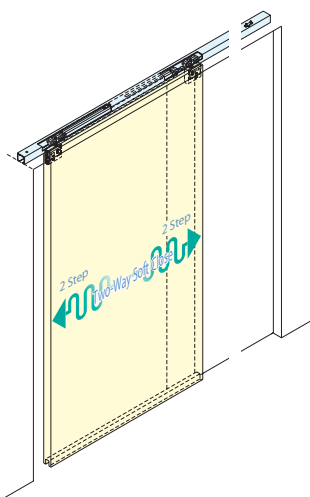
FD30



Type	FD30			
	Standard Sliding		One-way Soft Close	Two-way Soft Close
Roller	Recessed	Side Mount	Recessed	Recessed
Door Weight	Max. 66 lbs (30 kg)			
Door Thickness (Min.)	1"(24 mm)	1-1/8"(28 mm)	1"(24 mm)	
Door Width	Max. 39-3/8" (1000 mm)		20"-39-3/8" (510~1000 mm)	23-1/4"-39-3/8" (590~1000 mm)
Door Height	Max. 94-1/2" (2400 mm)			

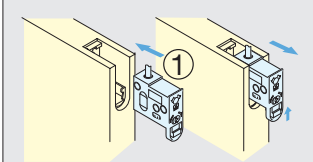
- Thin profile allows flexible design on various application
- Soft-Close Type available by selecting each roller type
- Various parts available for many applications

*Designed for interior use, not exterior.



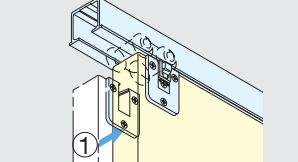
■ Door Installation

-Recessed Roller-



① Snap-in

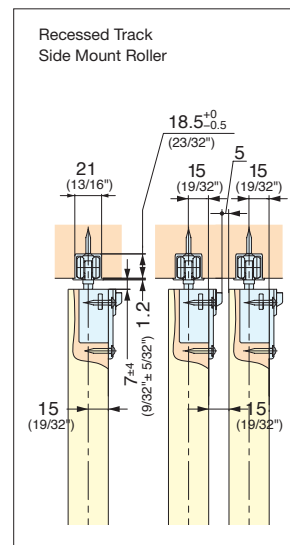
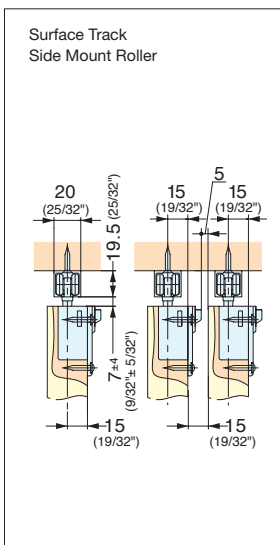
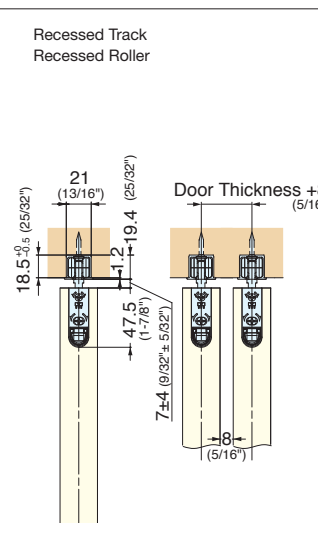
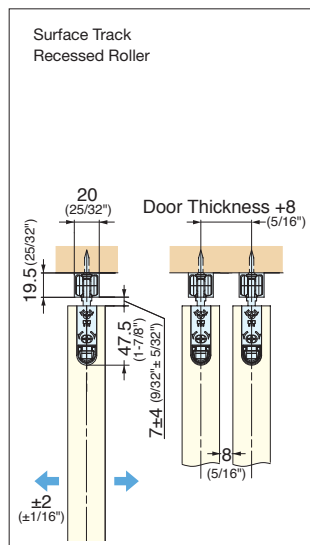
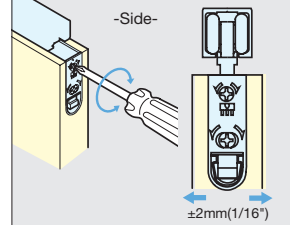
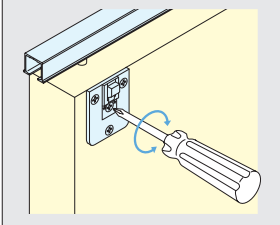
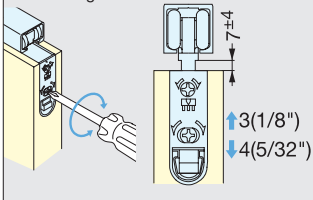
-Side Mount Roller-



① Snap-in

■ Adjustment (With Phillips Screwdriver)

-Height-



Parts Set (per door)		Necessary Parts	
		Please refer to "Qty [a] - [d]" for parts included in each set.	
	Item No.	Description	
		Roller	Function
[a]	FD30-DHCP	Recessed	Two Way Soft-Close
[b]	FD30-HCP	Recessed	One Way Soft-Close
[c]	FD30-HHP	Recessed	Standard Sliding
[d]	FD30-HUP	Side-Mount	Standard Sliding

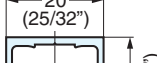
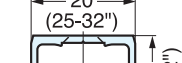
Parts Included

No.	Qty				Part Name	Description
	[a]	[b]	[c]	[d]		
1	1 pc	-	-	-	Recessed-Roller Soft-Closer (Two-Way) FD30-WRH-DSC	- Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
2	-	1 pc	-	-	Recessed-Roller Soft-Closer (One-Way) FD30-WRH-SC	- Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
3	1 pc	1 pc	2 pcs	-	Recessed-Roller Standard Sliding FD30-WRH	- Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
4	-	-	-	2 pcs	Side-Mount Roller Standard Sliding FD30-WRU	- Material Steel / Polyacetal - Finish Yellow Zinc Chromate / Brown
5	1 pc	1 pc	1 pc	1 pc	Floor Guide FD30-HBG	- Material Steel / Polyamide - Finish Yellow Zinc Chromate / Light Brown
6	-	1 pc	2 pcs	2 pcs	End Stopper FD30-HTST-DB	- Material Steel / Polyacetal - Finish Yellow Zinc Chromate / Brown

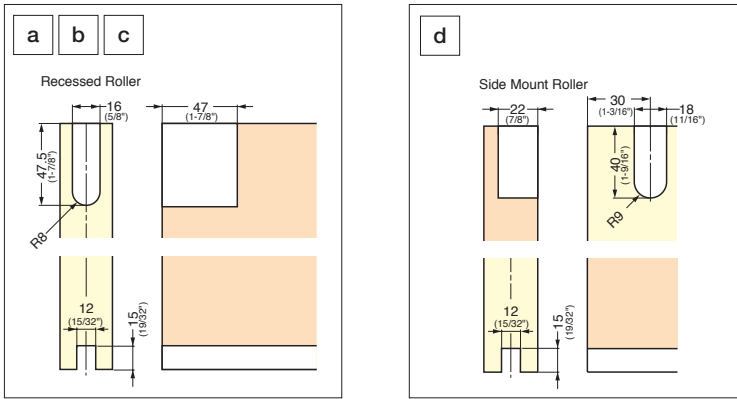
Optional Parts

	Part Name	Description
7	Door Stopper FD30-HTKY	- Material Zinc Alloy / Rubber - Finish / Grey
8	Stopper Block FD30-HSB	- Material / Polyacetal - Finish / Dark Brown
9	Cover Cap FD30-WRH-CP	- Material Polypropylene - Finish: Light Brown *Dark Brown / White
10	Bottom Guide (For By-pass Door) FD30-HGW	- Material / Polyamide - Finish / Light Brown
11	Door Guide Track FD30-HBRT1500SIL	- Material / Aluminum - Finish Anodized Silver

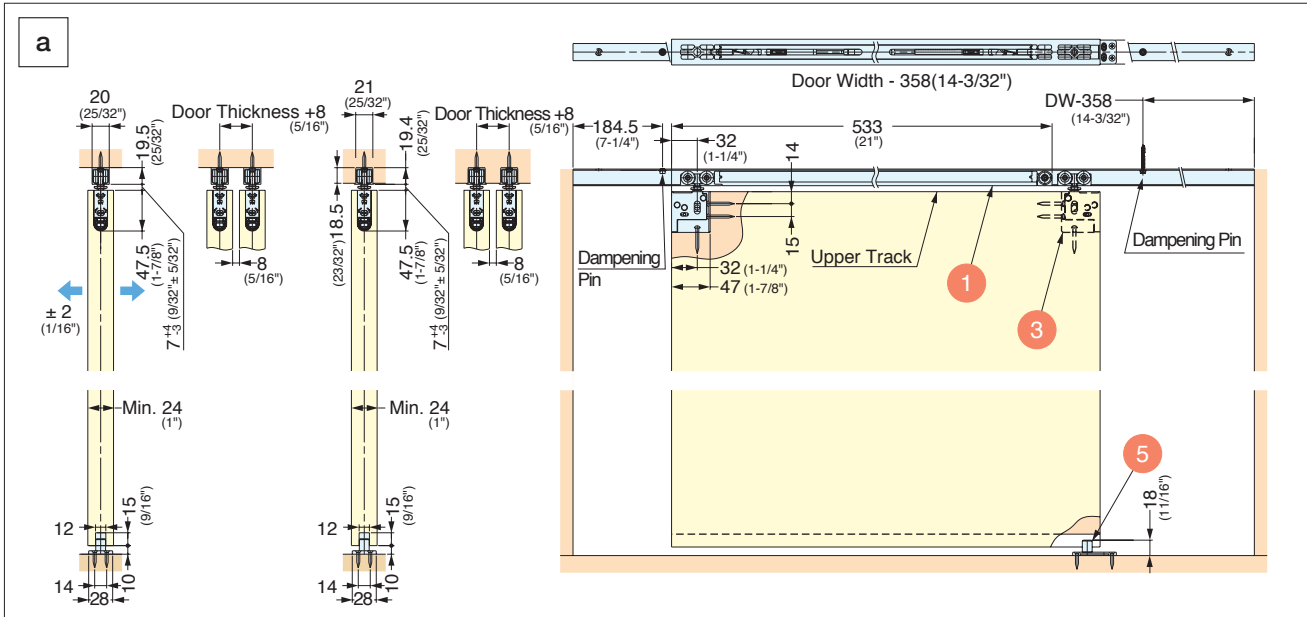
Upper Tracks

	Length	Item No.		Dimension, Material / Finish	
		Surface Mount	Recessed Mount	Surface	Recessed
Standard	71-5/8" (1820 mm)	FD30-TRM1820SIL	FD30-TRH1820SIL		
	107-1/2" (2730 mm)	FD30-TRM2730SIL	FD30-TRH2730SIL		
	143-5/16" (3640 mm)	FD30-TRM3640SIL	FD30-TRH3640SIL		
Soft-closing	71-5/8" (1820 mm)	FD30-TRM1820SCSIL	FD30-TRH1820SCSIL	Aluminum / Anodized Silver	
	107-1/2" (2730 mm)	FD30-TRM2730SCSIL	FD30-TRH2730SCSIL		
	143-5/16" (3640 mm)	FD30-TRM3640SCSIL	FD30-TRH3640SCSIL		

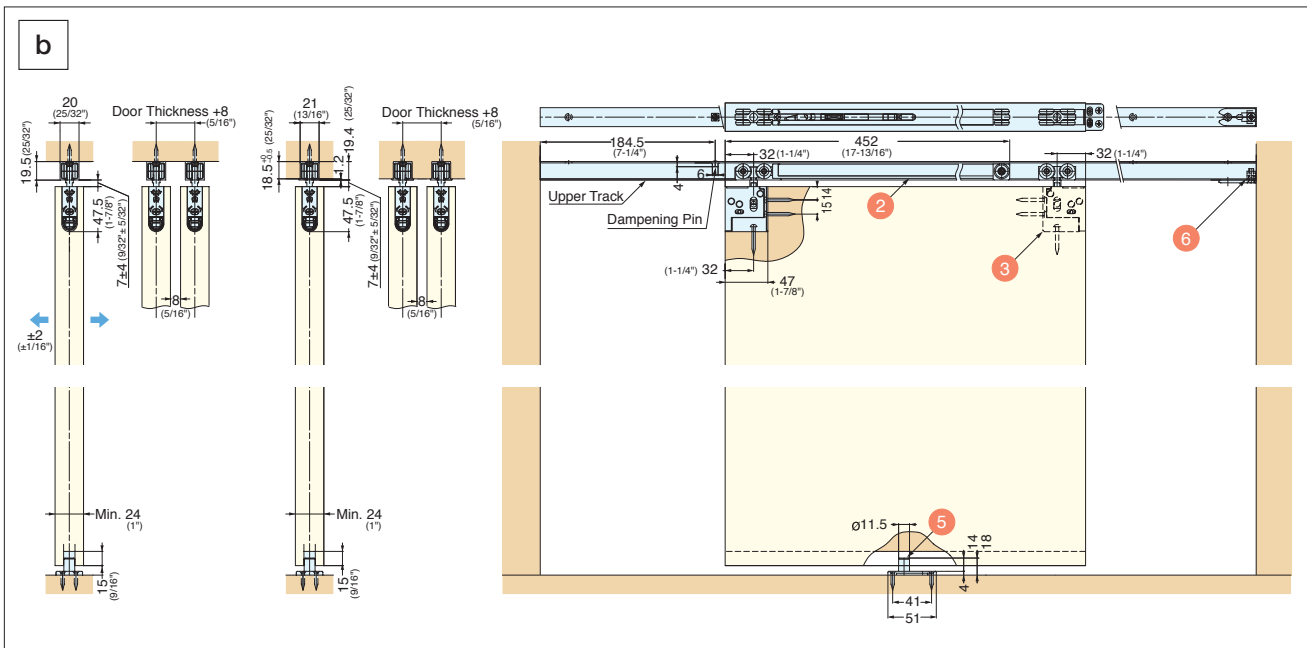
■ Door Preparation



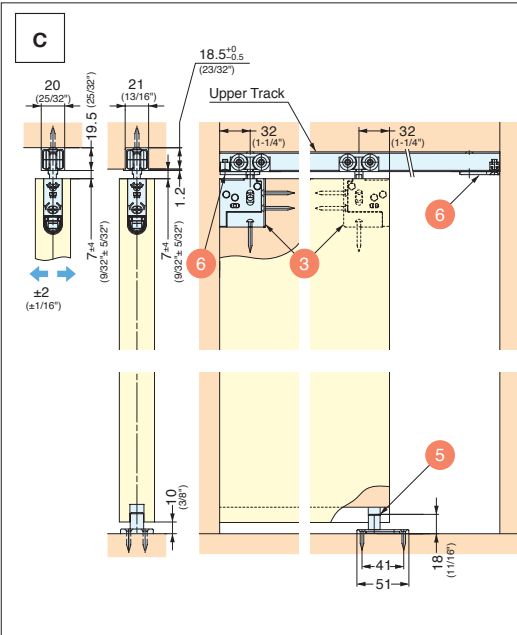
■ **FD30 / Recessed Roller / Two-Way Soft Close**



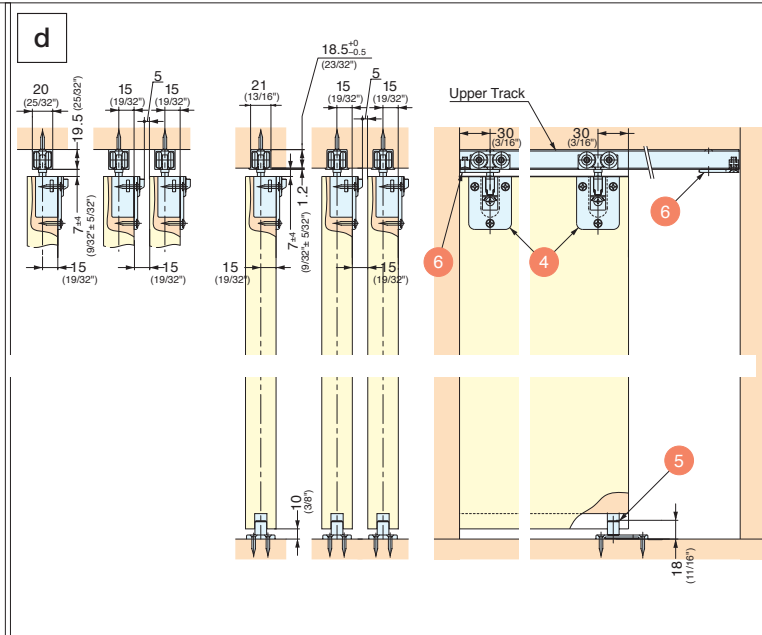
■ **FD30 / Recessed Roller / One-Way Soft Close**



■ FD30 / Recessed Roller / Standard Sliding



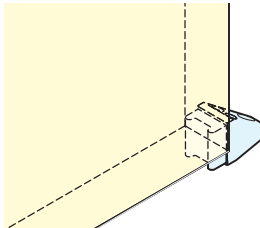
■ FD30 / Side Mount Roller / Standard Sliding



■ Optional Parts 7 ~ 10

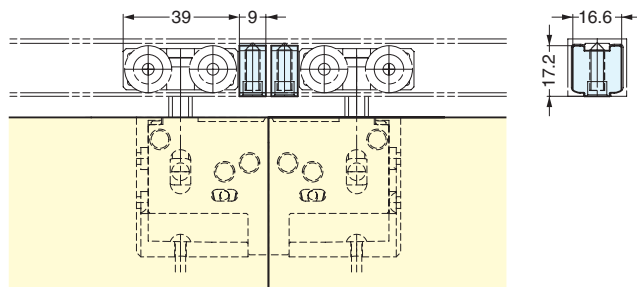
7 FD30-HTKY

Door Stopper (Floor Mount)



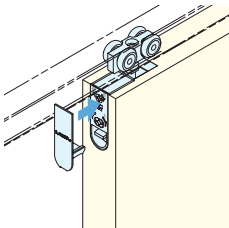
8 FD30-HSB

Stopper Block (2 doors in single track)



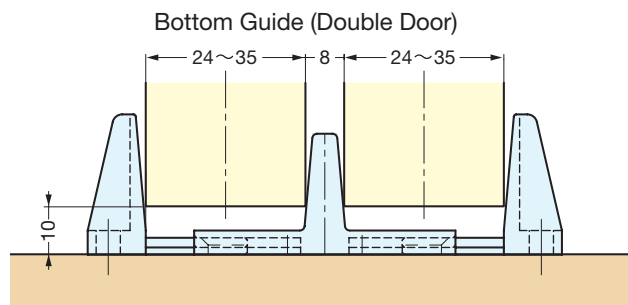
9 FD30-WRH-CP

Upper Roller Cover Cap

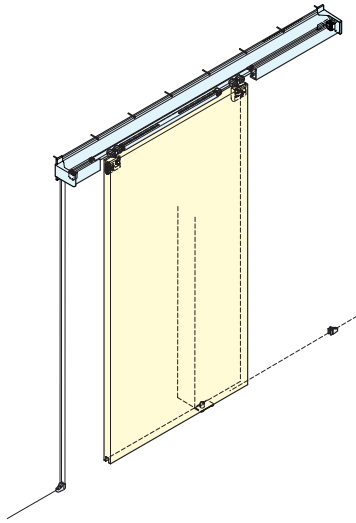


10 FD30-HGW

Bottom Guide for Double Door



FD30 - BARN DOOR STYLE



Type	FD30		
	Standard Sliding	One-way Soft Close	Two-way Soft Close
Roller	Recessed	Recessed	Recessed
Door Weight	Max. 66 lbs (30 kg)		
Door Thickness	1-3/16"~1-7/16" (30~36 mm)		
Door Width	Max. 39-3/8" (1000 mm)	20"~39-3/8" (510~1000 mm)	23-1/4"~39-3/8" (590~1000 mm)
Door Height	Max. 94-1/2" (2400 mm)		

Parts Set (per door)

Necessary Parts

Please refer to "Qty a - c" for parts included in each set.

	Item No.	Description	
		Roller	Function
a	FD30-DHCP-AK	Recessed	Two Way Soft-Close
b	FD30-HCP-AK	Recessed	One Way Soft-Close
c	FD30-HHP-AK	Recessed	Standard Sliding

Parts Included

Optional Parts		
	Part Name	Description
9	Door Stopper (Floor Mount) FD30-HTKY	- Material Zinc Alloy / Rubber - Finish Grey
10	Floor Guide (Wall Mount) FD30-HBGK	- Material Steel / POM - Finish Yellow Zinc Chromate / Light Brown

Upper Tracks

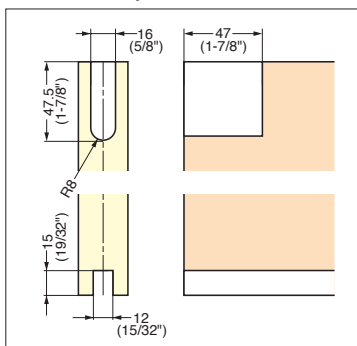
Length	Item No.	Dimension, Material / Finish
82-11/16" (2100 mm)	FD30-TRA2100SIL	Aluminum / Anodized Silver
107-1/2" (2730 mm)	FD30-TRA2730SIL	

No.	Qty			Part Name	Description
	a	b	c		
1	1 pc	-	-	Recessed-Roller Soft-Closer (Two-Way) FD30-WRH-DSC	- Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
2	-	1 pc	-	Recessed-Roller Soft-Closer (One-Way) FD30-WRH-SC	- Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
3	1 pc	1 pc	2 pcs	Recessed-Roller Standard Sliding FD30-WRH	- Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
4	1 pc	1 pc	-	Dampening Pin FD30-HATG	- Material / Steel - Finish / Chromate
5	-	1 pc	2 pcs	End Stopper FD30-HTST-DB	- Material Steel / Polyacetal - Finish Yellow Zinc Chromate / Brown
6	1 pc	1 pc	1 pc	Floor Guide FD30-HBG	- Material Steel / Polyamide - Finish Yellow Zinc Chromate / Brown
7	2 pcs	1 pc	-	Bumper Block FD30-HBB	- Material Steel / EPDM - Finish Yellow Zinc Chromate / Black
8	2 pcs	2 pcs	2 pcs	Side Cover Cap FD30-HASC-GR	- Material Steel / ABS - Finish Chromate / GREY

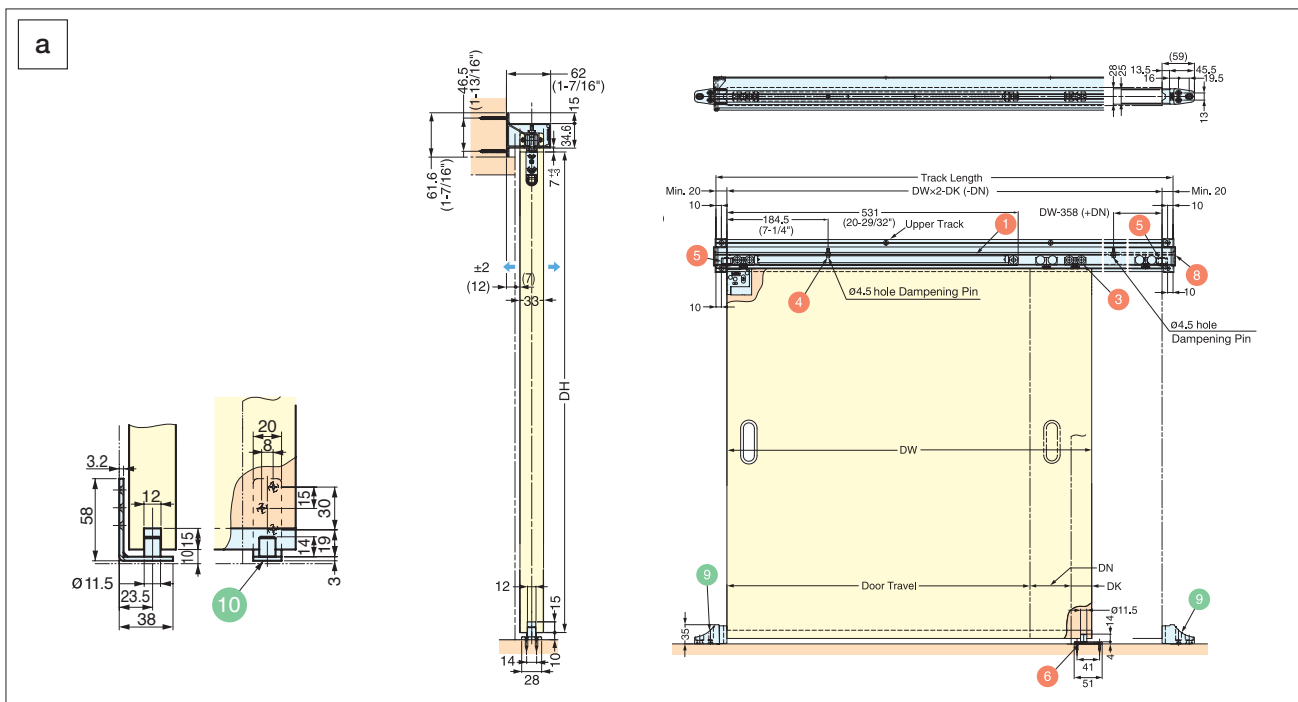
SLIDING & FOLDING DOOR HARDWARE

FD30 - BARN DOOR STYLE

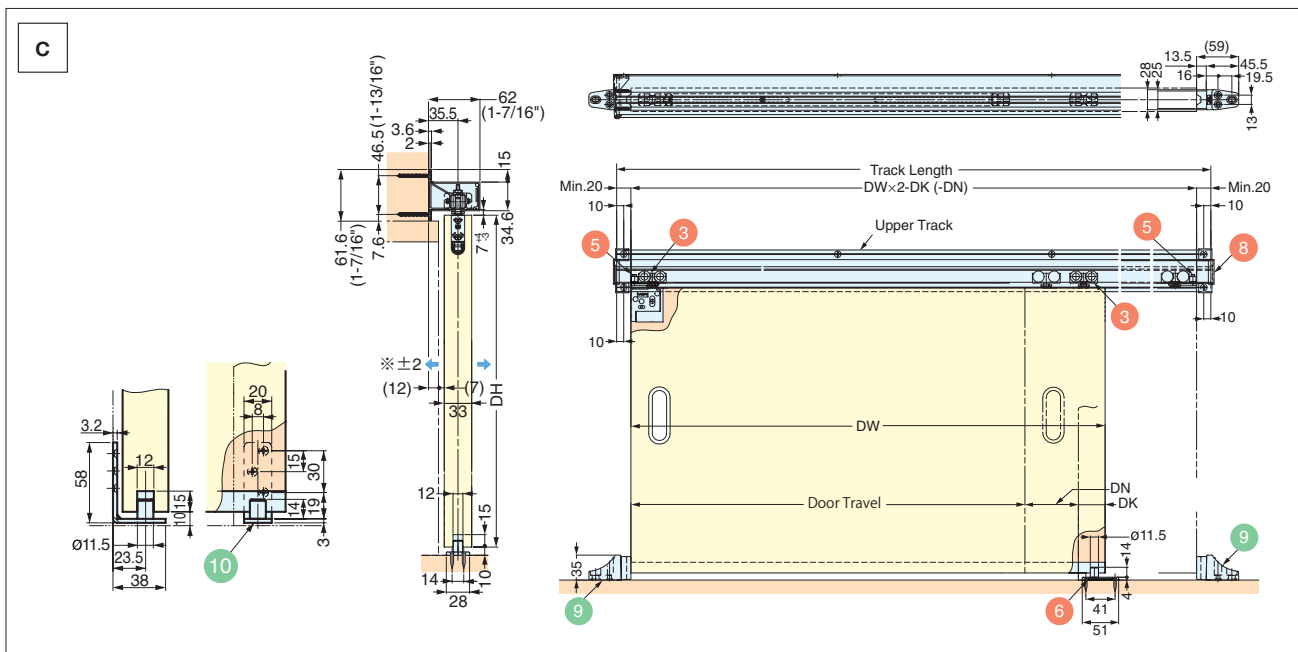
■ Door Preparation



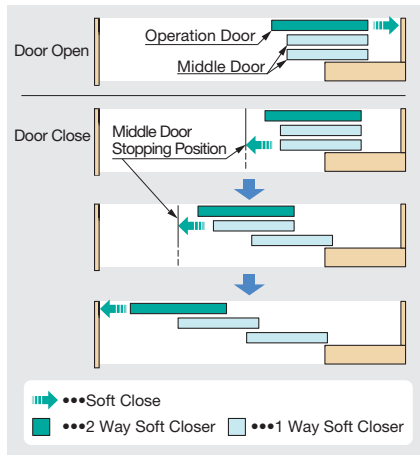
■ **FD30 / Barn Door Style / Two-Way Soft Close**



■ **FD30 / Barn Door Style / Standard Sliding**



FD30 - MULTIPLE SYNCHRONIZED SLIDING DOOR

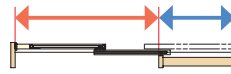


Type	FD30 / 2 or 3 Doors Synchronized Sliding Style	
	With One-Way Soft Closer	With Two-Way Soft Closer
Door Thickness	1-3/16"~1-1/2" (30~38 mm)	
Door Width	20"~39-3/8"(510~1000 mm)	23-1/4"~39-3/8" (590~1000 mm)
Door Weight	Max. 66 lbs per door (30kg)	

Maximum Opening Clearance

2 Doors

Maximum Opening
1840mm (72-7/16")
*Door Width 1000mm(39-3/8")



3 Doors

Maximum Opening
2760mm (108-5/8")
*Door Width 1000mm(39-3/8")



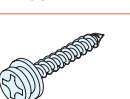
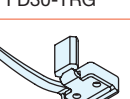
Parts Set (per door)

Necessary Parts

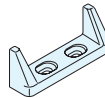
Please refer to "Qty [a] - [b]" for parts included in each set.

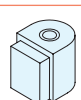
	Item No.	Description	
		Roller	Function
[a]	FD30-HRP2	Recessed	2 Doors Synchronized
[b]	FD30-HRP3	Recessed	3 Doors Synchronized

Parts Included

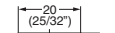
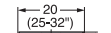
No.	Qty		Part Name	Description
	[a]	[b]		
1	1 pc	1 pc	Recessed-Roller Soft-Closer (Two-Way)	 - Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
2	1 pc	2 pcs	Recessed-Roller Soft-Closer (One-Way)	 - Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
3	2 pcs	3 pcs	Recessed-Roller Standard Sliding	 - Material Zinc Alloy / Polyacetal - Finish Yellow Zinc Chromate / Light Brown
4	2 pcs	3 pcs	Dampening Pin	 - Material / Steel - Finish Yellow Zinc Chromate
5	1 pc	2 pcs	End Stopper	 - Material SUS304 / POM - Finish / Grey, Plain

Optional Parts

	Part Name	Description
11	Guide for Door	 - Material / Polyamide - Finish / Light Brown

No.	Qty		Part Name	Description
	[a]	[b]		
6	1 pc	2 pcs	Door Guide (Door Mount)	 - Material SUS304 / POM - Finish / Grey, Plain
7	1 pc	1 pc	Door Guide (Wall Mount)	 - Material SUS304 / POM - Finish / Grey, Plain
8	1 pc	1 pc	Block for Bottom Guide	 - Material / EPDM - Finish / Black
9	1 pc	2 pcs	Bumper Block	 - Material Steel / EPDM - Finish Chromate / Black
10	2 pcs	3 pcs	Guide Track	 - Material / ABS - Finish / Black

Upper Tracks

Length	Item No.		Dimension, Material / Finish	
	Surface Mount	Recessed Mount	Surface	Recessed
71-5/8" (1820 mm)	FD30-TRM1820SCSIL	FD30-TRH1820SCSIL		
107-1/2" (2730 mm)	FD30-TRM2730SCSIL	FD30-TRH2730SCSIL		
143-5/16" (3640 mm)	FD30-TRM3640SCSIL	FD30-TRH3640SCSIL		
Aluminum / Anodized Silver				

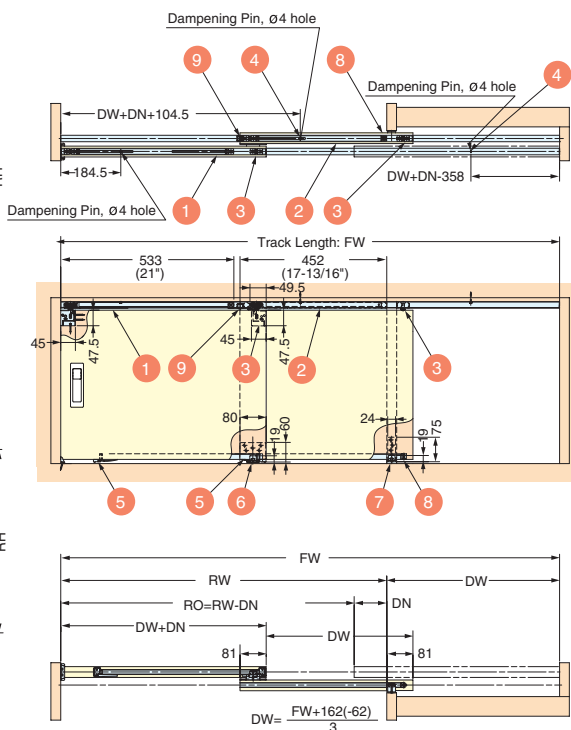
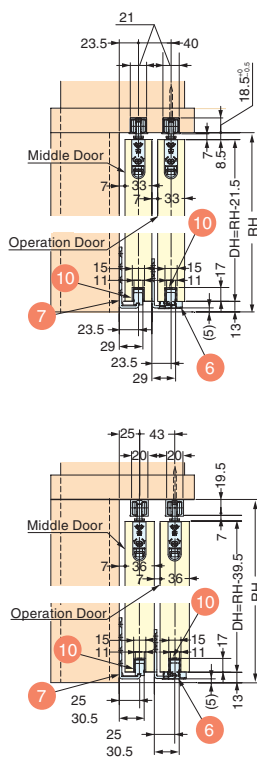
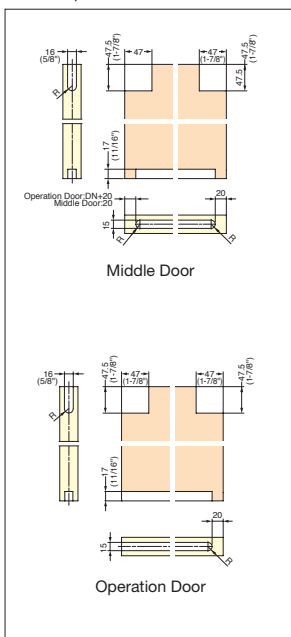
SLIDING & FOLDING

FD30 - MULTIPLE SYNCHRONIZED SLIDING DOOR

■ **FD30 / Synchronized Sliding / 2 doors**

a

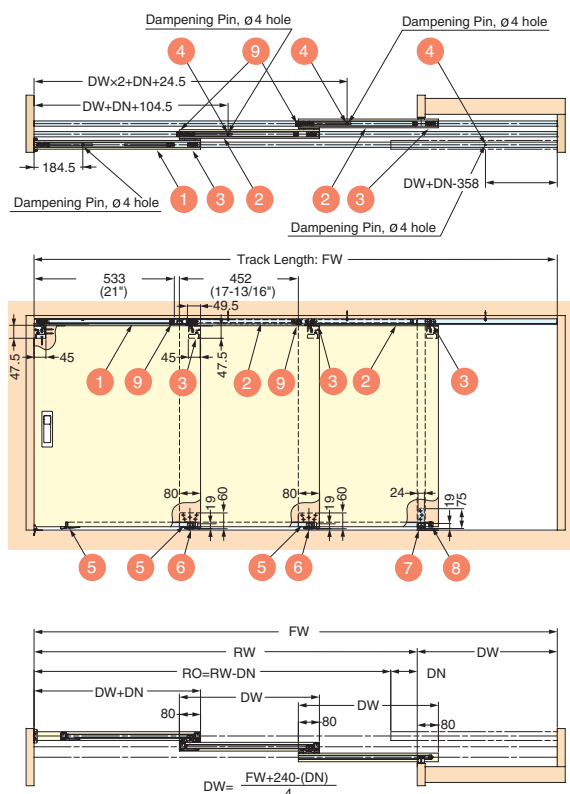
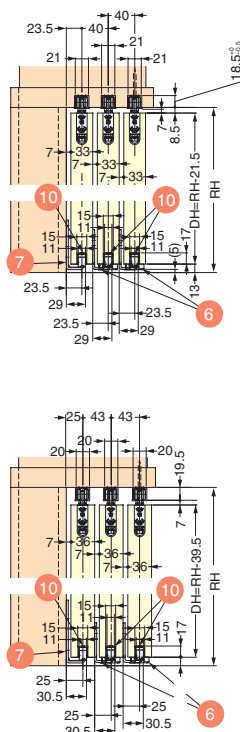
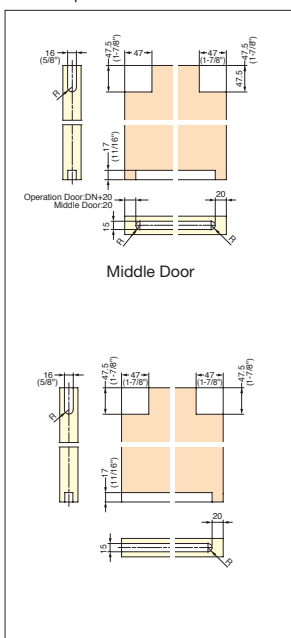
Door Preparation



■ **FD30 / Synchronized Sliding / 3 doors**

b

Door Preparation



SLIDING DOOR SYSTEM (Door Weight 110 lbs)

FD50

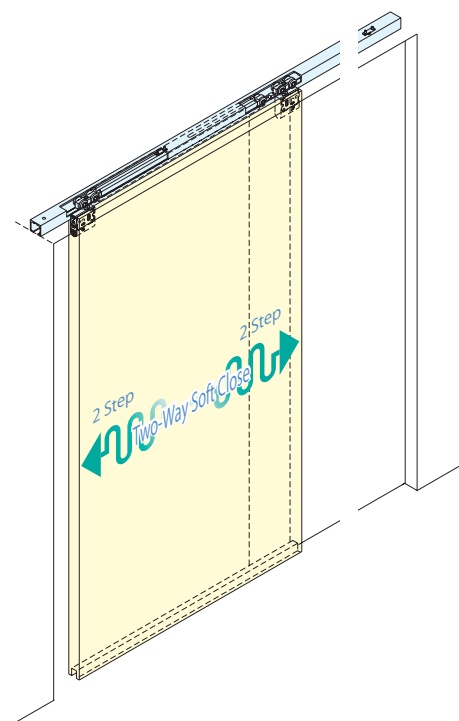
SLIDING & FOLDING
DOOR HARDWARE



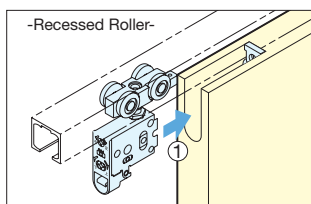
Type	FD50			
	Standard Sliding		Two-way Soft Close	
Roller	Recessed	Top Surface	Recessed	Top Surface
Door Weight	Max. 110 lbs (50 kg)			
Door Thickness (Min.)	1"(24 mm)	1-3/16"(30 mm)	1"(24 mm)	1-3/16"(30 mm)
Door Width	Max. 59-1/16" (1500 mm)		26-3/4"~59-1/16" (680 mm~1500mm)	
Door Height	Max.94-1/2" (2400 mm)			

- Thin profile allows flexible design on various application
- Soft-Close Type available by selecting each roller type
- Various parts available for many applications

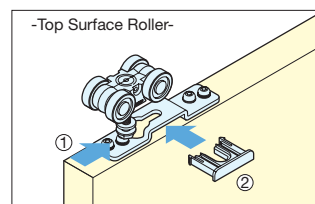
*Designed for interior use, not exterior.



■ Door Installation

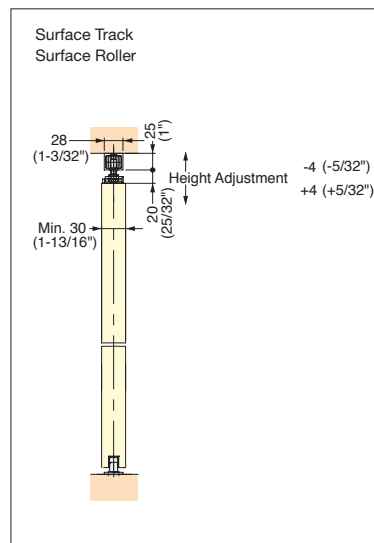
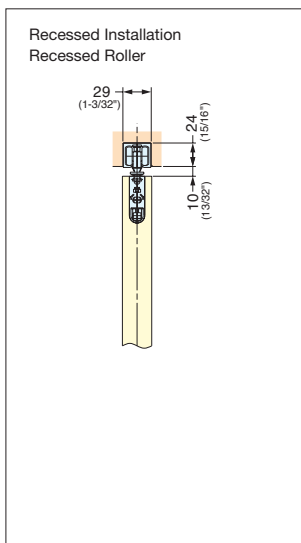
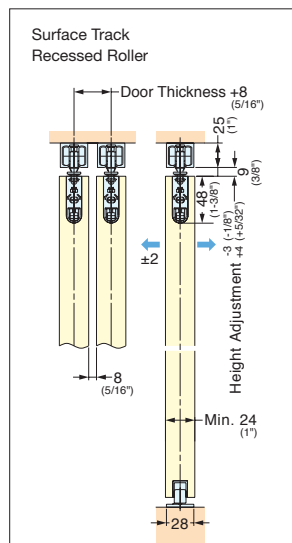
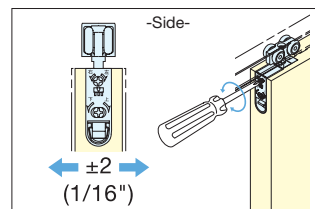
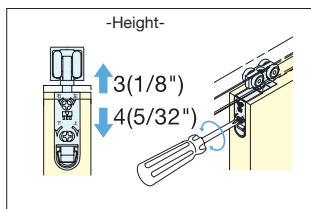


① Snap-in



① Snap-in ② Fix

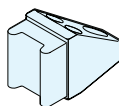
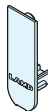
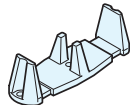
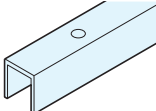
■ Adjustment (With Phillips Screwdriver)



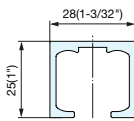
Parts Set (per door)		Necessary Parts	
		Please refer to "Qty [a] - [d]" for parts included in each set.	
	Item No.	Description	
		Roller	Function
[a]	FD50-DHCP	Recessed	Two Way Soft-Close
[b]	FD50-HHP-LBR	Recessed	Standard Sliding
[c]	FD50-DHCMP	Top Surface	Two Way Soft-Close
[d]	FD50-HMP	Top Surface	Standard Sliding

Parts Included

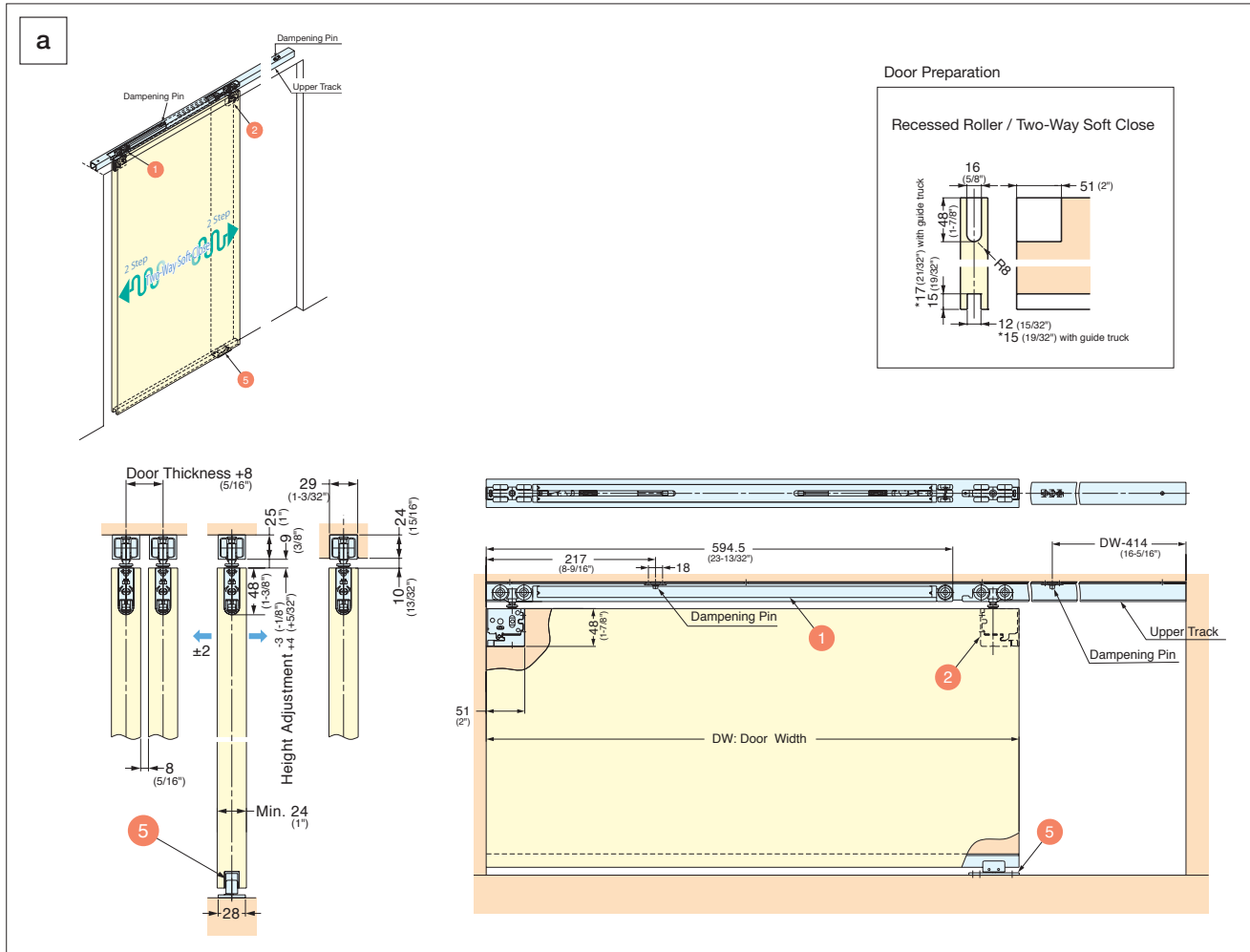
No.	Qty				Part Name	Description
	[a]	[b]	[c]	[d]		
1	1 pc	-	-	-	Recessed Roller Soft-Closer (Two-Way) FD50-WRH-DSC	- Material Steel / Zinc Alloy Polyacetal - Finish Chromate / Grey
2	1 pc	2 pcs	-	-	Recessed Roller Standard Sliding FD50-WRH	- Material Steel / Zinc Alloy Polyacetal - Finish Chromate / Grey
3	-	-	1 pcs	-	Top-Surface Roller Soft-Closer (Two-Way) FD50-WRM-DSC	- Material Steel / Zinc Alloy Polyacetal - Finish Chromate / Grey
4	-	-	1 pc	2 pcs	Top-Surface Roller Standard Sliding FD50-WRM	- Material Steel / Zinc Alloy Polyacetal - Finish Chromate / Grey
5	1 pc	1 pc	1 pc	1 pc	Floor Guide FD50-BG18	- Material 304 Stainless Steel - Finish Plain / White
6	-	2 pcs	-	2 pcs	End Stopper FD50-HTST	- Material Steel - Finish Chromate
7	-	2 pcs	-	-	Cover Cap for Recessed Roller FD50-WRH-SCP-LBR	- Material Polypropylene - Finish Light Brown ** Dark Brown / White available by special order

Optional Parts			
	Part Name		Description
8	Door Stopper		- Material Zinc Alloy / Rubber - Finish / Grey
9	Stopper Block		- Material / Steel - Finish / Chromate
10	Cover Cap (For Soft Close Roller)		- Material Polypropylene - Finish: Light Brown *Dark Brown / White available by special order
11	Bottom Guide (For By-pass doors)		- Material / Polyamide - Finish / Light Brown
12	Door Guide Track		- Material / Aluminum - Finish Anodized Silver

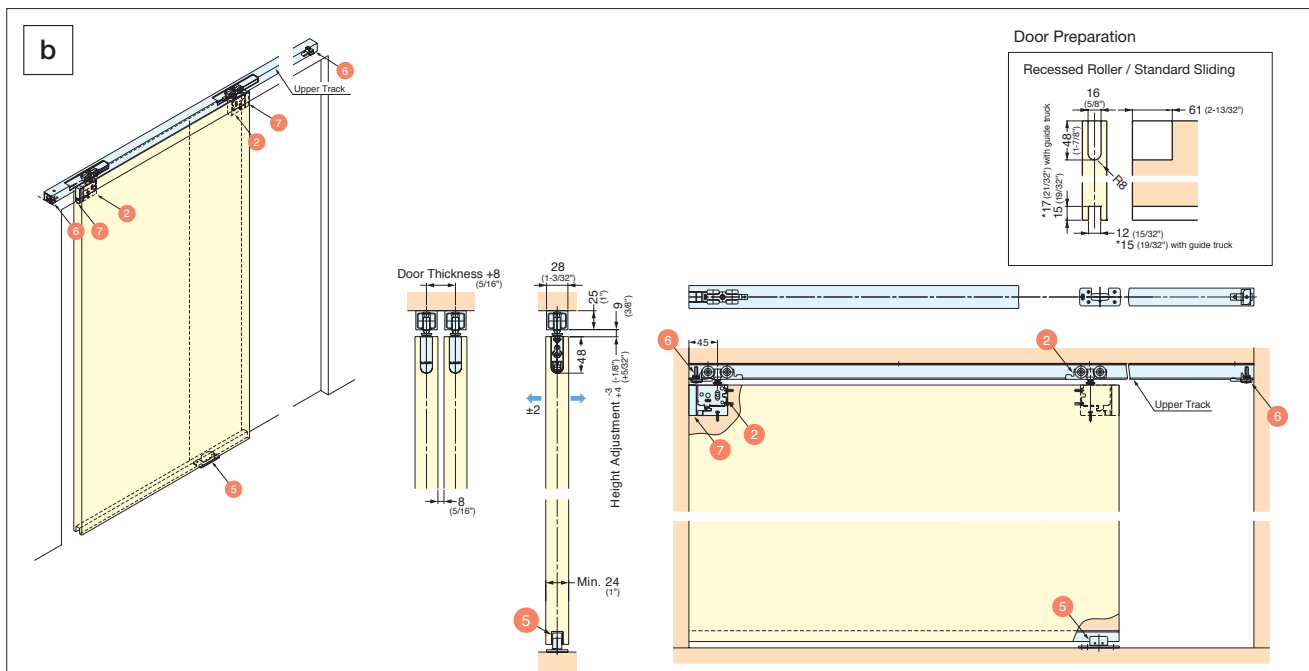
Upper Tracks

Length	Item No.	Dimension, Material / Finish
	Surface Mount	
71-5/8" (1820 mm)	FD50-TRM1820SIL	
107-1/2" (2730 mm)	FD50-TRM2730SIL	
143-5/16" (3640 mm)	FD50-TRM3640SIL	Aluminum / Anodized Silver

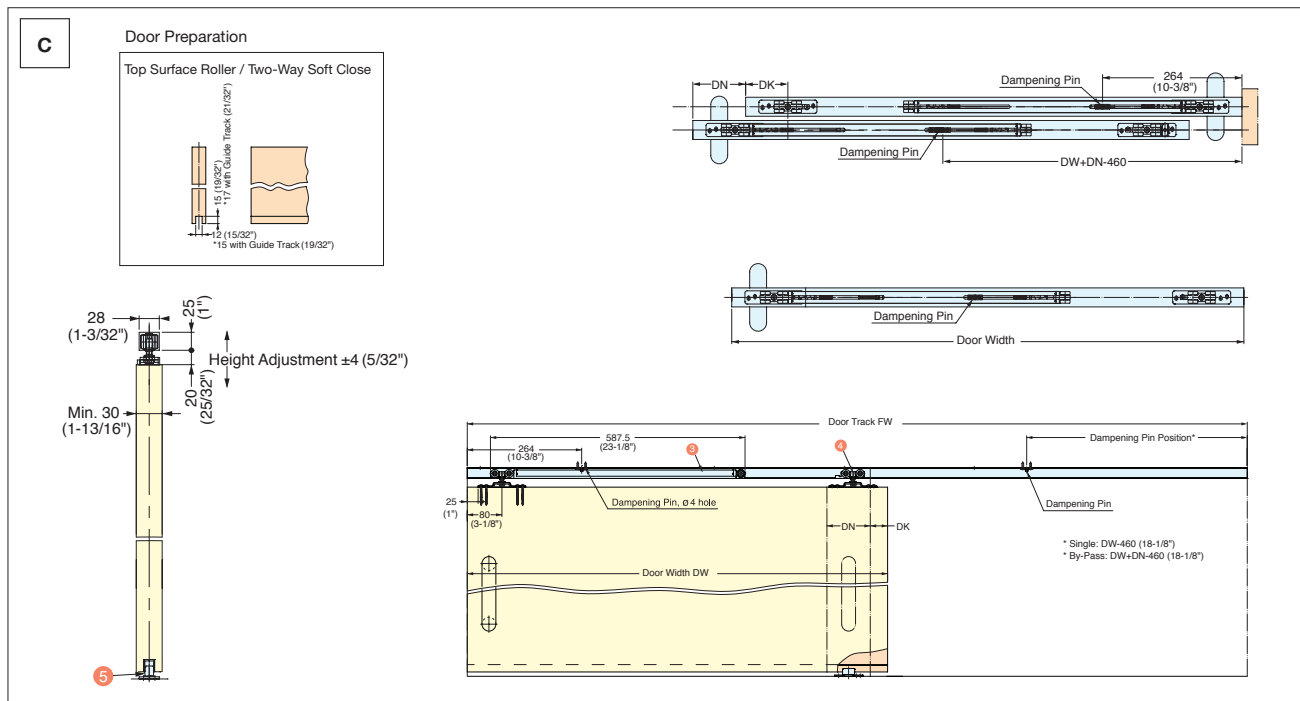
■ FD50 / Recessed Roller / Two-Way Soft Close



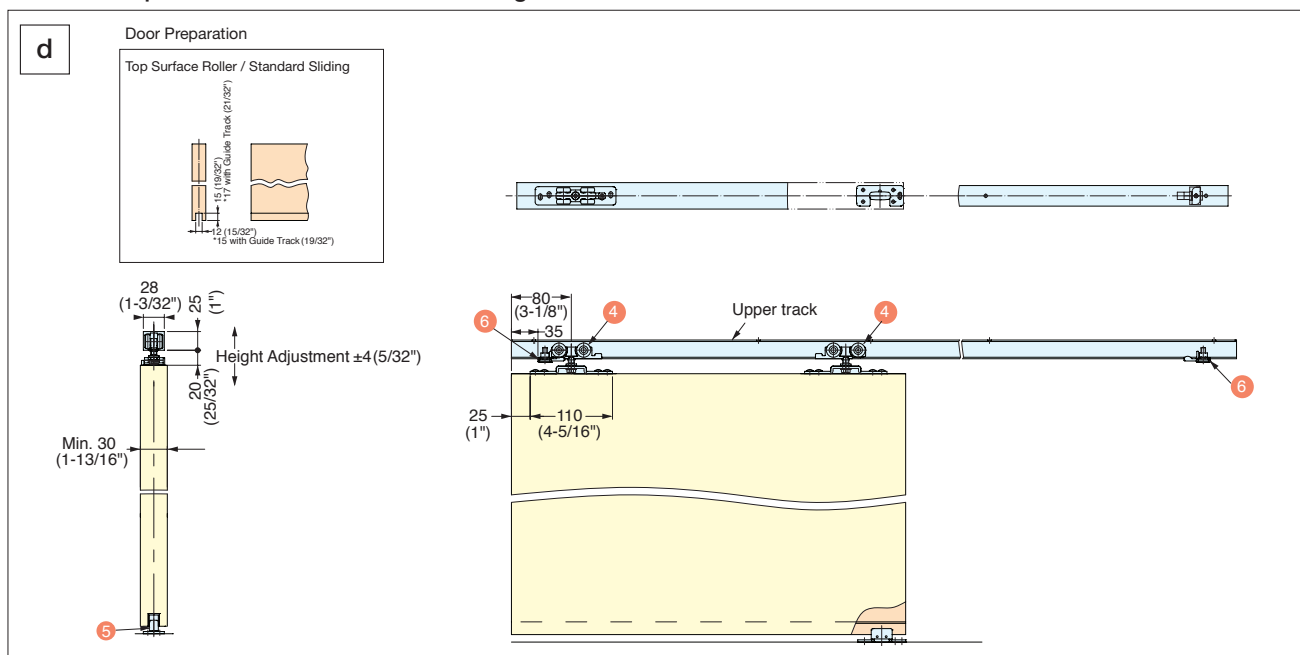
■ FD50 / Recessed Roller / Standard Sliding



■ FD50 / Top Surface Roller / Two-Way Soft Close



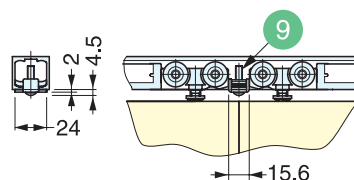
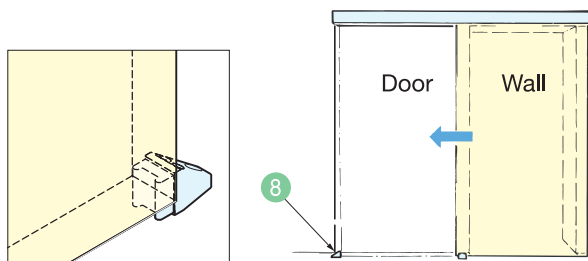
■ FD50 / Top Surface Roller / Standard Sliding



■ Optional Parts 8 ~ 9

8 FD30-HTKY
Door Stopper (Floor Mount)

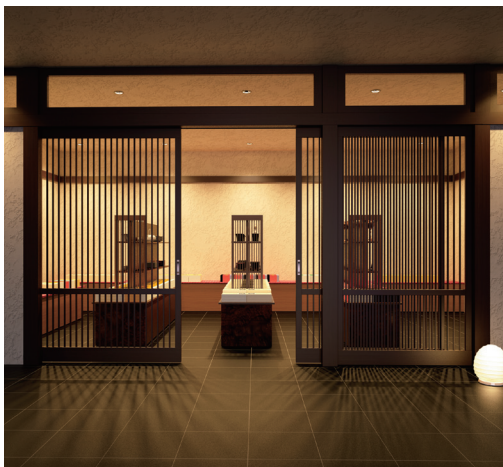
9 FD50-HSB
Stopper Block (2 doors in single track)



SLIDING DOOR SYSTEM (Door Weight 176 lbs)

FD80

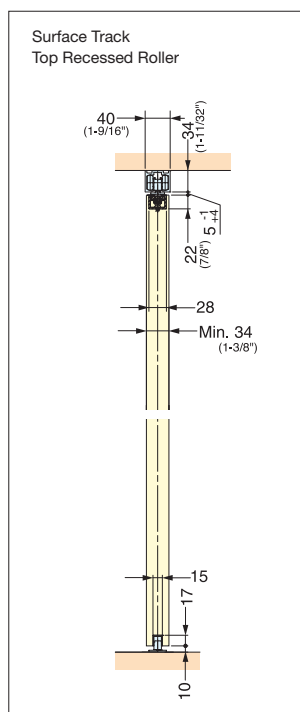
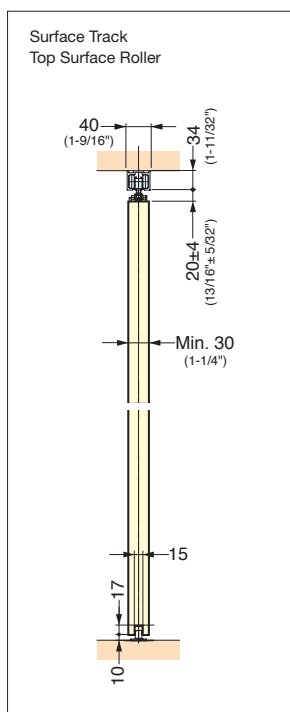
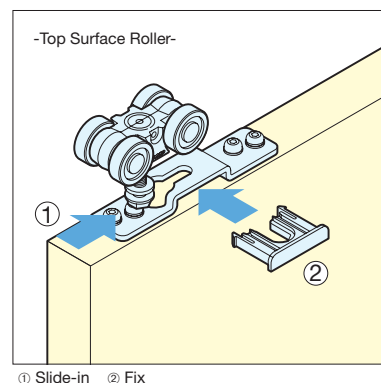
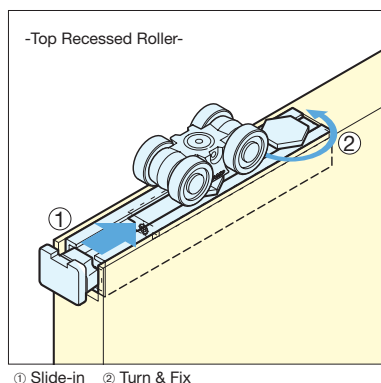
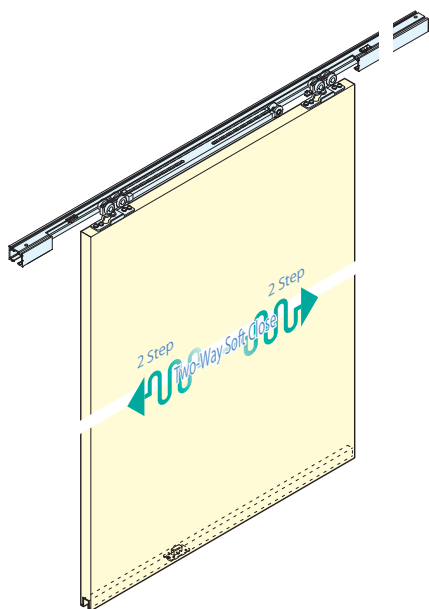
SLIDING & FOLDING
DOOR HARDWARE



Type	FD80			
	Standard Sliding		Two-way Soft Close	
Roller	Top Recessed	Top Surface	Top Recessed	Top Surface
Door Weight	Max. 176 lbs (80 kg)			
Door Thickness (Min.)	1-3/8" (34 mm)	1-1/4" (30 mm)	1-3/8" (34 mm)	1-1/4" (30mm)
Door Width	Max. 1500 (59-1/16")		784 ~ 1500 (30-7/8"~59-1/16")	
Door Height	Max. 98-7/16" (2500 mm)			

- Heavy Duty version
- Soft-Close Type available by selecting each roller type
- Top surface mount system for easy installation - No door boring is required
- Easy door installation - Simply hang the door onto the rollers
- Easy height adjustment

■ Door Installation

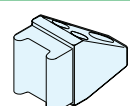
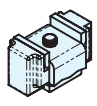
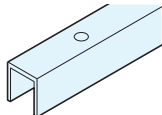


SLIDING DOOR SYSTEM (DOOR WEIGHT 176 LBS)

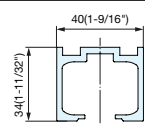
Parts Set (per door)		Necessary Parts	
		Please refer to "Qty [a] - [d]" for parts included in each set.	
	Item No.	Description	
		Roller	Function
[a]	FD80-DHCHP	Top Recessed	Two Way Soft-Close
[b]	FD80-HHP	Top Recessed	Standard Sliding
[c]	FD80-DHCMP	Top Surface	Two Way Soft-Close
[d]	FD80-HMP	Top Surface	Standard Sliding

Parts Included

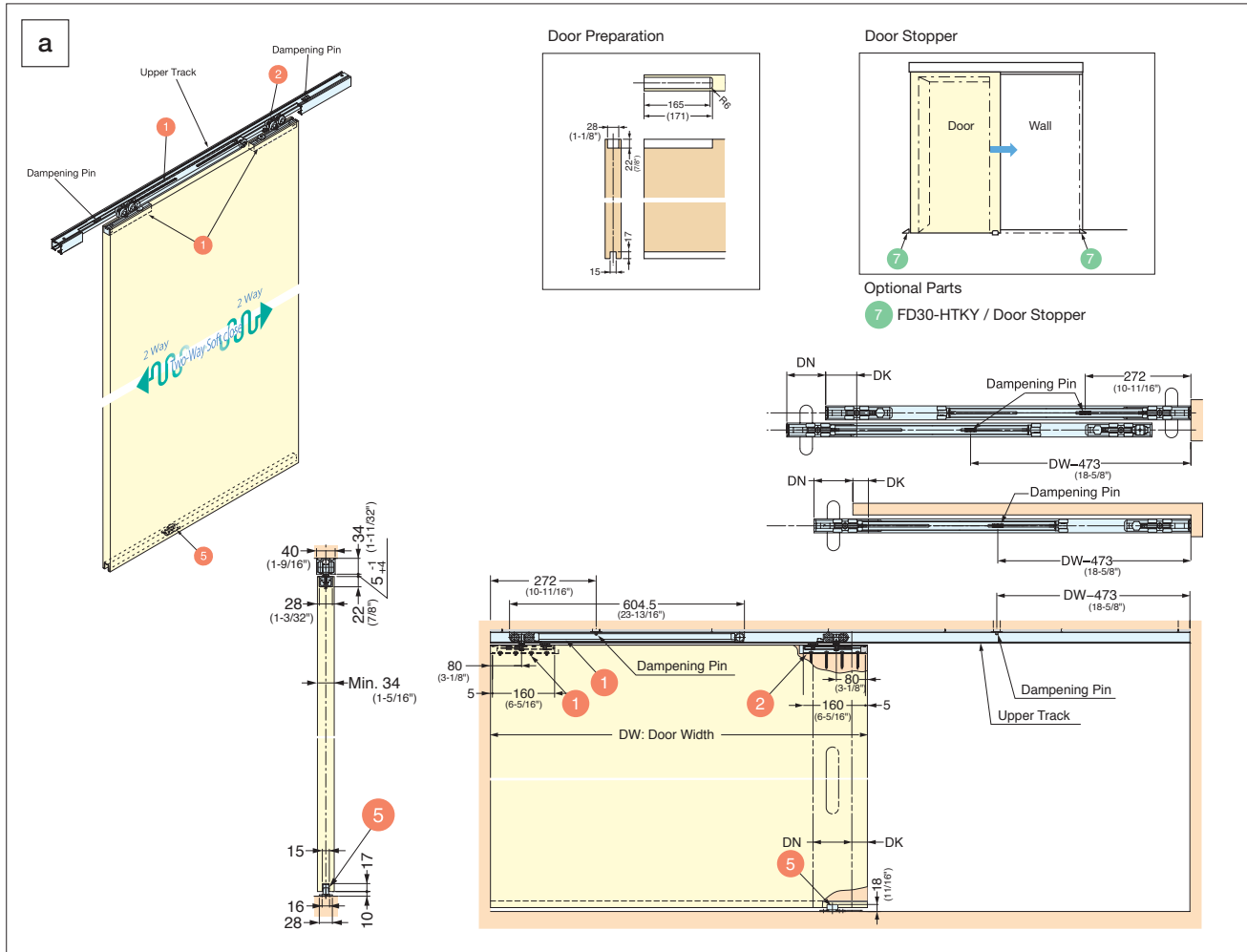
No.	Qty				Part Name	Description
	[a]	[b]	[c]	[d]		
1	1 pc	-	-	-	 FD80-WRH-DSC  FD70B-HB160	- Material Zinc Alloy / Polyacetal Steel / Aluminum - Finish Nickel / Black
2	1 pc	2 pcs	-	-	 FD80-WRH  FD70B-HB160	- Material Zinc Alloy / Polyacetal Steel / Aluminum - Finish Nickel / Natural
3	-	-	1 pcs	-	 FD80-WRM-DSC	- Material Zinc Alloy / Polyacetal Steel - Finish Nickel / Black
4	-	-	1 pc	2 pcs	 FD80-WRM	- Material Zinc Alloy / Polyacetal Steel - Finish Nickel / Natural
5	1 pc	1 pc	1 pc	1 pc	 FD50-BG18	- Material 304 Stainless Steel - Finish Plain / White
6	-	2 pcs	-	2 pcs	 FD80-HTST	- Material Steel / Polyacetal - Finish Chromate / White

Optional Parts			
	Part Name		Description
7	Door Stopper	 FD30-HTKY	- Material Zinc Alloy / Rubber - Finish / Grey
8	Stopper Block	 FD80-HSB	- Material / Steel / EPDM - Finish Chromate / Black
9	Door Guide Track	 FD30-HBRT1500SIL	- Material / Aluminum - Finish Anodized Silver

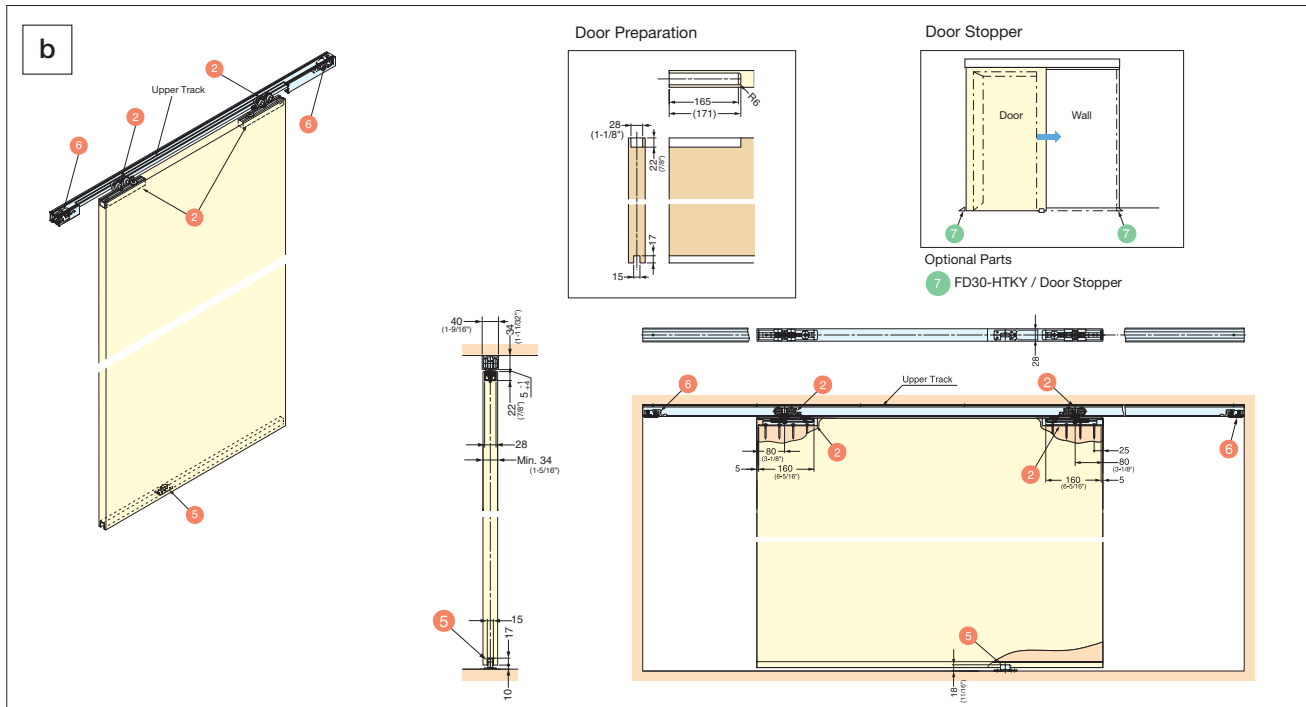
Upper Tracks

Length	Item No.	Dimension, Material / Finish
	Surface Mount	
78-3/4" (2000 mm)	FD80-TRM2000SIL	
107-1/2" (2730 mm)	FD80-TRM2730SIL	
143-5/16" (3640 mm)	FD80-TRM3640SIL	Aluminum / Anodized Silver

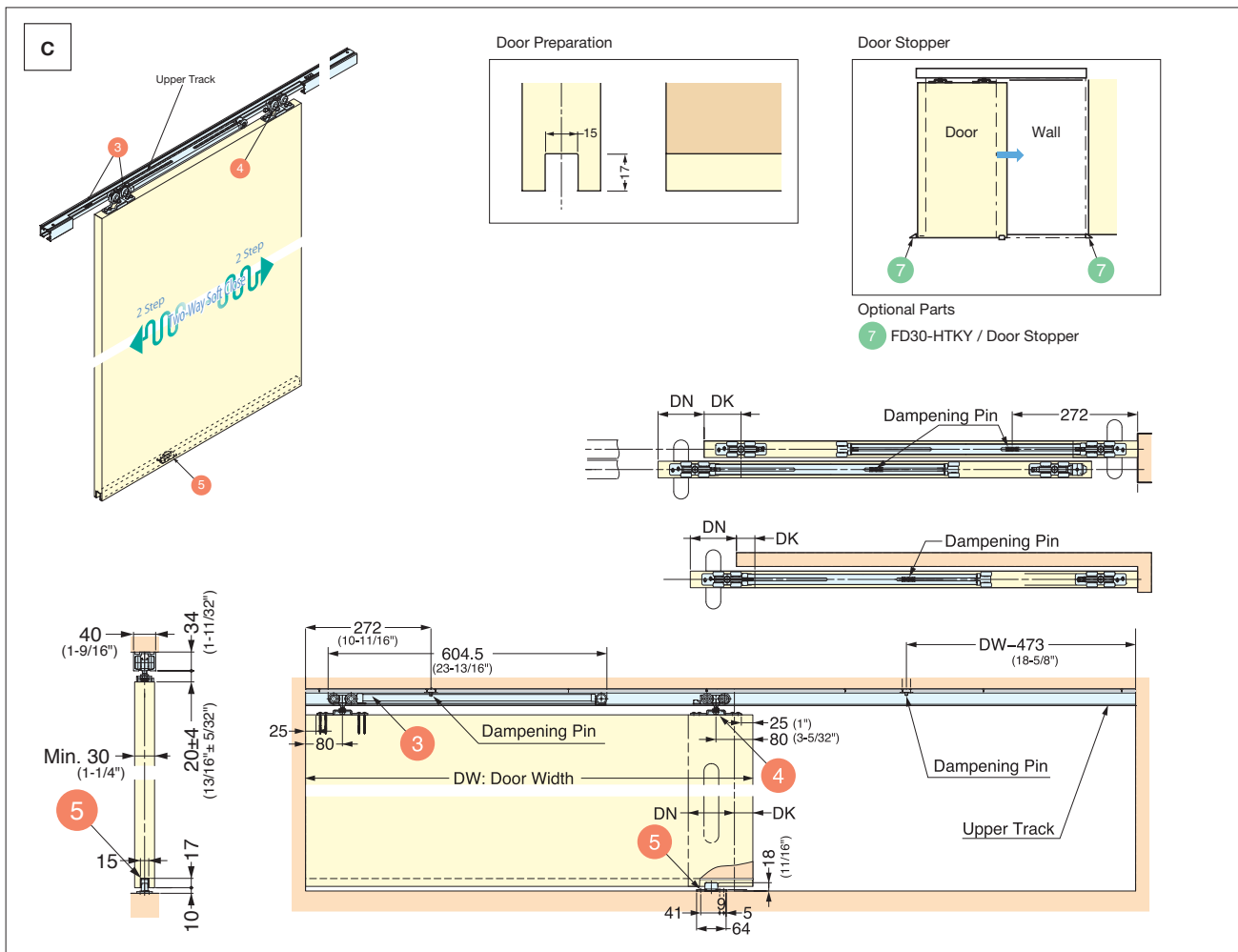
■ FD80 / Top Recessed Roller / Two-Way Soft Close



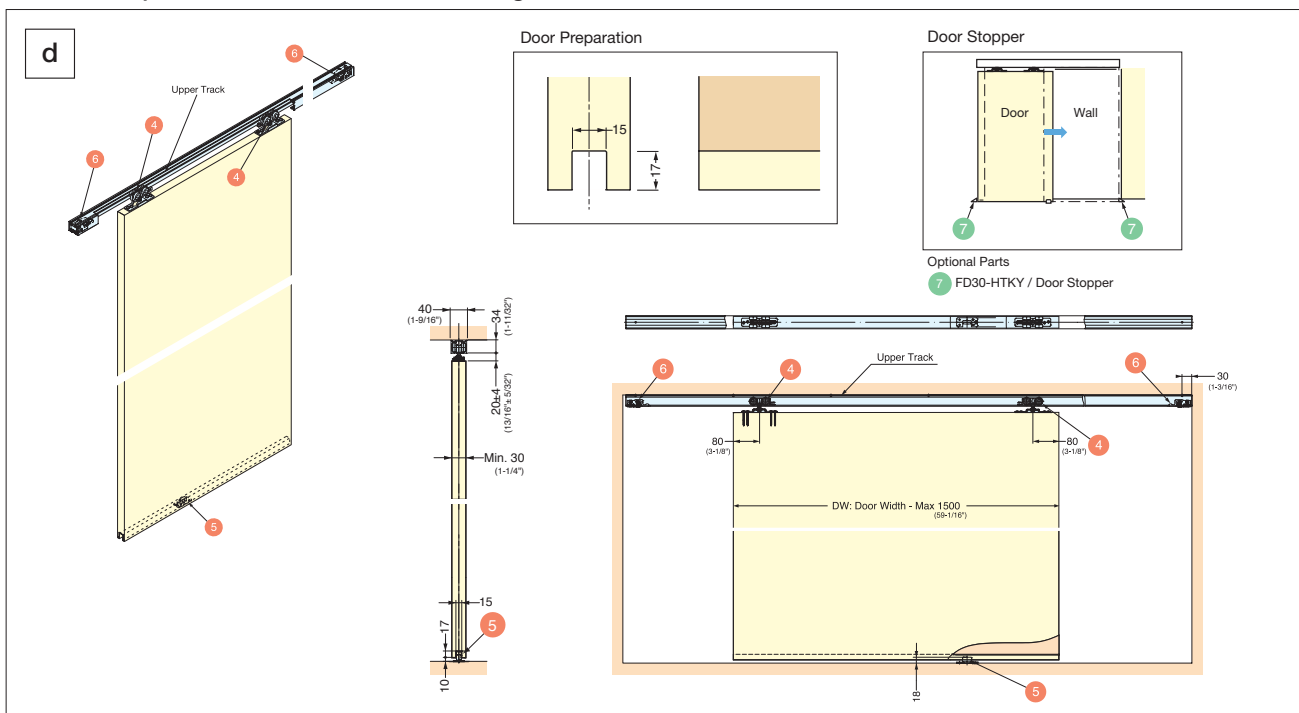
■ FD80 / Top Recessed Roller / Standard Sliding



■ FD80 / Top Surface Roller / Two-Way Soft Close



■ FD80 / Top Surface Roller / Standard Sliding

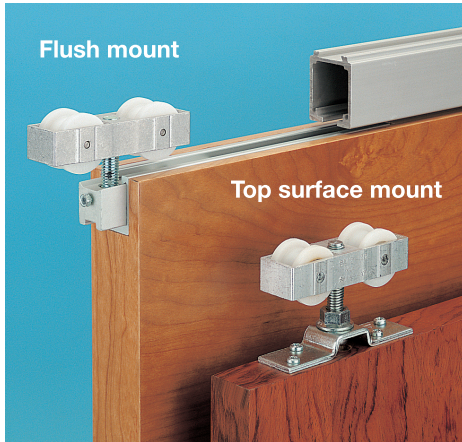


SLIDING DOOR SYSTEM (Door Weight 187 lbs, 275 lbs)

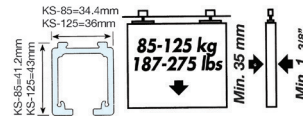
KS-85, KS-125

Flush mount

Top surface mount



- Smooth and quiet movement.
- Easy installation.
- Easy height adjustment.
- No bottom rail, clean appearance.
- Two mounting selection available to suit application.
 - Top surface mount – For drop ceiling application or places where hardware will be covered.
 - Flush mount – For room dividers or application where both side of door is visible.
- Door weight : KS-85 Series – Max. 85 kg (187 lbs)
KS-125 Series – Max. 125 kg (275 lbs)
- Wall mount bracket (KS-3531) and track connection pins (KS-3536) available (sold separately).



Ordering Info:

Order the track and the parts kit.

e.g.) You have 1 sliding door (200 lbs) to cover a 3 foot wide area

QTY	ITEM
1	KS-2752
1	KS-3505

KS-85



* Drilled every 250mm (10")

Item No.: KS-2742 Track for KS-85

Material: Aluminum

Finish: Anodized

Length: 2000mm (78-3/4")

Item No.: KS-3531

Wall Mount Bracket
(Optional parts)

KS-125 (w/FULL ball bearing rollers)



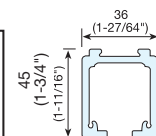
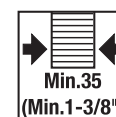
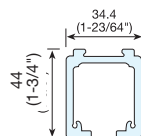
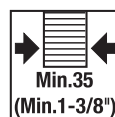
* Drilled every 250mm (10")

Item No.: KS-2752 Track for KS-125

Material: Aluminum

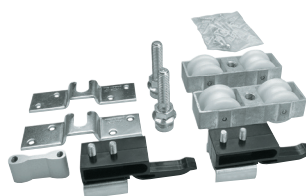
Finish: Anodized

Length: 2000mm (78-3/4")



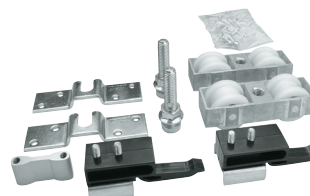
TOP SURFACE MOUNT

Item No.: KS-2701 (set/door)



KS-85 parts kit for one door
Contents: 2 rollers, 2 adjustment bolts, 1 guide, 2 brackets, 2 locking device stoppers, screws and mounting instructions

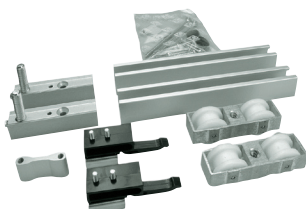
Item No.: KS-2721 (set/door)



KS-125 parts kit for one door
Contents: 2 rollers, 2 adjustment bolts, 1 guide, 2 brackets, 2 locking device stoppers, screws and mounting instructions

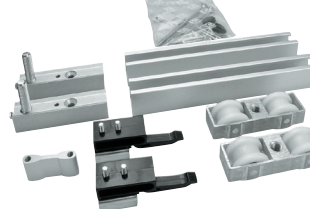
FLUSH MOUNT

Item No.: KS-2705 (set/door)



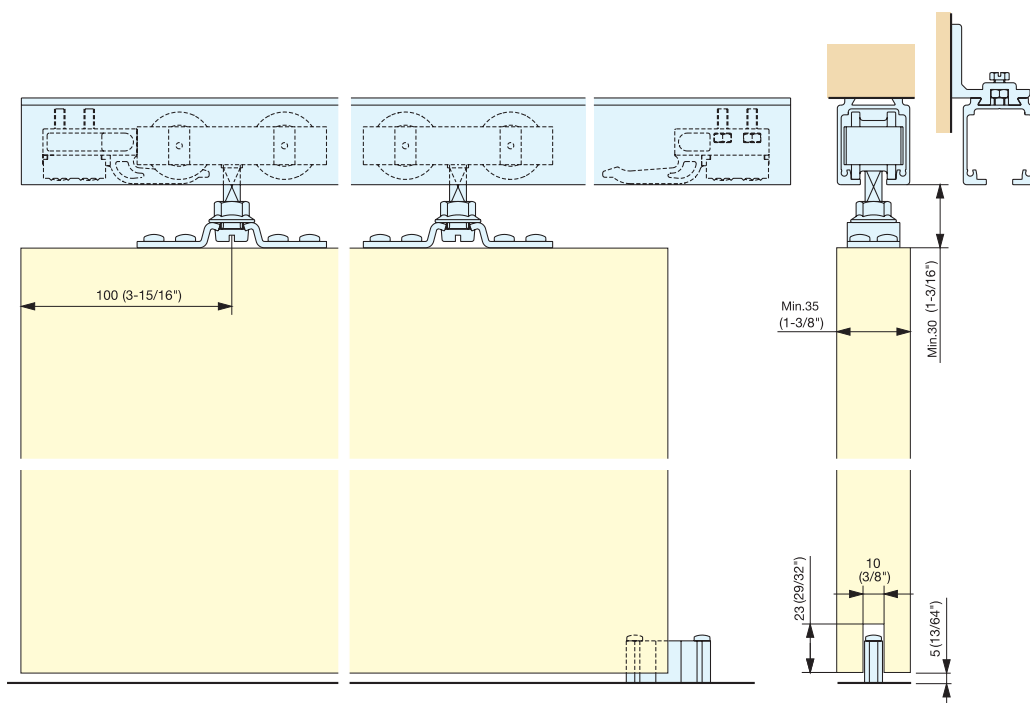
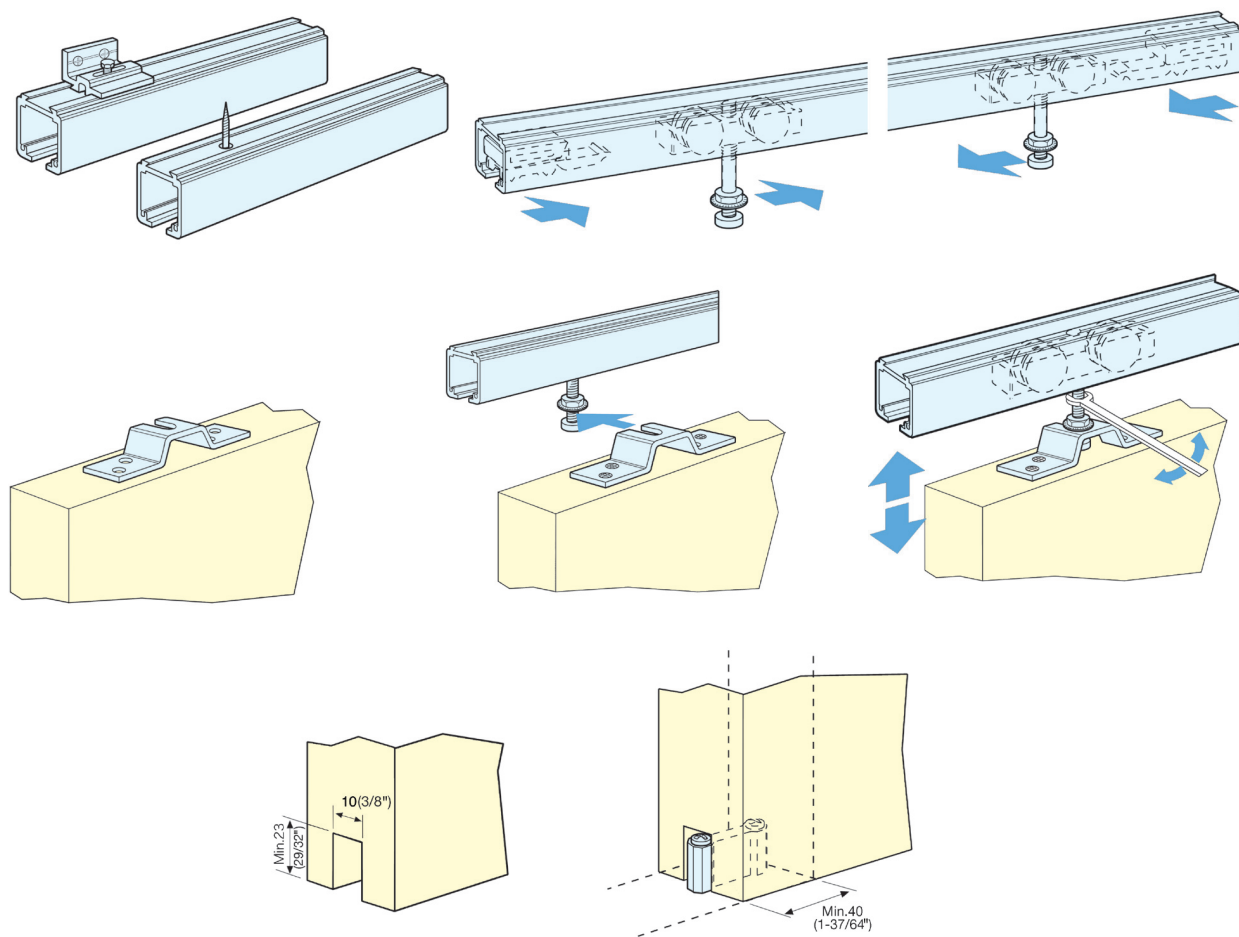
KS-85 parts kit for one door
Contents: 2 rollers, 2 adjustment bolts, 2 locking device stoppers, 2 suspension blocks, 1 bottom guide, screws and mounting instructions

Item No.: KS-2725 (set/door)



KS-125 parts kit for one door
Contents: 2 rollers, 2 adjustment bolts, 2 locking device stoppers, 2 suspension blocks, 1 bottom guide, screws and mounting instructions

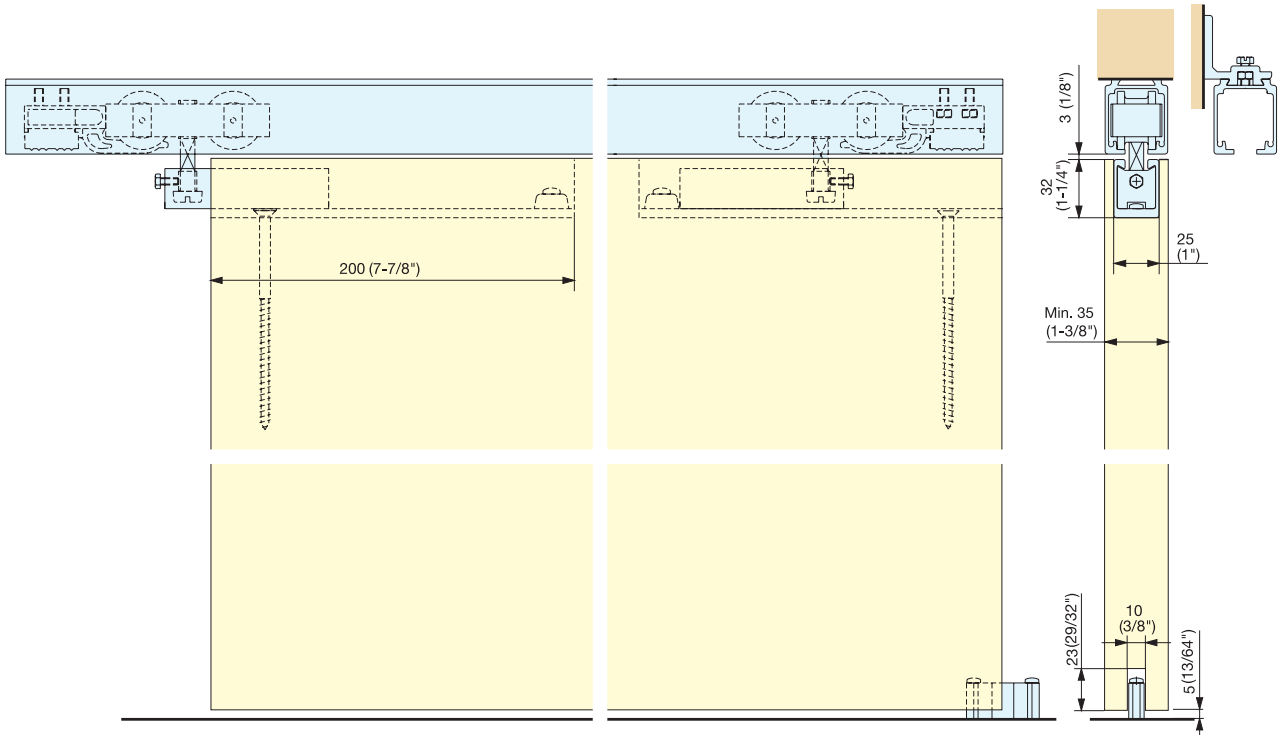
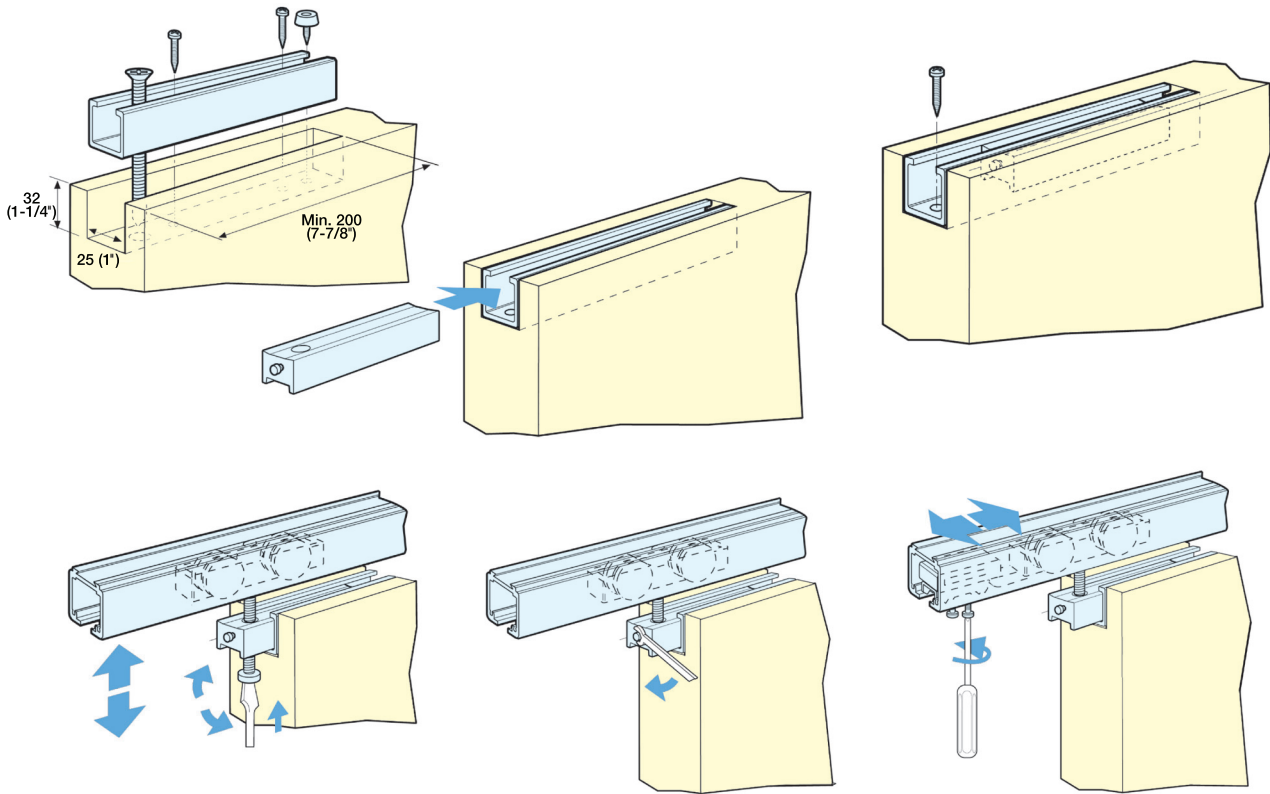
Top Surface Mount Dimensions



Flush Surface Mount Dimensions

SLIDING & FOLDING
DOOR HARDWARE

SLIDING DOOR SYSTEM (DOOR WEIGHT 187 LBS, 275 LBS)



SLIDING DOOR ROLLER

**STAINLESS
304
STEEL**
FMS, FDS, FES


FMS-0509

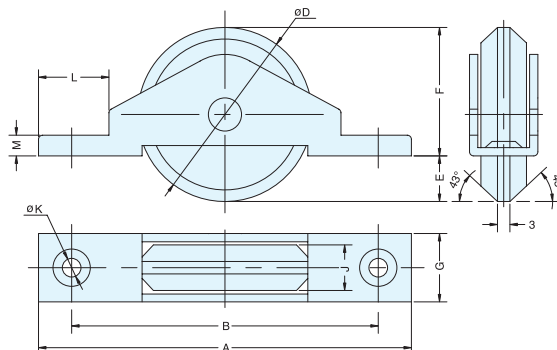


FDS-0339



FES-0429

- Smooth and quiet movement with plastic rollers.
- FES and FMS are equipped with ball bearings providing easy operating even with heavy load.



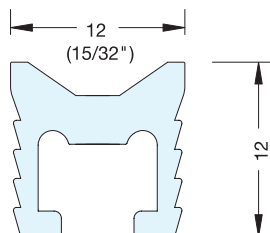
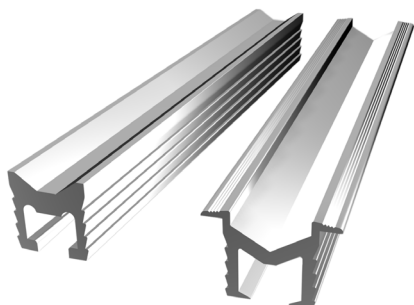
Part Name	Series	Material	Finish
Bracket, Pin	FDS, FES, FMS	304 Stainless Steel	Plain
Wheel	FDS, FES	Polyacetal	White
	FMS	MC Nylon	Blue

Item No.	A	B	D	E	F	G	J	K	L	M	Load Capacity (kg) /per 2pcs	Weight (g)	Box (pcs)	Carton (pcs)
FDS-0259	60 (2-23/64")	50	25	5	20	11	7	3	10	1.2	15 (33 lbs)	15	20	200
FDS-0339	74 (2-29/32")	63	33	5.5	27.5	13	8	4	12	1.5	25 (55 lbs)	25	12	120
FES-0339	68 (2-43/64")	57	33	7	26	13	9	4	14	5	50 (110 lbs)	35	4	40
FES-0429	92 (3-5/8")	76	42	6	36	14	9	4	18	5	70 (154 lbs)	60		
FMS-0509	110 (4-21/64")	85	50	8	42	17	11	5	19	5	100 (220 lbs)	95		

"V" RAIL FOR SLIDING DOOR

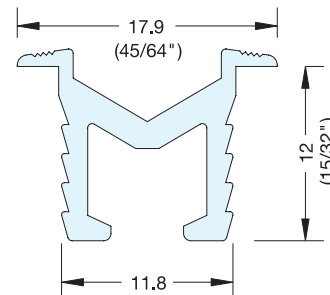
ALUMINUM
AV

- Bottom rail for FMS, FDS, FES Rollers.



Item No.: AVF-12S/1820

Applicable Rollers: FDS-0259, FDS-0339
FES-0339, FES-0429
FMS-0509



Item No.: AVED-12S/1820

Applicable Rollers: FDS-0259, FDS-0339
FES-0339, FES-0429

Item No.	Length	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
AVF-12S/1820	1820 (71-5/8")	256	1	10	Aluminum	Anodized
AVED-12S/1820		309				

SELF CLOSING SLIDING DOOR SYSTEM (Door Weight 66~176 lbs)

LM-80

SLIDING & FOLDING
DOOR HARDWARE

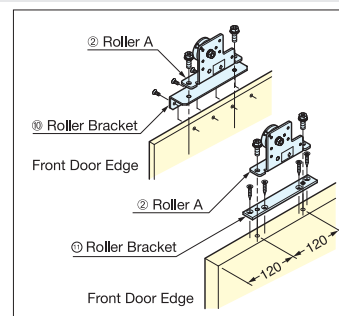
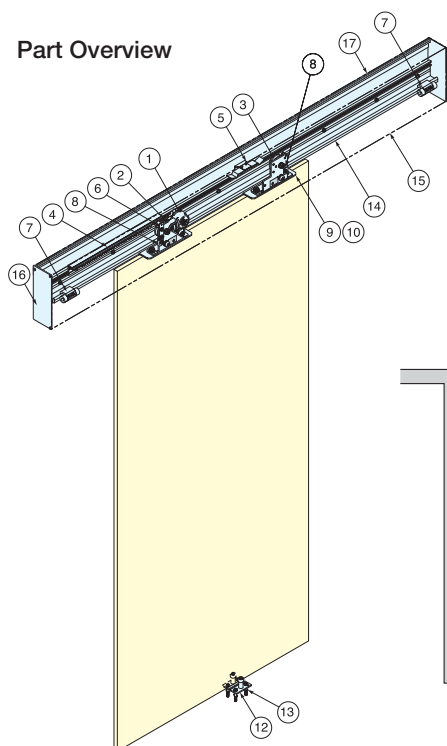
SELF CLOSING SLIDING DOOR SYSTEM (DOOR WEIGHT 66~176 LBS)



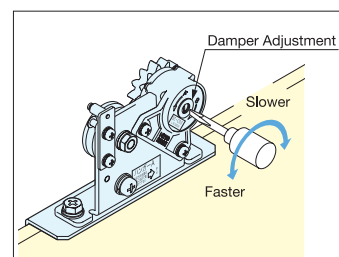
Item No.	LM-80
Door Width	700~1200 mm (27-9/16"~47-1/4")
Door Thickness	13 or 28~40 mm (1/2" or 1-1/8"~1-9/16")
Door Weight	30~80 kg/Door (66~176 lbs/door)
Door Travel	Max. 1100 mm (in case of door width 1200 mm) Max. 43-5/16" (in case of door width 47-1/4")

- Self closing sliding door system.
- Equipped with damper for smooth and soft closing, eliminating slam shut.
- Dampening speed adjustable for best soft closing.
- Wall surface mount type for easy installation.
- No bottom rail needed for clean appearance.
- Door opens lightly for easy operation.
- Door catch included to hold door in fully open position.
- Designed for 13 mm solid phenolic panel or 28~40 mm thick wood doors.
- Non-handed.
- Glass door system available (See P.530).

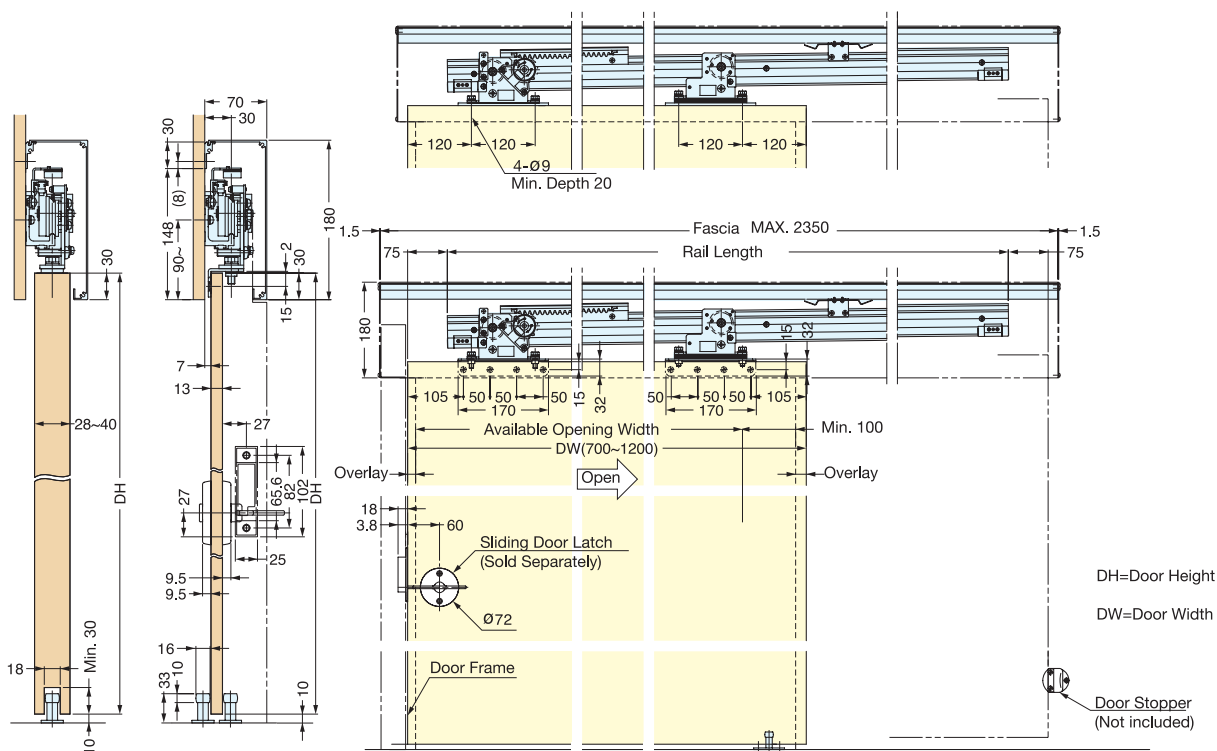
Part Overview



Roller Brackets for solid phenolic panel and wood door included.



Closing speed adjustable by turning adjustment screw on damper.



Part Details

[illegible]

No.	⑧	⑨	⑩	⑪	⑫	⑬	⑭
Name	Stopper Plate	Height Adjustment Spacer	Roller Bracket (For Solid Phenolic)	Roller Bracket (For Wood)	Bottom Roller Guide	Anchor	Roller Rail (2200mm)
							
Qty. / Set	2 pcs	t1:15 pcs, t0.5:1 pc	2 pcs	2 pcs	2 pcs	4 pcs	1 pc

No.	15	16	17
Name	Fascia (2350mm)	Side Cover	Mounting Plate (For Fascia) (2350mm)
			
Qty. / Set	1 pc	1 pc ea. (Left & Right)	1 pc

No.	Option
Name	Latch w/indicator
Item No.	ET-125T
	
Qty. / Set	1 pc

LATERAL OPENING DOOR SYSTEM

FAD-54 / FAD-54L



MonoFlat FAD™

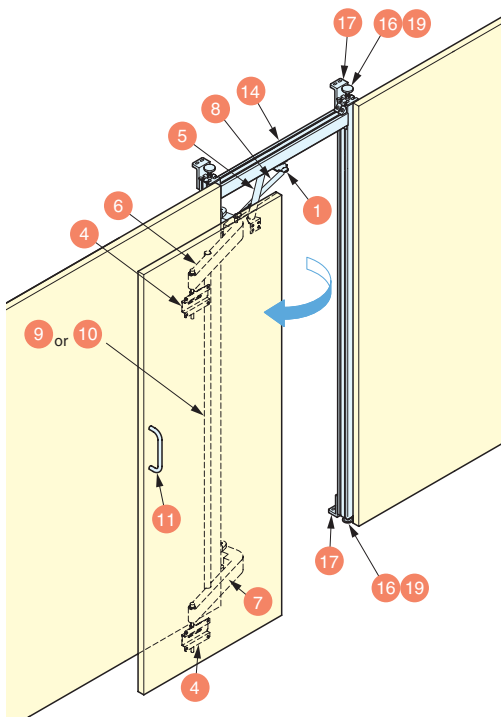
Item No.	FAD-54	FAD-54L
Door Width	800~850 mm (31-1/2"~33-15/32")	
Door Height	Max. 2380 mm (93-11/16")	Max. 2980 mm (117-5/16")
Door Thickness	24~38 mm (61/64"~1-1/2")	
Door Weight	Max. 35 kg (77 lbs)/Door	

*In case of 25mm (1") overlay.

• Other "MonoFlat series" available.

MonoFlat FAD-5	For door weight 5 kg (11 lbs) - P.557
MonoFlat FAD-20	For door weight 20 kg (44 lbs) - P.558~559
MonoFlat LIN-X	For door weight 24 kg (53 lbs) - P.550~555
MonoFlat Unison	For door weight 30 kg (66 lbs) - P.516~517

- **Flush Surface**
Designed to close flush against surrounding walls, providing clean appearance.
- **Lateral Opening Mechanism**
Allows doors to swing out laterally in a small radius, ideal for tight front space application.
- **Aluminum frame supplied for durable construction**
- **No rails or bottom guide required**
- **Smooth Movement**
Built-in gas spring provides a smooth self opening & closing movement.
- **Height adjustable by cutting arm connecting pipe**
- **Various applications**
Can be used in single or double door configuration.
Ideal for walk-in closets, partitions, hidden door applications etc.



■ Various Opening Configurations

Left Hand Use



Right / Left Combinations

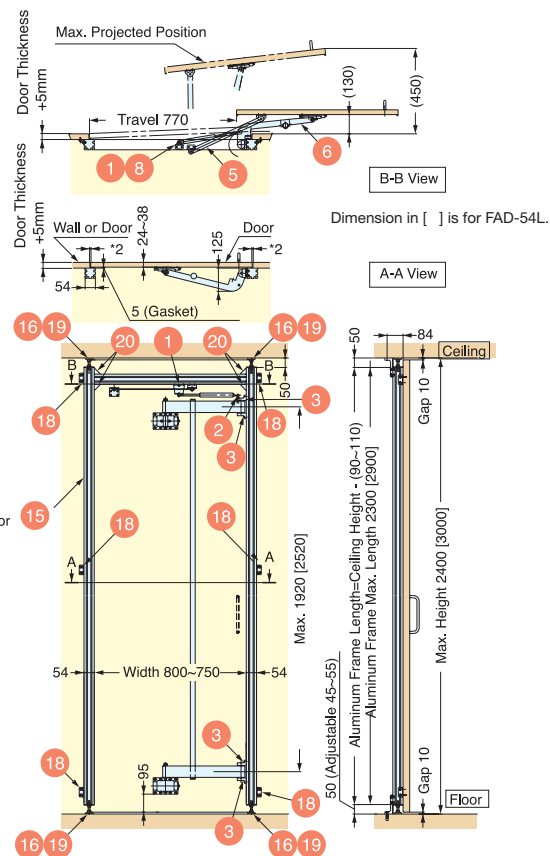
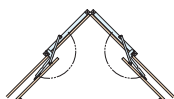


Right Hand Use



*1 Vertical frame or door stoppers on floor for both doors required in center.

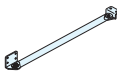
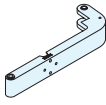
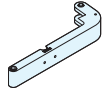
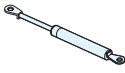
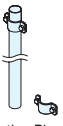
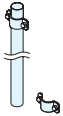
Corner Use

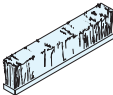
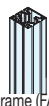
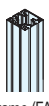
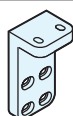
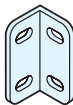
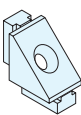


*2 Min.4mm gap on both side of door.

Parts Set (per door)		Necessary Parts	
Item No.	Door Height	Description	
FAD-54	Max. 2380 mm (93-11/16")	Please see Qty a	
FAD-54L	Max. 2980 mm (117-5/16")	Please see Qty b	

Parts Included

No.	Qty		Part Name	Description
	a	b		
1	1pc	1pc	 Gas Spring Bracket	- Material / Steel - Finish / Clear Zinc Chromate
2	1pc	1pc	 Screw Pin	- Material / Steel - Finish / Clear Zinc Chromate
3	4pcs	4pcs	 Bearing Housing	- Material / Aluminum - Finish / Color - Silver
4	2pcs	2pcs	 Arm Bracket	- Material / Steel, Polyacetal - Finish / Color - Silver
5	1pc	1pc	 Support Arm	- Material / Steel, Polyacetal - Finish / Color - Silver
6	1pc	1pc	 Upper Arm	- Material / Aluminum - Finish / Color - Silver
7	1pc	1pc	 Bottom Arm	- Material / Aluminum - Finish / Color - Silver
8	1pc	1pc	 Gas Spring	Color / Grey
9	1set	—	 Connecting Pipe & Clamp	- Material / Steel - Finish / Color - Silver 1990 mm
10	—	1set	 Connecting Pipe & Clamp	- Material / Steel - Finish / Color - Silver 2600 mm

No.	Qty		Part Name	Description
	a	b		
11	1pc	1pc	 Handle	- Material / 304 Stainless Steel - Finish / Mirror
12	1pc	1pc	 Bumper	- Material / Polyurethane - Finish / Clear
13	1pc	1pc	 Strip Brush	Color / Grey
14	V 2pcs H 1pc	—	 Alum. Frame (FAD-54) (V2300mm, H800mm)	- Material / Aluminum - Finish / Anodized
15	—	V 2pcs H 1pc	 Alum. Frame (FAD-54L) (V2900mm, H800mm)	- Material / Aluminum - Finish / Anodized
16	4pcs	4pcs	 Glide Base	- Material / Steel - Finish / Color - Silver
17	4pcs	4pcs	 Frame Bracket	- Material / Aluminum - Finish / Color - Silver
18	6pcs	6pcs	 Angle Connector	- Material / Steel - Finish / Clear Zinc Chromate
19	4pcs	4pcs	 Leveling Glide	- Material / Steel, Elastomer - Finish / Color - Clear Zinc - Chromate - Black
20	8pcs	8pcs	 Frame Connector	- Material / Aluminum, Zinc Alloy - Finish / Silver, Chromate

FLUSH SLIDING DOOR SYSTEM

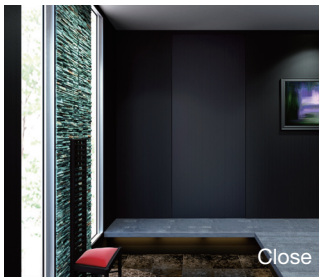
MFU

SLIDING & FOLDING
DOOR HARDWARE

FLUSH SLIDING DOOR SYSTEM



MFU-1000-L shown.



MonoFlat UNISON®

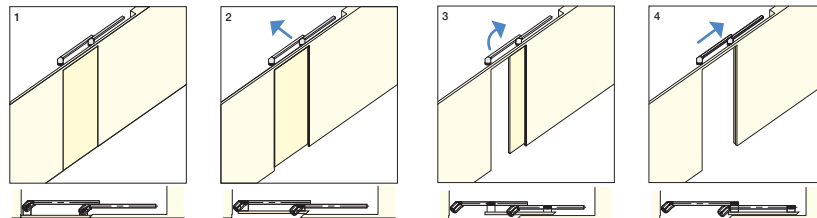
Door Width	800~1000 mm (31-1/2"~39-3/8")
Door Height	Max. 2500 mm (98-7/16")
Door Thickness	*28~30 mm (1-3/32"~1-3/16")
Door Weight	Max. 30 kg (66 lbs)
Adjustability	Depth: ± 3.5 mm (1/8")
	Horizontal: ± 4 mm (5/32")
	Vertical: ± 4 mm (5/32")

*Can be used on door thicker than 30 mm (1-3/16") by mortising hanging bracket into the door.

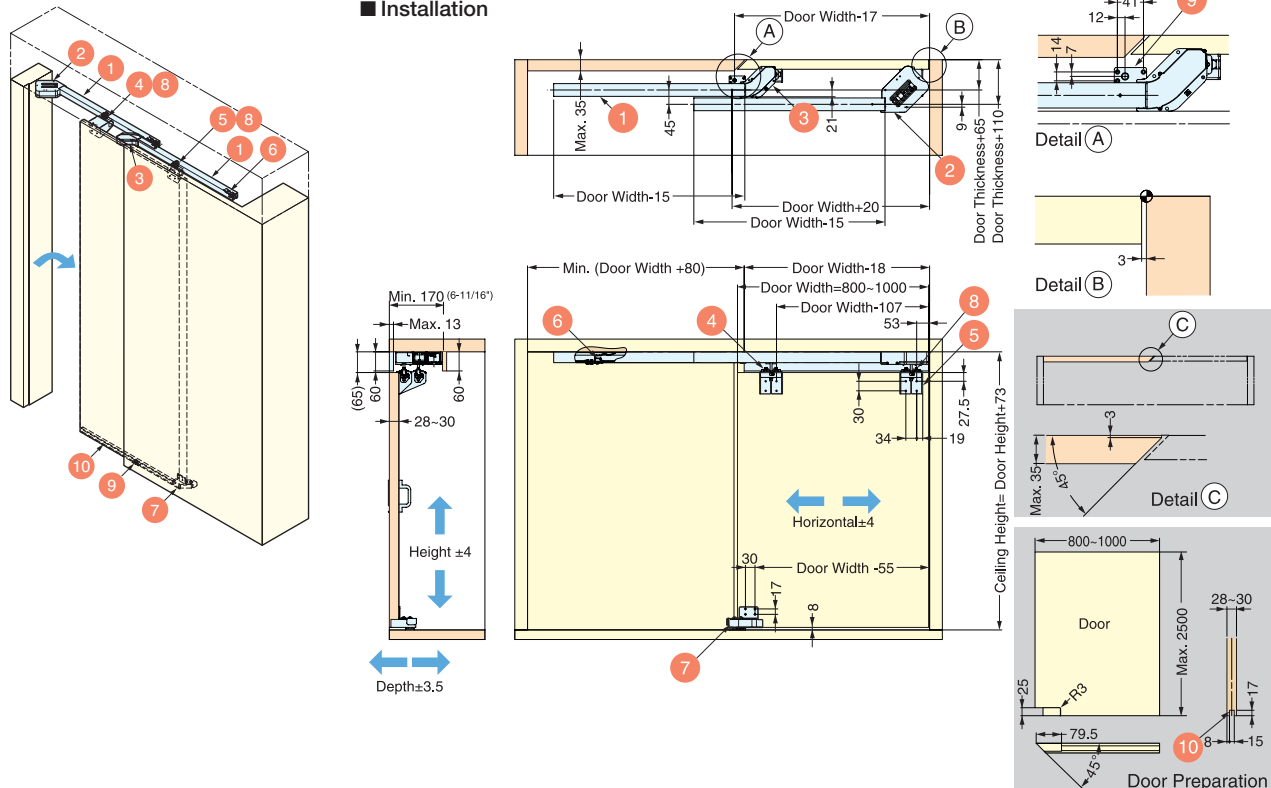
- **Flush Surface**
Designed to close flush against surrounding walls, providing clean appearance.
- **Unique Movement**
Door moves in first, and then slides sideways.
- **Clean Appearance**
No bottom rails on floor required on MFU-1000-R/L

Note: Hardware must be installed onto a rigid frame, ceiling or wall to prevent door from falling off.

■ How the door moves

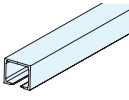
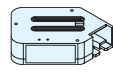
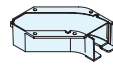
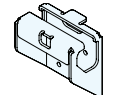
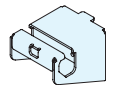


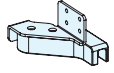
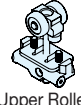
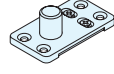
■ Installation



Parts Set (per door)	Necessary Parts
Item No.	Description
MFU-1000-R	For Right-Handed Opening
MFU-1000-L	For Left-Handed Opening

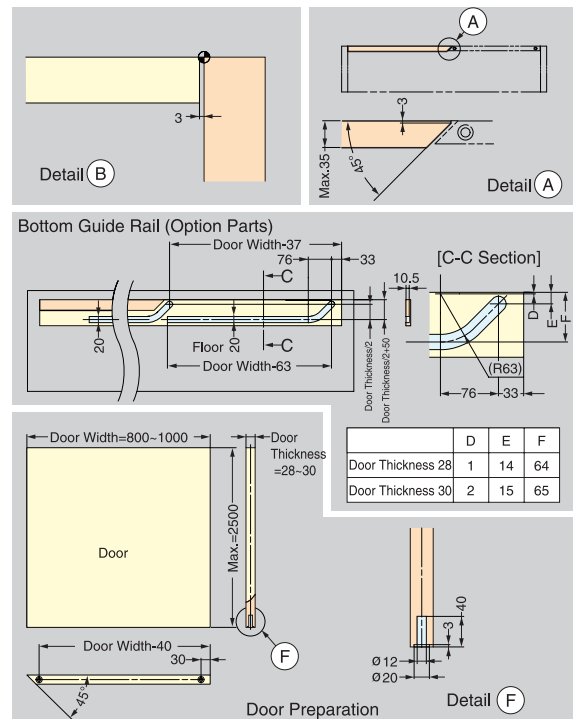
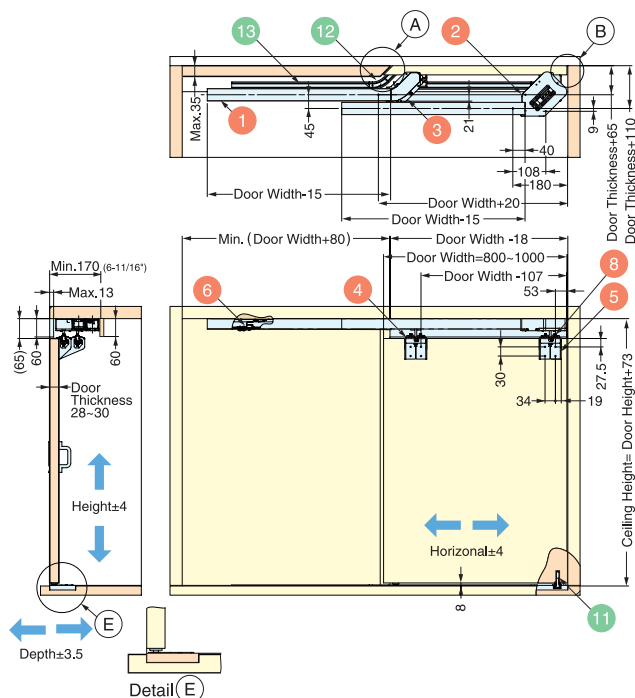
Parts Included

No.	Qty	Part Name	Description
1	2 pcs	 Upper Track	- Material / Aluminum - Finish / Anodized
2	1 pc	 Guide Block (Top)	- Material / Aluminum, Polycarbonate - Finish / Silver White
3	1 pc	 Guide Block (Bottom)	- Material / Aluminum - Finish / Silver
4	1 pc	 Upper Bracket A	- Material / Steel - Finish / Chromate
5	1 pc	 Upper Bracket B	- Material / Steel - Finish / Chromate

No.	Qty	Part Name	Description
6	1 pc	 Stopper	- Material / PBT, Steel - Finish / White, Yellow Zinc Chromate
7	1 pc	 Lower Guide	- Material / Steel - Finish / Chromate
8	2 pcs	 Upper Roller	- Material / POM, Steel - Finish / Natural, Chromate
9	1 pc	 Bottom Guide Pin	- Material / Polyamide - Finish / Yellow Zinc Chromate, Light Brown
10	1 pc	 Guide Track	- Material / Aluminum - Finish / Anodized

■ Installation - With option parts for floor mounted recessed guide track.

Item No.	Description	Parts Included
MFU-1000RG-SL-R	For Right-Handed Opening	11 Guide Pin FD30-FGR 12 Lower Guide Track FD30-FBRH910SIL 13 Recessed Guide Track MFU-RG-GR-(L/R)
MFU-1000RG-SL-L	For Left-Handed Opening	



ALUMINUM FRAME SWING DOOR (2 WAY ADJUSTABLE)

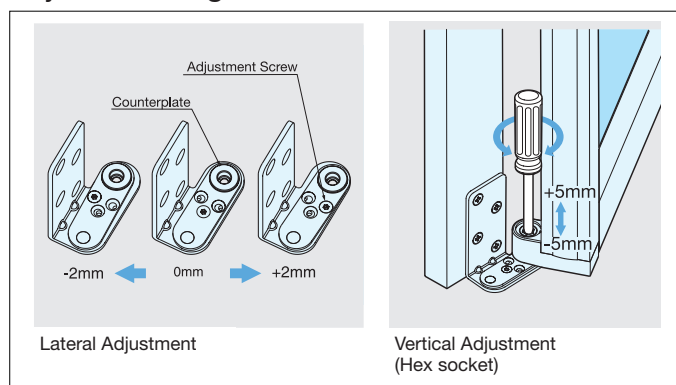
AF-25D

SLIDING & FOLDING
DOOR HARDWARE

ALUMINUM FRAME SWING DOOR (2 WAY ADJUSTABLE)



Adjustable Hinge

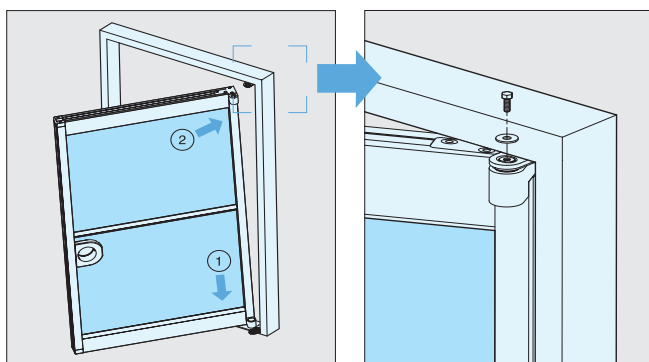


- Aluminum profile provides excellent rigidity preventing door flex.
 - Intermediate support not needed when door size within H 2200mm x W 900mm (H 86-39/64" x W 35-7/16").
 - Vertically and laterally adjustable after installed.
 - Hinge is non-handed.
 - Sliding door version available.
- Please see P.522-525 for details.

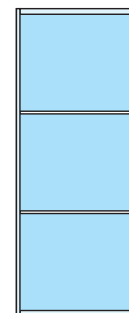
Door Height	Max. 2500 mm (98-27/64")
Door Width	Max. 1000 mm (39-3/8")
Door Weight	Max. 40 kg (88 lbs)
Glass Thickness	5 or 6 mm
Standard Size	H 2200 mm x W 900 mm (H 86-39/64" x W 35-7/16")

* Intermediate support required when either door height or door width exceeds standard size.

Easy Door Installation

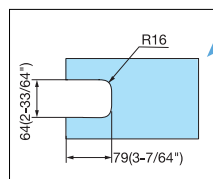
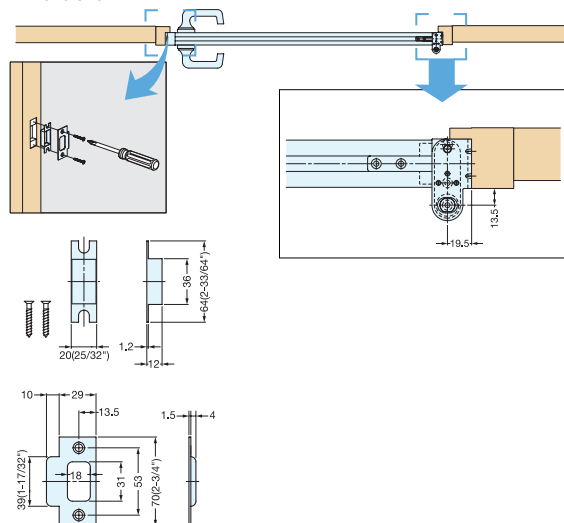


Standard Size
(Smaller than H 2200 x W 900)

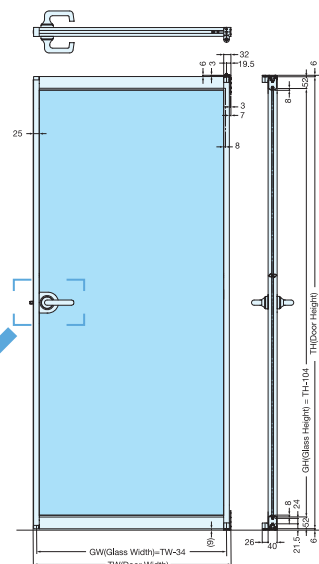


2 Supports
(Smaller than H 2500 x W 800)

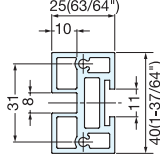
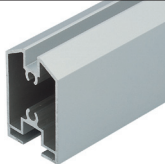
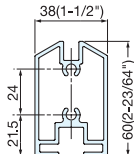
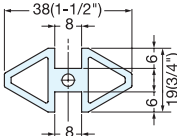
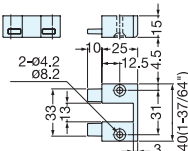
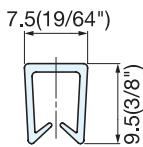
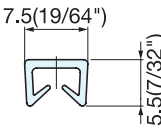
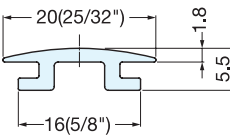
Dimensions

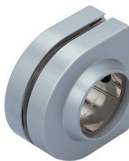
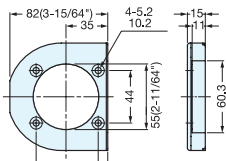
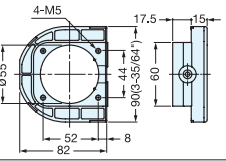
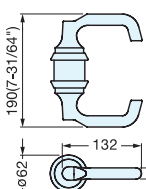
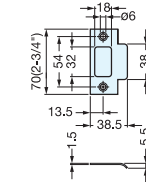
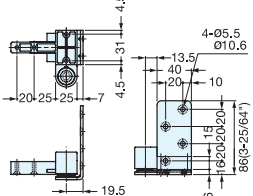


Cut Out Dimension

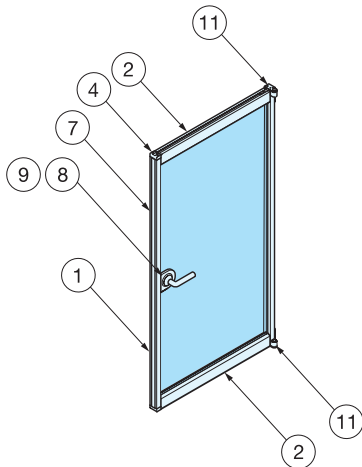


Part Details (for one door)

No.	Item No.	Part Name		Dimensions	Quantity	Description
①	AF-25-W01	Vertical Frame			Necessary quantity	● Material Aluminum ● Finish / Color Matte Silver ● Length 2500 mm (98-27/64")
②	AF-25-W02	Horizontal Frame			Necessary quantity	● Material Aluminum ● Finish / Color Matte Silver ● Length 2000 mm (78-47/64")
③	AF-25-W03	Intermediate Support (Optional)			Necessary quantity	● Material Aluminum ● Finish / Color Matte Silver ● Length 2000 mm (78-47/64")
④	AF-25-P04	Connector			4 pcs	● Material Zinc Alloy ● Finish / Color Matte Chrome
⑤	AF-25-P02 (For 5mm Glass)	Gasket			Necessary quantity	● Material Elastomer ● Finish / Color Light Grey ● Length 2500 mm (98-27/64") (AF-25-P02) 3000 mm (118-7/64") (AF-25-P15)
	AF-25-P15 (For 6mm Glass)					
⑥	AF-25-P03 (For 5mm Glass)	Gasket for Intermediate Support (Optional)			Necessary quantity	● Material Elastomer ● Finish / Color Light Grey ● Length 2500 mm (98-27/64") (AF-25-P03) 2500 mm (98-27/64") (AF-25-P16)
	AF-25-P16 (For 6mm Glass)					
⑦	AF-25-P01-25	Edge Cover			Necessary quantity	● Material Synthetic Rubber ● Finish / Color Light Grey ● Length 2500 mm (98-27/64")

No.	Item No.	Part Name		Dimensions	Quantity	Description
⑧	AF-25-P06	Handle Case A			1 set	● Material Zinc Alloy ● Finish / Color Matte Silver (Cover)
		Handle Case B				
⑨	● HCSA138F11 (Passage)	Lever Handle			1 set	● Material Aluminum ● Finish / Color Anodized, Satin *Passage: No Lock - Privacy: Thumbturn and Slotted Lock Combination. Can be opened from outside with small coin or screwdriver.
	● HCSA138SF11G (Cylinder Lock & Thumbturn)					
	● HCSA138SF11H (Indicator & Thumbturn)					
	● HCSA138SF11M (Privacy & Thumbturn)					
			HCSA138F11 is shown.			
⑩	-	Strikeplate			Included in Lever Handle package	● Material Steel, Polyamide ● Finish / Color Plain, Black ● Screw 4x30 Flat Head Screw x 2 included
⑪	AF-25-P10	Pivot Hinge for Aluminum Frame			1 pair	● Material Zinc Alloy (Body) 304 Stainless Steel (Bracket) ● Finish / Color Matte Chrome (Body) Plain (Bracket)
⑫	AF-25-DS	Screw Set for AF-25D			1 set	● Material 304 Stainless Steel ● Finish / Color Plain ● Screws Breakdown M6 x 30 Hex. Socket Cap x 8pcs M4 x 30 Hex. Socket Cap x 6pcs M4 x 25 Hex / Flat Head x 12pcs 5 x 30 Hex / Flat Head x 8pcs *Screws for 3 Intermediate Supports included.

* Glass not included.

**ORDERING INFO:**

Please order parts based on required door size and opening dimensions.

e.g.) Single Swing Door Application

Door Size: H 2200 x W 900 mm (H 86-5/8" x W 35-7/16")

Glass Thickness: 6 mm

Qty	No.	Item No.
2	①	AF-25-W01
1	②	AF-25-W02
-	③	AF-25-W03
4	④	AF-25-P04
3	⑤	AF-25-P15 (For 6 mm Glass)
-	⑥	AF-25-P16 (For 6 mm Glass)
2	⑦	AF-25-P01-25
1	⑧	AF-25-P06
1	⑨⑩	HCSA138F11 (Passage Type)
1	⑪	AF-25-P10
1	⑫	AF-25-DS

Functional Sliding Door Systems

Sugatsune - progressive sliding door systems for the modern interior. Sliding doors allow home dwellers to utilize more space in a room than traditional hinged doors because of its minimalized opening and closing profile. Our innovative sliding door systems add unique features such as soft closing, soft opening, discreet flush appearance, folding, and frameless glass mounting. If you're looking for an unparalleled look within your home, look no further than our product line.



Two-Way Soft Close



Slidable Folding Door



Frameless Glass Sliding Door



Self - Close



Flush Close

ALUMINUM FRAME SLIDING DOOR (Door Weight 176 lbs)

FD80-AF

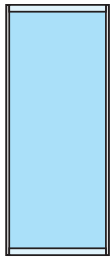


Type	FD80-AF			
	Standard Sliding		Two-Way Soft Close	
Roller	Top Recessed	Top Surface	Top Recessed	Top Surface
Door Weight	Max. 80 kg (176 lbs)			
Glass Thickness	5 or 6 mm			
Door Width	Max. 1500 mm (59-1/16")		804~1500 mm (31-5/8"~59-1/16")	
Door Height	Max. 2500 mm (98-27/64")			

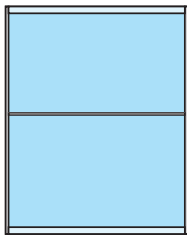
- Two-way soft closer option available.
- Top surface or recessed mount roller available.
- Thick aluminum profile provides excellent rigidity preventing door flex.
- Ball bearing roller provides ultra smooth movement.
- Easy assembly and installation.
- Intermediate support not needed when door size within H 2200mm x W 900mm (H 86-39/64" x W 35-7/16").
- No rail on floor needed.
- Swing door version available for total coordination. Please see P.518~520 for details.
- Black frame available by special order only.



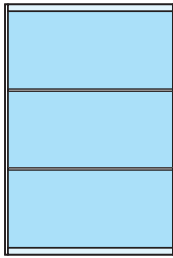
* Intermediate support required when either door height or door width exceeds standard size. Pictures shown below are door size examples which require intermediate support.



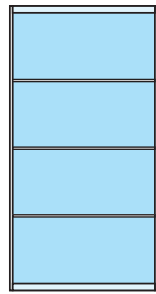
Standard Size
(Smaller than H 2200 x W 900)



1 Support
(Smaller than H 2000 x W 1600)



2 Supports
(Smaller than H 2200 x W 1500)



3 Supports
(Smaller than H 2500 x W 1300)

Parts Set (per door)		Necessary Parts	
		Please refer to "Qty [a] - [d]" for parts included in each set.	
	Item No.	Description	
		Roller	Function
[a]	FD80-DHCHP-AF	Top Recessed	Two Way Soft-Close
[b]	FD80-HHP-AF	Top Recessed	Standard Sliding
[c]	FD80-DHCMP-AF	Top Surface	Two Way Soft-Close
[d]	FD80-HMP-AF	Top Surface	Standard Sliding

Parts Included

No.	Qty				Part Name	Description
	[a]	[b]	[c]	[d]		
1	1 pc	-	-	-	Top Recessed Roller Soft-Closer (Two-Way) FD80-WRH-DSC	- Material Zinc Alloy / Polyacetal / Steel - Finish Nickel / Black
2	1 pc	2 pc	-	-	Top Recessed Roller Standard Sliding FD80-WRH	- Material Zinc Alloy / Polyacetal / Steel - Finish Nickel / Natural
3	-	-	1 pcs	-	Top-Surface Roller Soft-Closer (Two-Way) FD80-WRM-DSC	- Material Zinc Alloy / Polyacetal / Steel - Finish Nickel / Black
4	-	-	1 pc	2 pcs	Top-Surface Roller Standard Sliding FD80-WRM	- Material Zinc Alloy / Polyacetal / Steel - Finish Nickel / Natural
5	1 pc	1 pc	1 pc	1 pc	Floor Guide FD50-BG18	- Material 304 Stainless Steel, POM - Finish Plain / White
6	-	2 pcs	-	2 pcs	End Stopper FD80-HTST	- Material Steel / Polyacetal - Finish Chromate / White
7	-	-	1 pc	1 pc	Sheet Nut FD80-AFB	- Material Steel - Finish / Chromate
8	2 pcs	2 pcs	-	-	End Cap AF-25HB-EC	- Material / Elastomer - Finish / Grey

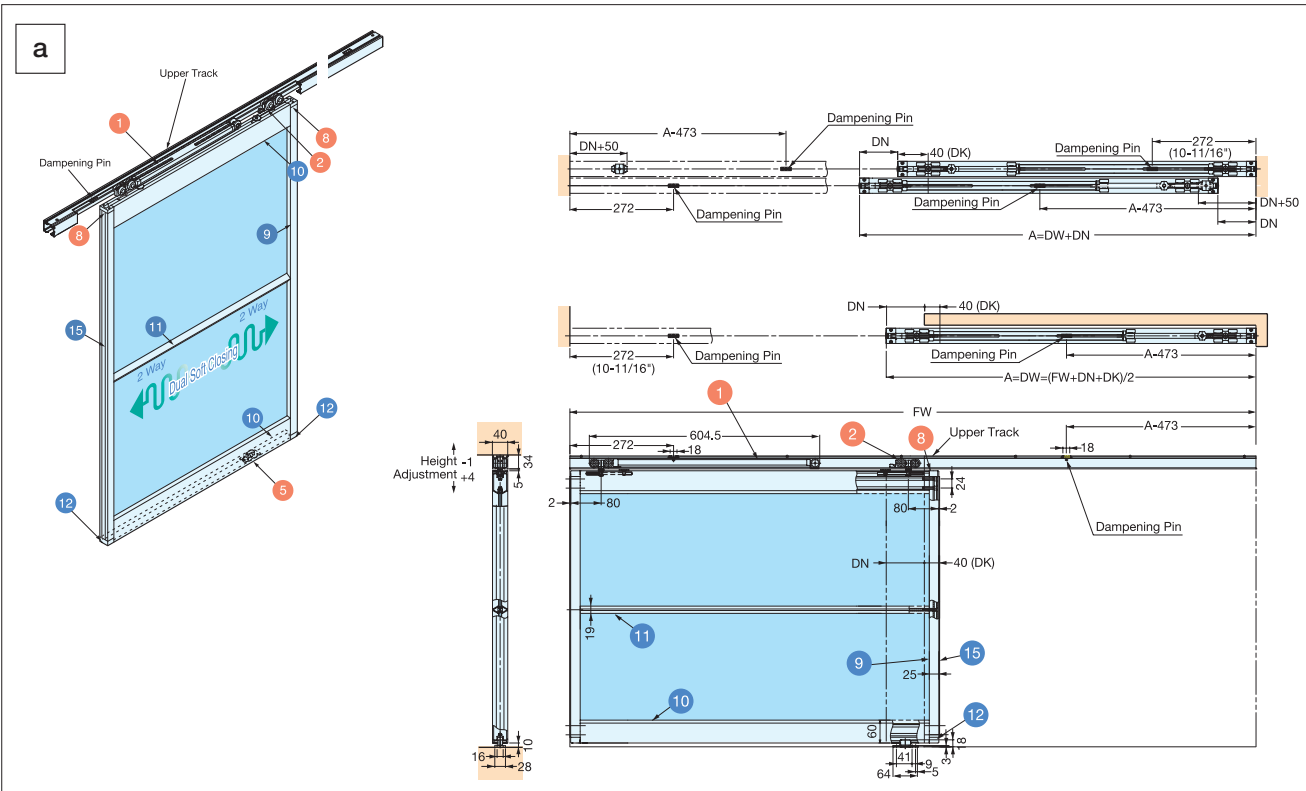
Upper Tracks

Length	Item No.	Dimensions, Material / Finish
78-3/4" (2000 mm)	FD80-TRM2000SIL	 Aluminum / Anodized Silver
107-1/2" (2730 mm)	FD80-TRM2730SIL	
143-5/16" (3640 mm)	FD80-TRM3640SIL	

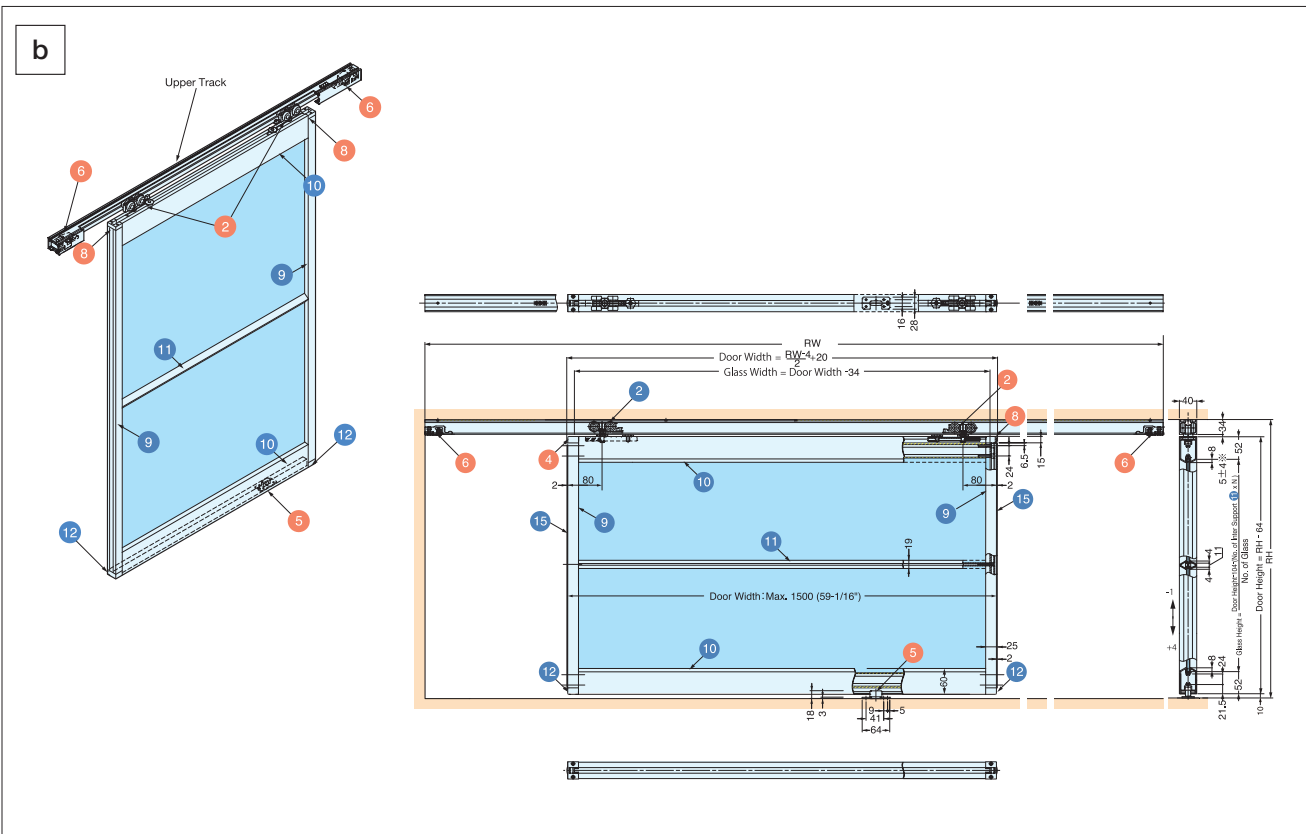
Part Details (for one door)

No.	Part Name		Description
9	Vertical Frame	AF-25-W01	- Material Aluminum - Finish Matte Silver
10	Horizontal Frame	AF-25-W02	- Material Aluminum - Finish Matte Silver
11	Intermediate Support (Optional)	AF-25-W03	- Material Aluminum - Finish Matte Silver
12	Connector	AF-25-P04	- Material Zinc Alloy - Finish Matte Chrome
13	Gasket	AF-25-P02 (For 5mm Glass) AF-25-P15 (For 6mm Glass)	- Material Elastomer - Finish Light Grey
14	Gasket for Intermediate Support (Optional)	AF-25-P03 (For 5mm Glass) AF-25-P16 (For 6mm Glass)	- Material / Elastomer - Finish / Light Grey
15	Edge Cover	AF-25-P01-25	- Material Elastomer - Finish Light Grey
16	Handle (Optional)	MN799Z160E101	- Material Zinc Alloy - Finish Matte Chrome
17	Screw Set for AF-25H	AF-25-HS	- Material 304 Stainless Steel - Finish Plain

■ FD80-AF / Top Recessed Roller / Two-Way Soft Close



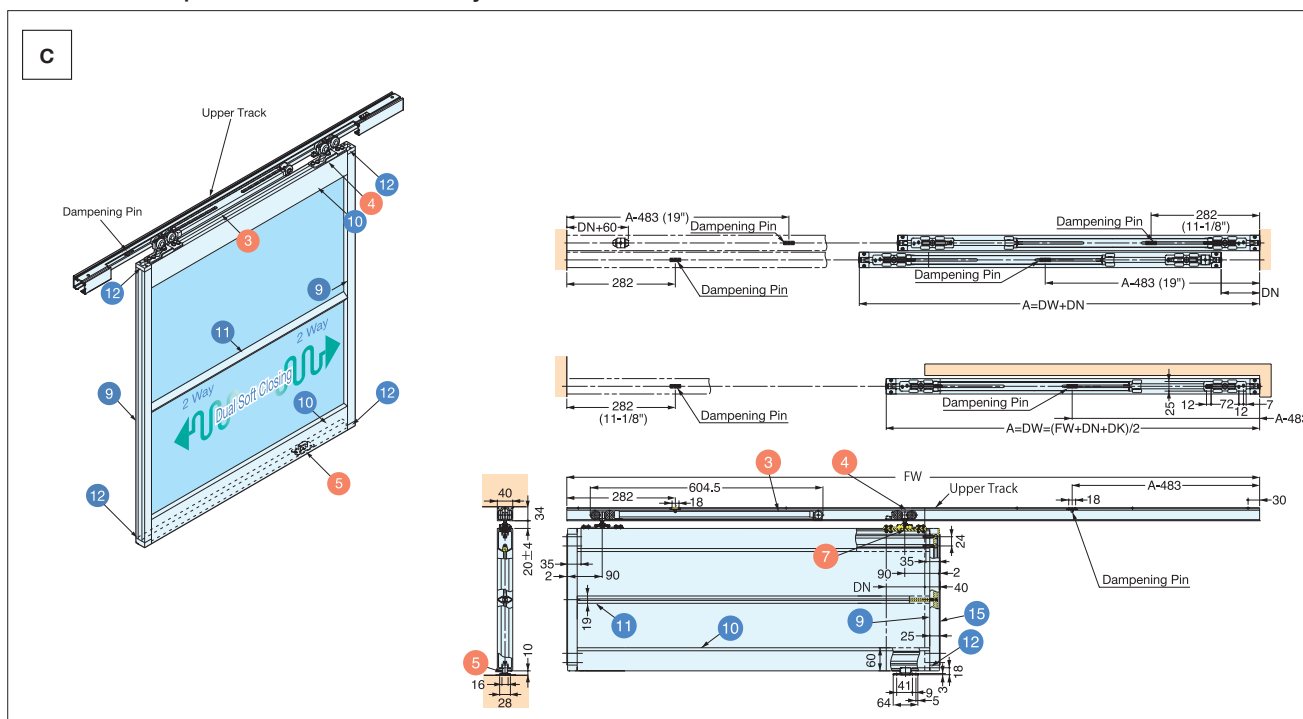
■ FD80-AF / Top Recessed Roller / Standard Sliding



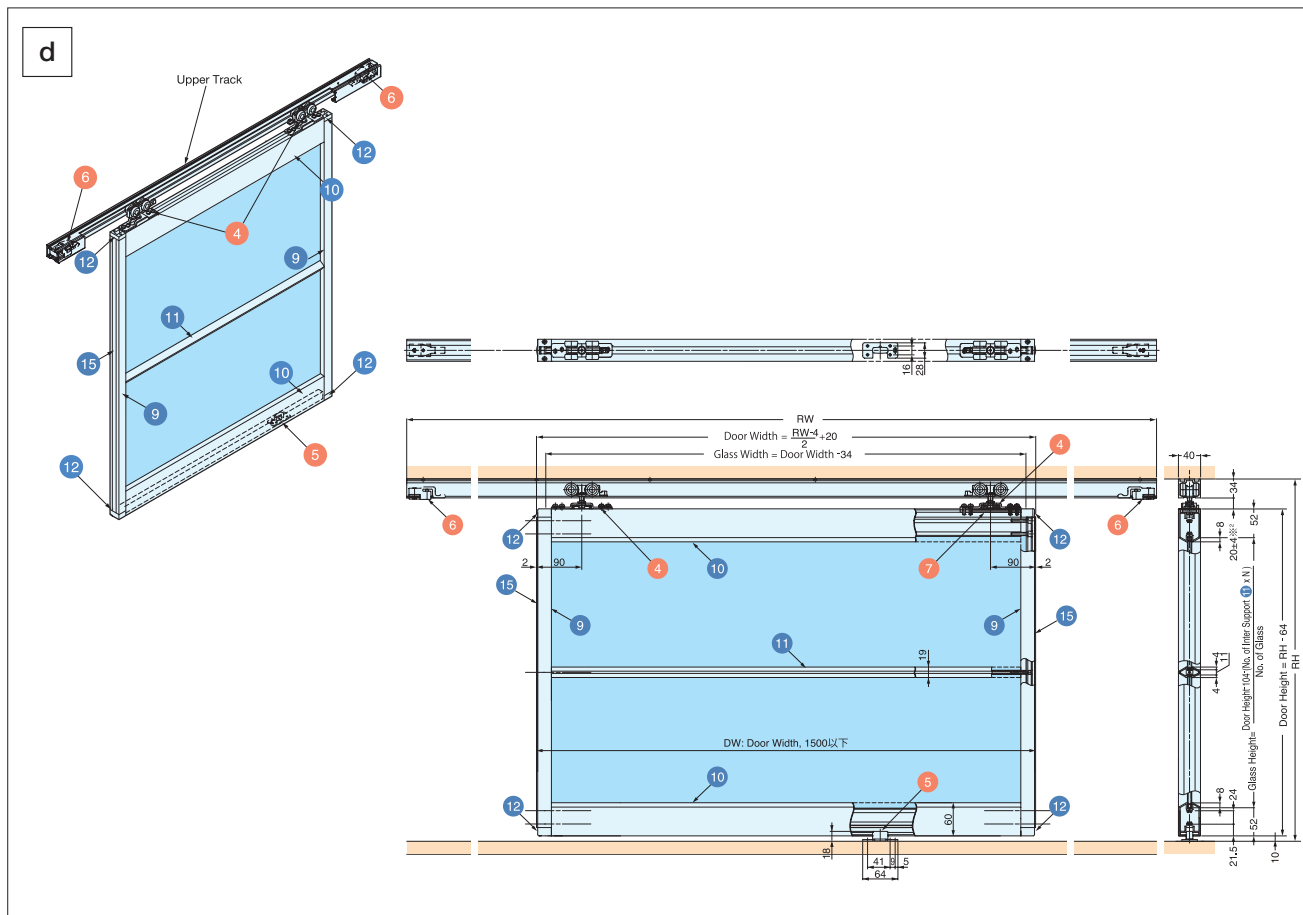
SLIDING & FOLDING DOOR HARDWARE

ALUMINUM FRAME SLIDING DOOR (DOOR WEIGHT 176 LBS)

■ **FD80-AF / Top Surface Roller / Two-Way Soft Close**



■ **FD80-AF / Top Surface Roller / Standard Sliding**



GLASS SLIDING DOOR SYSTEM (Door Weight 286 lbs)

KSPG

SLIDING & FOLDING
DOOR HARDWARE

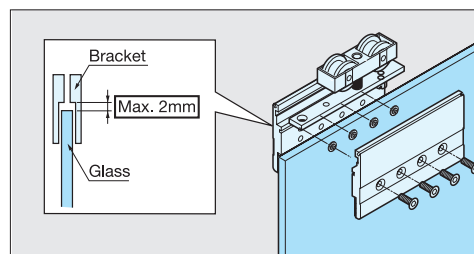
GLASS SLIDING DOOR SYSTEM (DOOR WEIGHT 286 LBS)



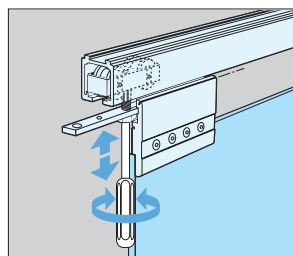
Item No.	KSPG
Weight	Max. 130 kg (286 lbs)
Height	Max. 3000 mm (118-1/8")
Glass Thickness	10 or 12 mm

- Sliding door system for single glass door.
- No pre-drilled holes on glass needed for installation.
- Easy height adjustment.
- *Not for resin panels.

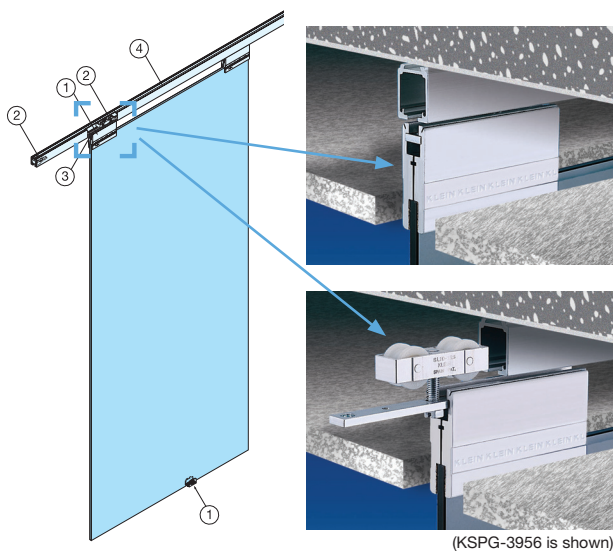
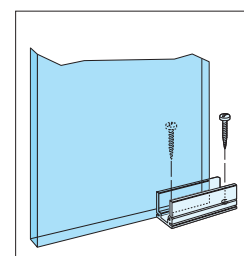
■ Door Installation



■ Adjustment (Height)

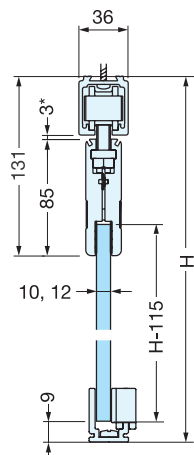


■ Bottom Guide



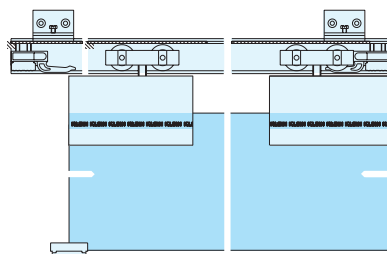
(KSPG-3956 is shown)

■ Dimensions

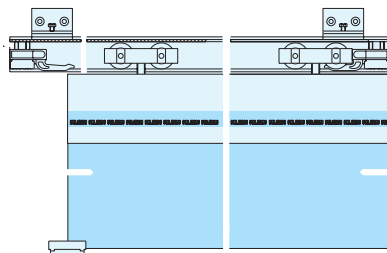


*Must be between 3 mm ~ 5 mm
to prevent glass door from falling.

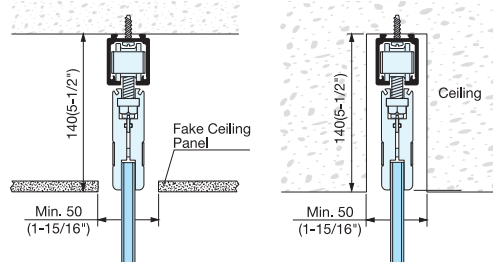
Short Bracket Type



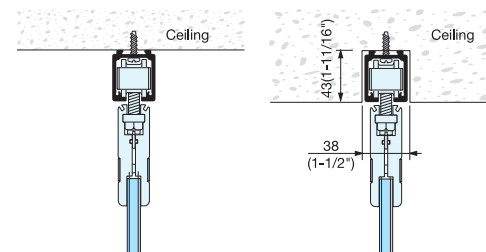
Long Bracket Type (W600, W900, W1200 per bracket)



Application Example



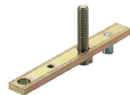
- Short Bracket is designed for application where it can be hidden.



- Long Brackets are designed to cover the top glass edge all the way across.
- Ideal for surface mounting, for application where ceiling space is limited.

Parts Set (per door)		Necessary Parts				
No.	Item No.	Part Name		Quantity	Description 1	Description 2
-	KSPG-3936 (Short Bracket Set)	Glass Bracket		1 set (Select one type)	• Material Aluminum • Finish / Color Anodized *2 pcs per set	• Kit with short bracket. • For 10 mm glass.
	KSPG-3956 (Short Bracket Set)		• Kit with short bracket. • For 12 mm glass.			
	KSPG-PE1043 (W600 Bracket Set)		• Kit with 600 mm bracket. • For 10 mm glass.			
	KSPG-PE1044 (W600 Bracket Set)		• Kit with 600 mm bracket. • For 12 mm glass.			
	KSPG-PE1045 (W900 Bracket Set)		• Kit with 900 mm bracket. • For 10 mm glass.			
	KSPG-PE1046 (W900 Bracket Set)		• Kit with 900 mm bracket. • For 12 mm glass.			
	KSPG-PE1047 (W1200 Bracket Set)		• Kit with 1200 mm bracket. • For 10 mm glass.			
	KSPG-PE1048 (W1200 Bracket Set)		• Kit with 1200 mm bracket. • For 12 mm glass.			

Parts Included

No.	Part Name		Quantity	Description
①	Bottom Guide		1 set	• Material Aluminum, Polyacetal • Finish / Color Anodized, White
②	Screw Set		1 set	• Material Steel • Finish / Color Clear Zinc Chromate
③	Roller		2 pcs	• Material Aluminum, Polyamide • Finish / Color Plain, White
	Stopper		2 pcs	• Material Polyacetal • Finish / Color Black
④	Hanging Bracket (for 10 mm Glass)		1 set	• Material Steel • Finish / Color Yellow Zinc Chromate
	Hanging Bracket (for 12 mm Glass)			• Material Steel • Finish / Color Clear Zinc Chromate

Upper Tracks

-	KS-2752	Upper Rail		Necessary quantity	• Material Aluminum • Finish / Color Anodized • Length 2000 mm (78-47/64") *Screw hole drilled every 250 mm (10"). *Connecting pin KS-3536 available to align two rails.
---	---------	------------	---	-----------------------	---

Optional Parts

-	KS-3531	Angle Bracket (for Upper Rail)		Optional	• Material Aluminum • Finish / Color Anodized *M5x16 screw included.
---	---------	-----------------------------------	---	----------	--

GLASS SLIDING DOOR SYSTEM (Door Weight 132 lbs / 198 lbs)

KSUG

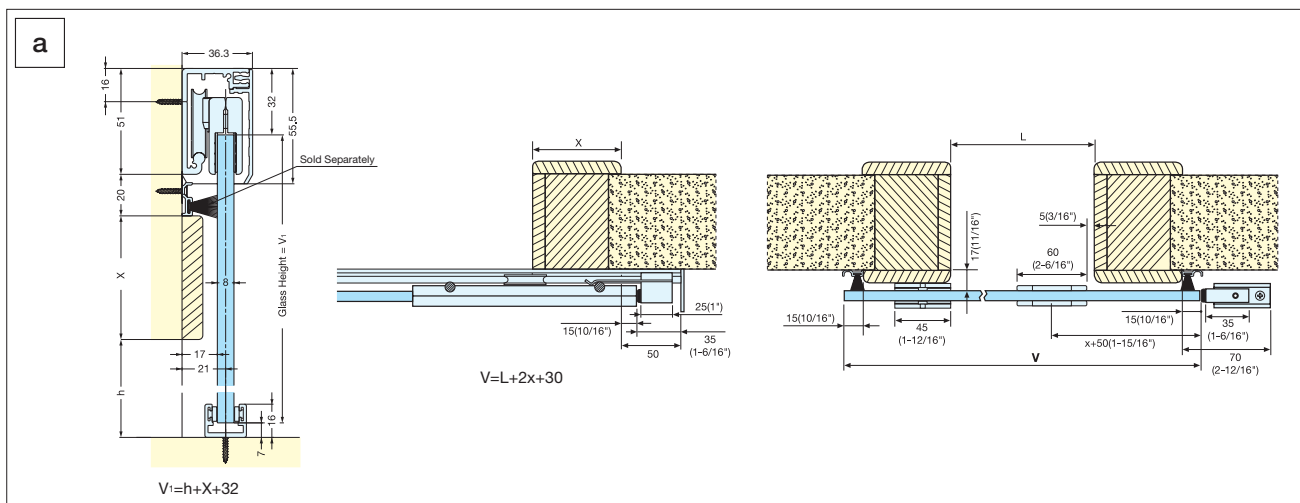


Item No.	KSUG-2974/60	KSUG-2984/90
Weight	Max. 60kg (132 lbs)	Max. 90 kg (198 lbs)
Height	Max. 3000 mm (118-1/8")	
Glass Thickness	8 mm	10 mm

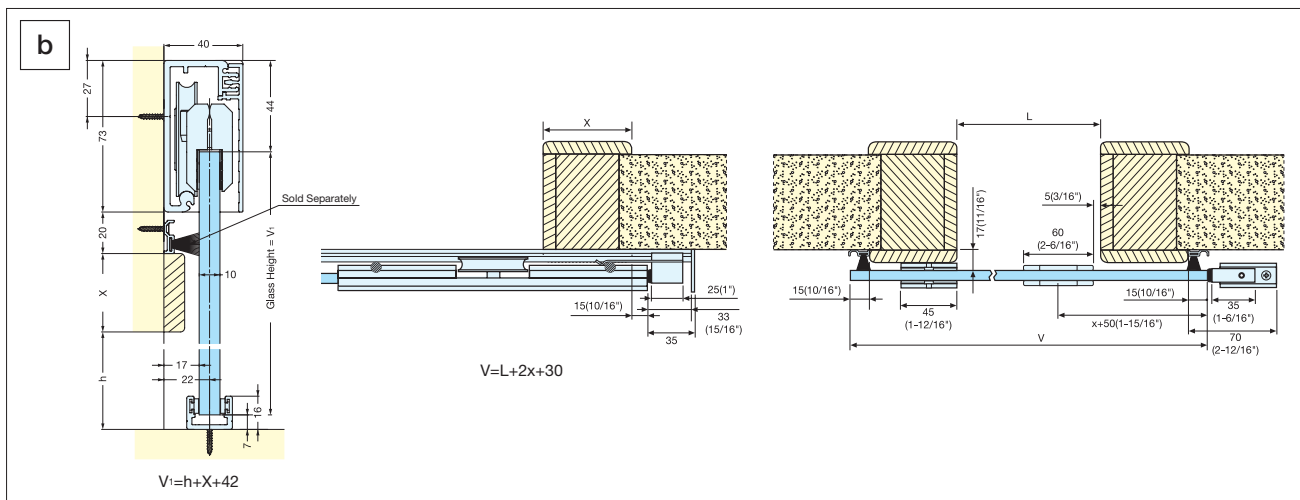
- Sliding door system for single glass door.
- Wall surface mount type.
- No pre-drilled holes on glass needed for installation.
- Can be installed over existing door frame.
- Snap-on type fascia for clean appearance.

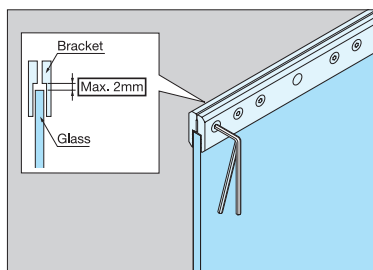
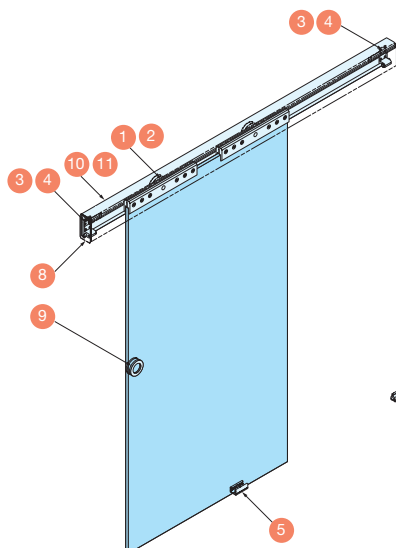
*Not for resin panels.

■ KSUG-2974 / 60

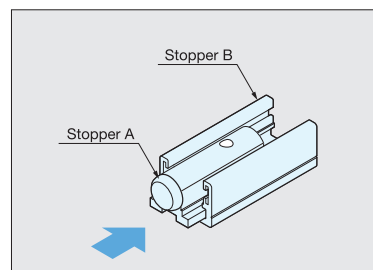


■ KSUG-2984 / 90





Mount bracket on corner and align to the edge of glass.



Install stopper B on floor and insert stopper A to B.



Tightening Torque (clamp screw):
15N·m (132 lbs·in)

Parts Set (per door)

Necessary Parts

Please refer to "Qty [a] - [b]" for parts included in each set.

	Item No.	Description	
		Door Weight	Glass Door Thickness
[a]	KSUG-2974/60	Max. 60kg (132 lbs)	8 mm (5/16")
[b]	KSUG-2984/90	Max. 90kg (198 lbs)	10 mm (13/32")

Parts Included

No.	Qty	Part Name	Description
	[a] [b]		
1	1 pc -	Glass Bracket for KSUG-60	- Material Aluminum (Body) Polyamide (Roller) - Finish Anodized (Body) White (Roller)
2	- 1 pc	Glass Bracket for KSUG-90	- Material Aluminum (Body) Polyamide (Roller) - Finish Anodized (Body) White (Roller)
3	1 pc -	Upper Stopper for KSUG-60	- Material Aluminum, Steel, Synthetic Rubber - Finish Anodized / Black Handed (Left handed is shown)
4	- 1 pc	Upper Stopper for KSUG-90	- Material Aluminum, Steel, Synthetic Rubber - Finish Anodized / Black Handed (Left handed is shown)
5	1 pc 1 pc	Bottom Guide for KSUG-60 and 90	- Material Aluminum, Steel, Polyacetal - Finish Anodized, White
6	2 pcs 2 pcs	Lower Stopper A for KSUG-60 and 90	- Material Aluminum, Steel, Synthetic Rubber - Finish Anodized, Black
7	2 pcs 2 pcs	Lower Stopper B for KSUG-60 and 90	- Material Aluminum - Finish Anodized

No.	Qty	Part Name	Description
	[a] [b]		
8	1 pair 1 pair	Rail End Cover for KSUG-60 and 90	- Material Aluminum - Finish Anodized *Screws included
9	2 pc 2 pc	Pull for KSUG-60 and 90	- Material Polycarbonate - Finish Plain
10	1 pc -	Upper Rail for KSUG-60	- Material / Aluminum - Finish / Anodized - Length / 2000 mm (78-47/64") *Fascia included
11	- 1 pc	Upper Rail for KSUG-90	- Material / Aluminum - Finish / Anodized - Length / 2000 mm (78-47/64") *Fascia included

Optional Parts

No.	Item No.	Part Name		Description
12	KS-2977	Sealing Brush		- Material Aluminum / Polypropylene - Finish / Anodized Grey - Length 2500 mm (98-5/8") × 2pcs 1500 mm (59-5/8") × 1pc
13	KS-3959	Glass Edge Pad for KSUG-60 and 90		- Material Polyvinyl Chloride (PVC) - Finish / Plain - Length 3000 mm (118-7/64")

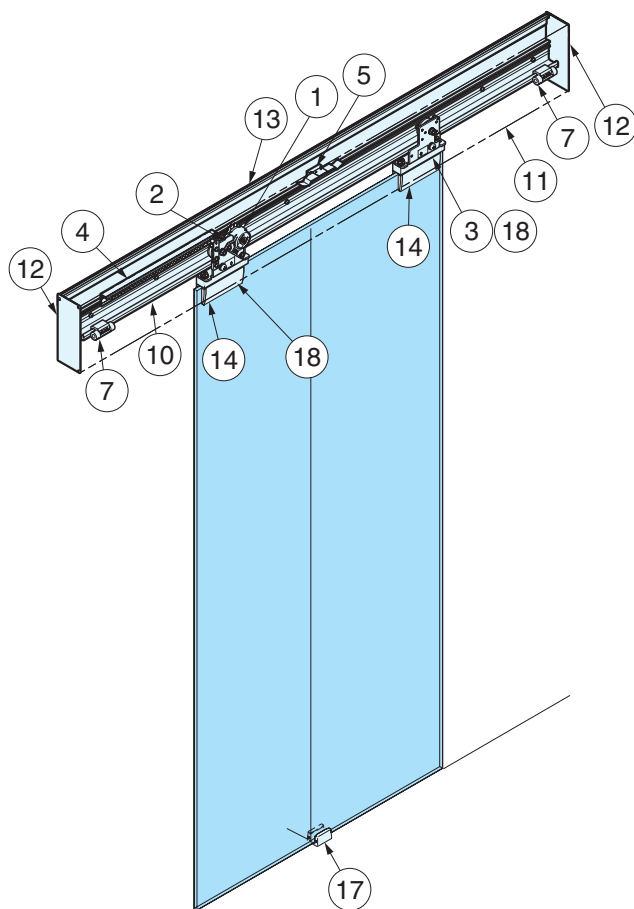
SELF CLOSING GLASS SLIDING DOOR SYSTEM (Door Weight 66~176 lbs)

LM-80G

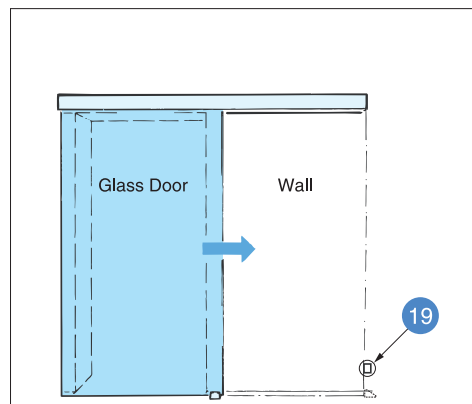


Item No.	LM-80G
Door Width	700 ~1200 mm (27-9/16" ~47-1/4")
Door Thickness	8~12 mm
Door Weight	30 ~80kg/Door (66 ~ 176 lbs/door)
Door Travel	Max. 1100 mm (in case of door width 1200 mm) Max. 43-5/16" (in case of door width 47-1/4")

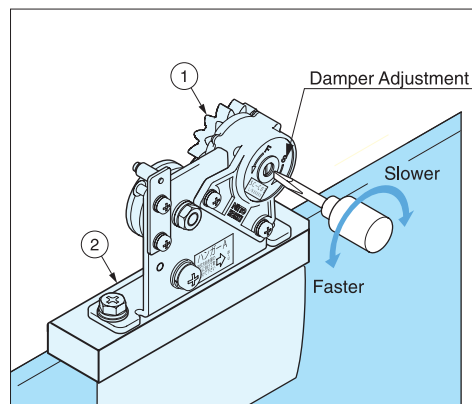
- Self closing sliding door system – no electricity required
- Equipped with damper for smooth and soft closing, eliminating slamming.
- No-pre-drilled holes on glass needed for installation.
- Door catch included to hold door in fully open position.



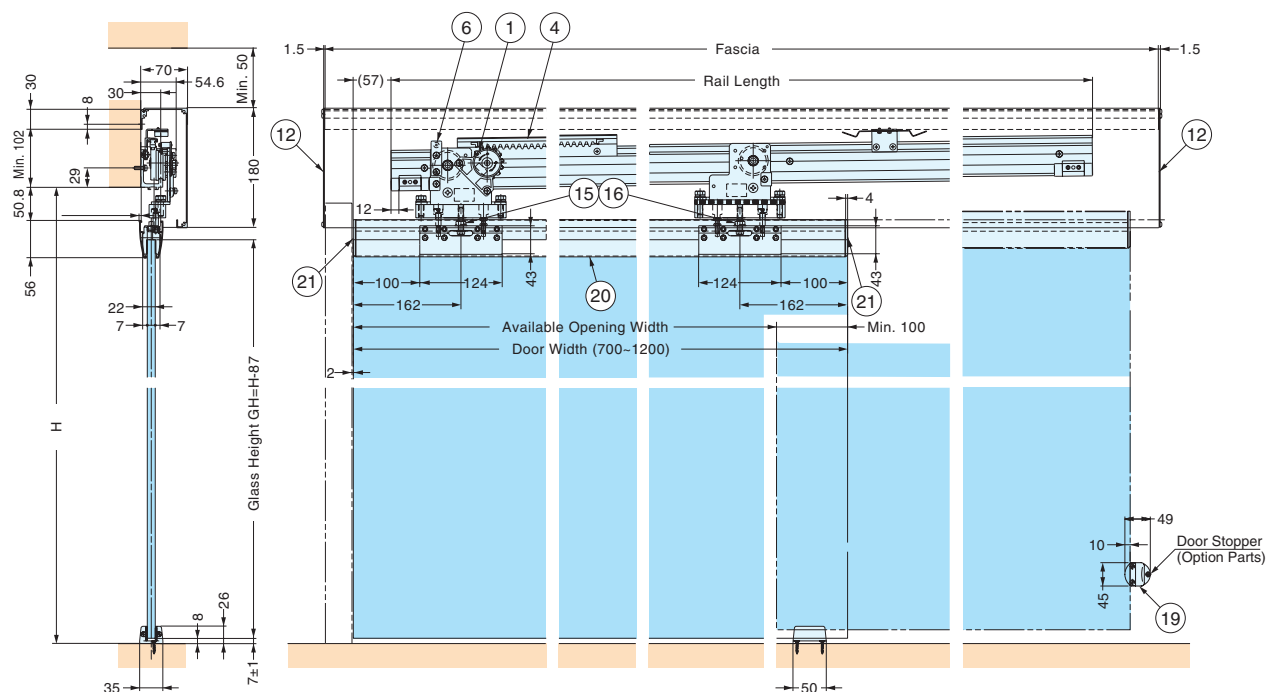
■ Door Stopper



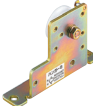
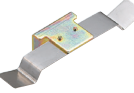
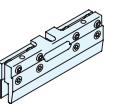
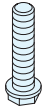
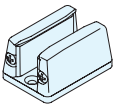
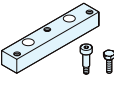
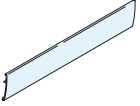
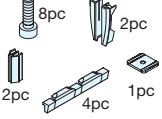
■ Speed Adjustment



Closing speed adjustable by turning
adjustment screw on damper.



Part Details

No.	①	②	③	④	⑤	⑥	⑦
Name	Damper	Roller A	Roller B	Gear Rack	Spring	Stopper Roller	Door Stopper
							
Qty. / Set	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc	2 pcs
No.	⑧	⑨	⑩	⑪	⑫	⑬	⑭
Name	Stopper Plate	Height Adjustment Spacer	Roller Rail (2200mm)	Fascia (2350mm)	Side Cover	Mounting Plate (For Fascia) (2350mm)	Glass Bracket
							
Qty. / Set	2 pcs	t1:15 pcs, t0.5:1 pc	1 pc	1 pc	1 pc ea. (Left & Right)	1 pc	2 pcs
No.	⑮	⑯	⑰	⑱	⑲	⑳	㉑
Name	Hanger Bolt	Nut	Bottom Guide	Bracket	Door Stopper	Bracket cover	End Cap Set
							
Qty. / Set	2 pcs	2 pcs	1 pc	2 pcs	1 pc	1 pc	1 set

SELF AND SOFT-CLOSE FOLDING DOOR SYSTEM



SFD

SLIDING & FOLDING
DOOR HARDWARE

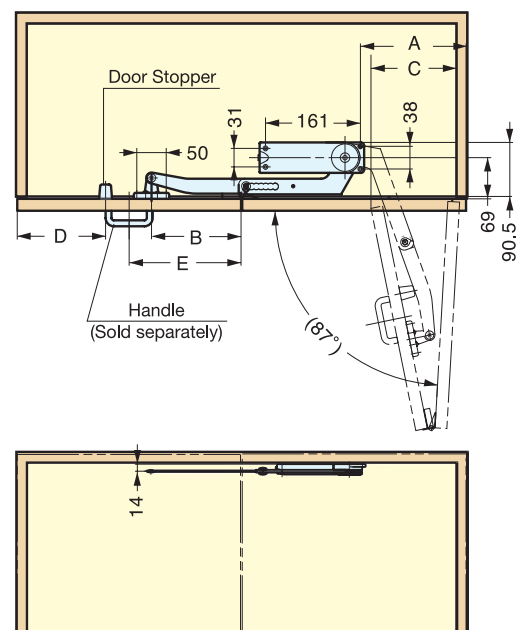
SELF AND SOFT-CLOSE FOLDING DOOR SYSTEM



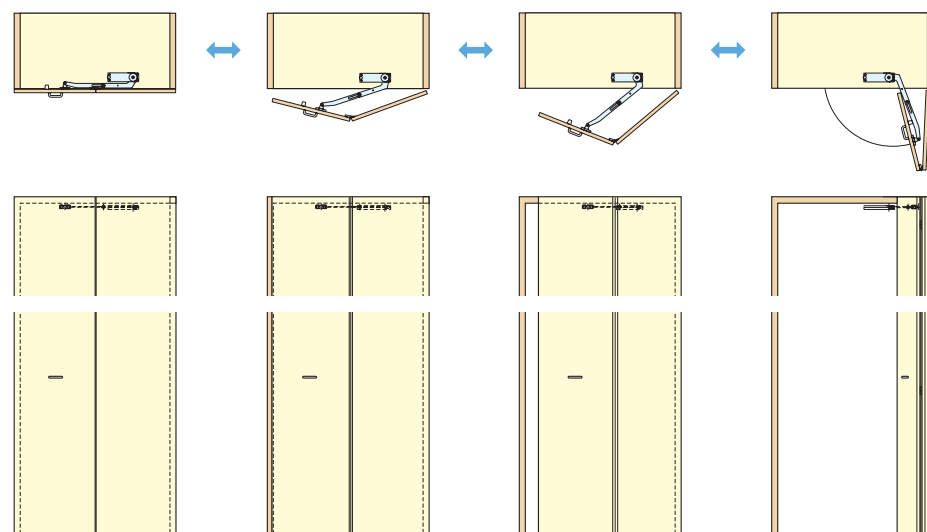
- Unique soft close mechanism ideal for cabinets.
- Dampening mechanism provides smooth and soft close movement.
- No guide rail on top and bottom.
- Arm length adjustable to fit different door width.
- Easy Installation.

Item No.	Door Height	Door Width	Door Weight	Door Thickness
SFD-3L-R (Right Open)	Max. 2600 mm (102-3/8")	380~460 mm (14-61/64"~18-7/64") / Door	Max. 8kg (17.6 lbs) / Door	20 mm (3/4")
SFD-3L-L (Left Open)				

Door Width	Applicable Door Width	Arm Adjustment point	A	B	C	D	E
380	375~385	1	179.5	152	(145)	(150)	(190)
390	385~395	2	184.5	155	(150)	(155)	(195)
400	395~405	3	189.5	158	(154)	(160)	(200)
410	405~415	4	194.5	161	(158)	(165)	(205)
420	415~425	5	199.5	164	(162)	(170)	(210)
430	425~435	6	204.5	167	(168)	(170)	(215)
440	435~445	7	209.5	170	(172)	(175)	(220)
450	445~455	8	214.5	173	(177)	(180)	(225)
460	455~465	9	219.5	176	(181)	(180)	(230)



Door Opening / Closing

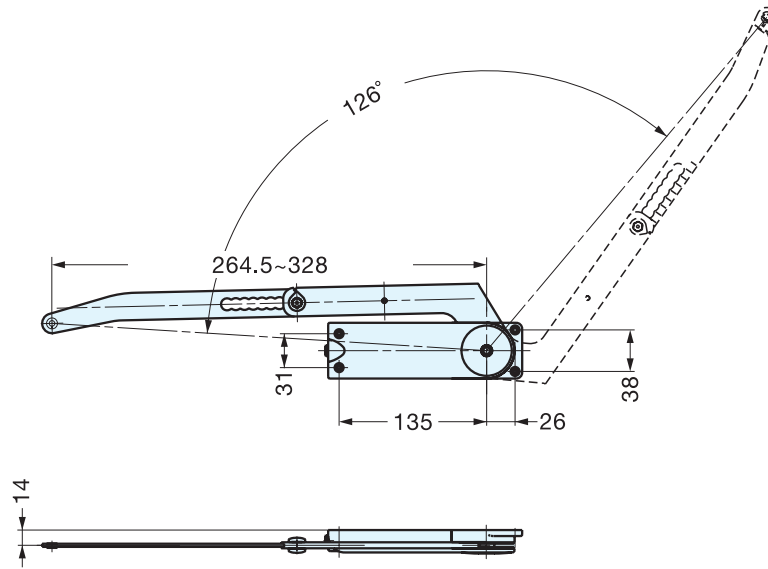


Door Height	Required Quantity	
	Center Hinge ②	Concealed Hinge ④ Plate ③
~500 mm	2	2
500~1000 mm	2	3
1000~1500 mm	3	4
1500~2000 mm	4	5
2000~2600 mm	4	6

Part Details

No.	Item No.	Part Name		Dimensions	Quantity	Description
①	SFD-3L-R/L (Right Open is shown)	Soft Closing Door Mechanism		Dimension 1 (P.534)	1 pc	Reference 1 (P.534)
②	CH-75/NI	Center Hinge		Dimension 2 (P.534)	Necessary quantity (see table)	Reference 2 (P.534)
	CH-75/GB					
③	230-P4W-32T	Mounting Plate		Dimension 3 (P.534)	Necessary quantity (see table)	Reference 3 (P.534)
④	H230-26/16T	Overlay Door Concealed Hinge		Dimension 4 (P.535)	Necessary quantity (see table)	Reference 4 (P.535)
	H230-26/0T	Inset Door Concealed Hinge		Dimension 5 (P.535)		Reference 5 (P.535)

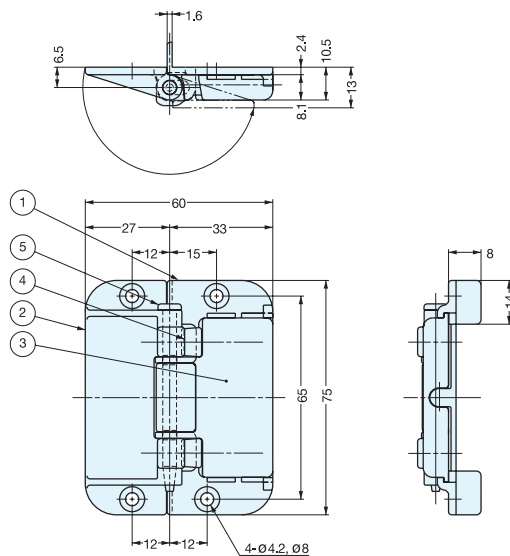
Dimension 1



Reference 1

Item No.	Material	Finish / Color
SFD-3L-R/L	Steel, ABS	Nickel, Light Grey

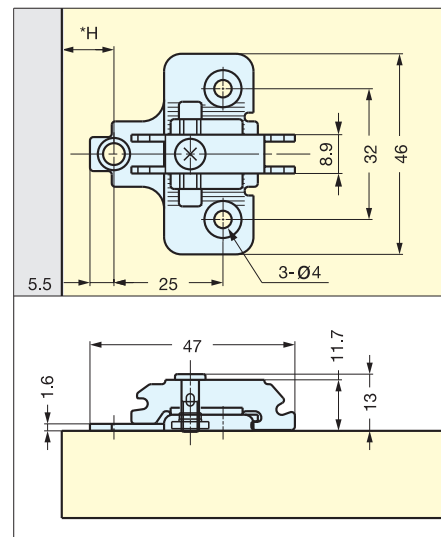
Dimension 2



Reference 2

No.	Part Name	Material	Finish / Color
①	Body A	Zinc Alloy	Nickel (NI)
②	Body B	Zinc Alloy	Bronze (GB)
③	Catch	Polyamide	Brown
④	Latch	Polyamide	Black
⑤	Shaft	Steel	Black

Dimension 3

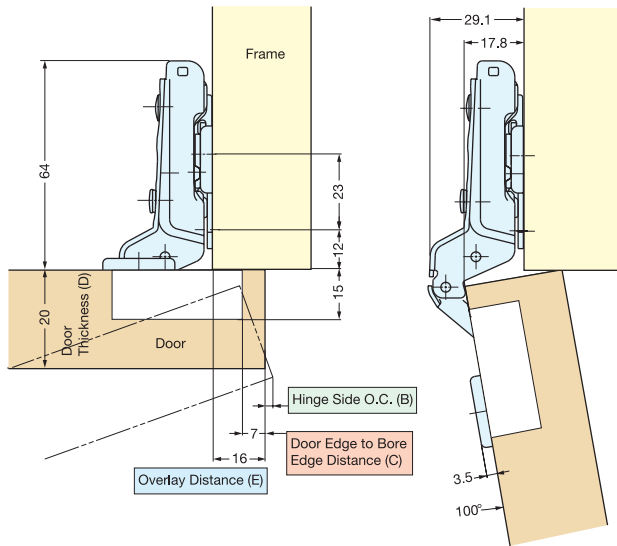


*Overlay use: H=12mm
Inset use: H=Door Thickness+17mm

Reference 3

Item No.	Material	Finish / Color
230-P4W-32T	Steel	Nickel

Dimension 4



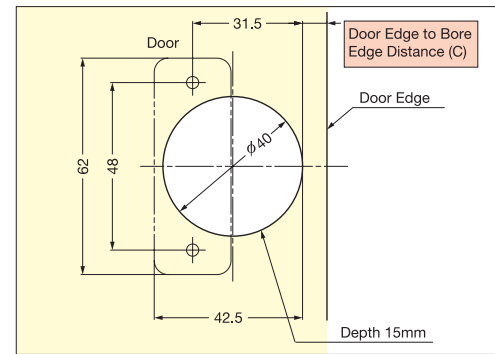
Reference 4

Item No.	Material		Finish / Color		
H230-26/16T	Steel		Nickel		
Door Edge to Bore Edge Distance (C)	3	4	5	6	7
Overlay Distance (E)	12	13	14	15	16

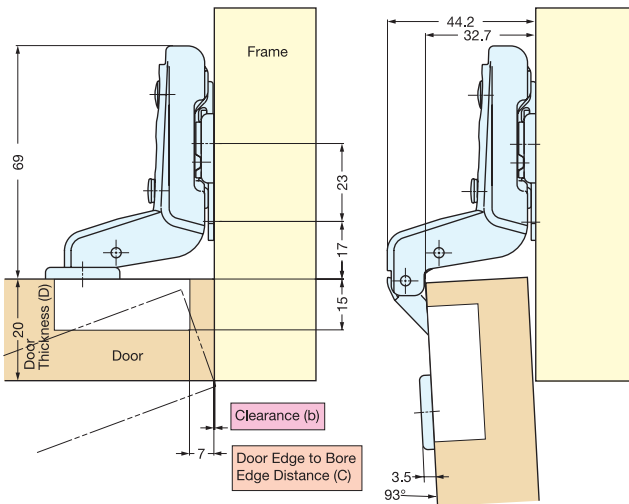
Door Thickness (D)	Door Edge to Bore Edge Distance (C)				
	3	4	5	6	7
18	0.2	0.2	0.2	0.2	0.2
20	0.3	0.3	0.3	0.3	0.3

Hinge Side O.C. (B)

Bore Dimension



Dimension 5



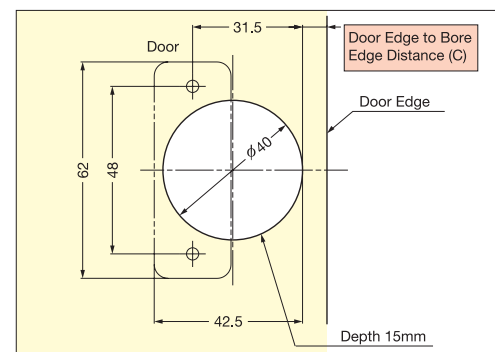
Reference 5

Item No.	Material		Finish / Color		
H230-26/0T	Zinc Alloy, Steel		Nickel		
Door Edge to Bore Edge Distance (C)	3	4	5	6	7
Clearance (b)	4.3	3.3	2.3	1.3	0.3

Door Thickness (D)	Door Edge to Bore Edge Distance (C)				
	3	4	5	6	7
18	0	0	0	0	0
20	0	0	0	0	0

Hinge Side O.C. (B)

Bore Dimension



FOLDING DOOR SYSTEM

FD30-F

SLIDING & FOLDING
DOOR HARDWARE

FOLDING DOOR SYSTEM



Item No.	FD30UKP	FD30URP	FD30UMP	FD30UP
Application	Standard Folding (One pivot fixed)	Slidable (for partition use)	Slidable (for cabinet use)	Swing Door
Door Width	Max. 450 mm (17-3/4")			
Door Height	Max. 2400 mm (94-1/2")			
Door Thickness	Min. 30 mm (1-3/16")			
Door Weight	Max. 15kg (33 lbs) per door panel			

Parts Set (Per 2 doors)

Necessary Parts

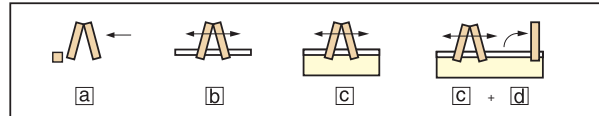
Please refer to "Qty [a] - [d]" for parts included in each set.

	Item No.	Description
[a]	FD30UKP	Pivoted Folding, Center Hinge (Surface Mount)
[b]	FD30URP	Slidable Folding, Center Hinge (Door Edge Recessed Mount)
[c]	FD30UMP	Slidable Folding, Center Hinge (Back Side Recessed Mount)
[d]	FD30UP	Pivoted Swing open (Single Panel)

Parts Included

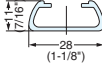
No.	Qty				Part Name / Item No.	Description
	a	b	c	d		
1	2 pcs	2 pcs	-	1 pc	Upper Roller (Recessed Type) FD30-WRH	- Material Zinc Alloy / Polyacetal - Finish Chromate / Light Brown
2	-	-	2 pcs	-	Upper Roller (Side-Mount) FD30-WRU	- Material Steel / Polyacetal - Finish Chromate / Brown
3	1 pc	-	-	-	Stopper Block FD30-HSB	- Material Polyacetal - Finish Dark Brown
4	1 pc	-	-	1 pc	Bottom Pin FD30-FBP	- Material Steel / Polyacetal - Finish Chromate / White
5	-	2 pcs	2 pcs	-	Guide Pin FD30-FGR	- Material Steel / Polyacetal - Finish Chromate / White
6	1 pc	1 pc	1 pc	1 pc	Pin Insert Jig FD30-FKPIJ	-
7	1 pc	-	-	1 pc	Spanner Wrench FD30-FSP	-
8	-	-	-	1 pc	Top Bracket FD30-FSK	- Material Steel - Finish Chromate

Configuration



No.	Qty				Part Name / Item No.	Description
	a	b	c	d		
9	1 pc	-	-	-	Pivot Bracket (Bottom) FD30-FPU	- Material Steel - Finish Chromate
10	1 pc	-	-	1 pc	Fixing Plate FD30-FKK	- Material Steel - Finish Chromate
11	-	1 pc	1 pc	-	Upper Stopper FD30-FTST	- Material Steel / Polyacetal - Finish Chromate / Brown
12	-	1 pc	1 pc	-	Bottom Stopper FD30-FBKS	- Material Steel / Polyacetal - Finish Chromate / Brown
13	-	-	-	1 pc	Magnetic Catch FD30-FMC	- Material Steel / ABS Plastic - Finish Chromate / Brown
14	3 pcs	-	-	-	Center Hinge (Surface Mount, Angle adjustable) FD30-CHM	- Material Steel - Finish Black
15	-	-	3 pcs	-	Center Hinge (Recess Mount, Angle adjustable, W/Detent Stop) FD30-CHH	- Material Steel - Finish Black
16	-	3 pcs	-	-	Center Hinge (Door Edge Mount, Angle adjustable, W/Detent Stop) FD30-CHK	- Material Zinc Alloy - Finish Dark Brown

Upper Track		Necessary Parts			
	Mounting	Length	Item No.	Dimensions	Material / Finish
17	Surface Mount	910 mm	FD30-TRM910SIL		- Material Aluminum - Finish Anodized Silver
18		1820 mm	FD30-TRM1820SIL		
19		2730 mm	FD30-TRM2730SIL		
20		3640 mm	FD30-TRM3640SIL		
21	Recessed Mount	910 mm	FD30-TRH910SIL		- Material Aluminum - Finish Anodized Silver
22		1820 mm	FD30-TRH1820SIL		
23		2730 mm	FD30-TRH2730SIL		
24		3640 mm	FD30-TRH3640SIL		

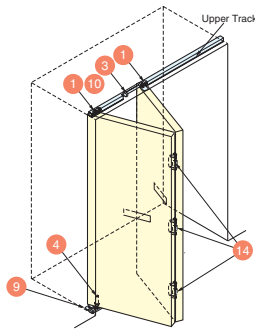
Bottom Guide Track			Necessary Parts		
*Must be ordered when using b c d					
	Mounting	Length	Item No.	Dimensions	Material / Finish
25	Floor Surface Mount	910 mm	FD30-FBRM910SIL		- Material Aluminum - Finish Anodized Silver
26		1820 mm	FD30-FBRM1820SIL		
27		2730 mm	FD30-FBRM2730SIL		
28		3640 mm	FD30-FBRM3640SIL		
29	Floor Recessed Mount	910 mm	FD30-FBRH910SIL		- Material Aluminum - Finish Anodized Silver
30		1820 mm	FD30-FBRH1820SIL		
31		2730 mm	FD30-FBRH2730SIL		
32		3640 mm	FD30-FBRH3640SIL		

Optional Parts

No.	Item No.	Part Name	Installation	Description
33	FD30-WRH-CP	End Cap (For Rollers)		- Material Polypropylene - Finish Brown *For roller 1
34	FD30-FMF	Door End Holder (Magnetic)		- Material Polycarbonate Neodymium - Finish Dark Brown

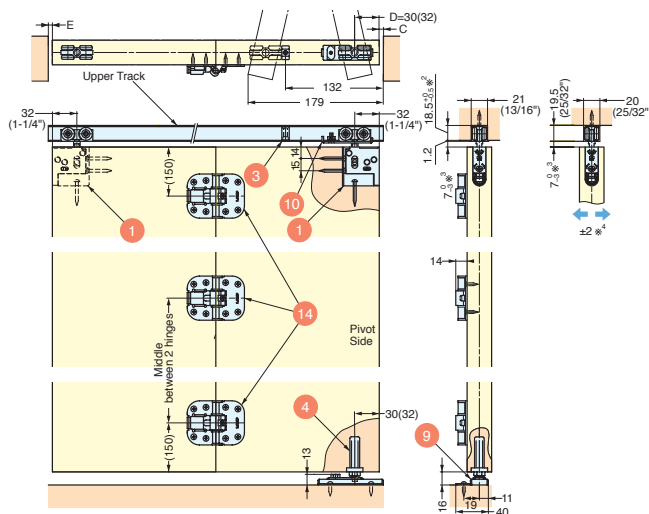
No.	Item No.	Part Name	Installation	Description
35	FD30-FTF	Door End Holder (Pin)		- Material Polyamide / Steel - Finish White / Chromate
36	FD30-FHL	Latch Unit		- Material Polyacetal - Finish Dark Brown *To be used when ordering ☐ ☐

a Pivoted Folding, Center Hinge - Surface Mount



- Center Hinge has angle adjustment, detent stop feature and mounted on surface at back side of door for easy installation.

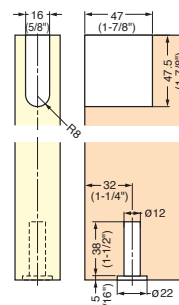
Installation Example (In case of 1-9/16" thick, 17-3/4" wide door)

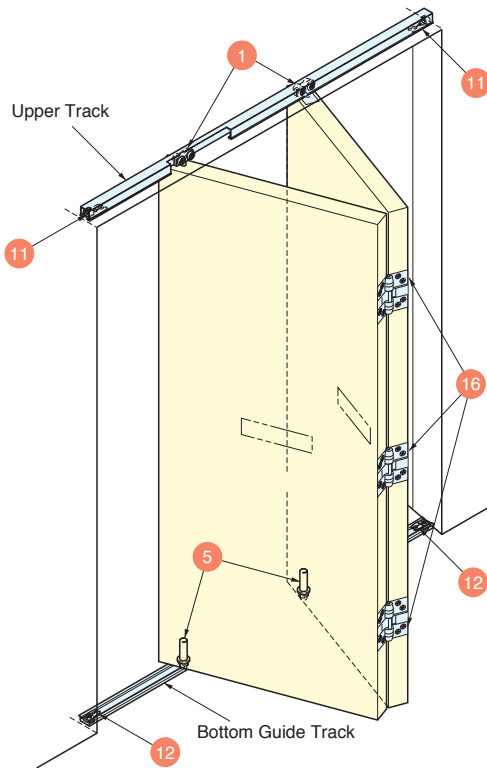


Gap - Door and Frame

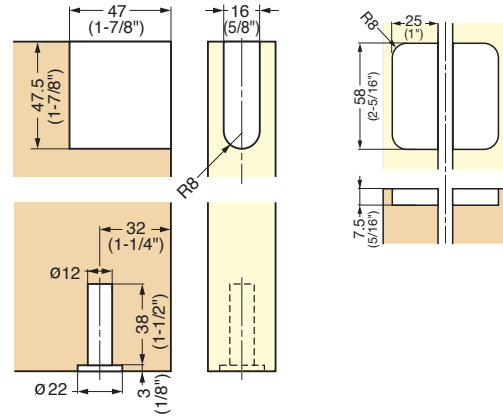
Door Thickness	C=Gap	Gap total : C + E			
		Width 300	Width 350	Width 400	Width 450
30	4.0	7.5	7.0	6.7	6.4
35	5.2	9.5	8.9	8.5	8.2
40	6.5	11.7	11.0	10.5	10.1

Door Preparation



b Slidable Folding, Center Hinge – Door Edge Recessed Mount


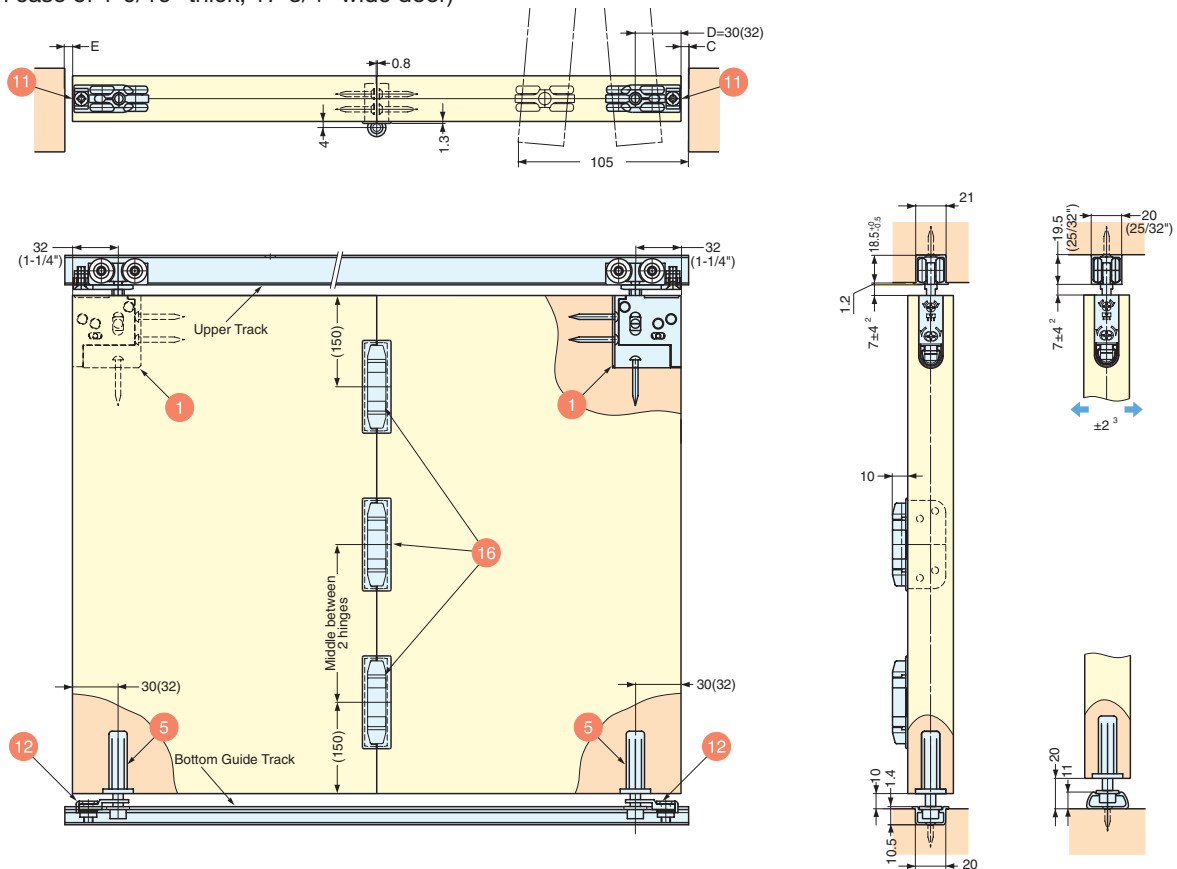
- Center Hinge has angle adjustment, detent stop feature and mounted in recess at door edge which is invisible from both side.
- Detent center hinge allows the folding door to slide freely for easy access and to maximize the space.

■ Door Preparation

■ Gap - Door and Frame

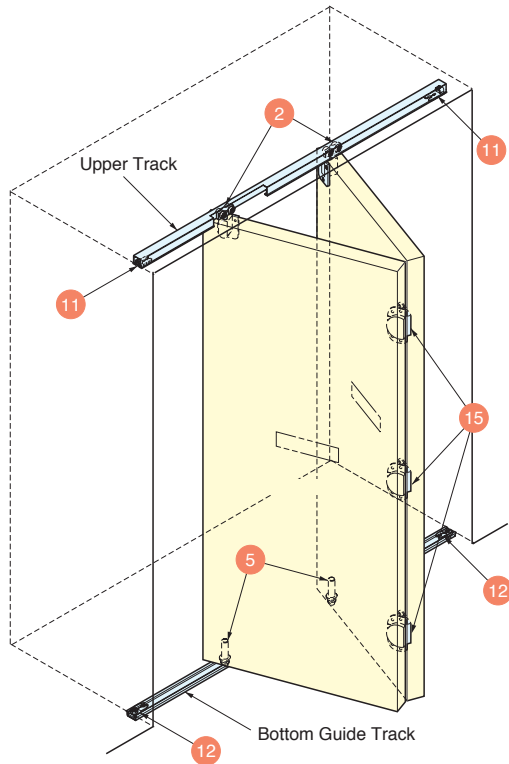
Door Thickness	C=Gap	Gap total : C + E			
		Width 300	Width 350	Width 400	Width 450
30	4.0	7.5	7.0	6.7	6.4
35	5.2	9.5	8.9	8.5	8.2
40	6.5	11.7	11.0	10.5	10.1

■ Installation Example

(In case of 1-9/16" thick, 17-3/4" wide door)



c Slidable Folding, Center Hinge – Back Side Recessed Mount



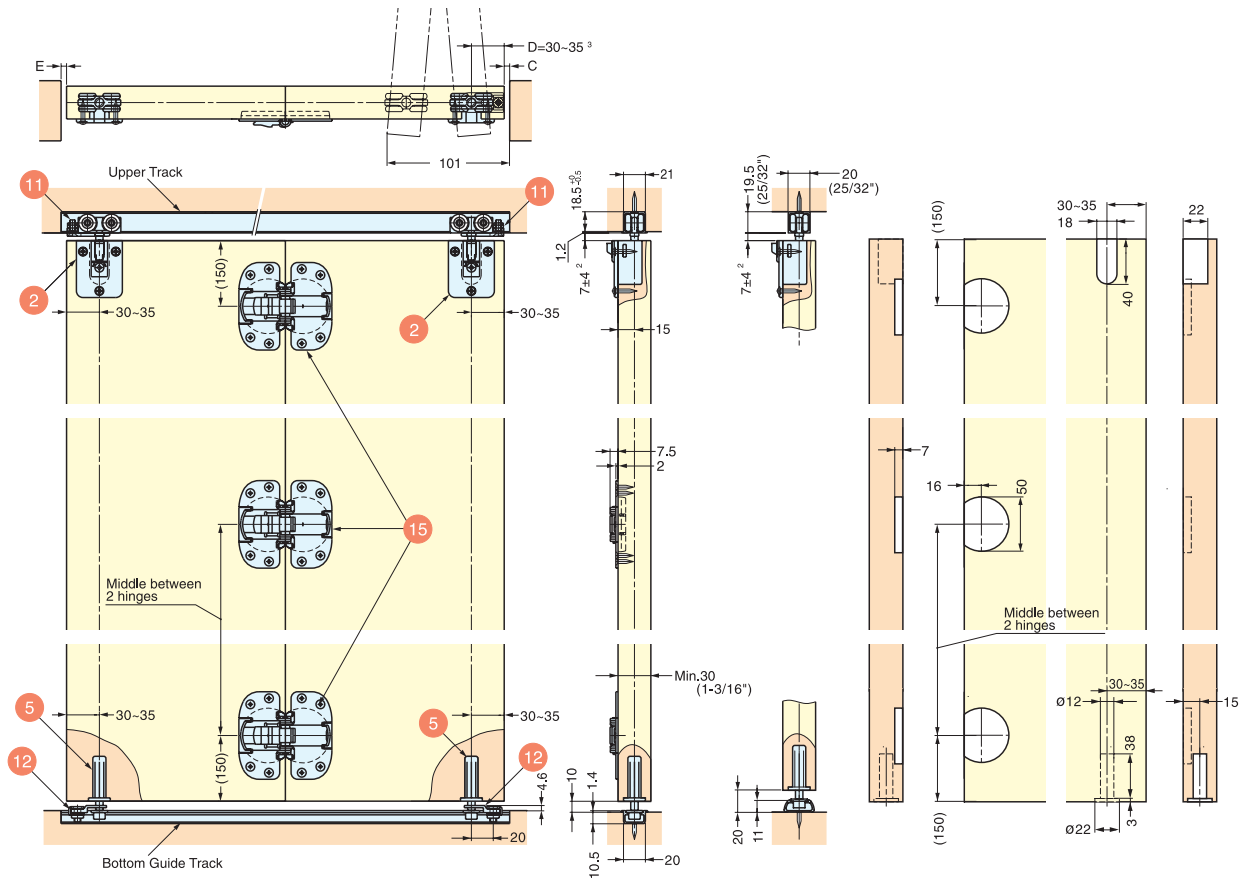
- Center Hinge has angle adjustment, detent stop feature and mounted in recess at back side of door.
- Detent center hinge allows the folding door to slide freely for easy access and to maximize the space.

■ Gap - Door and Frame

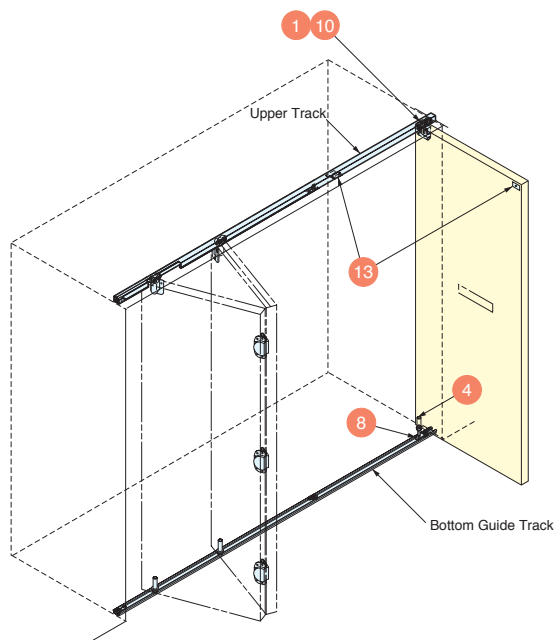
Door Thickness	C=Gap	Gap total : C + E			
		Width 300	Width 350	Width 400	Width 450
30	3.6	6.0	5.7	5.5	5.3
35	5.8	8.8	8.4	8.1	7.9
40	12.0	12.0	11.6	11.2	11.0

■ Installation Example

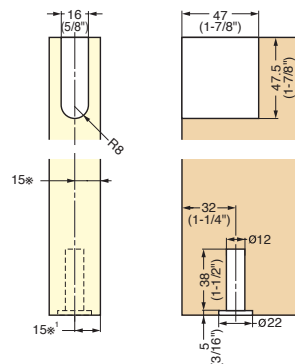
(In case of 1-9/16" thick, 17-3/4" wide door)



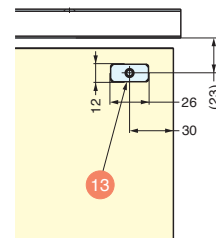
d Pivoted Swing open (Single Panel)



■ Door Preparation

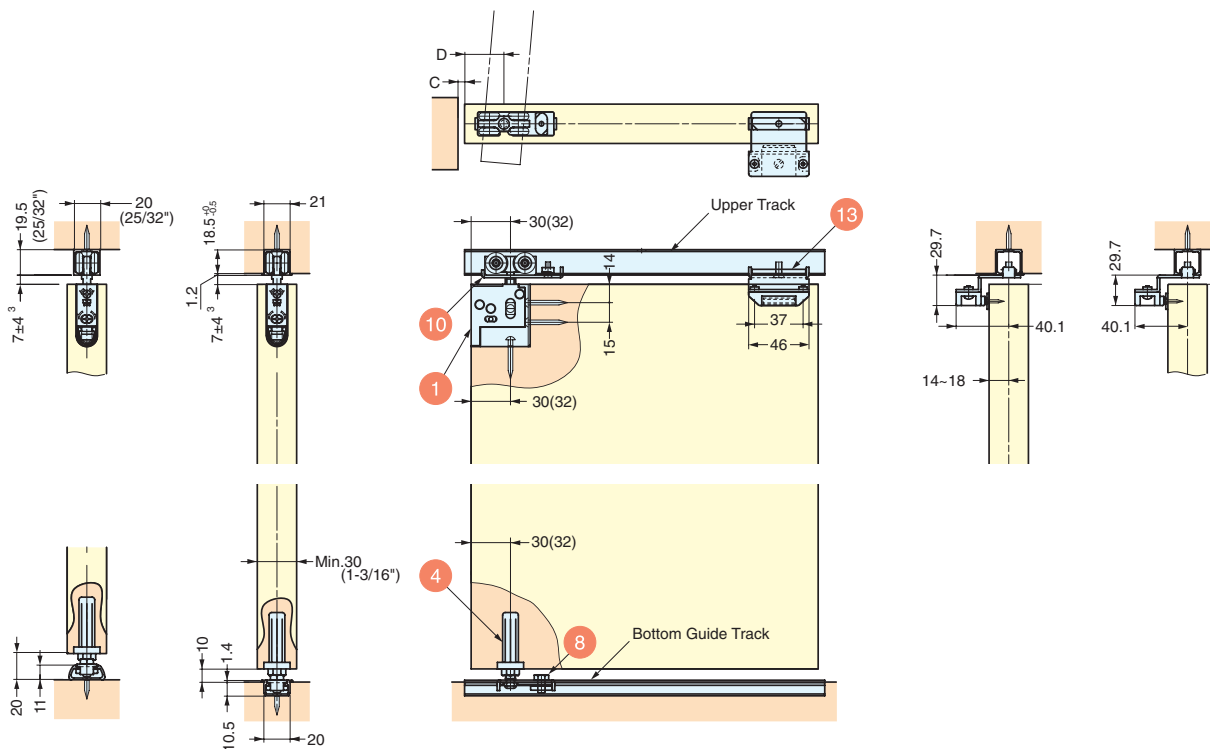


■ Preparation for counter plate

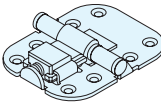
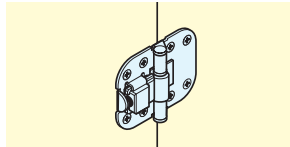
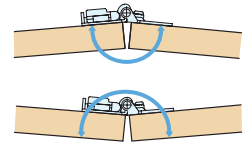
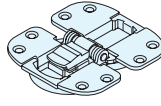
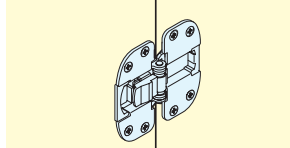
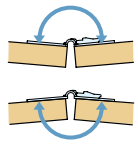
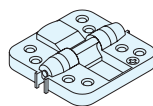
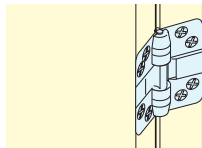
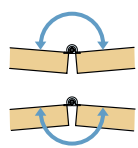


■ Gap - Door and Frame

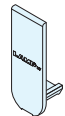
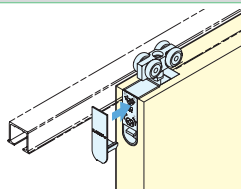
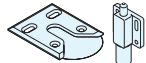
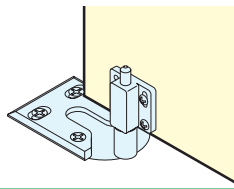
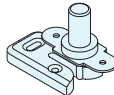
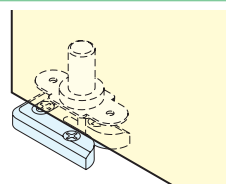
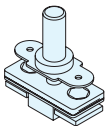
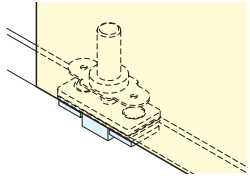
Door Thickness	C=Gap (In Case D = 30)
30	4.0
35	5.2
40	6.5



Center Hinge - Details

No.	Item No.	Installation	Angle Adjustment	Detent
14	 FD30-CHM	Surface Mount 		37° angle
15	 FD30-CHH	Back Side Recessed Mount 		50° angle
16	 FD30-CHK	Door Edge Recessed Mount 		47° angle

Optional Parts - Details

No.	Part Name / Item No.	Installation	Specification	Description
33	End Cap (For Rollers)  FD30-WRH-CP		Cover Cap for Upper Roller 1	- Material Polypropylene - Finish Brown
34	Door End Holder (Magnetic)  FD30-FMF		Prevents door racking when door is closed, especially in double doors	- Material Polycarbonate Neodymium - Finish Dark Brown
35	Door End Holder (Pin)  FD30-FTF		Prevents door racking when door is closed, especially in double doors	- Material Polyamide / Steel - Finish White / Chromate
36	Latch Unit  FD30-FHL		To hold the door close in [d] configuration, to be installed on bottom guide track	- Material Polypropylene - Finish Brown



CABINET DOOR HARDWARE

MULTIPLE MOTION DOOR SYSTEM
LATERAL OPENING DOOR SYSTEM
SPECIALTY DOOR HARDWARE

CABINET DOOR HARDWARE

MULTIPLE MOTION DOOR SYSTEM



Multiple Motion Door System
MultiMo **FLAT**™ (For Glass Doors)
P.546~547

MFS-G



Multiple Motion Door System
MultiMo **FLAT**™ (For Wooden Doors)
P.548~549

MFS-W

MONOFLAT LIN-X HINGE / LATERAL OPEN



MonoFlat **LIN-X** hinge™
P.552~553
Max. Door Weight 37.4 lbs

LIN-X450



MonoFlat **LIN-X** hinge™
P.554~555
Max. Door Weight 52.8 lbs

LIN-X600

MONOFLAT FAD / LATERAL OPEN



MonoFlat FAD™

P.557

Max. Door Weight 11 lbs

FAD-5



MonoFlat FAD™

P.558~559

Max. Door Weight 44 lbs

FAD-20



MonoFlat FAD™

P.560~561

Max. Door Weight 77 lbs

FAD-44/44L

SPECIALITY DOOR HARDWARE



P.562~563

XL-GC SERIES

Glass Showcase Hardware



P.564~565

180° Rotating Cabinet System

RB-600



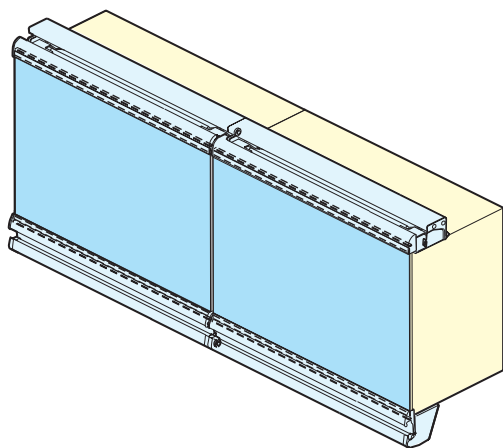
P.566~567

Shutter Door System

DIS-M, H



MULTIPLE MOTION DOOR SYSTEM (For Glass Doors)

MFS-G


Door Width	295 mm, 445 mm, 595 mm or 895 mm (11-5/8", 17-1/2", 23-7/16" or 35-1/4")
Door Height	300-900 mm (11-13/16"~35-7/16")
Door Thickness	5 mm (13/64")
Door Weight	1.3~6.7 kg (2.9~14.7 lbs) / Glass

- **Flush Door Surface**
All doors will be "flush" against others when in closed position. Provides sleek appearance compared to ordinary off-set sliding doors.
- **Interchangeable Door Position**
Opened doors can slide and close at any unoccupied position.
- **Multiple Doors in One Line**
Multiple doors can be added by connecting multiple sliding units.
- **Soft & Smooth Movement**
Equipped with damper for soft and smooth closing movement.
- **Minimal Hardware Space**
Ideal for shallow cabinets, hardware requires only 100mm (approx. 4") of depth.

*Recommended using on 3 or more doors for interchangeable door feature.

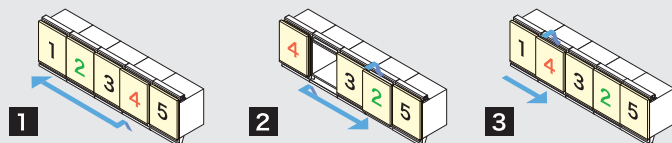
*Maximum door height is twice of door width.

*Please see page 4 for wooden door version.
(Cannot be used together with wooden version on one cabinet.)

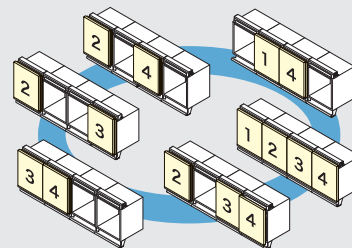
*Tempered glass recommended.

*For glass door assembly, Silicon caulk or double-sided tape (3M VHB recommended) is required. (Not included.)

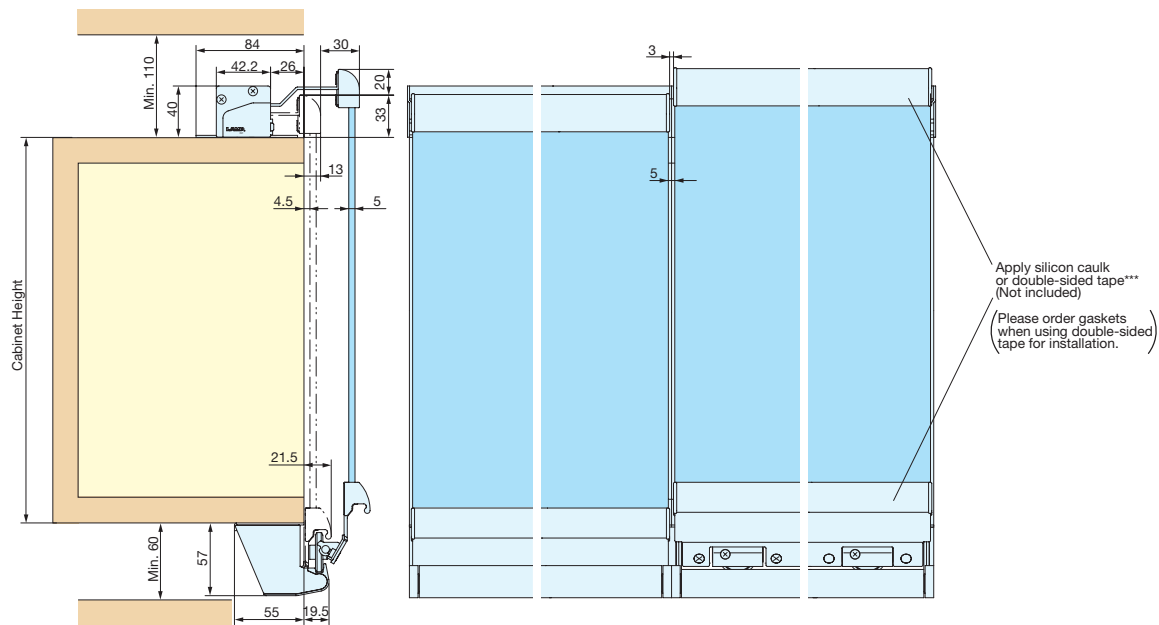
Interchangeable Door Position (3 doors or more)



Door Opening Example

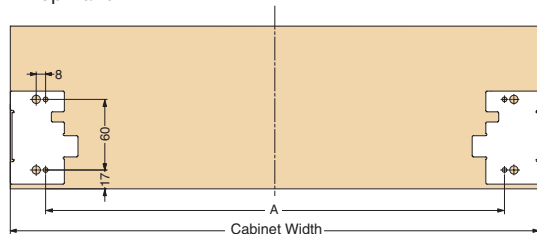


Provides various opening patterns. By adding more doors, the more opening patterns will be possible.



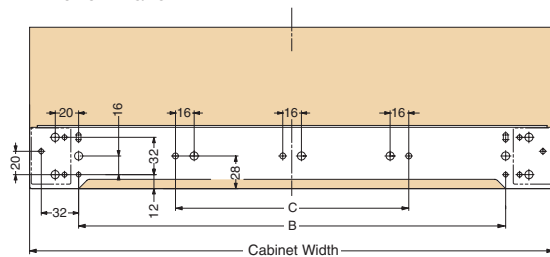
Glass Height = Cabinet Height + 18.5mm

•Top Panel



Cabinet Width	A
300	240
450	390
600	540
900	840

•Bottom Panel



Cabinet Width	B	C
300	216	-
450	366	-
600	516	200
900	816	300

Item No.	Each Cabinet Width	Glass Width	Door Weight / Door
MFS-G300/S2	300 mm (11-13/16")	295 mm (11-5/8")	1.5~2.4 kg (3.3~5.3 lbs)
MFS-G450/S2	450 mm (17-23/32")	445 mm (17-1/2")	1.3~2.2 kg (2.9~4.8 lbs)
MFS-G450/S3	450 mm (17-23/32")	445 mm (17-1/2")	2.3~3.2 kg (5.1~7.0 lbs)
MFS-G600/S3	600 mm (23-5/8")	595 mm (23-7/16")	2.1~3.0 kg (4.6~6.6 lbs)
MFS-G600/S4	600 mm (23-5/8")	595 mm (23-7/16")	3.1~4.0 kg (6.8~8.8 lbs)
MFS-G600/S5	600 mm (23-5/8")	595 mm (23-7/16")	4.1~5.0 kg (9.0~11.0 lbs)
**MFS-G900/S5	900 mm (35-7/16")	895 mm (35-1/4")	3.8~4.7 kg (8.4~10.3 lbs)
**MFS-G900/S6	900 mm (35-7/16")	895 mm (35-1/4")	4.8~5.7 kg (10.6~12.5 lbs)
**MFS-G900/S7	900 mm (35-7/16")	895 mm (35-1/4")	5.8~6.7 kg (12.8~14.7 lbs)

MFS-G Ordering Info:

Designed for cabinet with minimum 2 doors.
Each set contains hardware for one door only.

To order, please reference the total cabinet width, the number of doors that will be in the cabinet, and the set required (MFS-G_ _ _ /S_), for example:

1 cabinet 94-1/2" wide w/ 4 doors
(23-7/16" ea, 10lbs./door),
order as MFS-G600/S5 qty 4 each MFS-ED qty 1 pair

***Please order gaskets when using double-sided tape for installation.

Item No.	Description
MFS-ED	End Cap Set*

*1 pair of MFS-ED required per cabinet, not per door
**Special order item

Optional Gasket

Item No.	Door Width
MFS-PK300	295 mm (11-5/8")
MFS-PK450	445 mm (17-1/2")
MFS-PK600	595 mm (23-7/16")
**MFS-PK900	895 mm (35-1/4")

*1 set of gasket required per door, when using double sided-tape for door assembly.



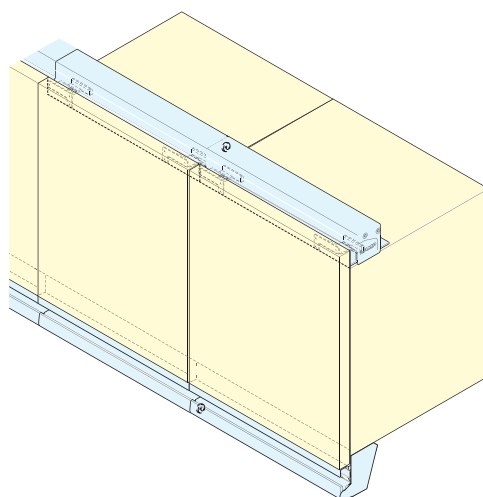
Multiple Motion Door System

MultiMo FLAT®

MULTIPLE MOTION DOOR SYSTEM (For Wooden Doors)



MFS-W



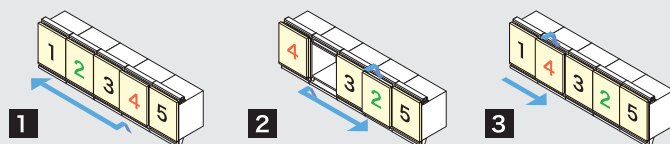
Door Width	297 mm, 447 mm, 597 mm or 897 mm (11-11/16", 17-5/8", 23-1/2" or 35-5/16")
Door Height	300~900 mm (11-13/16"~35-7/16")
Door Thickness	15~23 mm (19/32"~29/32")
Door Weight	1.4~6.8kg (3.1~14.9 lbs)/Door

- **Flush Door Surface**
All doors will be "flush" against others when in closed position. Provides sleek appearance compared to ordinary off-set sliding doors.
- **Interchangeable Door Position**
Opened doors can slide and close at any unoccupied position.
- **Multiple Doors in One Plane**
Multiple doors can be added by connecting multiple sliding units.
- **Soft & Smooth Movement**
Equipped with damper for soft and smooth closing movement.
- **Minimal Hardware Space**
Ideal for shallow cabinets, hardware requires only 100mm (approx. 4") of depth.

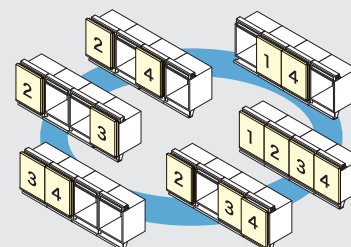
Technical Notes:

- *Recommended using on 3 or more doors for interchangeable door feature.
- *Minimum door height is twice of door width.
- *Please see page 6 for glass door version.
(Wooden door and glass door models are not compatible within the same cabinet.)

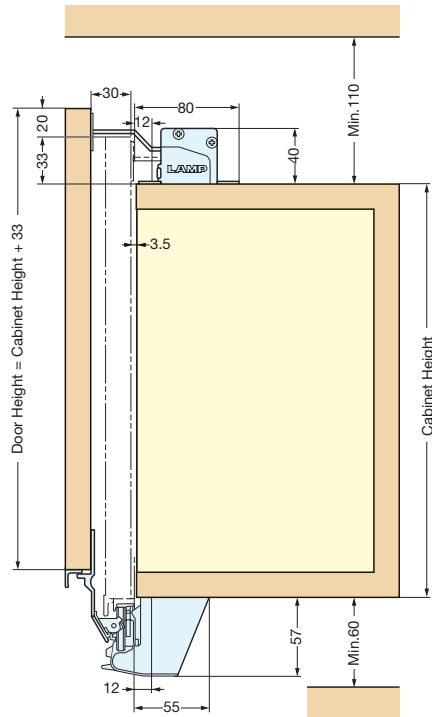
Interchangeable Door Position (3 doors or more)



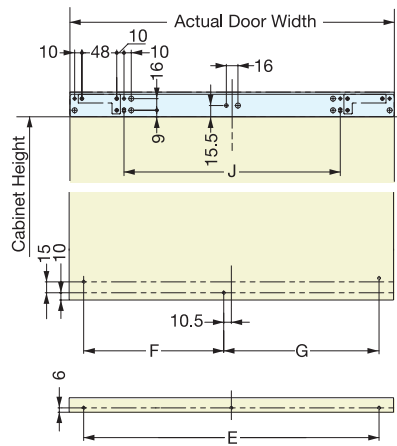
Door Opening Example



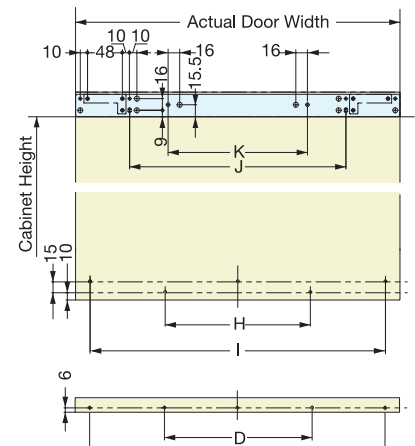
Provides various opening patterns. By adding more doors, the more opening patterns will be possible.



•Actual Door Width 297mm, 447mm

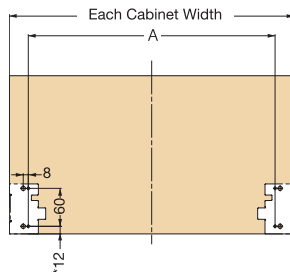


•Actual Door Width 597mm, 897mm



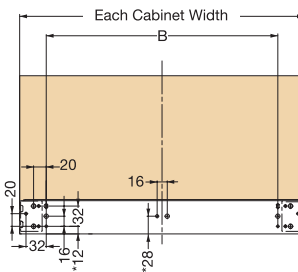
Actual Door Width	D	E	F	G	H	I	J	K
297	-	257	118	139	-	-	148	-
447	-	407	193	214	-	-	298	-
597	278.5	557	-	-	300	557	448	200
897	428.5	857	-	-	400	857	748	300

•Top Panel



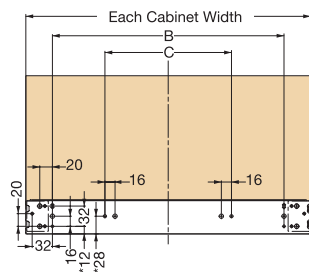
Each Cabinet Width	A
300	240
450	390
600	540
900	840

•Bottom Panel
(Each Cabinet Width 300mm, 450mm)



Each Cabinet Width	B
300	216
450	366

•Bottom Panel
(Each Cabinet Width 600mm, 900mm)



Each Cabinet Width	B	C
600	516	200
900	816	300

* When using gaskets on cabinet thicker than 3mm, subtract "gasket thickness - 3mm" from the * marked dimensions.

Item No.	Each Cabinet Width	Actual Door Width	Door Panel Weight
MFS-W300/S2	300 mm (11-13/16")	297 mm (11-11/16")	1.5~2.4 kg (3.3~5.28 lbs)
MFS-W450/S2	450 mm (17-23/32")	447 mm (17-5/8")	1.4~2.3 kg (3~5 lbs)
MFS-W450/S3	450 mm (17-23/32")	447 mm (17-5/8")	2.4~3.3 kg (5.28~7.26 lbs)
MFS-W600/S3	600 mm (23-5/8")	597 mm (23-1/2")	2.2~3.1 kg (4.48~6.82 lbs)
MFS-W600/S4	600 mm (23-5/8")	597 mm (23-1/2")	3.2~4.1 kg (7~9 lbs)
MFS-W600/S5	600 mm (23-5/8")	597 mm (23-1/2")	4.2~5.1 kg (9.24~11.2 lbs)
MFS-W900/S5	900 mm (35-7/16")	897 mm (35-5/16")	3.9~4.8 kg (8.58~10.5 lbs)
MFS-W900/S6	900 mm (35-7/16")	897 mm (35-5/16")	4.9~5.8 kg (10.7~12.7 lbs)
MFS-W900/S7	900 mm (35-7/16")	897 mm (35-5/16")	5.9~6.8 kg (12.9~14.9 lbs)

MFS-W Ordering Information:

Designed for cabinet with minimum 2 doors.
Each set contains hardware for one door only.
To order, please reference the total cabinet width, the number of doors that will be in the cabinet, and the set required (MFS-W___/S_), for example:
1 cabinet 94" wide w/ 4 doors (23 1/2" ea, 12lbs./door), order as MFS-W600/S5 qty 4 each MFS-ED qty 1 pair

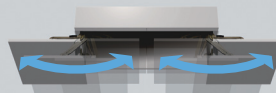
Item No.	Description
MFS-ED	End Cap Set*

*1 pair of MFS-ED required per cabinet, not per door



MonoFlat LIN-X hinge™

Stop in any position



Soft-closing



MONOFLAT LIN-X HINGE

LIN-X450 / LIN-X600

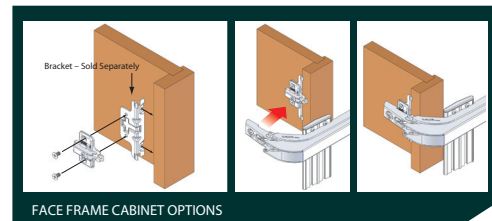
Item No.	LIN-X450	LIN-X600
Door Width	400~500 mm (15-3/4"~19-11/16")	550~650 mm (21-5/8"~25-9/16")
Door Height	600~2400 mm (23-5/8"~94-1/2")	
Door Thickness	15~24 mm (5/8"~15/16")	
Door Weight	*Max 17 kg (37.4 lbs)	*Max 24 kg (52.8 lbs)

*Max door weight will vary depending on number of hinges used.

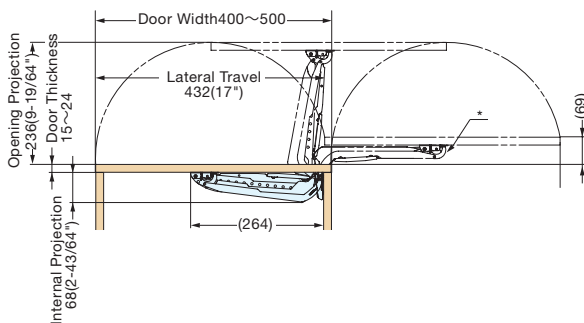
INSTALLATION



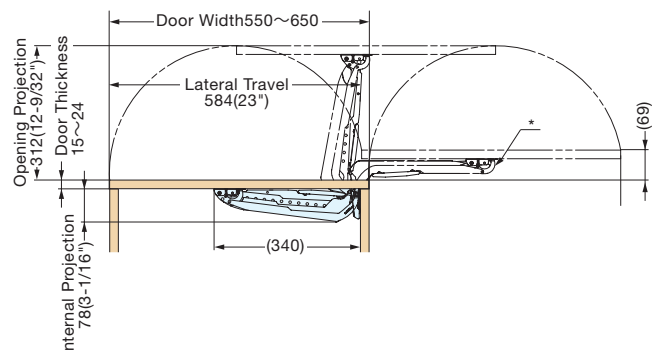
- **Lateral Swing Mechanism**
Allows doors to swing out laterally in a small radius, ideal for tight front space application.
 - **Full Access to Cabinet**
Door will not get in the way when fully opened providing full access to the cabinet.
 - **Free Swing & Soft-close**
 - **Easy Installation**
Designed for standard 32mm system mounting, with snap-on hinge.
 - **4-Way Adjustable**
3-way adjustable like concealed hinges and also with parallel adjustment.
 - **Various Applications**
Can be used in single or double door configuration. Ideal for cabinets in kitchen, bathroom, laundry room etc.
- *For overlay use.



■ LIN-X450



■ LIN-X600



■ Application

Kitchen Corner (Inside)



Close



Open

Kitchen Corner (Outside)



Kitchen



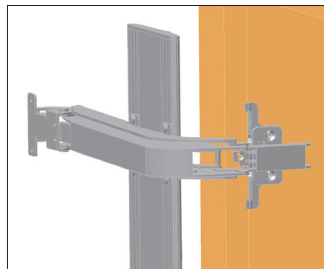
TV Base Cabinet



TV Cabinet



■ Face Frame Bracket

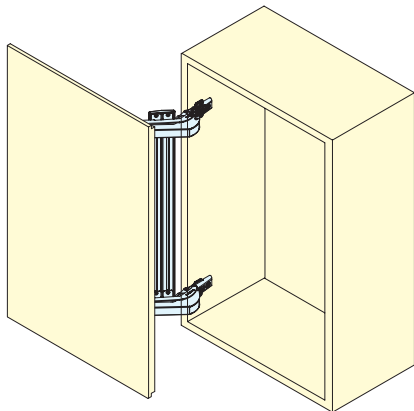


Item No.	Material
FFCB-HG-1	304 Stainless Steel

MONO FLAT LIN-X HINGE

LIN-X450

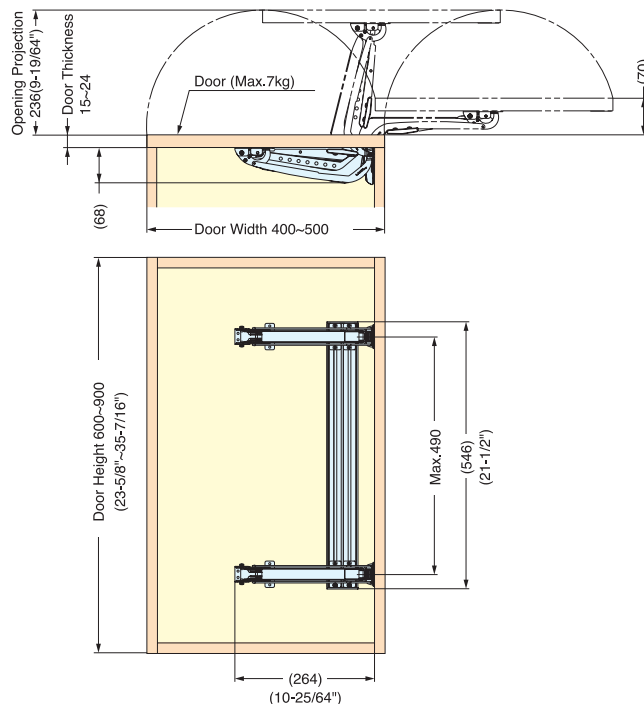
Standard Kit



Door Width	400~500 mm (15-3/4"~19-11/16")
Door Height	600~900 mm (23-5/8"~35-7/16")
Door Thickness	15 ~ 24 mm (5/8"~15/16")
Door Weight	Max. 7 kg (15.4 lbs) / Door

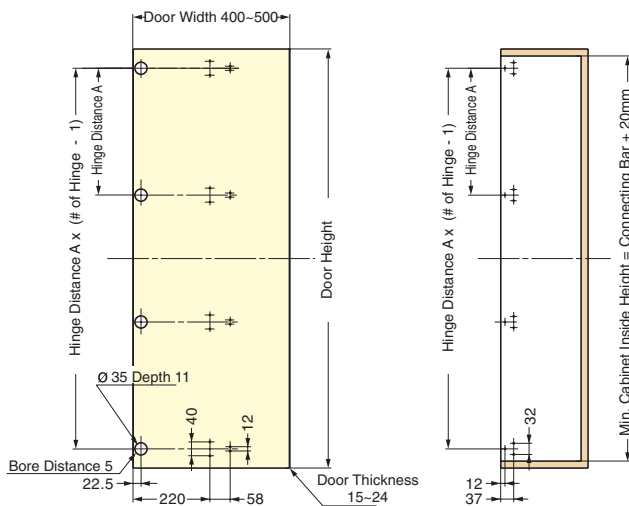
*Can be used on heavier / taller doors by adding hinge arms.
Please see below for details.

Item No.	Overlay	Material	Finish
LIN-X450	19 mm (3/4")	Steel/Aluminum	Nickel/Anodized
LIN-X450+5	14 mm (35/64")		



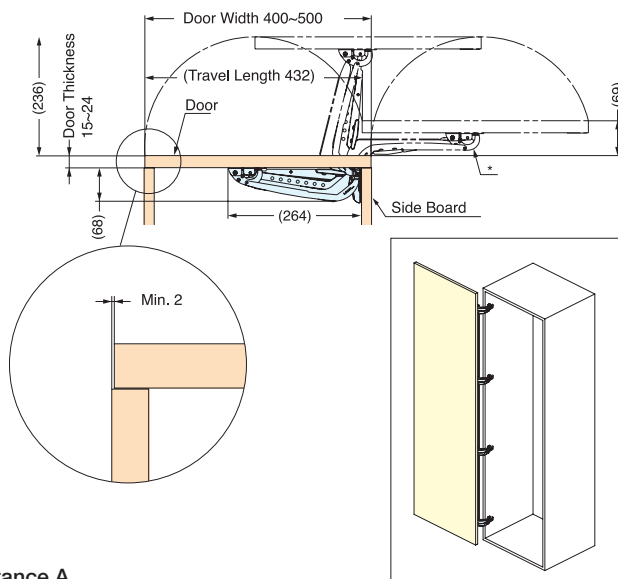
Individual Parts for Tall / Heavy Door

Door Preparation



Hinge in middle should be positioned at or equally distributed from center of door.

Cabinet Preparation



Hinge Distance A

Door Width	400~500 mm (15-3/4"~19-11/16")
Door Height	600~2400 mm (23-5/8"~94-1/2")
Door Thickness	15~24mm (5/8"~15/16")
Door Weight	Max. 17kg (37.4 lbs)

# of Hinges	Length of Connecting Bar (mm)					
	540	840	1140	1440	1740	2040
2 pcs	490	790	1090	-	-	-
3 pcs	245	395	545	695	845	-
4 pcs	-	263.3	363.3	463.3	563.3	663.3
5 pcs	-	-	272.5	347.5	422.5	497.5

Individual Parts - Ordering Chart

Ordering Info

Use corresponding letter in below table, and see "Parts Breakdown Table" for parts to be ordered.

Door Height	Door Weight				Connecting Bar / Cover Cap
	~15.5 lbs (~7.0 kg)	15.6~23.0 lbs (7.1~10.5 kg)	23.1~31 lbs (10.6~14.0 kg)	31.1~37.4 lbs (14.1~17.0 kg)	
23-5/8"~35-7/16" (600~900 mm)	LIN-X450 Standard Set Connecting Bar & Cover included	B			LIN-X450-L540 1 pc LIN-X450C 2 pcs
35-7/16"~47-1/4" (901~1200 mm)	A	B	C		LIN-X450-L840 1 pc LIN-X450C 2 pcs
47-1/4"~59-3/64" (1201~1500 mm)	A	B	C	D	LIN-X450-L1140 1 pc LIN-X450C 2 pcs
59-3/64"~70-7/8" (1501~1800 mm)	B	B	C	D	LIN-X450-L1440 1 pc LIN-X450C 2 pcs
70-7/8"~82-11/16" (1801~2100 mm)	B	B	C	D	LIN-X450-L1740 1 pc LIN-X450C 2 pcs
82-11/16"~94-1/2" (2101~2400 mm)	C	C	C	D	LIN-X450-L2040 1 pc LIN-X450C 2 pcs

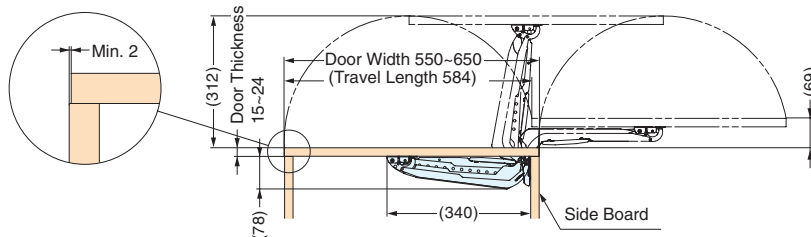
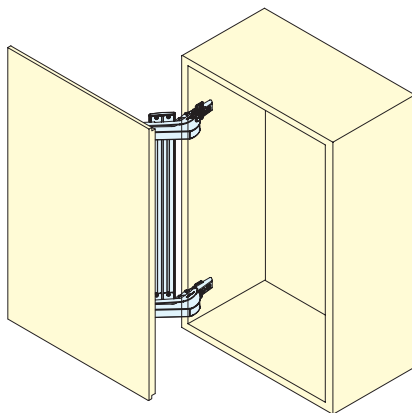
Parts Breakdown Table

Item Number	Description		Qty Required			
			A	B	C	D
LIN-X450ACD	Single Arm (with Damper)		2	3	3	3
LIN-X450A	Single Arm (without Damper)		-	-	1	2
230-P4W-32T (for 19mm overlay) or 230-P4W-32T+5 (for 14mm overlay)	Mounting Plate		2	3	4	5
LIN-X450-L540	Connecting Bar L=540MM		See table above			
LIN-X450-L840	Connecting Bar L=840MM					
LIN-X450-L1140	Connecting Bar L=1140MM					
LIN-X450-L1440	Connecting Bar L=1440MM					
LIN-X450-L1740	Connecting Bar L=1740MM					
LIN-X450-L2040	Connecting Bar L=2040MM					
LIN-X450C	End Cap for Connecting Bar		2			

MONO FLAT LIN-X HINGE

LIN-X600

■ Standard Kit



Please note handle position on other doors before installation, so that hinges will not interfere with the handles.

Item No.	Overlay	Material	Finish
LIN-X600	19 mm (3/4")	Steel, Aluminum	Nickel, Anodized

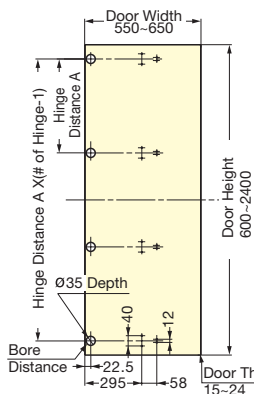
Included Parts: 2 each of Hinge Arms, Mounting Plates, Cup Covers, Bar End Caps and 1 Connecting Bar.

Door Width	550-650 mm (21-5/8"-25-9/16")
Door Height	600-900 mm (23-5/8"-35-7/16")
Door Thickness	15-24 mm (5/8"-15/16")
Door Weight	MAX. 9 kg (19.8 lbs)

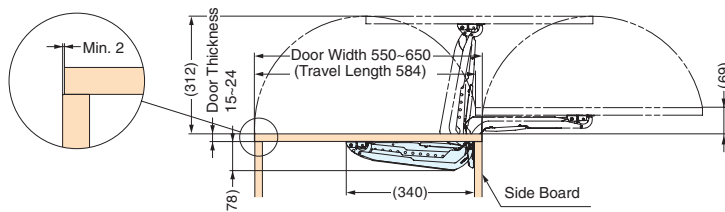
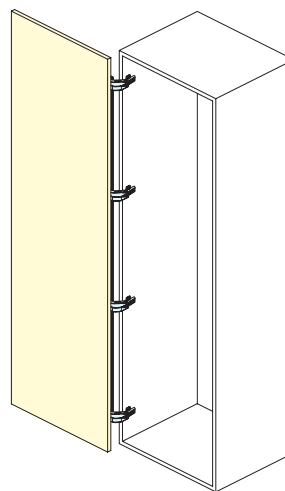
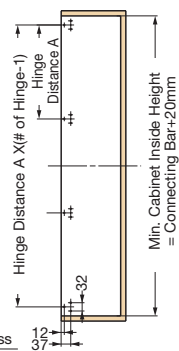
■ Individual Parts for Tall / Heavy Door

Door Width	550-650 mm (21-5/8"-25-9/16")
Door Height	600-2400 mm (23-5/8"-94-1/2")
Door Thickness	15-24 mm (5/8"-15/16")
Door Weight	Max. 24 kg (52.8 lbs)

■ Door Preparation



■ Cabinet Preparation



Please note handle position on other doors before installation, so that hinges will not interfere with the handles.

■ Hinge Distance A

# of Hinges	Length of Connecting Bar (mm)					
	540	840	1140	1440	1740	2040
2 pcs	490	790	-	-	-	-
3 pcs	245	395	545	695	845	-
4 pcs	-	-	363.3	463.3	563.3	663.3
5 pcs	-	-	-	347.5	422.5	497.5

Individual Parts - Ordering Chart

Ordering Info

Use corresponding letter in below table, and see "Parts Breakdown Table" for parts to be ordered.

Door Height	Door Weight					Connecting Bar / Cover Cap
	~19.9lbs (~9.0kg)	20.0~26.5 lbs (9.1~12.0 kg)	26.6~35.4 lbs (12.1~16.0 kg)	35.5~44.2 lbs (16.1~20.0 kg)	44.3~52.8 lbs (20.1~24.0 kg)	
23-5/8"~35-7/16" (600~900 mm)	LIN-X600 Standard Set Connecting Bar & Cover included	B				LIN-X60-L540 1 pc LIN-X60C 2 pcs
35-7/16"~47-1/4" (901~1200 mm)		B	B			LIN-X60-L840 1 pc LIN-X60C 2 pcs
47-1/4"~59-3/64" (1201~1500 mm)		B	B	C		LIN-X60-L1140 1 pc LIN-X60C 2 pcs
59-3/64"~70-7/8" (1501~1800 mm)		B	B	C	D	LIN-X60-L1440 1 pc LIN-X60C 2 pcs
70-7/8"~82-11/16" (1801~2100 mm)		B	B	C	D	LIN-X60-L1740 1 pc LIN-X60C 2 pcs
82-11/16"~94-1/2" (2101~2400 mm)		C	C	C	D	LIN-X60-L2040 1 pc LIN-X60C 2 pcs

Parts Breakdown Table

Item Number	Description		Qty Required			
			A	B	C	D
LIN-X600ACD	Single Arm (with Damper)		2	3	3	3
LIN-X600A	Single Arm (without Damper)		-	-	1	2
230-P4W-32T (for 19mm overlay)	Mounting Plate		2	3	4	5
LIN-X60-L540	Connecting Bar L=540MM		See table above			
LIN-X60-L840	Connecting Bar L=840MM					
LIN-X60-L1140	Connecting Bar L=1140MM					
LIN-X60-L1440	Connecting Bar L=1440MM					
LIN-X60-L1740	Connecting Bar L=1740MM					
LIN-X60-L2040	Connecting Bar L=2040MM					
LIN-X60C	End Cap for Connecting Bar		2			

MONOFLAT DOOR SERIES

SLIDING & FOLDING
CABINET HARDWARE

MONOFLAT DOOR SERIES



MonoFlat FAD™

Door Weight: Max. 5kg (11 lbs)
Please see P557 for details

FAD-5



MonoFlat LIN-X hinge™

Door Weight: Max. 17~24 kg (37~53 lbs)
Please see P550~555 for details

LIN-X450 / 600



MonoFlat FAD™

Door Weight: Max. 20 kg (44 lbs)
Please see P558~559 for details

FAD-20



MonoFlat FAD™

Door Weight: Max. 35 kg (77 lbs)
Please see P560~561 for details

FAD-44 / 44L



MonoFlat FAD™

Door Weight: Max. 35 kg (77 lbs)
Please see P514~515 for details

FAD-54 / 54L



MonoFlat UNISON™

Door Weight: Max. 30 kg (66 lbs)
Please see P516~517 for details

MFU

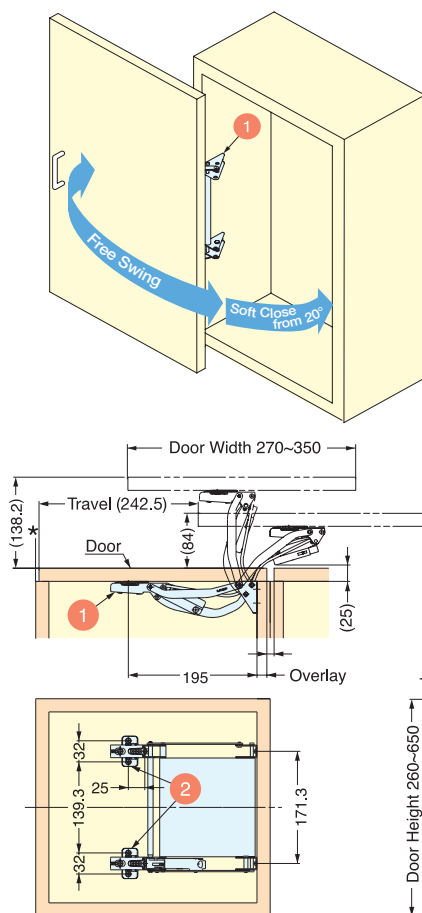


MonoFlat FAD™

Door Width	270 ~ 350 mm (10-5/8"~13-3/4")
Door Height	260 ~ 650 mm (10-1/4"~25-9/16")
Door Thickness	15 ~ 20 mm (19/32"~25/32")
Door Weight	5kg (11 lbs)

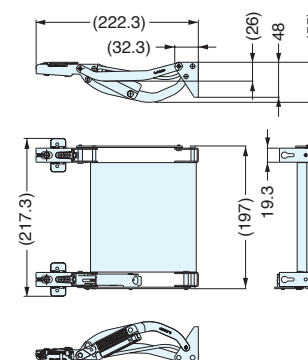
MONOFLAT FAD (For Light Weight Doors)

FAD-5



*4mm gap required between doors.

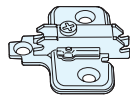
Hinge Dimensions



Part Details

Item No.	Box (sets)
FAD-5	1

1set includes both hinge body and mounting plates.

No.	Qty	Part Name	Material / Finish
1	1pc	 Hinge Body	- Material: Aluminum, Polyacetal, Steel - Finish / Color: Anodized, Grey, Nickel
2	2pcs	 Mounting Plate	- Material: Steel - Finish: Nickel



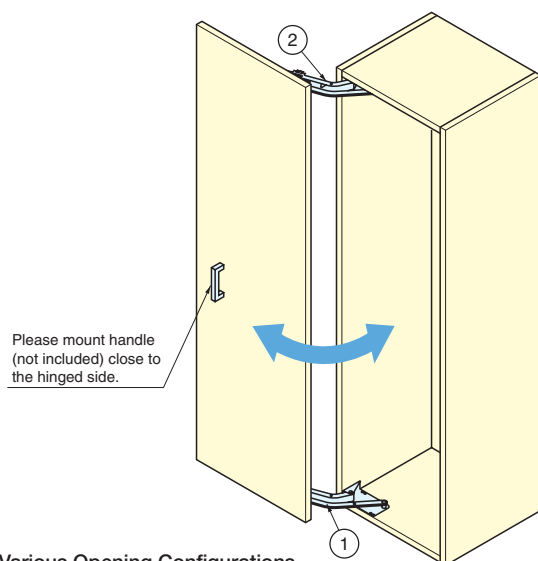
MonoFlat FAD™

Inside Door Width	500~550mm (19-11/16"~21-21/32")
Inside Door Height	Max. 2420 mm (95-9/32")
Door Thickness	Max. 35 mm (1-3/8")
Door Weight	Max. 20kg (44 lbs) / Door

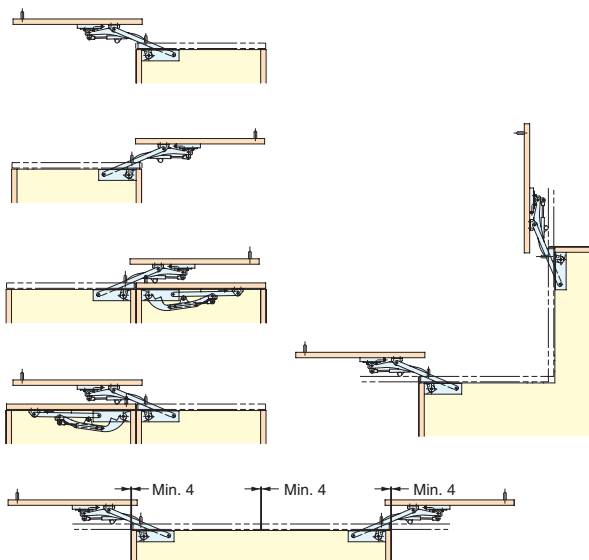
- **Lateral Opening Mechanism**
Allows doors to swing out laterally in a small radius, ideal for tight front space application.
 - **Smooth Movement**
Built-in gas spring provides a smooth self opening & closing movement.
 - **Various applications**
Can be used in single or double door configuration.
Ideal for storage cabinets in kitchen, closet room, bathroom, laundry room etc.
- *For overlay use.

MONOFLAT FAD (For Medium Weight Doors)

FAD-20

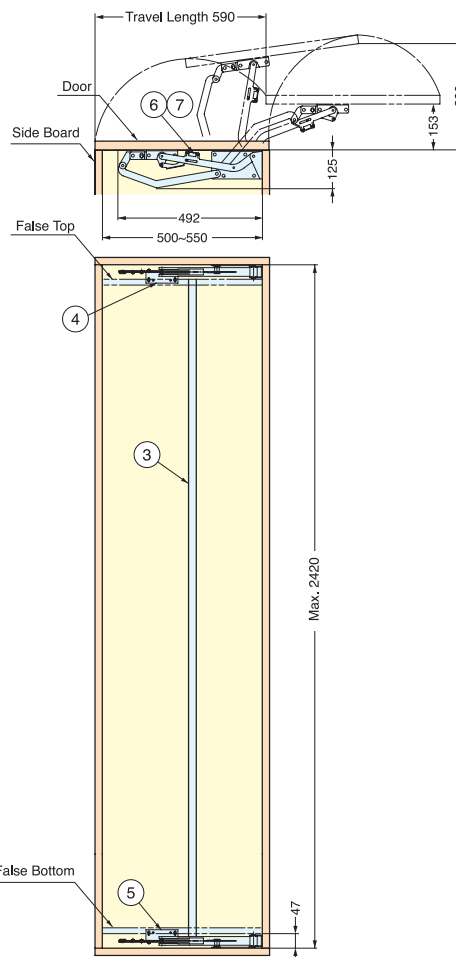


■ Various Opening Configurations



- Other "MonoFlat series" available.

MonoFlat FAD-5	For door weight 5kg (11lbs) – Page 557
MonoFlat LIN-X	For door weight 24kg (53lbs) – Page 550~555
MonoFlat Unison	For door weight 30kg (66lbs) – Page 516~517
MonoFlat FAD-44	For door weight 35kg (77lbs) – Page 560~561
MonoFlat FAD-54	For door weight 35kg (77lbs) – Page 514~515



Part Details

No.	①	②	③	④	⑤	⑥	⑦
Name	Arm A	Arm B	Connecting Bar	Door Bracket (Top)	Door Bracket (Bottom)	Bar Clamp	End Cap
Qty. / Set	1 pc	1 pc	1 pc	1 pc	1 pc	2 pcs	2 pcs
Discription	• Material Aluminum, Steel • Finish / Color Silver	• Material Aluminum, Steel • Finish / Color Silver	• Material / Steel • Finish / Color Silver	• Material / Steel • Finish / Color Silver	• Material / Steel • Finish / Color Silver	• Material / Steel • Finish / Color Silver	• Material Polyethylene • Finish / Color Black

Flush closing door Systems

A recent development, Flush-closing sliding door systems offer an unbroken surface for storage systems giving a minimalist contemporary look. Sugatsune's approach is to give the designer a complete range of flush closing options from small cabinets to full height walk in wardrobe or partition doors.



Revolutionary MultiMo Interleaved Sliding Door System - P.548~549



FAD Lateral Opening Door System - P.514~515



Multimo Flush Door System - P.548~549

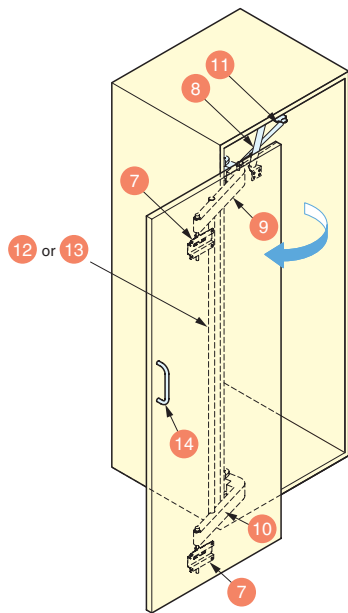


MonoFlat FAD™

Item No.	FAD-44	FAD-44L
Door Width	800~850 mm (31-1/2"~33-15/32")	
Door Height	Max. 2380 mm (93-11/16")	Max. 2980 mm (117-5/16")
Door Thickness	24 ~ 38 mm (61/64"~1-1/2")	
Door Weight	Max. 35kg (77 lbs)	

MONOFLAT FAD (For Large Cabinet Doors)

FAD-44 / FAD-44L



- **Lateral Opening Mechanism**
Allows doors to swing out laterally in a small radius, ideal for tight front space application.
- **No rails and bottom guide required**
- **Smooth Movement**
Built-in gas spring provides a smooth self opening & closing movement.
- **Height adjustable by cutting arm connecting pipe**
- **Various applications**
Can be used in single or double door configuration.
Ideal for storage cabinets in kitchen, closet room, bathroom, laundry room etc.
- *For overlay use.

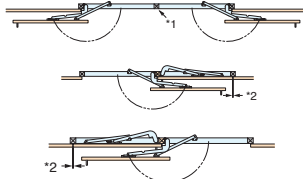
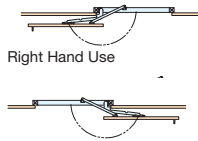
• Other "MonoFlat series" available.

MonoFlat FAD-5	For door weight 5 kg (11 lbs) – P.557
MonoFlat FAD-20	For door weight 20 kg (44 lbs) – P.558
MonoFlat LIN-X	For door weight 24 kg (53 lbs) – P.550
MonoFlat Unison	For door weight 30 kg (66 lbs) – P.516

■ Various Opening Configurations

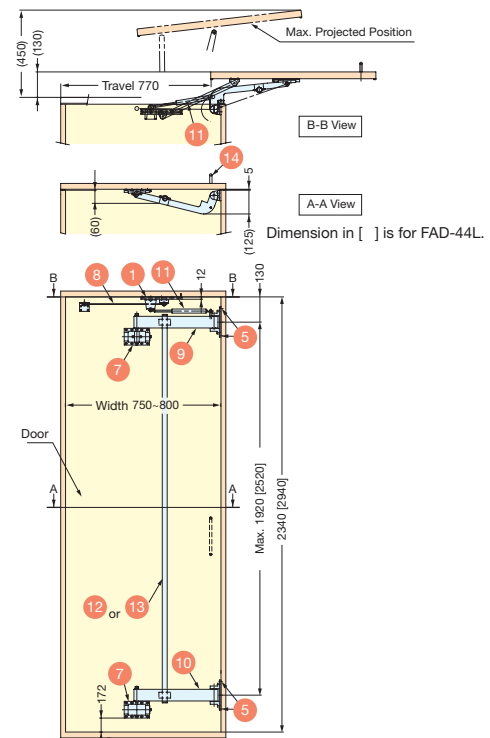
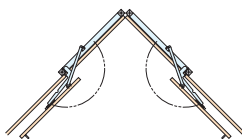
Left Hand Use

Right / Left Combinations



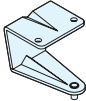
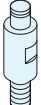
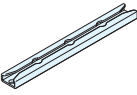
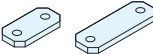
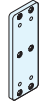
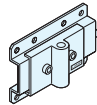
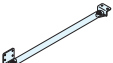
- *1 Vertical frame or door stoppers on floor for both doors required in center.
*2 Min.4mm gap around door.

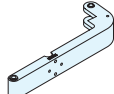
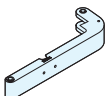
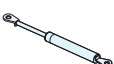
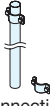
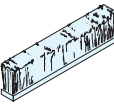
Corner Use



Parts Set (per door)		Necessary Parts	
Item No.	Door Height	Description	
FAD-44	Max. 2380mm (93-11/16")	Please see Qty a	
FAD-44L	Max. 2980mm (117-5/16")	Please see Qty b	

Parts Included

No.	Qty		Part Name	Description
	a	b		
1	1pc	1pc	 Gas Spring Bracket	- Material / Steel - Finish / Clear Zinc Chromate
2	1pc	1pc	 Screw Pin	- Material / Steel - Finish / Clear Zinc Chromate
3	1pc	1pc	 Channel Rail	- Material / Steel - Finish / Nickel
4	1ea	1ea	 Square Nut	- Material / Steel - Finish / Clear Zinc Chromate
5	4pcs	4pcs	 Bearing Housing	- Material / Aluminum - Finish / Color - Silver
6	2pcs	2pcs	 Hinge Base Plate	- Material / Zinc Alloy - Finish / Color - Silver
7	2pcs	2pcs	 Arm Bracket	- Material / Steel / Polyacetal - Finish / Color - Silver
8	1pc	1pc	 Support Arm	- Material / Steel / Polyacetal - Finish / Color - Silver

No.	Qty		Part Name	Description
	a	b		
9	1pc	1pc	 Upper Arm	- Material / Aluminum - Finish / Color - Silver
10	1pc	1pc	 Lower Arm	- Material / Aluminum - Finish / Color - Silver
11	1pc	1pc	 Gas Spring	Color / Grey
12	1set	-	 Connecting Pipe & Clamp	- Material / Steel - Finish / Color - Silver 1990 mm
13	-	1set	 Connecting Pipe & Clamp	- Material / Steel - Finish / Color - Silver 2600 mm
14	1pc	1pc	 Handle	- Material / 304 Stainless Steel - Finish / Mirror
15	1pc	1pc	 Bumper	- Material / Polyurethane - Finish / Clear
16	1pc	1pc	 Strip Brush	Color / Grey

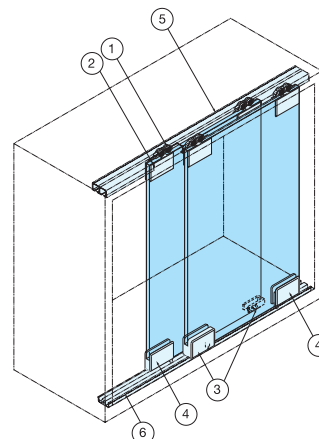
XL-GC SERIES (FOR SLIDING DOORS)

SLIDING & FOLDING
CABINET HARDWARE

GLASS SHOWCASE HARDWARE



- Installation example: Double bypass doors.
(Refer to order quantity below)



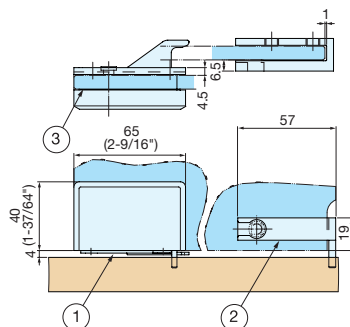
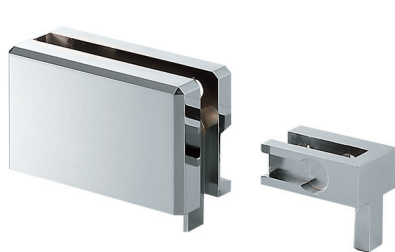
Door Width	Max. 500 mm (19-11/16")
Door Height	Max. 1200 mm (47-1/4")
Door Weight	Max. 12kg (26.5 lbs) / Per Door
Glass Thickness	8 mm (5/16")

Part Details

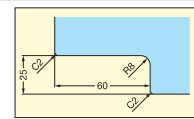
Order Quantity	No.	Item No.	Part Name		Dimensions	Description
4 ea	①	53-3061-081	Upper Roller			● Material Zinc Alloy (Body) Polyacetal (Roller) ● Finish / Color Yellow Zinc Chromate (Body) White (Roller)
1 set	②	XL-GC06-C	Upper Bracket		See P.563	● Material Zinc Alloy ● Finish / Color Chrome *4 pcs 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			● Material Aluminum ● Finish / Color Plain *Length: 1200 mm (47-23/32")
1 ea	⑥	XL-GC03-GL 1200	Bottom Rail		Bore Dimension	● Material ABS ● Finish / Color Black *Length: 1200 mm (47-23/32")

GLASS LOCK (FOR SLIDING DOOR)

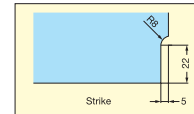
XL-GC03



• Key hole located on the side for clean appearance.



Cut Out Dimension (Body)



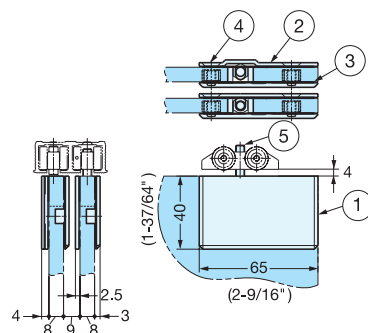
Cut Out Dimension (Strike)

Item No.	Glass Thickness (mm)	Key Changes	Key (pcs)	Weight (g)	Box (pcs)	Carton (pcs)
XL-GC03-C	8 (5/16")	24	2	351	1	24

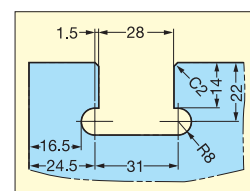
No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Chrome
②	Strike		
③	Spacer	Synthetic Rubber	Black
④	Screws	304 Stainless Steel	Plain
⑤	Key	Brass	Nickel

UPPER BRACKET (FOR SLIDING DOOR)

XL-GC06



• 4 pcs per set
• Roller (53-3061-081) sold separately.
• Door Size: Max. W500 x H1200 x t8mm



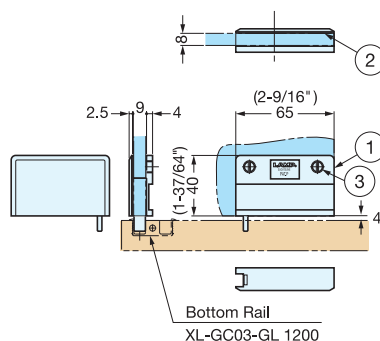
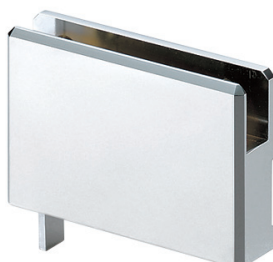
Cut Out Dimension

Item No.	Glass Thickness (mm)	Load Capacity (kg)	Weight (g)	Box (sets)	Carton (sets)
XL-GC06-C	8 (5/16")	12 (26.5lbs) / Door	400	1	24

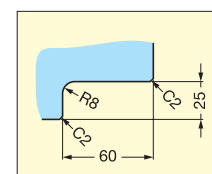
No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Chrome
②	Backplate	Steel	
③	Spacer	Synthetic Rubber	Clear
④	Screws	304 Stainless Steel	Plain
⑤	Bolt	Steel	Clear Zinc Chromate

BOTTOM GUIDE BRACKET (FOR SLIDING DOOR)

XL-GC08



• 1 pair (Left / Right) per set



Cut Out Dimension

Item No.	Glass Thickness (mm)	Weight (g)	Box (pairs)	Carton (pairs)
XL-GC08-C	8 (5/16")	360	1	24

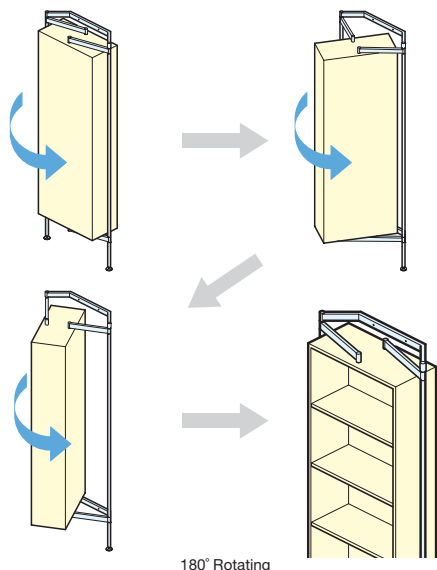
No.	Part Name	Material	Finish/Color
①	Body	Zinc Alloy	Chrome
②	Spacer	Synthetic Rubber	Black
③	Screws	304 Stainless Steel	Plain

180° ROTATING CABINET SYSTEM

RB-600

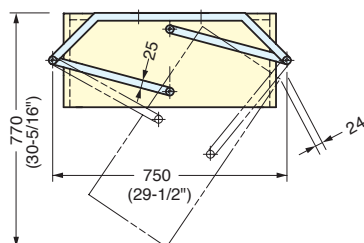
SLIDING & FOLDING
CABINET HARDWARE

180° ROTATING CABINET SYSTEM



180° Rotating

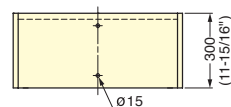
■ Rotating Clearance



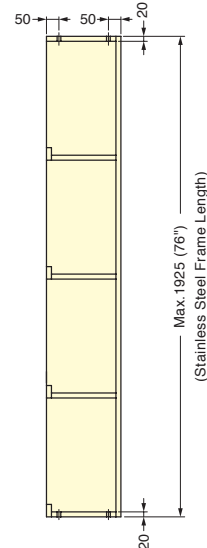
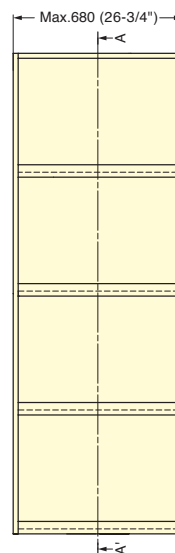
Cabinet Width	Max. 680 mm (26-3/4")
Cabinet Height	Max. 1930 mm (76")
Total Height	RB-600-NC--- Cabinet Height + 230 (9-1/16") RB-600-ST--- Cabinet Height + 435 (17-1/8") RB-600-CH--- Cabinet Height + 600 (26")
Cabinet Depth	300 mm (11-13/16")
Load capacity	Max. 75kg (165 lbs) **incl. cabinet**

- Innovative "reversible" cabinet system rotates 180° for easy access to both sides.
- 3 model types available: Inset Wall Type (NC), Floor Type (ST), and Floor-to-Ceiling Type (CH).
- Stainless steel frame can be cut to length to accommodate cabinets of various heights.
- Useful for a variety of storage and display installations in residential and retail settings.

■ Cabinet Preparation



A-A' Section



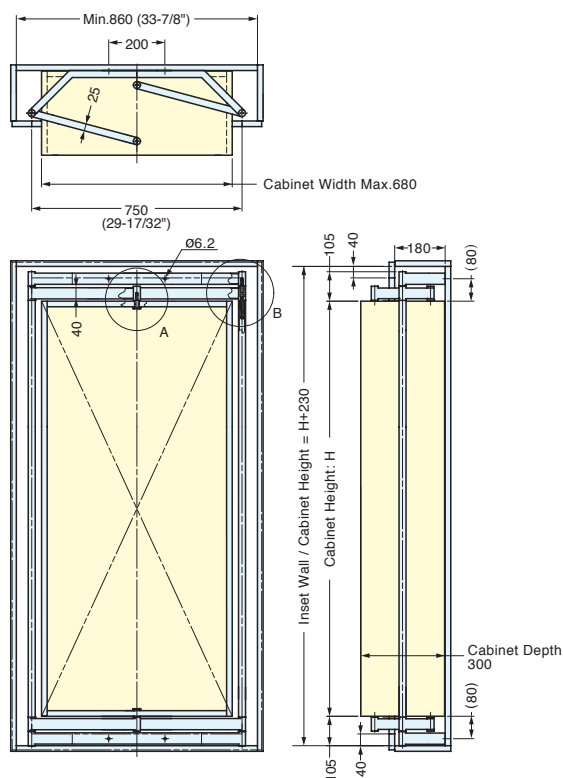
Item No.	Installation	Material / Finish
RB-600-NC	Inset Wall / Cabinet	304 Stainless Steel / Satin
RB-600-ST	Floor	
RB-600-CH	Floor-to-Ceiling	

Assembly Wrench (Sold separately)



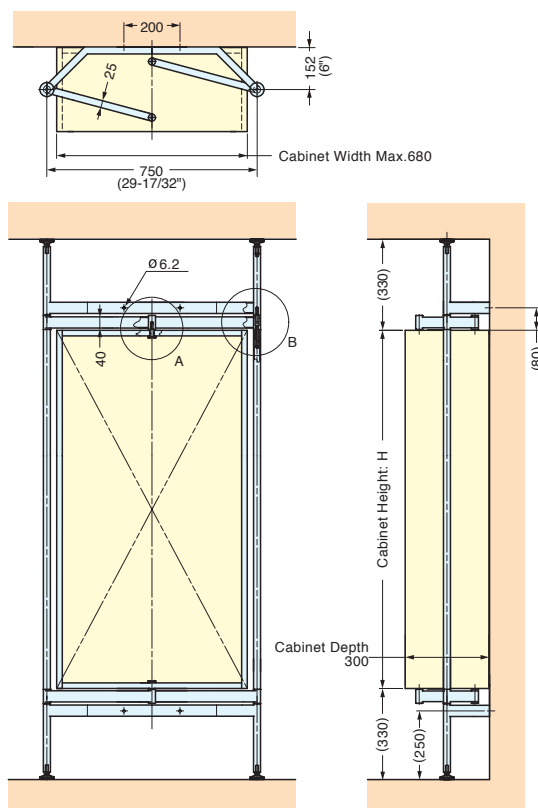
Item No.
Z059

■ RB-600-NC, Inset Wall / Cabinet



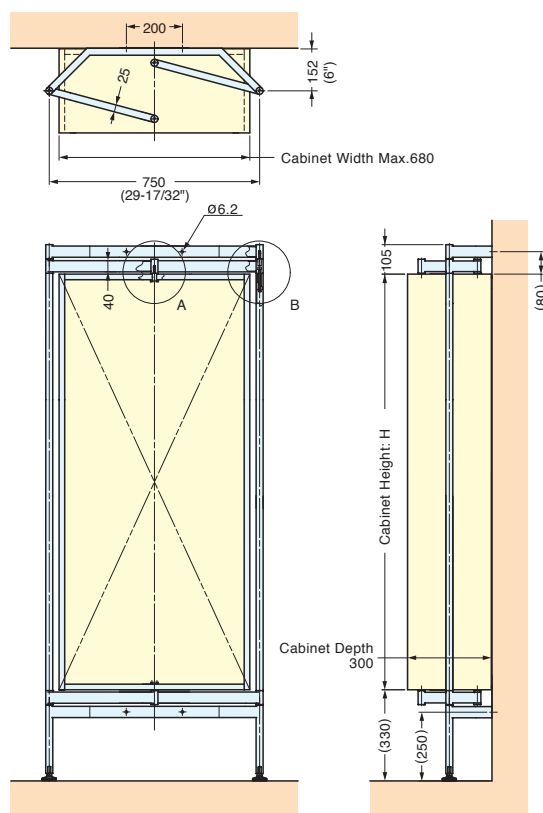
Max. cabinet height: 1925 mm (75-3/4")

■ RB-600-CH, Installation - Floor-to-Celing



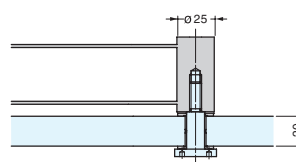
Max. cabinet height: 1925 mm (75-3/4")

■ RB-600-ST, Installation - Floor

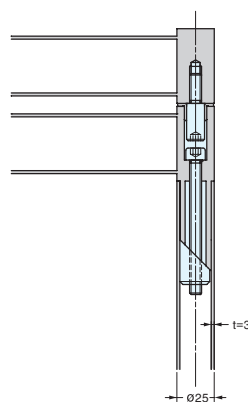


Max. cabinet height: 1925 mm (75-3/4")

■ Detail-A



■ Detail-B



SHUTTER DOOR SYSTEM <SPECIAL ORDER>

DIS-M

SLIDING & FOLDING
CABINET HARDWARE

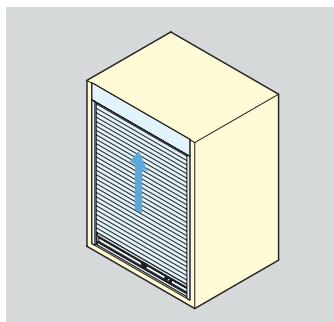
SHUTTER DOOR SYSTEM <SPECIAL ORDER>



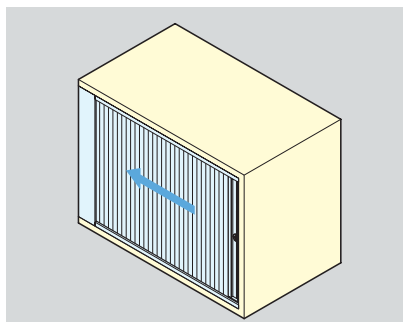
	Vertical	Horizontal	Horizontal-Double Doors
Cabinet Inside Width	300~1200 mm	300~900 mm	600~1800 mm
Cabinet Inside Height	300~900 mm	100~1200 mm	100~1200 mm
Cabinet Inside Depth	Min. 330 mm	Min. 330 mm	Min. 330 mm

- Surface mount
- No boring is required

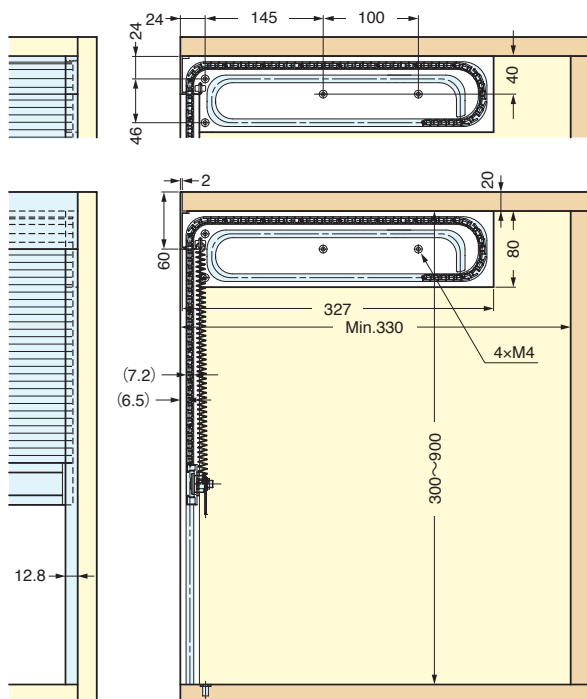
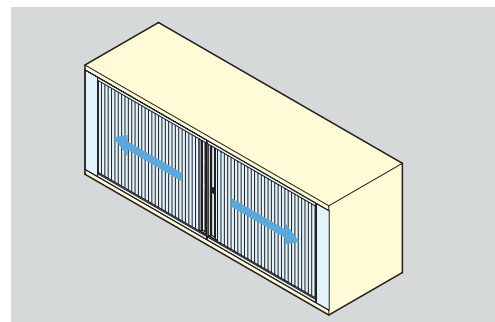
■ Vertical



■ Horizontal



■ Horizontal - Double Doors



SHUTTER DOOR SYSTEM <SPECIAL ORDER>

DIS-H



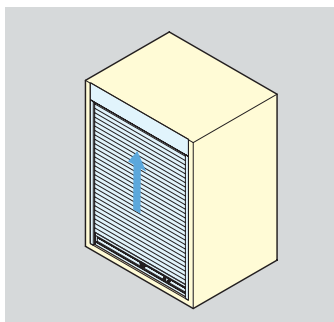
	Vertical	Horizontal	Horizontal-Double Doors
Cabinet Inside Width	300~900 mm	300~900 mm	600~1800 mm
Cabinet Inside Height	300~900 mm	100~1188 mm	100~1188 mm
Cabinet Inside Depth	200~600 mm	200~600 mm	200~600 mm

- Recessed mount
- Minimum installation space is required.

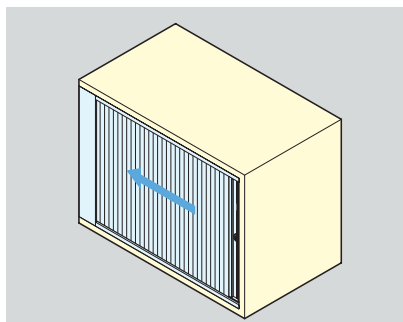
SLIDING & FOLDING
CABINET HARDWARE

SHUTTER DOOR SYSTEM <SPECIAL ORDER>

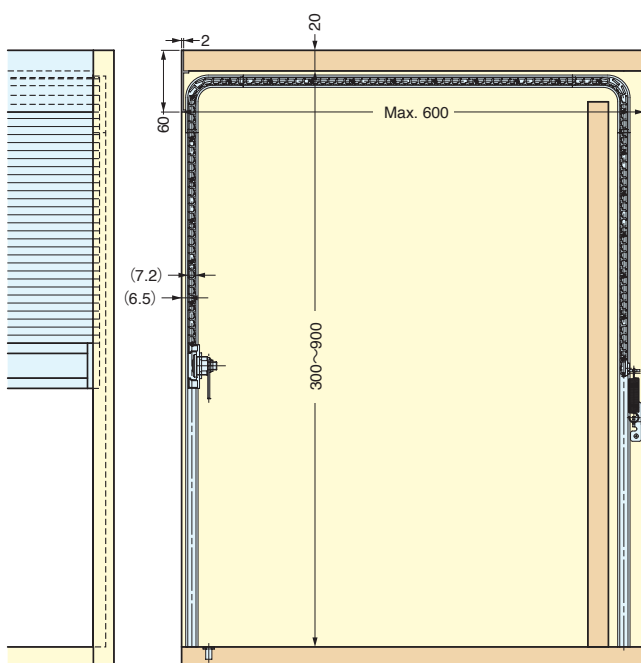
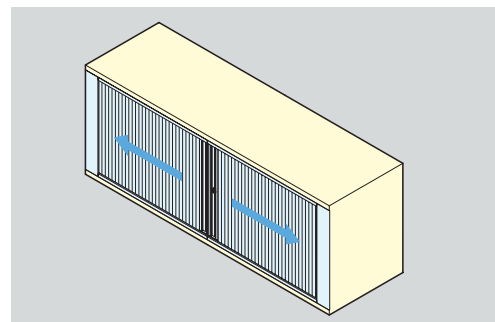
■ Vertical



■ Horizontal



■ Horizontal - Double Doors





LOCKS

GLASS LOCKS
CABINET LOCKS
PUSH LOCKS
CAM LOCKS

GLASS LOCKS

Picture	Item No.		Key Changes	Master Key Option	Page
	XL-GC01-C		24	-	572
	XL-GC02		24	-	572
	XL-GC03-C		24	-	573
	2100GLK		12	-	573
	2100GL		12	-	574
	2200GL		12	-	574
	1100GL/CR		25	-	575
	1300GL		1 Million	2520 changes per master key	575
	1310GL		1 Million	2520 changes per master key	576
	1310GLW		1 Million	2520 changes per master key	576
	1330GL-MK		6500	750 changes per master key	577

MILLION CABINET LOCKS

Picture	Item No.		Key Changes	Master Key Option	Page
	1830-MK		6500	750 changes per master key	579
	6830-30MK		7800	750 changes per master key	580
	7810		1 Million	2520 changes per master key	581
	8810		3 Million	3000 changes per master key	582

CABINET LOCKS

Picture	Item No.		Key Changes	Master Key Option	Page
	2100		12	-	583
	2200		12 (300 special order)	170 changes per master key	584
	2550		300	80 changes per master key	585
	2650		48 (2650-16) 96 (2650-22) 96 (2650-30)	-	586

Picture	Item No.	Key Changes	Master Key Option	Page
	3310	156	-	587
	3320	156	-	588
	5830-24MK	3120	780 changes per master key	589
	2200QL	300	170 changes per master key	590
	3810S	300	300 changes per master key	590
	1300SK	1 Million	2520 changes per master key	591

PUSH LOCKS

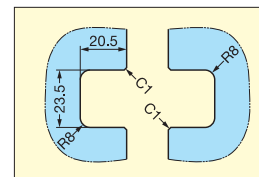
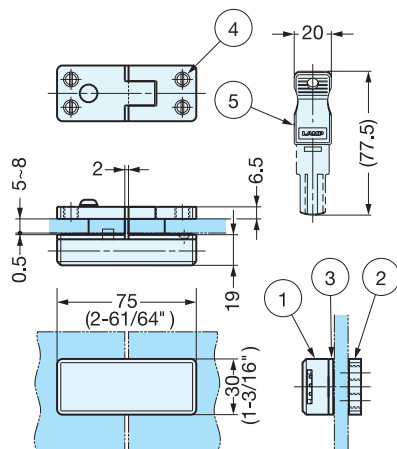
Picture	Item No.	Key Changes	Master Key Option	Page
	2300M	1 Million	2520 changes per master key	592
	2400M	1 Million	2520 changes per master key	592
	2160M	24	-	592
	2100M	12	-	593
	2110M	12	-	593
	2100B	12	-	594
	2110B	12	-	594
	2150B	24	-	595
	6300	96	-	595

SHEET METAL CAM LOCKS

Picture	Item No.	Key Changes	Master Key Option	Page
	900	1 Million	2520 changes per master key	596
	SN-711-8	Up to 1500 changes by special order		596
	DCY-34	2000	866 changes per master key	597
	3800S	300	300 changes per master key	597
	NAL-S	Up to 100 changes by special order	-	598
	NAL	5000	-	598

GLASS DOOR LOCK FOR SWINGING DOUBLE DOORS

XL-GC01



- Dual locking mechanism: locks and unlocks both doors at once by inserting the key.
- Non-handed. Key hole located on the right side for a clean appearance.
- Key acts as a knob when unlocked.
- Includes 2 keys.
- Use with XL-GL Series glass showcase hardware (sold separately, P.256).

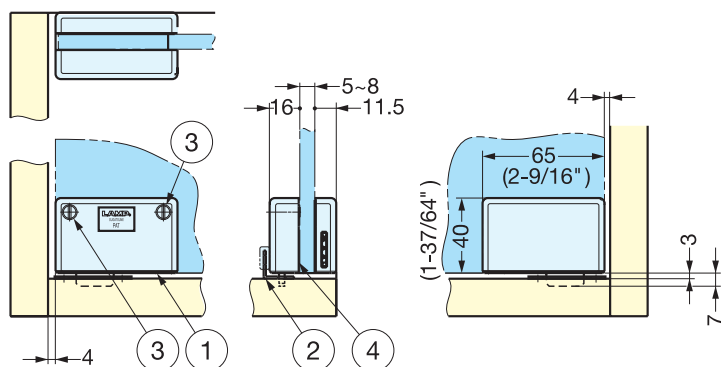
Item No.	Glass Thickness (mm)	Key Changes	Key (pcs)	Weight (g)	Box (pcs)	Carton (pcs)
XL-GC01-C	5~8 (3/16"~5/16")	24	2	406	1	24

No.	Part Name	Material	Finish / Color
①	Body	Zinc Alloy	Chrome
②	Counterplate		
③	Spacer	Synthetic Rubber	Black
④	Screws	304 Stainless Steel	Plain
⑤	Key	Brass/ABS	Nickel/Black

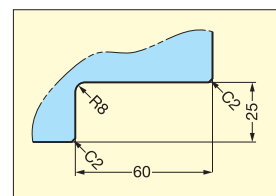
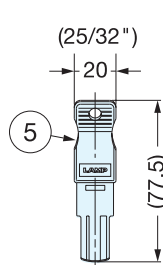
GLASS DOOR LOCK FOR INSET SWINGING DOORS



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 2 keys.
- Use with Inset Glass Pivot Hinge XL-GC04 (sold separately, P.257).
- Use with XL-GL Series glass showcase hardware (sold separately, P.256).

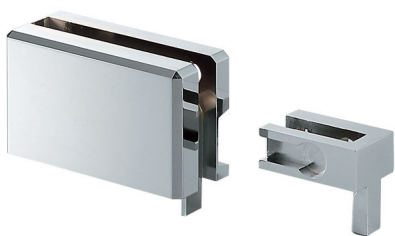


Item No.	Type	Glass Thickness (mm)	Key Changes	Key (pcs)	Weight (g)	Box (pcs)	Carton (pcs)
XL-GC02-R-C	Right	5~8 (3/16"~5/16")	24	2	415	1	24
XL-GC02-L-C	Left						

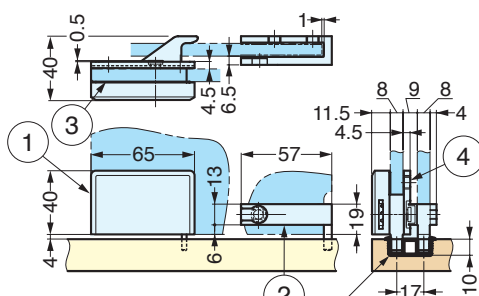
No.	Part Name	Material	Finish / Color
①	Body	Zinc Alloy	Chrome
②	Counterplate	304 Stainless Steel Chloroprene Rubber	Polished/Black
③	Screws	304 Stainless Steel	Plain
④	Spacer	Synthetic Rubber	Black
⑤	Key	Brass/ABS	Nickel/Black

GLASS DOOR LOCK FOR SLIDING DOOR

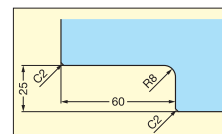
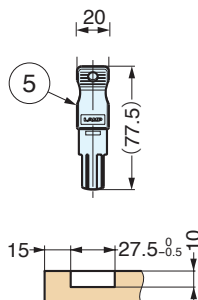
XL-GC03



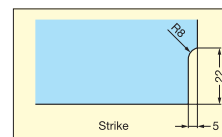
- For bypass sliding glass doors.
- Key hole located on the right side for a clean appearance.
- Includes 2 keys.
- Use with XL-GC Series glass showcase hardware (sold separately, P.562).
- Please order 1 pc per 2 doors.



Bottom Rail
XL-GC03-GL1200
Sold separately (P.562)



Cut Out Dimension (Body)



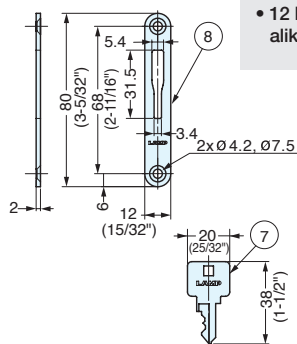
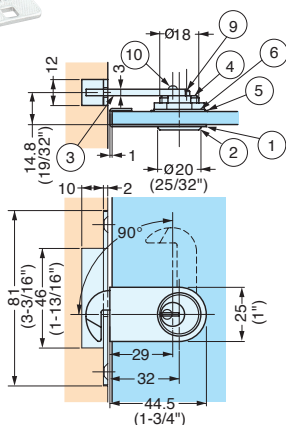
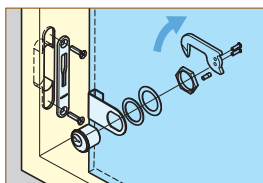
Cut Out Dimension (Strike)

Item No.	Glass Thickness (mm)	Key Changes	Key (pcs)	Weight (g)	Box (pcs)	Carton (pcs)
XL-GC03-C	8 (5/16")	24	2	351	1	24

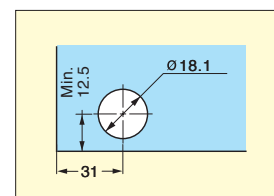
No.	Part Name	Material	Finish / Color
①	Body	Zinc Alloy	Chrome
②	Strike		
③	Spacer	Synthetic Rubber	Black
④	Screws	304 Stainless Steel	Plain
⑤	Key	Brass/ABS	Nickel/Black

GLASS DOOR CAM LOCK

2100GLK



- For swinging glass doors with glass 5/32" to 1/4" (4-6 mm) thick.
- Requires ø23/32" (18.1 mm) 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.



Cut Out Dimension

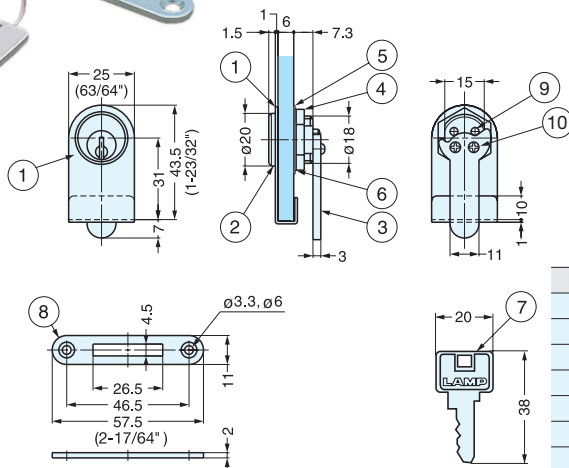
Item No.	Glass Thickness (mm)	Key Changes	Key (pcs)	Weight (g)	Box (pcs)	Carton (pcs)
2100GLK	4~6 (5/32"~1/4")	12	1	75	12	120

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

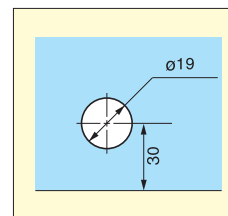
GLASS DOOR CAM LOCK



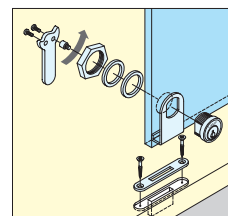
2100GL



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



Cut Out Dimension



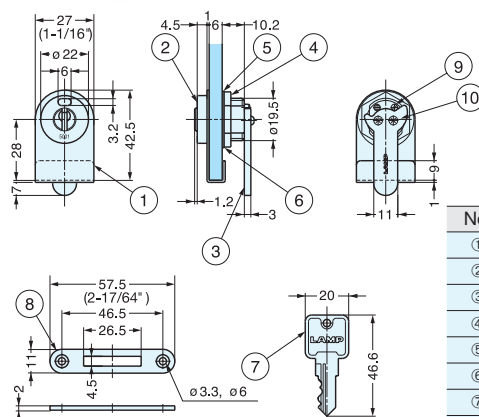
Installation

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
2100GL	4~6 (5/32"~1/4")	75	12	120

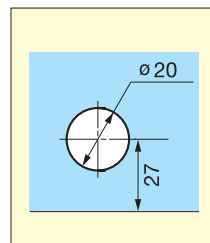
No.	Part Name	Material	Finish
①	Front Plate	304 Stainless Steel	Polished
②	Body	Brass	Nickel
③	Cam	Steel	
④	Hex. Nut	Brass	Natural
⑤	Plastic Washer	Polyamide	Chrome
⑥	Washer	Steel	Nickel
⑦	Key	Brass	Chrome
⑧	Counterplate	Steel	Plain
⑨	Pin	Brass	Nickel(M2.5x8)
⑩	Screw	Steel	

GLASS DOOR CAM LOCK (W/INDICATOR)

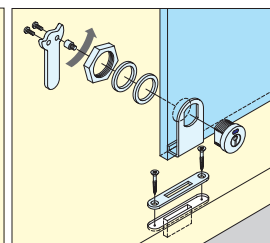
2200GL



- Brass cylinder lock with 2 keys.
- Locked / Unlocked Indicator
 - Unlocked : Blue
 - Locked : Red
- Master key system (2200 GLMK) available at surcharge.
- Key can be shared with other 2200 series locks.
- 12 key changes available; please specify keyed alike or differently when ordering.



Cut Out Dimension



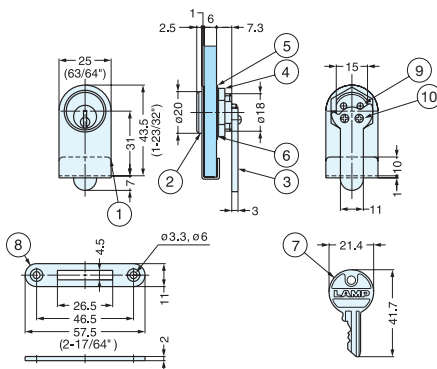
Installation

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
2200GL	4~6 (5/32"~1/4")	75	12	120

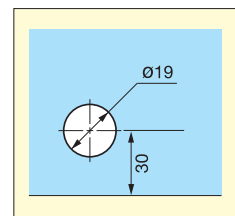
No.	Part Name	Material	Finish
①	Front Plate	303 Stainless Steel	Polished
②	Body	Brass	Nickel
③	Cam	Steel	
④	Hex. Nut	Brass	Natural
⑤	Plastic Washer	Polyamide	Chrome
⑥	Washer	Steel	Nickel
⑦	Key	Brass	Chrome
⑧	Counterplate	Steel	Plain
⑨	Pin	Brass	Nickel(M2.5x8)
⑩	Screw	Steel	

GLASS DOOR CAM LOCK

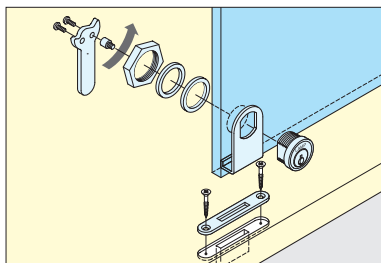
1100GL



- Chrome cylinder glass door lock with 2 keys.
- Key acts as a knob and can only be removed when locked.
- Master key NOT available.
- 25 key changes; Please specify keyed alike or differently when ordering.



Cut Out Dimension



Installation

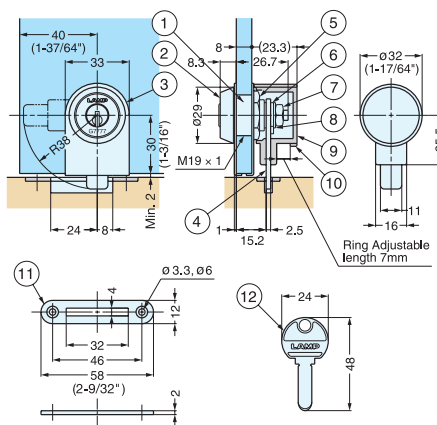
No.	Part Name	Material	Finish
①	Front Plate	304 Stainless Steel	Polished
②	Body	Brass	Chrome
③	Cam	Steel	Nickel
④	Hex Nut	Brass	
⑤	Plastic Washer	Polyamide	Natural
⑥	Washer	Steel	Chrome
⑦	Key	Brass	Nickel
⑧	Counterplate	Steel	Chrome
⑨	Pin	Brass	Plain
⑩	Screw	Steel	Chrome (M2.2x6)

Item No.	Glass Thickness (mm)	Cylinder Diameter	Key Changes	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
1100GL/CR	4-6 (5/32"~1/4")	18 (45/64")	25	2	65	25	250

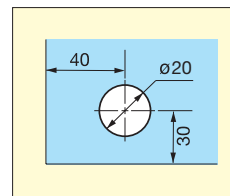
GLASS DOOR CAM LOCK



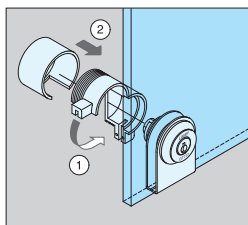
1300GL



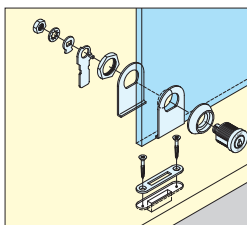
- Dimple key lock series ideal for showcase application.
- High security reversible key. (3 keys supplied)
- 1 million key changes available; please specify keyed alike or differently when ordering.
- Master key system available at surcharge. (Max. 2,520 key changes per master key.)



Cut Out Dimension



Installation



No.	Part Name	Material	Finish
①	Body	Brass	Satin Nickel
②	Ring		
③	Front Plate	304 Stainless Steel	Polished
④	Cam		
⑤	Hex Nut	Steel	Silver
⑥	Washer	Brass	Nickel
⑦	Hex Nut	Steel	Silver
⑧	Washer		
⑨	Case Cover	Polypropylene	Black
⑩	Ring		
⑪	Counterplate	303 Stainless Steel	Polished
⑫	Key	Brass	Nickel

Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
1300GL	5~8 (3/16"~5/16")	140	12	60

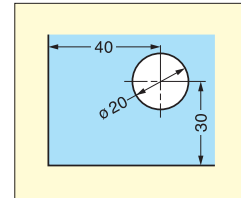
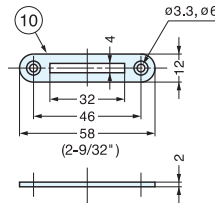
GLASS DOOR CAM LOCK



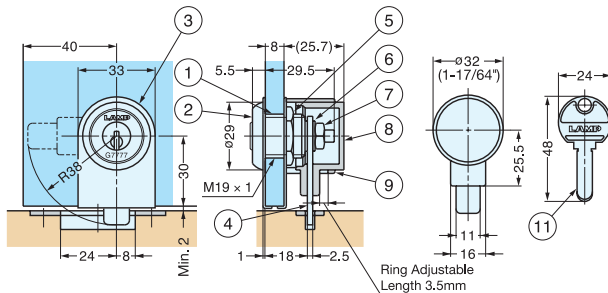
1310GL



- 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. (Max. 2,520 key changes per master key.)



Cut Out Dimension



Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
1310GL	5~8 (3/16"~5/16")	139	12	60

No.	Part Name	Material	Finish
①	Body	Brass	Nickel
②	Ring		Nickel
③	Front Plate	304 Stainless Steel	Satin
④	Cam		Plain
⑤	Hex Nut	Steel	Silver
⑥	Washer		Nickel
⑦	Hex Nut	Polypropylene	Silver
⑧	Case Cover		Black
⑨	Ring	303 Stainless Steel	Polished
⑩	Counterplate		Polished
⑪	Key	Brass	Nickel

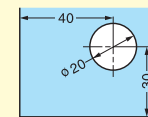
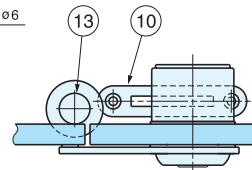
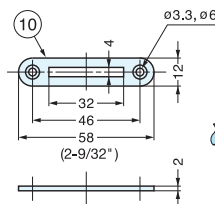
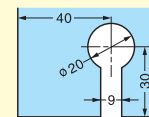
GLASS DOOR CAM LOCK FOR DOUBLE DOORS



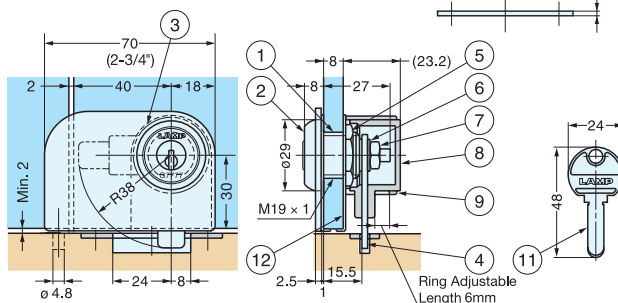
1310GLW



- 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. (Max. 2,520 key changes per master key.)

5.6 mm (15/64")
Glass Thickness8mm (5/16")
Glass Thickness

Cut Out Dimensions



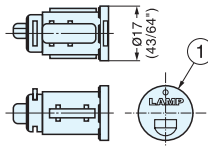
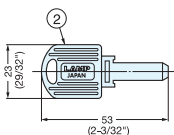
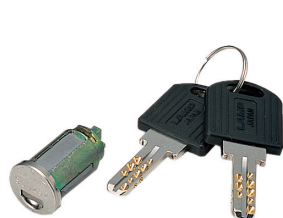
Item No.	Glass Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
1310GLW	5~8 (3/16"~5/16")	206	12	60

No.	Part Name	Material	Finish
①	Body	Brass	Nickel
②	Ring		Nickel
③	Front Plate	304 Stainless Steel	Satin
④	Cam		Plain
⑤	Hex Nut	Steel	Silver
⑥	Washer		Nickel
⑦	Hex Nut	Polypropylene	Silver
⑧	Case Cover		Black
⑨	Ring	304 Stainless Steel	Polished
⑩	Counterplate		Polished
⑪	Key	Brass	Nickel
⑫	Backplate	304 Stainless Steel	Polished
⑬	Stopper	Polyamide	Brown

INTERCHANGEABLE CYLINDER KEY



MD-N1



- Cylinder and key set for 1830, 6830 and 1330GL locks.
- Interchangeable feature allows easy cylinder replacement in case key is lost.
- Up to 7,800 key changes available.
(750 key changes per master key.)
- Keyed Alike (KA) or Keyed Different (KD) available. Please specify when ordering.

Item No.	Component	Weight (g)	Box (pcs)	Carton (pcs)
MD-N1	Cylinder	21	12	60
	Key	12		

Component	Material	Finish
Cylinder	304 Stainless Steel/Zinc Alloy	Polished/Yellow Zinc Chromate
Key	Brass/ABS	Nickel/Black

INTERCHANGEABLE CYLINDER KEY



MD-MK1, K1



- MD-MK1 - Master key for easy key management.
- MD-K1 - Key to remove existing cylinder only. Does NOT open lock.

Item No.	Key Type	Weight (g)	Box (pcs)	Carton (pcs)
MD-MK1	Master Key	12	1	10
MD-K1	Change Key			

Material	Finish/Color
Brass/ABS	Nickel/Black

GLASS DOOR CAM LOCK



1330GL-MK

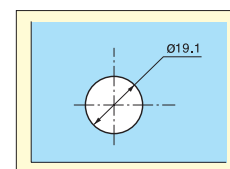
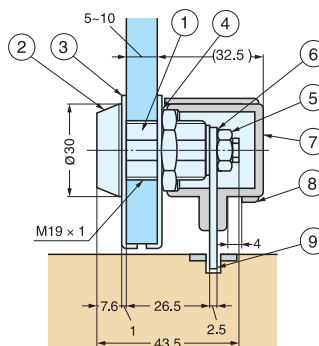
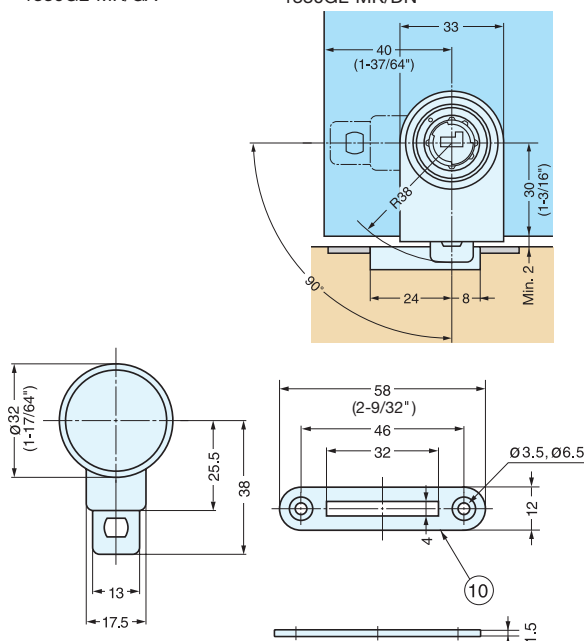


1330GL-MK/GA

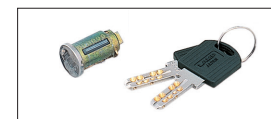


1330GL-MK/DN

- Glass door cam lock with interchangeable cylinder. (Please see page P.578 for details.)
- Cylinder can be changed by using change key MD-K1.
- Easy to replace cylinder in case key is lost. Note: Cylinder housing only. Interchangeable Cylinder MD-N1 must be ordered for a complete assembly.
- Up to 6,500 key changes available. (750 key changes per master key.)



Cut Out Dimension

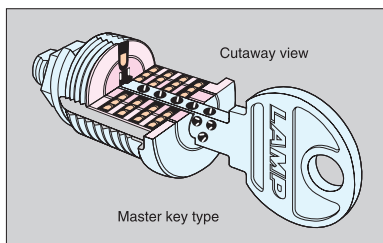


Master Key, Interchangeable Cylinder, Interchangeable Cylinder Key are sold separately.

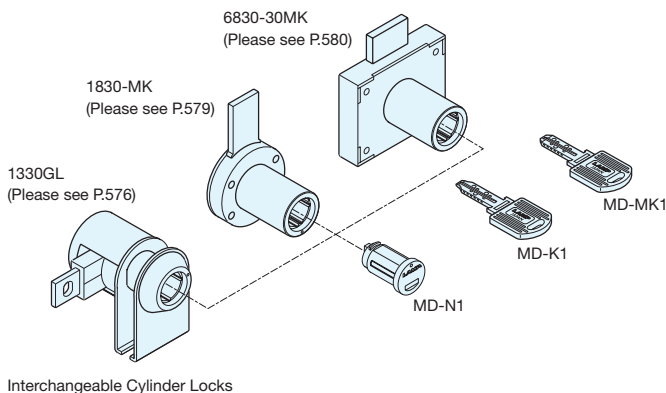
No.	Part Name	Material	Finish
①	Cylinder Housing	Zinc Alloy	Satin Nickel (DN)/Gold (GA)
②	Front Ring	Brass	
③	Front Plate	304 Stainless Steel	Satin Nickel (DN)/Gold
④	Large Hex Nut	Steel	Yellow Zinc Chromate
⑤	Small Hex Nut		
⑥	Washer	Polypropylene	Chromate
⑦	Case Cover		
⑧	Ring	304 Stainless Steel	Black
⑨	Cam		
⑩	Counterplate		

Item No.	Glass Thickness (mm)	Finish	Weight (g)	Box (pcs)	Carton (pcs)
1330GL-MK/GA	5~10	Gold (GA)	130	12	60
1330GL-MK/DN	(3/16"~3/8")	Satin Nickel (DN)			

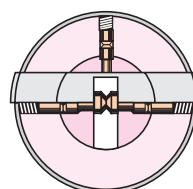
MILLION LOCK SERIES



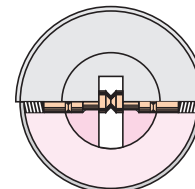
Interchangeable Cylinder + Million Lock = Complete Assembly
Example: MD-N1 + 6830-30MK/DN



- Dimple key lock series.
- Cylinder changeable type.
 - One cylinder can be used on 3 different types of locks. (1830, 6830 and 1330GL)
 - Using with master key system allows easy key management.



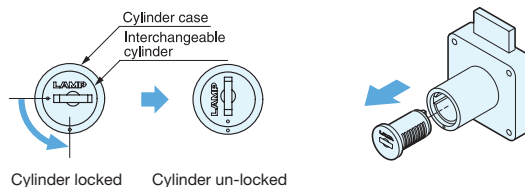
Master key type



Standard key type

To remove the cylinder:

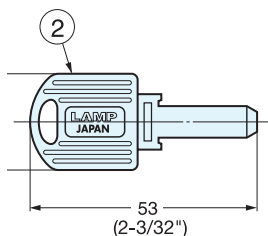
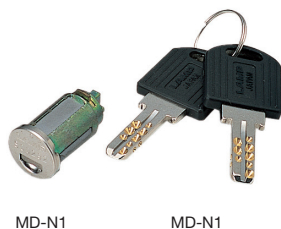
Turn cylinder by using cylinder change key (optional).
Match dots on cylinder and case.
Pull key to detach.



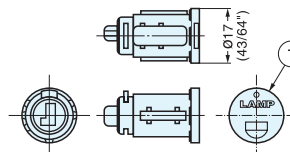
INTERCHANGEABLE CYLINDER KEY



MD-N1



- Cylinder and key set for 1830, 6830 and 1330GL locks.
- Interchangeable feature allows easy cylinder replacement in case key is lost.
- Up to 7,800 key changes available. (750 key changes per master key.)
- Keyed Alike (KA) or Keyed Different (KD) available. Please specify when ordering.



Item No.	Component	Weight (g)	Box (pcs)	Carton (pcs)
MD-N1	Cylinder	21	12	60
	Key	12		

No.	Component	Material	Finish
①	Interchangeable Cylinder	304 Stainless Steel/Zinc Alloy	Polished/Yellow Zinc Chromate
②	Key	Brass/ABS	Nickel/Black

INTERCHANGEABLE CYLINDER KEY



MD-MK1, K1



- MD-MK1 - Master key for easy key management.
- MD-K1 - Key to remove existing cylinder only. Does NOT open lock.

Item No.	Key Type	Weight (g)	Box (pcs)	Carton (pcs)
MD-MK1	Master Key	12	1	10
MD-K1	Change Key			

Material	Finish/Color
Brass/ABS	Nickel/Black

DRAWER LOCK



1830-MK

LOCKS

MILLION LOCKS



1830-MK/GA

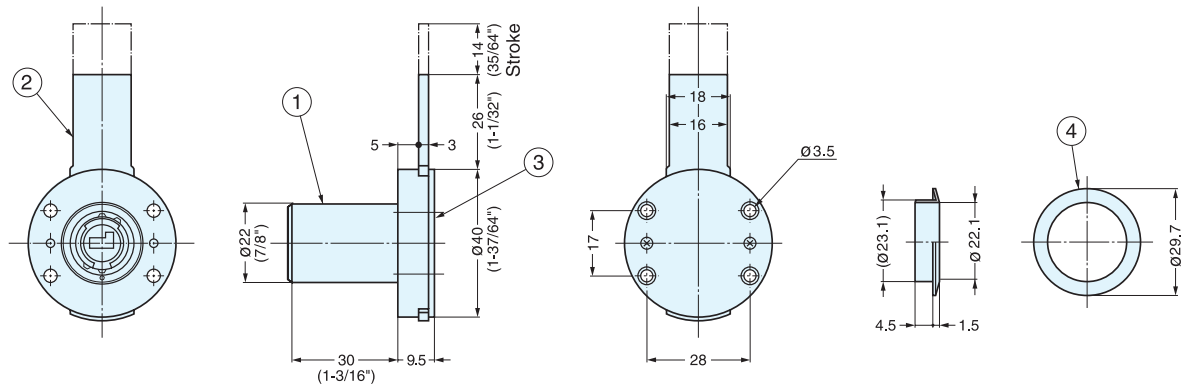


1830-MK/DN

- Interchangeable Cylinder Lock
- Cylinder can be changed by using change key MD-K1. Easy to replace cylinder in case key is lost.
- Up to 6,500 key changes available.
(750 key changes per master key.)
- Cylinder housing Diameter: 22mm (7/8")
- * Cylinder housing only. Interchangeable Cylinder MD-N1 must be ordered for a complete assembly.



Master Key, Interchangeable Cylinder & Key are sold separately. See P.578



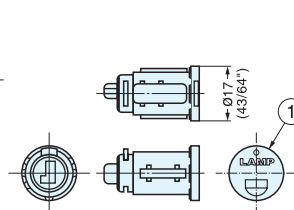
No.	Part Name	Material	Finish
①	Cylinder Housing	Zinc Alloy	Satin Nickel (DN)/Gold (GA)
②	Dead Bolt	304 Stainless Steel	Polished
③	Cover		
④	Ring	Brass	Satin Nickel (DN)/Gold (GA)

Item No.	Door Thickness	Finish	Weight (g)	Box (pcs)	Carton (pcs)
1830-MK/GA	30 (1-3/16")	Gold (GA)/Clear	185	12	60
1830-MK/DN	30 (1-3/16")	Satin Nickel (DN)			

INTERCHANGEABLE CYLINDER KEY



MD-N1



- Cylinder and key set for 1830, 6830 and 1330GL locks.
- Interchangeable feature allows easy cylinder replacement in case key is lost.
- Up to 7,800 key changes available. (750 key changes per master key.)
- Keyed Alike (KA) or Keyed Different (KD) available. Please specify when ordering.

Item No.	Component	Weight (g)	Box (pcs)	Carton (pcs)	Component	Material	Finish
MD-N1	Cylinder	21	12	60	Cylinder	304 Stainless Steel/Zinc Alloy	Polished/Yellow Zinc Chromate
	Key	12			Key	Brass/ABS	Nickel/Black

INTERCHANGEABLE CYLINDER KEY



MD-MK1, K1



- MD-MK1 - Master key for easy key management.
- MD-K1 - Key to remove existing cylinder only. Does NOT open lock.

Item No.	Key Type	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish/Color
MD-MK1	Master Key	12	1	10	Brass/ABS	Nickel/Black
MD-K1	Change Key					

CABINET LOCK



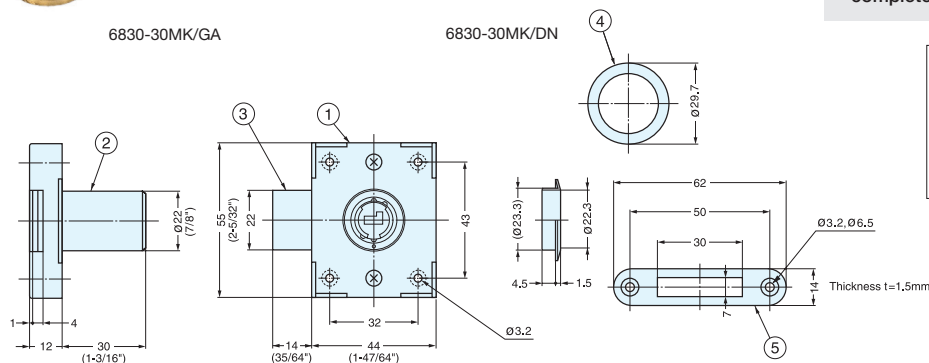
6830-30MK



6830-30MK/GA

6830-30MK/DN

- Cylinder lock with stainless steel body.
- Interchangeable Cylinder Lock
- 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. (750 key changes per master key.)
- Cylinder housing Diameter: 22 mm (7/8")
- 2 mm (5/64") plastic distance plate 6810-SP available for various door thickness. See P.581
- * Cylinder housing only. Interchangeable Cylinder MD-N1 must be ordered for a complete assembly.



Master Key, Interchangeable Cylinder & Key are sold separately. See P.578

Item No.	Door Thickness	Finish	Weight (g)	Box (pcs)	Carton (pcs)
6830-30MK/GA	30 (1-3/16")	Gold/Clear	180	12	60
6830-30MK/DN	30 (1-3/16")	Nickel			

No.	Part Name	Material	Finish
①	Body	304 Stainless Steel	Satin
②	Cylinder Housing	Zinc Alloy	Satin Nickel (DN)/Gold (GA)
③	Dead Bolt	304 Stainless Steel	-
④	Ring	Brass	Satin Nickel (DN)/Gold (GA)
⑤	Counterplate	304 Stainless Steel	Satin

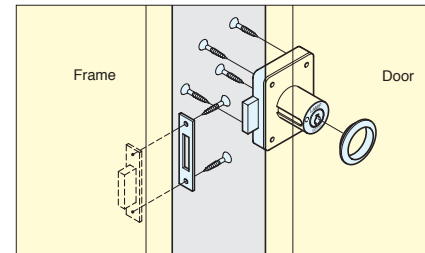
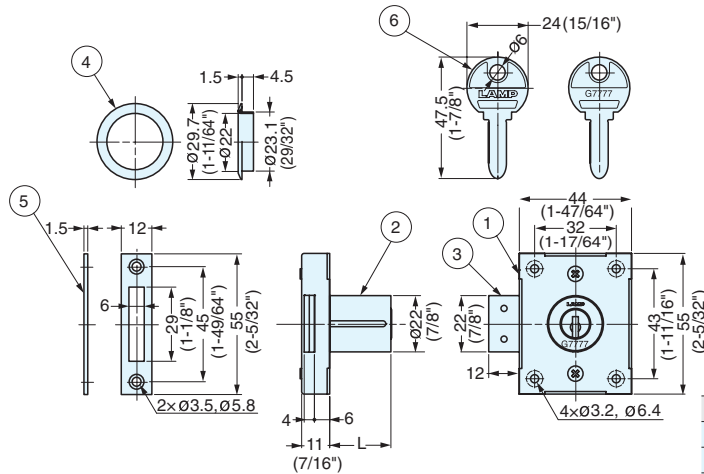
CABINET LOCK



7810



- For use on right-handed doors (Lock for drawer application available by special order).
- High-security Million Lock dimple key; keys are reversible. Turn the key 360° to lock or unlock.
- Brass cylinder lock with stainless steel body.
- One million key changes available; Please specify keyed alike or differently when ordering.
- Includes screws.
- Available in Satin Nickel (NI) or Chrome (CR) finish.
- Can be used with spacer 6810-SP, sold separately. See below.
- Master key system available at a surcharge (Max. 2,520 key changes per master key.)

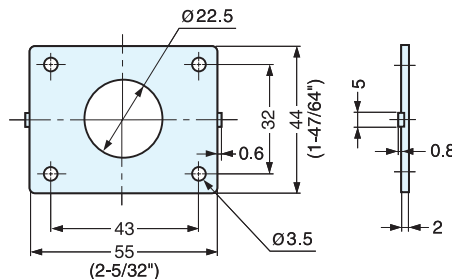


No.	Part Name	Material	Finish
①	Body	304 Stainless Steel	Satin
②	Cylinder Housing	Brass	Satin Nickel(NI)/Chrome(CR)
③	Dead Bolt	304 Stainless Steel	Plain
④	Ring	Brass	Satin Nickel(NI)/Chrome(CR)
⑤	Counterplate	304 Stainless Steel	Satin
⑥	Key	Brass	Nickel

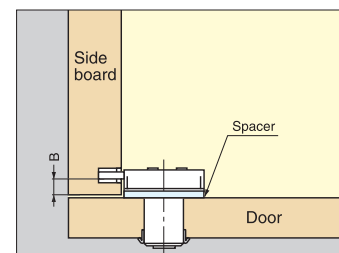
Item No.	L	Door Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
7810-24NI	24 (15/16")	22~24 (7/8"~15/16")	190	12	60
7810-24CR					
7810-30NI	30 (1-3/16")	28~30 (1-3/32"~1-3/16")	210		
7810-30CR					
7810-36NI	36 (1-7/16")	34~36 (1-3/18"~1-7/16")	225		
7810-36CR					

SPACER

6810-SP



- Distance spacer for 3810S, 6830, 7810, and 8810-24 series locks.
- Use when additional distance on dimension B is required.
- Thickness: 2mm (5/64")
- Multiple spacers can be used if needed.



Item No.	Thickness	Weight (g)	Box (pcs)	Carton (pcs)
6810-SP	2	4.5	150	1500

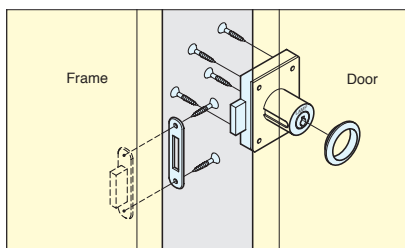
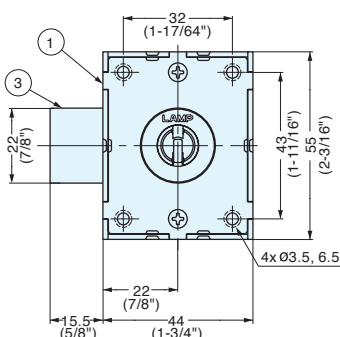
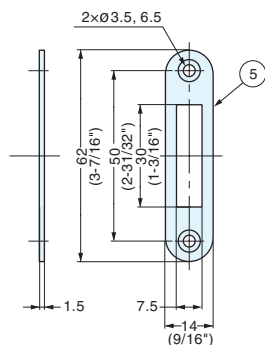
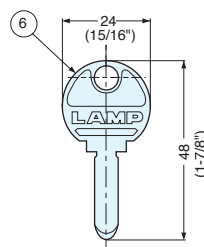
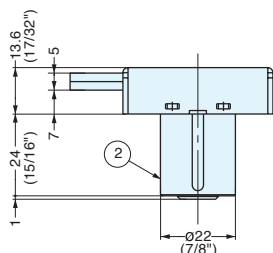
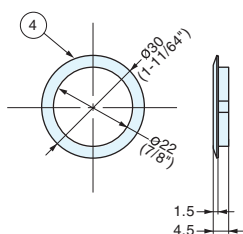
CABINET LOCK (W/BUILT-IN KEY CHANGE)



8810-24



- Lock's key number can be changed in place without removing the lock.
- Cost effective hardware where retrieving keys can be problematic, such as lockers, laundry rooms, etc.
- Change each lock's key number up to 2 times.
- High security dimple key.
- Up to 3 million key changes available. (3,000 key changes per master key.)
- Please specify keyed alike or differently when ordering.
- Master key available at a surcharge.
- Includes screws and original keys.



Installation for door

How it works:

- Each lock includes keys for the original key number only.
- To change the lock's key number, enter the new key and rotate 360°.
- After changing the lock's key number, the previously used key cannot open the lock.
- 1st and 2nd change keys are sold separately.

Master Key System:

- Master keys for each key number change are available.
- Master keys must be also changed after the lock's key number is changed.
- If only some of the locks' key numbers in a master key system are changed, multiple master keys for that portion should still be kept.

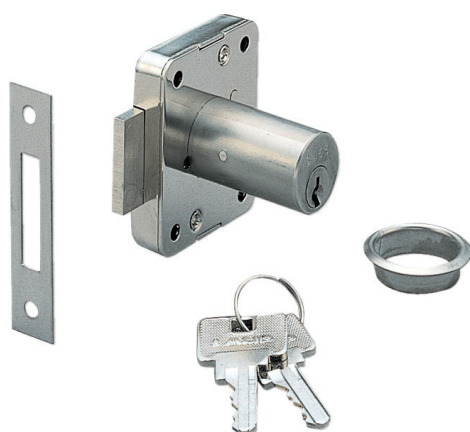
No.	Part Name	Material	Finish
①	Body	430 Stainless Steel	Satin
②	Cylinder Housing	Brass	Satin Nickel
③	Dead Bolt	430 Stainless Steel	Plain
④	Ring	Brass	Nickel
⑤	Counterplate	430 Stainless Steel	Satin
⑥	Key	Nickel Silver	Polished

Item No.	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
8810-24	22~24 (7/8" ~ 15/16")	190	12	60
8810-24MK				

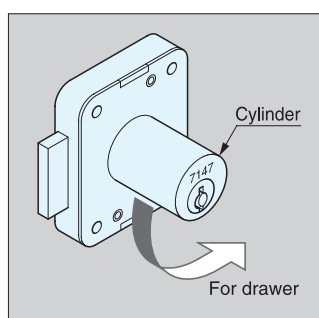
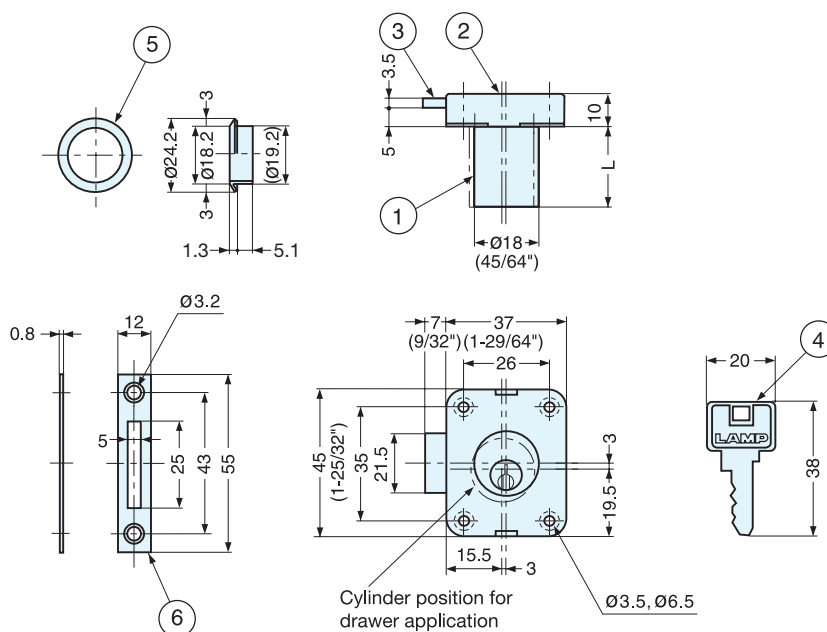
CABINET LOCK



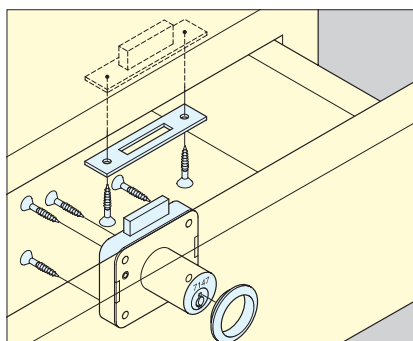
2100



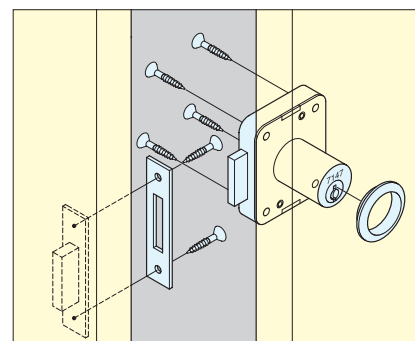
- Brass cylinder lock.
- Cylinder rotates for either drawer or cabinet door application.
- Cylinder Diameter: 18mm (11/16")
- 12 key changes available; Please specify keyed alike or differently when ordering.
- Master key NOT available.
- Keys can be shared with other 2100 series locks.



To change lock for drawer application:
turn lock cylinder 90° counterclockwise.



Installation for drawer



Installation for right-handed door

No.	Part Name	Material	Finish
①	Cylinder Housing	Brass	Nickel
②	Body		
③	Dead Bolt		
④	Key		
⑤	Ring		
⑥	Counterplate	304 Stainless Steel	Plain

Item No.	L	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2100-24	24 (15/16")	24 (15/16")	116	12	120
2100-30	30 (1-3/16")	30 (1-3/16")	125		

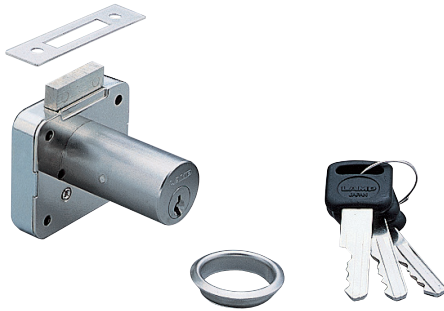
CABINET LOCK



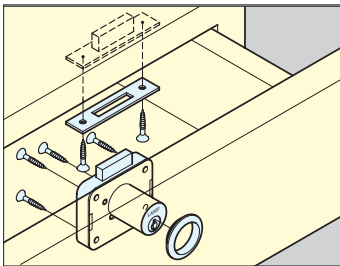
2550

LOCKS

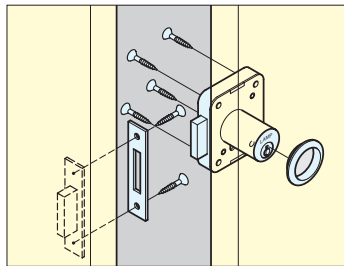
CABINET LOCKS



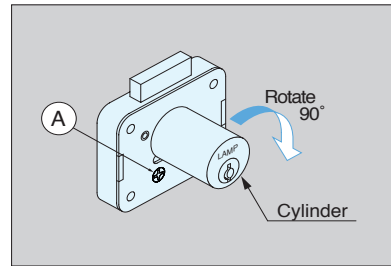
- Cabinet lock with 90° rotating cylinder for right-handed doors (see diagram below).
- Up to 300 key changes available; Please specify keyed alike or differently when ordering. (80 key changes per master key.)
- Includes screws.
- Master key available as a special order at a surcharge.



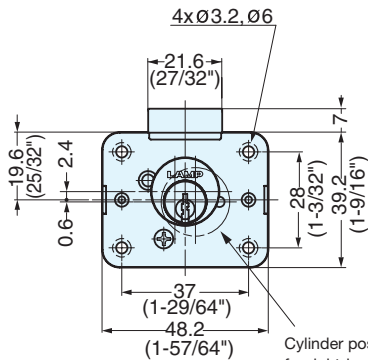
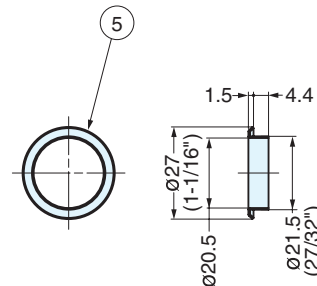
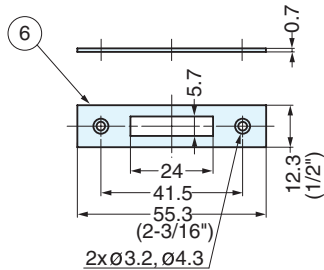
Installation for drawer



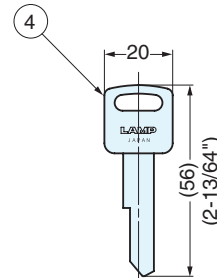
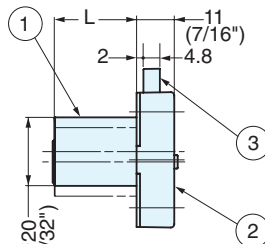
Installation for right-handed door



To rotate cylinder, loosen screw ③ and rotate cylinder 90° clockwise and tighten it afterwards.



Cylinder position for right-handed door



No.	Part Name	Material	Finish
①	Cylinder Housing	Brass	Nickel
②	Body	Zinc Alloy	Yellow Zinc Chromate
③	Dead Bolt		Nickel
④	Key	Brass	Nickel
⑤	Ring		Satin Nickel
⑥	Counterplate		Nickel

Item No.	L	Door Thickness (mm)	Weight (g)	Box (pcs)	Carton (pcs)
2550-24-DN	24 (15/16")	24 (15/16")	140	12	120
2550-24-DNMK					
2550-36-DN	36 (1-7/16")	36 (1-7/16")	170		
2550-36-DNMK					

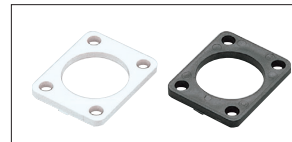
CABINET LOCK



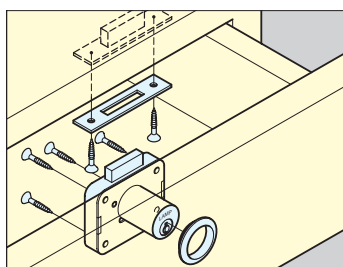
2650



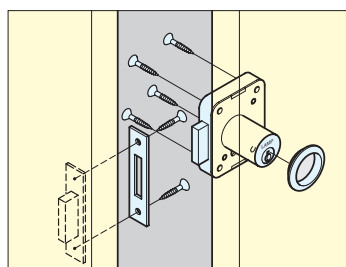
- Cabinet lock with 90° rotating cylinder for right-handed doors (see diagram below).
- Up to 48 key changes available for 2650-16; up to 96 key changes available for each of 2650-22 and 2650-30.
- Please specify keyed alike or differently when ordering.
- Can be used with spacer TSSP (P.587), sold separately.



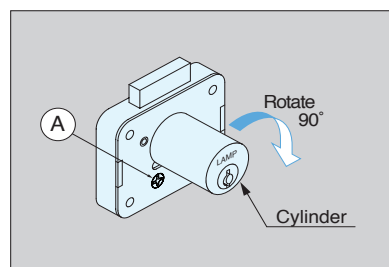
TSSP SERIES (Sold separately)



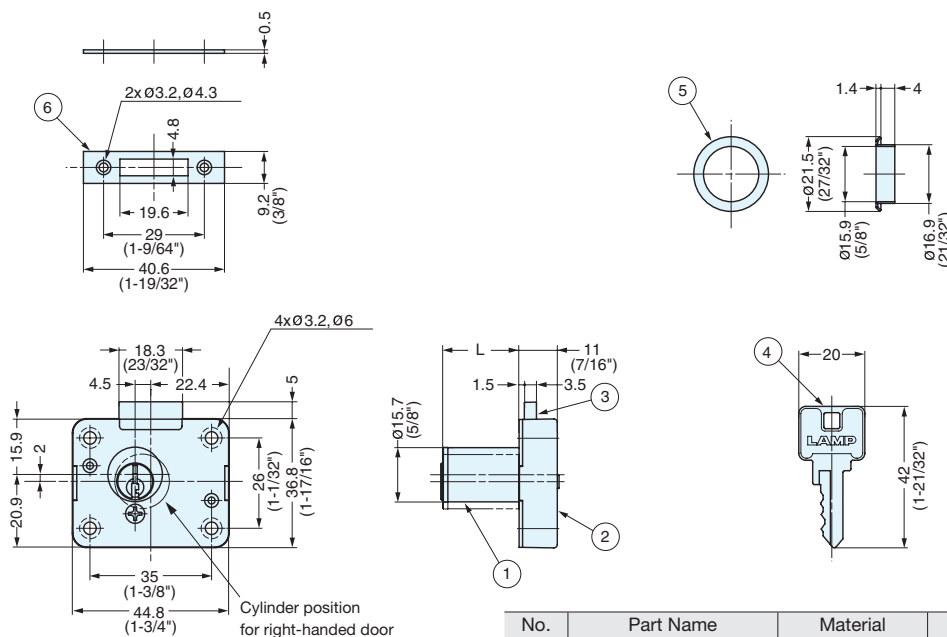
Installation for drawer



Installation for right-handed door



To rotate cylinder, loosen screw A and rotate cylinder 90° clockwise and tighten it afterwards.



No.	Part Name	Material	Finish
①	Cylinder Housing	Zinc Alloy	Satin Nickel
②	Body		Yellow Zinc Chromate
③	Dead Bolt	Brass	Nickel
④	Key		Nickel
⑤	Ring		Satin Nickel
⑥	Counterplate		Plain

Item No.	L	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2650-16-DN	16 (5/8")	16 (5/8")	81.5	12	240
2650-22-DN	22 (7/8")	22 (7/8")	89.5		
2650-30-DN	30 (1-3/16")	30 (1-3/16")	98		

CABINET LOCK



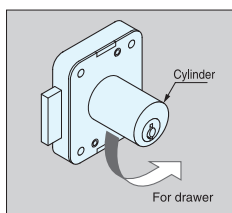
3310



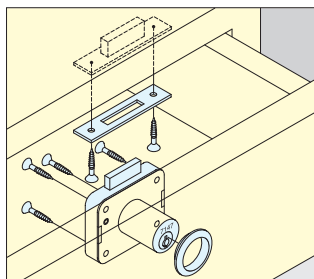
- Brass cylinder lock.
- Cylinder rotates for either drawer or cabinet door application.
- Cylinder Diameter: 18mm (11/16")
- 156 key changes available; Please specify keyed alike or differently when ordering.
- Master key NOT available.
- Keys can be shared with other 3300 series locks.
- 4mm (5/32") plastic distance plate TSSP available for various door thickness. See below.

LOCKS

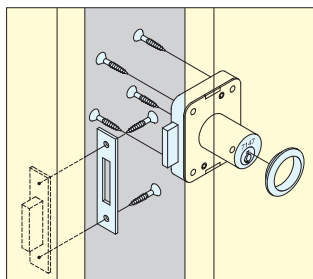
CABINET LOCKS



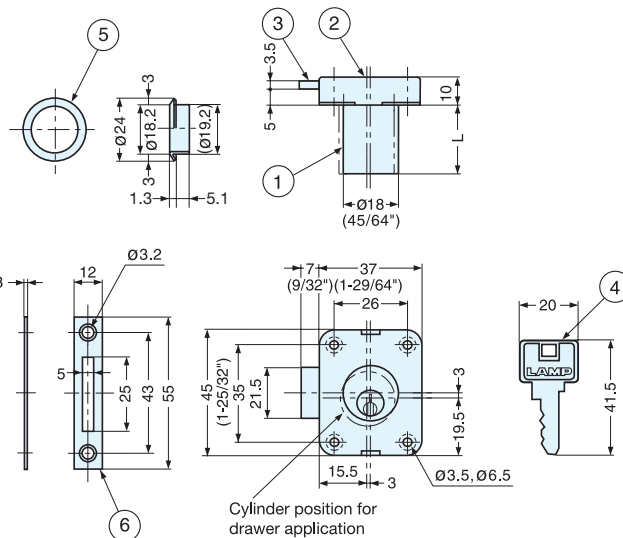
To change lock for drawer application:
turn lock cylinder 90° counterclockwise.



Installation for drawer



Installation for right-handed door

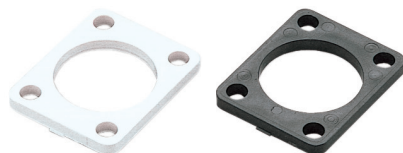


No.	Part Name	Material	Finish
①	Cylinder Housing	Brass	Nickel
②	Body		
③	Dead Bolt		
④	Key		
⑤	Ring	304 Stainless Steel	-
⑥	Counterplate		

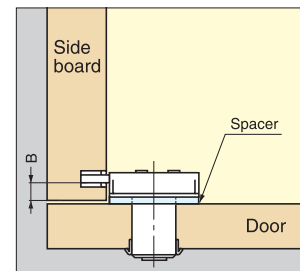
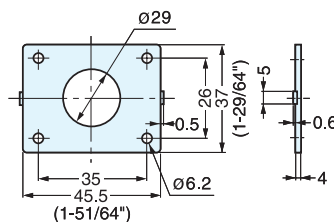
Item No.	L	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
3310-24	24 (15/16")	24 (15/16")	116	12	120
3310-30	30 (1-3/16")	30 (1-3/16")	125		

SPACER

TSSP



- Spacer for 2100, 2200, 2650, 3310, and 3320 locks.
- Use when additional distance on dimension B is required.
- Thickness: 4mm (5/32")
- Multiple spacers can be used if needed.



Item No.		Weight (g)	Box (pcs)	Carton (pcs)	Material	Color
TSSP-W	TSSP-B	14	150	1500	ABS	White/Black

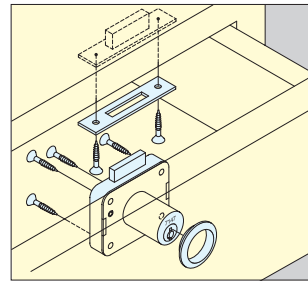
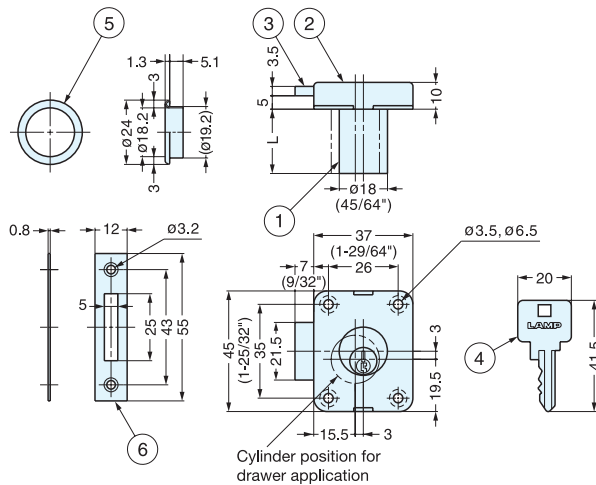
CABINET LOCK



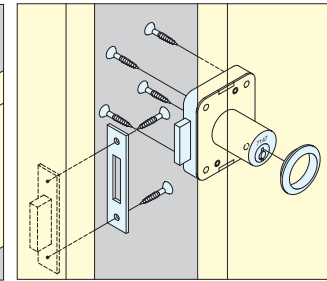
3320



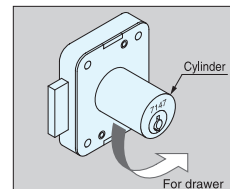
- Brass cylinder lock.
- Cylinder rotates for either drawer or cabinet door application.
- Cylinder Diameter: 18 mm (11/16")
- 156 key changes available; Please specify keyed alike or differently when ordering.
- Master key NOT available.
- Key is not removable in unlocked position, can be used as a knob.
- Keys can be shared with other 3300 series locks.
- 4 mm (5/32") plastic distance plate TSSP available for various door thickness.



Installation for drawer



Installation for right-handed door



To change lock for drawer application:
turn lock cylinder 90° counterclockwise.

No.	Part Name	Material	Finish
①	Cylinder Housing	Brass	Nickel
②	Body		
③	Dead Bolt		
④	Key		
⑤	Ring		
⑥	Counterplate	304 Stainless Steel	Plain

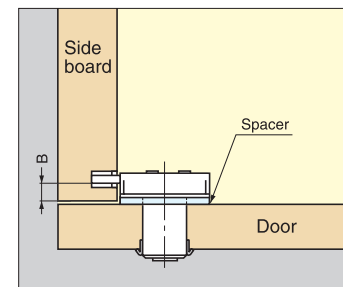
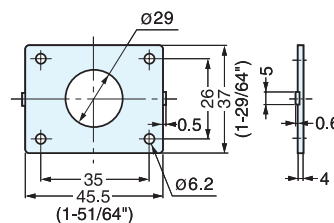
Item No.	L	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
3320-24	24 (15/16")	24 (15/16")	123	12	120
3320-30	30 (1-3/16")	30 (1-3/16")	135		

SPACER

TSSP



- Spacer for 2100, 2200, 2650, 3310 and 3320 locks.
- Use when additional distance on dimension B required.
- Thickness: 4 mm (5/32").
- Multiple spacers can be used if needed.



Item No.		Weight (g)	Box (pcs)	Carton (pcs)
TSSP-W	TSSP-B	14	150	1500

Material	Color
ABS	White/Black

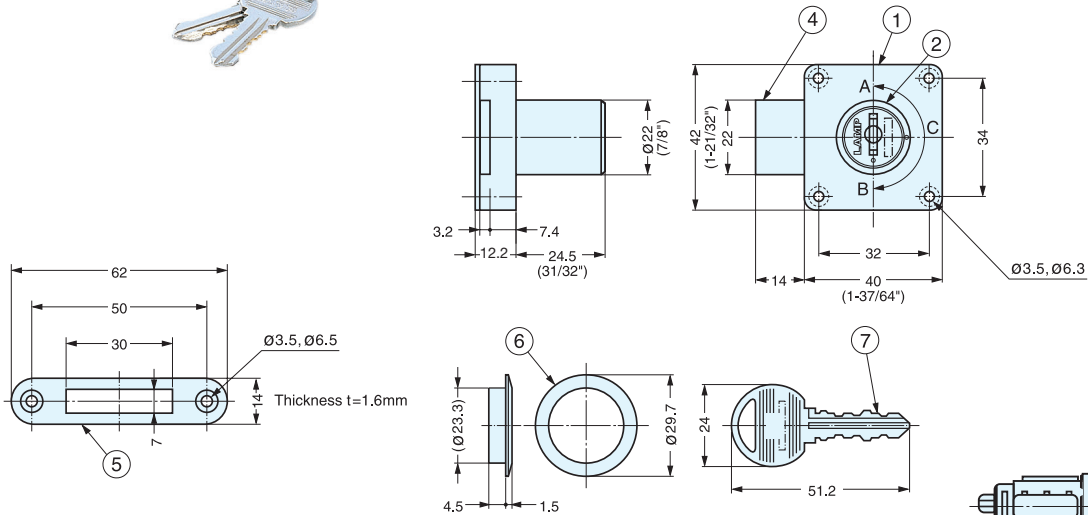
CABINET LOCK



5830-24MK

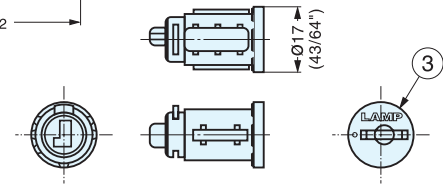
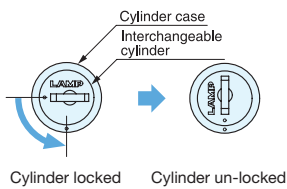


- Interchangeable Cylinder Lock.
- Inner cylinder can be replaced, ideal for applications where keys are often lost, and key numbers need to be changed for security.
- Long dead bolt.
- Lock housing, cylinder and 2 keys supplied per set.
- Cylinder housing Diameter: 22mm (7/8")
- Maximum 3,120 key changes available. (780 per master key.)
- Master Key, Cylinder Change Key and Cylinder for replacement sold separately.
Master Key - 5830-MK1
Cylinder Change Key - 5830-K1
Replacement Cylinder - 5830-N1



To remove the cylinder:

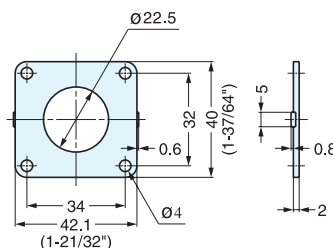
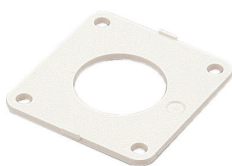
Turn cylinder by using cylinder change key (optional).
Match dots on cylinder and case.
Pull key to detach.



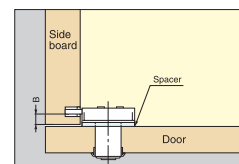
No.	Part Name	Material	Finish
①	Body	Zinc Alloy	Nickel
②	Cylinder Housing	Steel	
③	Interchangeable Cylinder	Zinc Alloy	
④	Dead Bolt	Steel	
⑤	Counterplate		
⑥	Ring	Brass	
⑦	Key		

SPACER

5830-SP



- Spacer for 5830-24MK.
- Use when additional distance on dimension B required.
- Thickness: 2mm (5/64")
- Multiple spacers can be used if needed.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Color
5830-SP	14	25	250	ABS	White

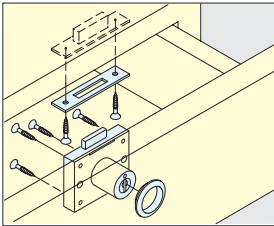
CABINET LOCK (W/INDICATOR)



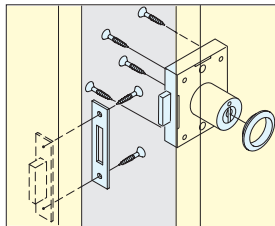
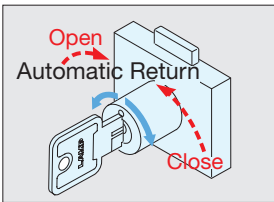
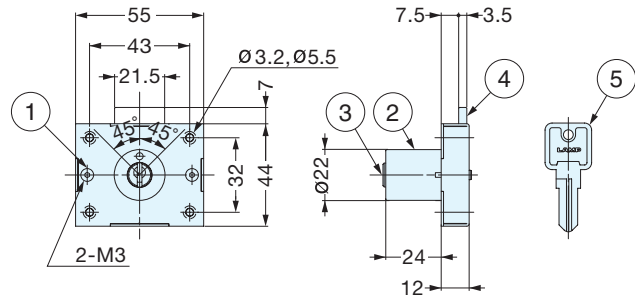
2200QL



- Only 1/8 turn is needed to unlock/lock the door.
- Key automatically returns to original position, making it easy to remove the key.
- With indicator.
- 300 key changes available; Please specify keyed alike or differently when ordering.
- Master key type available at surcharge.
(Maximum 170 key changes per master key)
- Keys can be shared with other 2200 series locks.



Installation for drawer

Installation for right-handed door
(This application is available with special ordered lock.)

Operation

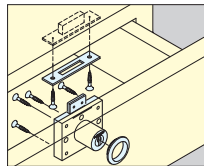
Item No.	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2200QL-24	24 (15/16")	200	12	60

No.	Part Name	Material	Finish
①	Body	304 Stainless Steel	Plain
②	Cylinder (Outer)	Brass	Stain Nickel
③	Cylinder (Inner)	Zinc Alloy	
④	Dead Bolt		Nickel
⑤	Key	Brass	

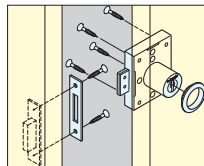
STAINLESS STEEL CABINET LOCK



3810S

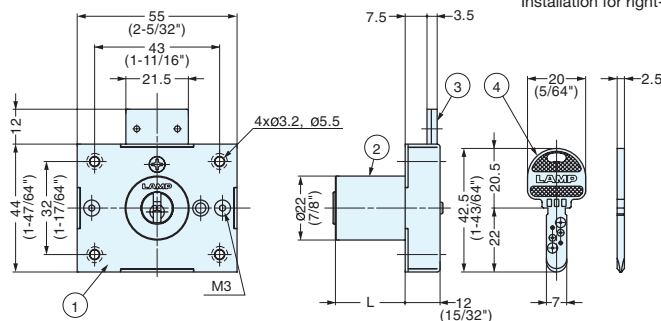


Installation for drawer

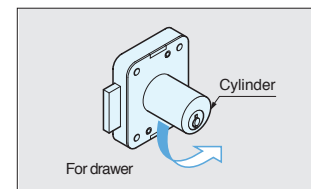


Installation for right-handed door

- Components made of 304 stainless steel for corrosion resistance.
- Durable key made of corrosion/abrasion resistant nickel. Key is reversible.
- Cylinder rotates for either drawer or cabinet door application.
- Up to 300 key changes available. Please specify keyed alike or differently when ordering.
- Master key option available as a special order at a surcharge.
- Can be used with spacer 6810-SP (P.581), sold separately.



6810-SP (Sold separately)



To change lock for drawer application, turn cylinder 90° counterclockwise and install fixing screw.

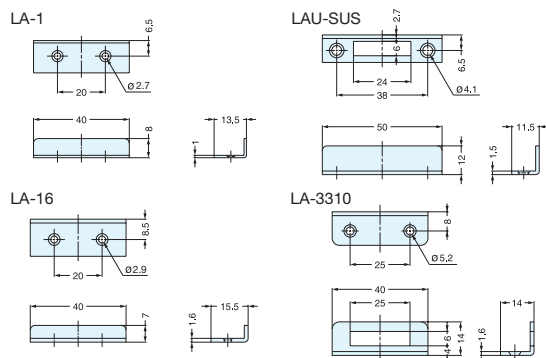
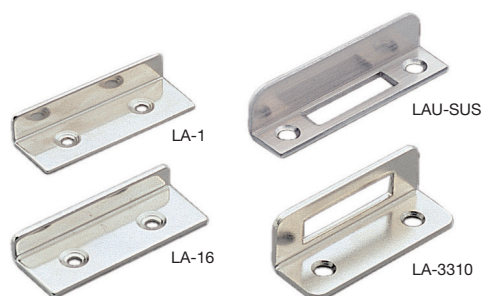
Item No.	L	Door Thickness(mm)	Weight(g)	Box(pcs)	Carton(pcs)
3810S-24	24 (15/16")	24 (15/16")	180	12	60
3810S-30	30 (1-3/16")	30 (1-3/16")	195		

No.	Part Name	Material	Finish
①	Body*	304 Stainless Steel	Plain
②	Cylinder Housing		Satin
③	Dead Bolt	Nickel Silver	Plain
④	Key		

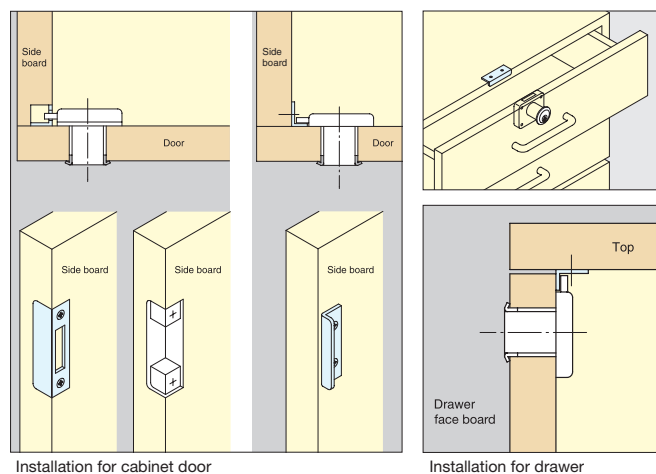
*Cylinder pins are made of brass.

STRIKE

LA SERIES



- Optional strike plates for applications where dead bolt is close to the cabinet edge, or for inset applications.
- LA-3310 is for double door application of 3310 series and 3320 series.

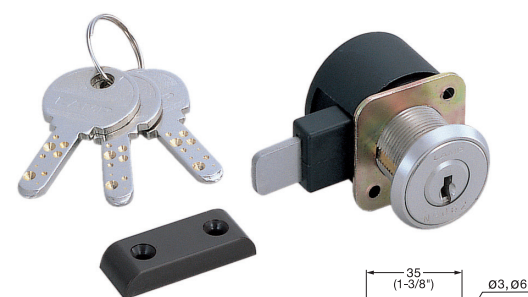


Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
LA-1	6	400	1600	Steel	Nickel
LA-16	9				
LA-3310	11	100	1000	304 Stainless Steel	Satin
LAU-SUS	10	250			

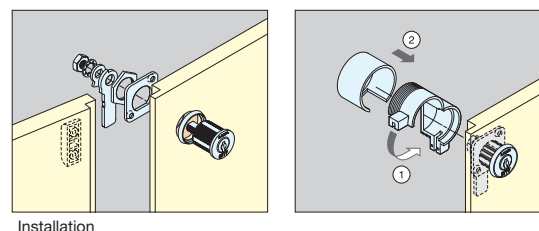
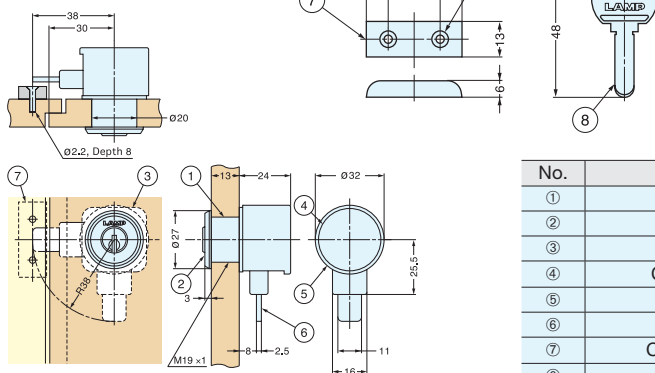
CAM LOCK FOR WOOD DOORS



1300SK



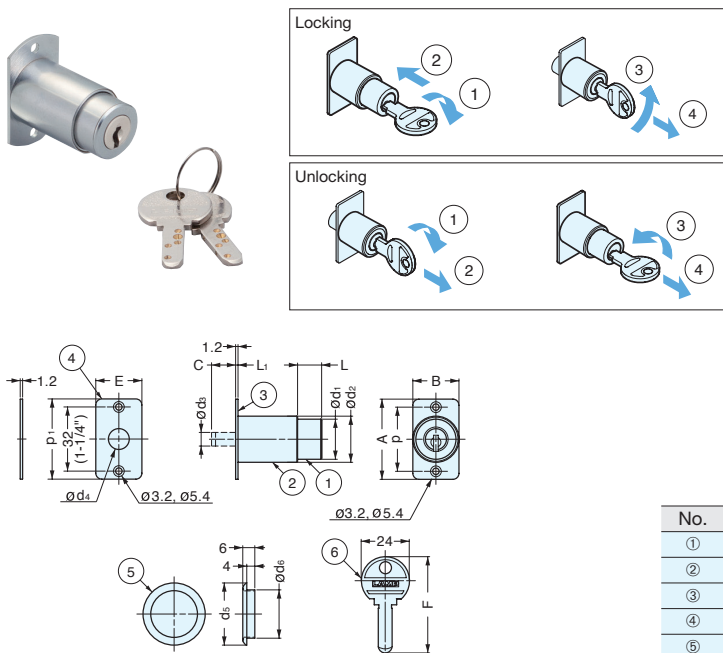
- Dimple key lock series.
- Reversible key. (3 keys supplied)
- Designed for door thickness 13mm (1/2").
- 1 million key changes available; Please specify keyed alike or differently when ordering.
- Turn the key 360° to lock or unlock.
- 90° cam rotation.
- Master key system available at surcharge.
(Max. 2,520 key changes per master key.)



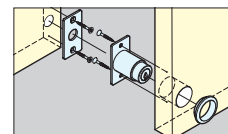
No.	Part Name	Material	Finish
①	Body	Brass	Nickel
②	Base Ring		
③	Plate	Steel	Zinc Chromate
④	Case Cover	Polypropylene	Black
⑤	Ring		
⑥	Cam	303 Stainless Steel	Satin
⑦	Counterplate	ABS	Brown
⑧	Key	Brass	Nickel

Item No.	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
1300SK	13 (1/2")	115	12	60

PUSH LOCK


2300, 2400


- Push lock for bypass sliding doors.
- Back-surface mount lock, counterplate is mounted on the front face of the back door.
- Locking: Turn key 90° to the right, push in, turn key 90° to the left, and remove.
- Unlocking: Turn key 90° to the right and lock will automatically disengage and turn the key 90° back, and remove.
- High-security Million Lock dimple key; one million key changes available.
- Please specify keyed alike or differently when ordering. (2,520 key changes per master key.)
- Master key system available by special order at a surcharge.



Installation

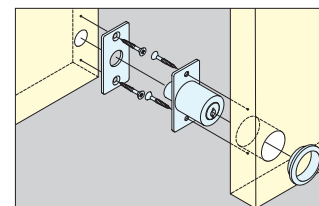
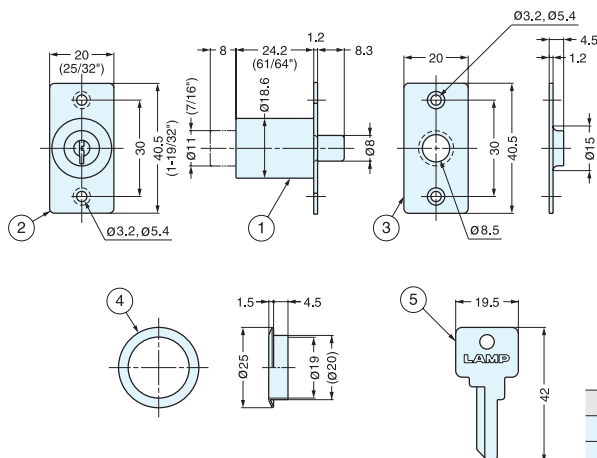
No.	Part Name	Material	Finish
①	Body	Brass	Chrome
②	Cylinder Housing	Zinc Alloy	
③	Counterplate	304 Stainless Steel	Plain
④	Mounting Plate		
⑤	Ring	Brass	Chrome
⑥	Key		Nickel

Item No.	Door Thickness(mm)	A	B	C	D	E	F	L ₁	L ₂	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	P	P ₁	Weight(g)	Box (pcs)	Carton (pcs)
2400M-20	20 (13/16")	35 (1-3/8")	20 (25/32")	10	35 (1-3/8")	20	46	22 (7/8")	10	16	20	7	7.5	26	21.1	27	27	65	12	60
2400M-25	25 (1")							27 (1-1/16")										70		
2300M	30 (1-3/16")	40 (1-9/16")	24 (15/16")	12	40 (1-9/16")	24	48	30 (1-3/16")	12	20	24	10	10.4	32	25.1	32	32	100		

PUSH LOCK


2160M


- Push lock for 1" thick bypass sliding doors.
- Back-surface mount lock, counterplate is mounted on the front face of the back door.
- Unlock by inserting the key and gently turning to the right and ejecting the cylinder.
- Lock by inserting the key and push the cylinder in.
- Up to 24 key changes available; master key option not available.
- Please specify keyed alike or differently when ordering.



Installation

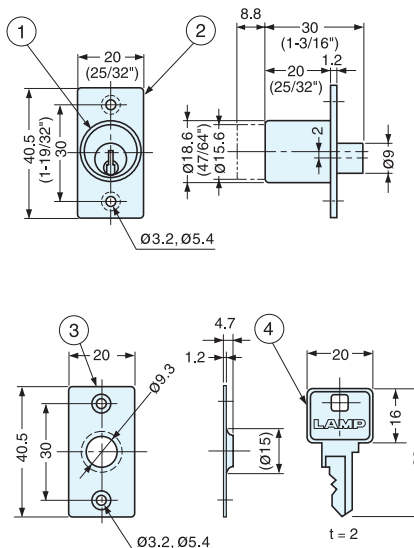
Item No.	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2160M	24 (15/16")	50	24	240

No.	Part Name	Material	Finish
①	Cylinder Housing	Zinc Alloy	Nickel
②	Mounting Plate	Brass	
③	Counterplate		
④	Ring		
⑤	Key		

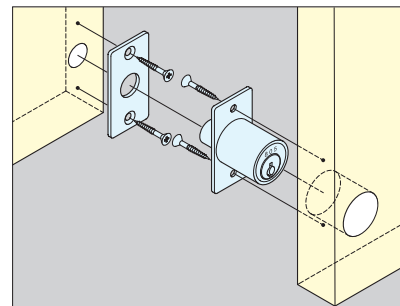
PUSH LOCK



2100M



- Zinc alloy cylinder push lock for sliding doors.
- Push cylinder to lock.
- Cylinder Length: 20mm (25/32")
- Cylinder Diameter: 18.6mm (47/64")
- 12 key changes available.
- Please specify keyed alike or differently when ordering.
- Master key NOT available.
- Keys can be shared with other 2100 series locks.



Installation

LOCKS

PUSH LOCKS

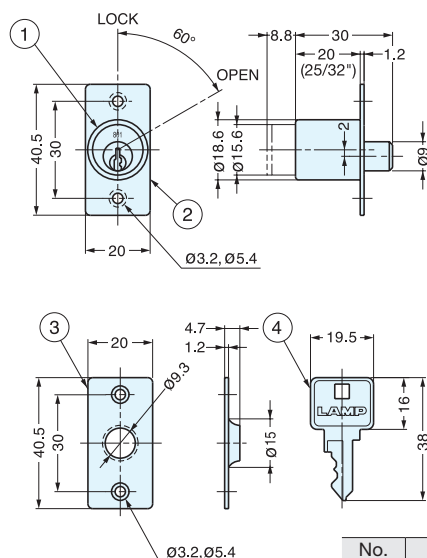
Item No.	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2100M	20 (25/32")	60	12	240

No.	Part Name	Material	Finish
①	Cylinder Housing	Zinc Alloy	Satin Nickel
②	Mounting Plate	Brass	Nickel
③	Counterplate		
④	Key		

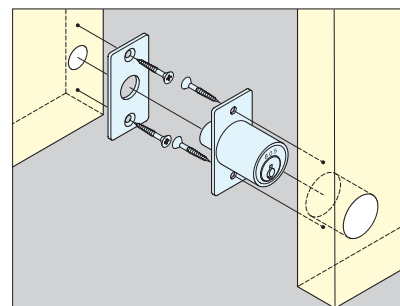
PUSH LOCK



2110M



- Zinc alloy cylinder push lock for sliding doors.
- Key is required to lock and to unlock.
- To Lock: Insert key and turn 60° clockwise. Push-in the cylinder and turn the key 60° back.
- Key is removable in both locked and un-locked position.
- Cylinder Length: 20mm (25/32")
- Cylinder Diameter: 18.6mm (47/64")
- 12 key changes available.
- Please specify keyed alike or differently when ordering.
- Master key NOT available.
- Keys can be shared with other 2100 series locks.



Installation

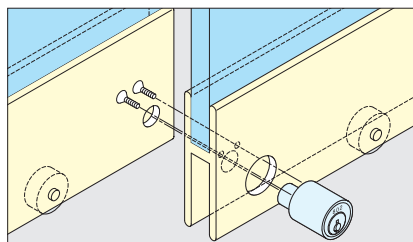
Item No.	Door Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2110M	20 (25/32")	60	12	240

No.	Part Name	Material	Finish
①	Cylinder Housing	Zinc Alloy	Nickel
②	Mounting Plate	Brass	
③	Counterplate		
④	Key		

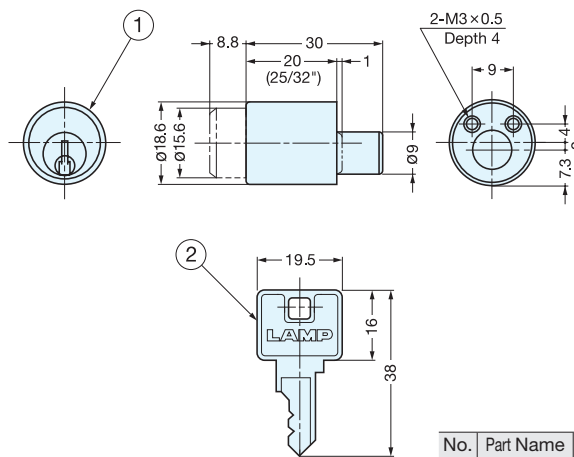
PUSH LOCK


2100B


- Zinc alloy cylinder push lock for metal-framed glass doors or sheet metal double sliding doors.
- Push cylinder to lock.
- Cylinder Diameter: 18.6 mm (47/64")
- Keys can be shared with other 2100 series locks.
- 12 key changes available; Please specify keyed alike or differently when ordering.



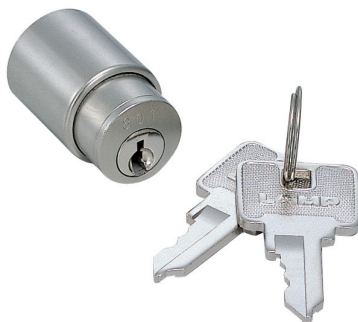
Installation



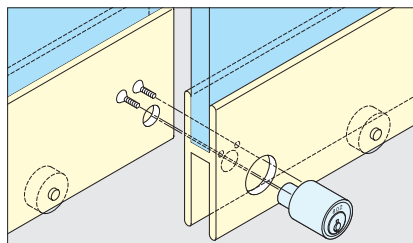
No.	Part Name	Material	Finish
①	Body	Zinc Alloy	Satin Nickel
②	Key	Brass	Nickel

Item No.	Metal Frame Thickness	Cylinder Diameter	Key Changes	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
2100B	20 (25/32")	18.6 (47/64")	12	2	50	40	400

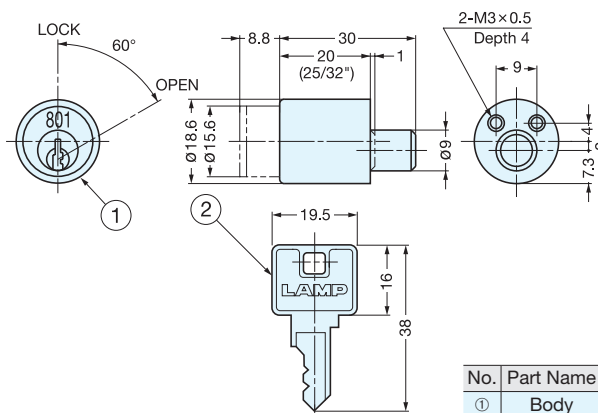
PUSH LOCK


2110B


- Zinc alloy cylinder push lock for metal-framed glass doors or sheet metal double sliding doors.
- Key is required to lock and to unlock.
- To Lock: Insert key and turn 60° clockwise. Push-in the cylinder and turn the key 60° back.
- Cylinder Diameter: 18.6 mm (47/64")
- 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 No.	Metal Frame Thickness	Cylinder Diameter	Key Changes	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
2110B	20 (25/32")	18.6 (47/64")	12	2	50	40	400

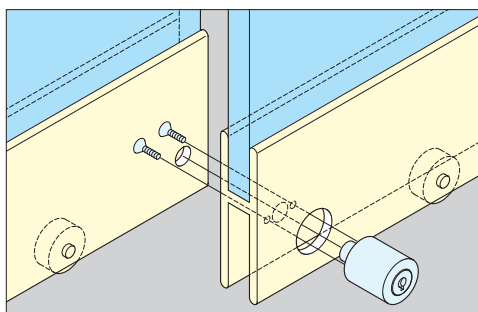
PUSH LOCK



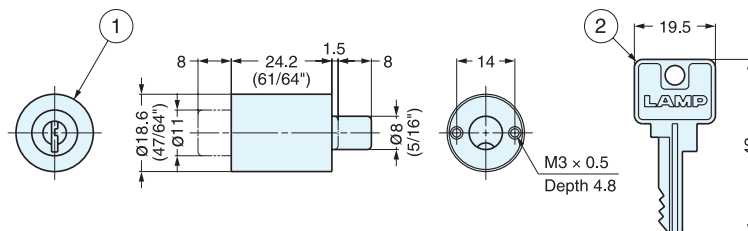
2150B



- Zinc alloy cylinder push lock for metal-framed glass door or sheet metal double sliding doors.
- Push cylinder to lock.
- Cylinder Diameter: 18.6mm (47/64")
- 24 key changes available; Please specify keyed alike or differently when ordering.
- Master key NOT available.



Installation



Item No.	Metal Frame Thickness	Weight (g)	Box (pcs)	Carton (pcs)
2150B	24 (15/16")	50	24	240

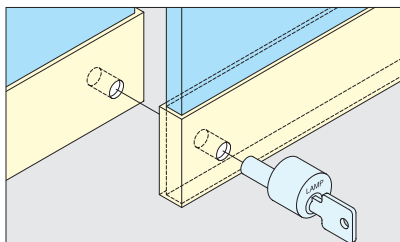
No.	Part Name	Material	Finish
①	Body	Zinc Alloy	Nickel
②	Key	Brass	

PUSH LOCK

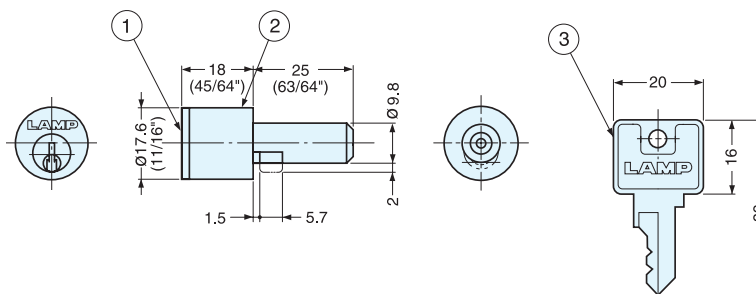
6300



- Zinc alloy cylinder push lock for metal-framed glass doors.
- Easy installation. Only 10mm hole required on door.
- Cylinder Diameter: 17.6mm (11/16")
- Bolt Length: 25mm (63/64")
- Bolt Diameter: 9.8mm (25/64")
- 96 key changes available; Please specify keyed alike or differently when ordering.
- Master key NOT available.
- For material thickness is 1.2mm.



Installation



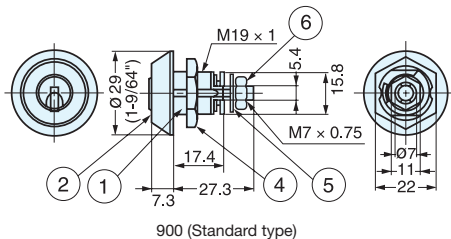
Item No.	Metal Frame Thickness	Cylinder Diameter	Key Changes	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
6300	19 (3/4")	17.6 (11/16")	96	2	50	24	240

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

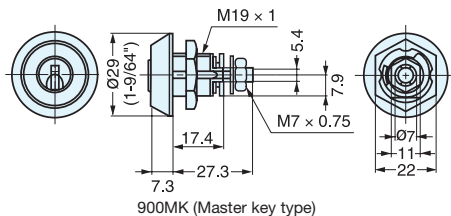
SHEET METAL CAM LOCK



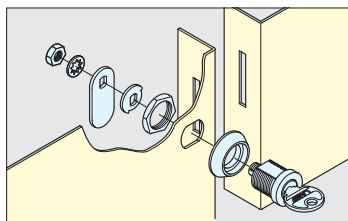
900



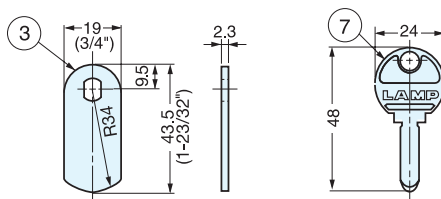
900 (Standard type)



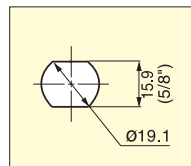
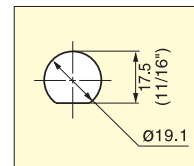
900MK (Master key type)



Installation



- Brass cylinder cam lock.
- Reversible key.
- 90 degree cam rotation.
- Key is removable in locked position only.
(Key works as a knob in unlocked position.)
- 1 million key changes available; Please specify keyed alike or differently when ordering.
- Master key type available at surcharge.
(Maximum 2,520 key changes per master key.)

Cut Out Dimensions
(Standard type)Cut Out Dimensions
(Master key type)

Item No.	Metal Thickness (mm)	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
900	0.8~8 (1/32"~5/16")	2	120	12	60
900MK (with Master key)					

No.	Part Name	Material	Finish
①	Body	Brass	Chrome
②	Ring		
③	Cam	Steel	Yellow Zinc Chromate
④	Hex Nut		Nickel
⑤	Washer		Yellow Zinc Chromate
⑥	Hex Nut	Brass	Nickel
⑦	Key		

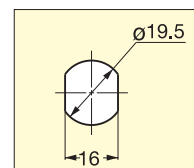
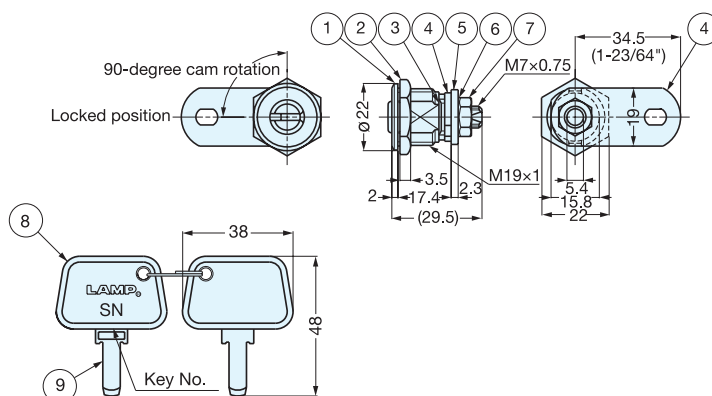
SHEET METAL CAM LOCK



SN-711-8



- Brass cylinder cam lock.
- 90 degree cam rotation.
- Key is removable in locked position only.
"Keyed differently" is available by special order.
(Up to 1,500 key changes.)
- * Extreme pressure on key when in unlocked position may cause damage to the lock.



Cut Out Dimensions

Item No.	Metal Thickness (mm)	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
SN-711-8	0.1~9 (1/64"~23/64")	2	77	50	150

No.	Part Name	Material	Finish/Color
①	Body	Brass	Chrome
②	Large Hex Nut	Steel	Yellow Zinc Chromate
③	Ring	304 Stainless Steel	Plain
④	Cam	Steel	Chromate
⑤	Plate		
⑥	Washer		
⑦	Small Hex Nut		Yellow Zinc Chromate
⑧	Cover	ABS	Black
⑨	Key	Brass	Nickel

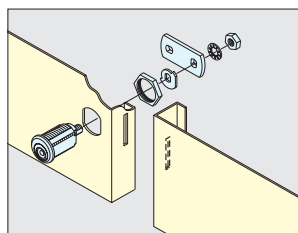
SHEET METAL CAM LOCK



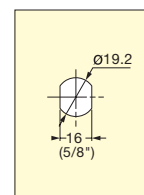
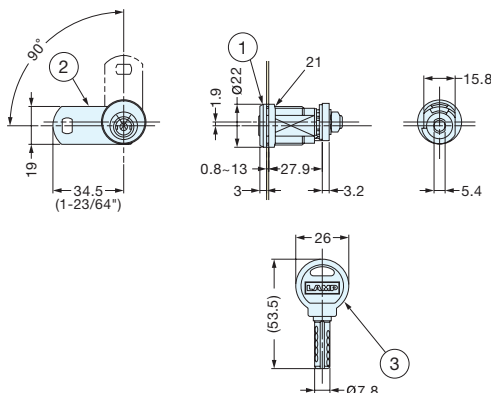
DCY-34



- High security with special key design.
- Reversible key.
- 90 degree cam rotation
- Key is removable in locked position only.
(Key works as a knob in unlocked position.)
- Universal direction - Cam direction changeable.
- 2,000 key changes available; Please specify keyed alike or differently when ordering.
- Master key type available at surcharge.
(Maximum 866 key changes per master key)



Installation



Cut Out Dimensions

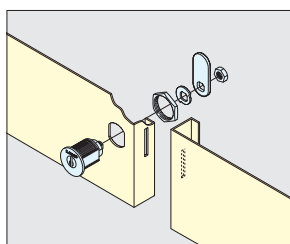
No.	Part Name	Material	Finish
①	Body	Brass	Chrome
②	Cam		Yellow Zinc Chromate
③	Key	Brass/ABS	Nickel/Black

Item No.	Metal Thickness (mm)	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
DCY-34	0.8~13 (1/32"~1/2")	2	101	12	60

SHEET METAL CAM LOCK

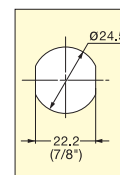
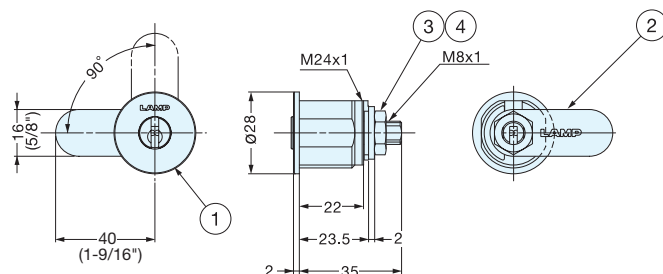


3800S



Installation

- High corrosion resistance.
- Reversible key.
- Key is removable in locked position only.
(Key works as a knob in unlocked position.)
- Universal direction - Cam direction changeable.
- 300 key changes available; Please specify keyed alike or differently when ordering.
- Master key type available at surcharge.
(Maximum 300 key changes per master key)



Cut Out Dimensions

						No.	Part Name	Material	Finish
						①	Body	303 Stainless Steel	Satin
						②	Cam	304 Stainless Steel	Plain
						③	Small Hex Nut	303 Stainless Steel	
						④	Washer	304 Stainless Steel	
						⑤	Key	Nickel Silver	
Item No.	Metal Thickness (mm)	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)				
3800S	2~10 (5/64"~3/8")	2	119	12	60				

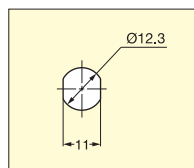
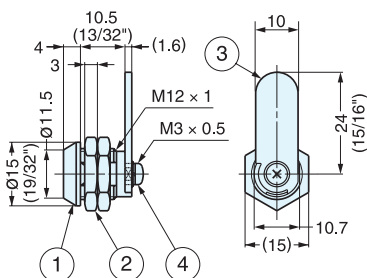
Item No.	Metal Thickness (mm)	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
3800S	2~10 (5/64"~3/8")	2	119	12	60

SHEET METAL MINI CAM LOCK

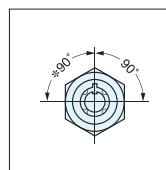
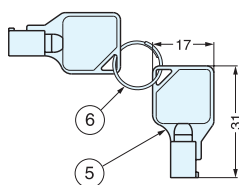
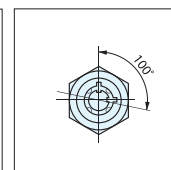
NAL-S



- Mini zinc alloy cylinder cam lock for sheet metal doors.
- 90 degrees cam rotation.
- Cam is reversible.
- NAL-S-1: Key withdrawals in locked position only. (Key works as a knob in unlocked position.)
- NAL-S-2: Key withdrawals in both locked and unlocked positions.
- Keyed alike only. Keyed differently type available upon request. (Special order)
- * Cam should be horizontal when unlocked, and should be pointing upwards when locked.
- * Not suitable for compression latch situation.
- * Pressure to cam may cause damage to cylinder.



Cut Out Dimensions

One slot type
NAL-S-1Two slot type
NAL-S-2

*Turn the cam (3) over to use NAL-S as a counterclockwise turn lock.

No.	Part Name	Material	Finish
①	Body	Zinc Alloy	Chrome
②	Hex Nut	Steel	Chromate
③	Cam		Chrome
④	Screw		Chromate
⑤	Key		Chrome
⑥	Key Ring	304 Stainless Steel	Plain

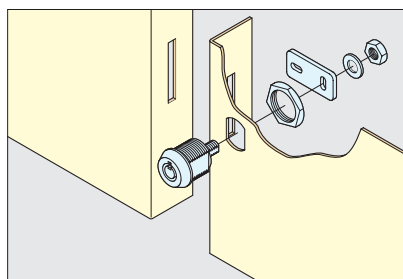
Item No.	Number of Slot (s)	Cylinder Diameter	Key Changes	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
NAL-S-1	1	12 (1/2") / Width 10.7 (7/16")	100	2	25	100	500
NAL-S-2	2	12 (1/2") / Width 10.7 (7/16")					

SHEET METAL CAM LOCK

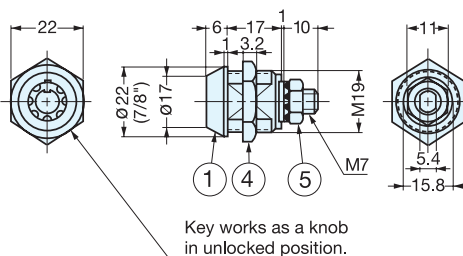
NAL



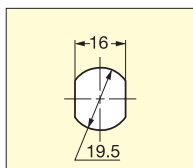
- Brass cylinder tubular cam lock for sheet metal doors.
- 90 degree cam rotation.
- Key is removable in locked position only. (Key acts as a knob in un-locked position.)
- Please specify key No. or combination when ordering if necessary.
- 5,000 key changes available; Please specify keyed alike or differently when ordering.



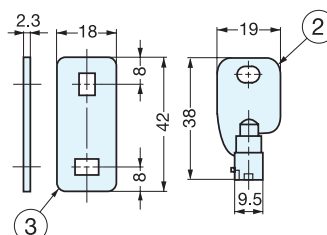
Installation



Key works as a knob in unlocked position.



Cut Out Dimensions



No.	Part Name	Material	Finish
①	Body	Brass	Chrome
②	Key	Steel	Nickel
③	Cam	Brass	Yellow Zinc Chromate
④	Hex Nut		
⑤			

Item No.	Door Thickness (mm)	Cylinder Diameter	Key Changes	Keys Included	Weight (g)	Box (pcs)	Carton (pcs)
NAL	Max. 10 (3/8")	19 (3/4") / Width 15.8 (5/8")	5000	2	55	100	300



CASTERS & LEVELING GLIDES

TWIN WHEEL CASTERS
DUAL BRAKE SYSTEM CASTERS
LOW PROFILE HEAVY DUTY CASTERS
CASTER WITH LEVELING GLIDES
SHOCK ABSORBING CASTERS
LEVELING GLIDES
ACCESSORIES

TWIN WHEEL CASTERS

Picture	Item No.	Load Capacity (lbs)	Wheel Diameter	Page	
	FA-45-PS, P (PLATE)	110	1-57/64"	602	
	FP-45-PS, P (PLATE)	88	1-57/64"	602	
	FA-45-NS, N (THREADED BOLT)	110	1-57/64"	603	
	FP-45-NS, N (THREADED BOLT)	88	1-57/64"	603	
	FA-55-PS, P (PLATE)	176	2-3/32"	604	
	FP-55-PS, P (PLATE)	110	2-3/32"	604	
	FA-55-NS, N (THREADED BOLT)	176	2-3/32"	605	
	FP-55-NS, N (THREADED BOLT)	110	2-3/32"	605	
	FAU-55-NS, N (THREADED BOLT)	154	2-3/32"	606	
	FPU-55-NS, N (THREADED BOLT)	110	2-3/32"	606	
	GX-50-PS, P (PLATE)	220	1-31/32"	608	
	GX-50-N12S, N12 (THREADED BOLT)	220	1-31/32"	608	
	GX-60-PS, P (PLATE)		330	2-23/64"	609
	GX-60-N12S, N12 (THREADED BOLT)		330	2-23/64"	609
	GX-75-PS, P (PLATE)	438	2-61/64"	610	
	GX-75-N16S, N16 (THREADED BOLT)	438	2-61/64"	610	
	GX-W50K (NON-SWIVEL)	441	1-31/32"	611	
	GX-W50GN12, GN16, GP (BOLT & PLATE)	441	1-31/32"	611	

SINGLE WHEEL CASTERS

Picture	Item No.	Load Capacity (lbs)	Wheel Diameter	Page
	PLN50P (PLATE)	220	1-31/32"	607
	PLN50N10 (THREADED BOLT)	220	1-31/32"	607

DUAL BRAKE SYSTEM CASTERS

Picture	Item No.	Load Capacity (lbs)	Wheel Diameter	Page	
	EX-100PS, P (PLATE)	220	3-15/16"	612	
	EX-100N (THREADED BOLT)	220	3-15/16"	612	
	MX-125PS, P (PLATE)		264	4-15/16"	613
	MX-125N (THREADED BOLT)		264	4-15/16"	613

LOW PROFILE HEAVY DUTY CASTERS

Picture	Item No.		Load Capacity (lbs)	Wheel Diameter	Page
	UHG (PLATE)		898 - 1795	1-31/32" ~3-15/16"	614
	HG (PLATE)		359 - 561	1-31/32" ~2-61/64"	614
	HR (NON-SWIVEL)		359 - 561	1-31/32" ~2-61/64"	615

CASTER WITH LEVELING GLIDES

Picture	Item No.		Load Capacity (lbs)	Wheel Diameter	Page
	AF-50, 65 (HEAVY DUTY)		561	1-31/32" 2-9/16"	616
	CA (PARTS SEPARABLE)		132 - 264	1-31/32" 2-61/64"	617

SHOCK ABSORBING CASTERS

Picture	Item No.		Load Capacity (lbs)	Wheel Diameter	Page
	NPG (PLATE)		66	3-15/16" 4-59/64"	618
	NPR (PLATE)		66	3-15/16" 4-59/64"	619
	NPT (THREADED BOLT)		66	3-15/16" 4-59/64"	619

LEVELING GLIDES

Picture	Item No.		Load Capacity (lbs)	Height	Page
	ADPS		660~1938	3"~8-5/16"	620
	ADCS		660~1938	5"~8-17/64"	620
	MKP		264~352	1-27/64"~1-15/32"	621
	MKPS		440~881	1-27/64"~2-1/32"	621
	MKR (W/RUBBER PAD)		88~132	1-27/64"~1-15/32"	622
	MKRS (W/RUBBER PAD)		88~220	1-27/64"~2-1/32"	622
	MKRL		132~440	2-23/64"~5-25/64"	623
	MKPLS (LONG-STEM)		440~748	3-13/16"~3-15/16"	624
	MKRLS (LONG-STEM)		176~220	3-13/16"~3-15/16"	624
	MN		264~880	1-37/64"~1-31/32"	625
	RP		132~1368	1-7/32"~2-5/8"	625
	TG		220~396	53/64"~1-1/32"	626
	TN		308	3-3/16"~3-1/4"	627
	EA (PARTS SEPARABLE)		110~594	1-7/32"~2-1/64"	627
	SAJ30 (AUTOMATIC HEIGHT ADJUSTING)		110	1-19/64"~1-47/64"	628
	MKR-N		132~176	1-13/32"~2-3/8"	629
	MKR-N32		100	1-7/8"~2-3/16"	629
	MDSF		-	2-5/8"~5-11/16"	630

ACCESSORIES

Picture	Item No.		Page
	AD-438 (GLIDE BASE)		631
	AP-36 (GLIDE BASE)		631
	KD-555 (GLIDE BASE)		631
	FA55-FIX (CASTER BRACKET)		607

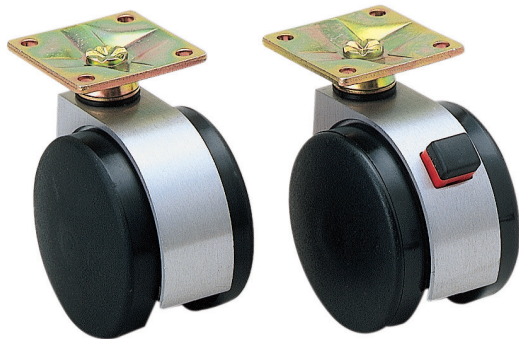
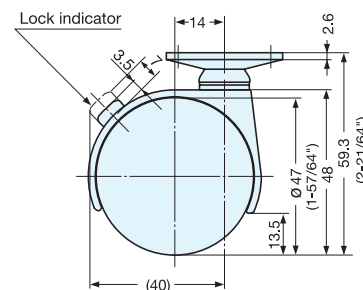
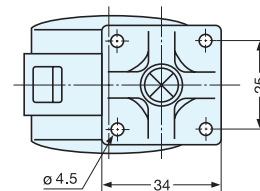
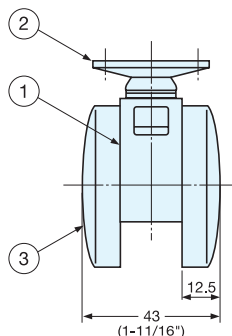
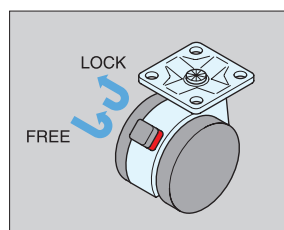
TWIN WHEEL CASTER (PLATE TYPE)



LOAD CAPACITY
50 kg
110 lbs

FA-45-PS, P

- Light & durable aluminum body construction.

FA-45-P
(w/o Brake)FA-45-PS
(w/ Brake)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FA-45-PS	50 (110 lbs)	117	4	100
FA-45-P	50 (110 lbs)	113		

No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Silver
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

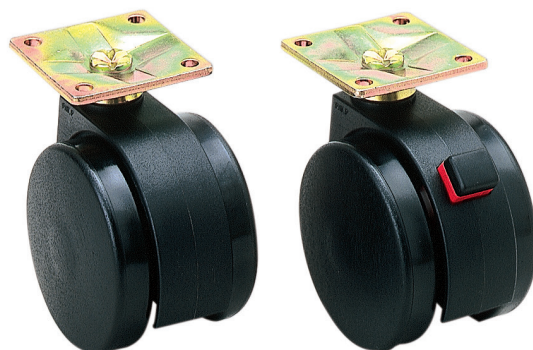
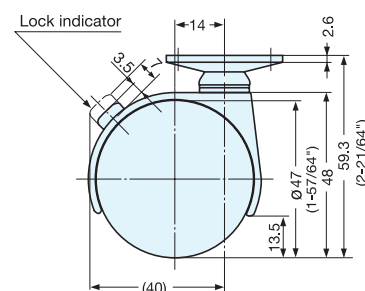
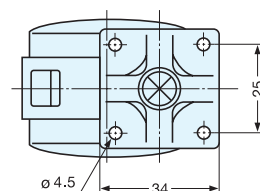
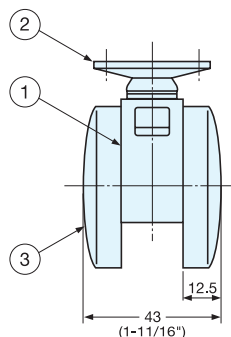
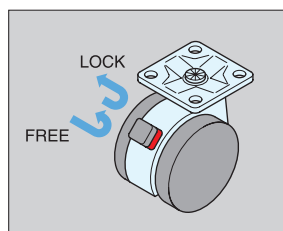
TWIN WHEEL CASTER (PLATE TYPE)



LOAD CAPACITY
40 kg
88 lbs

FP-45-PS, P

- Caster with high quality polyamide body. Excellent durability, chemical / weather / wear resistance.

FP-45-P
(w/o Brake)FP-45-PS
(w/ Brake)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FP-45-PS	40 (88 lbs)	98	4	100
FP-45-P	40 (88 lbs)	94		

No.	Part Name	Material	Finish
①	Body	Polyamide	Black
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)

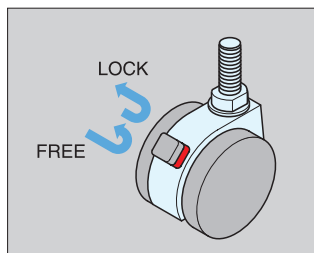
LOAD CAPACITY
50 kg
110 lbs

FA-45-NS, N

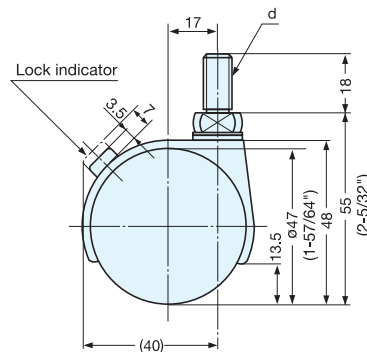
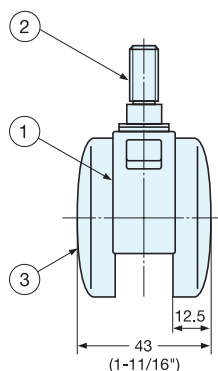


FA-45-N
(w/o Brake)

FA-45-NS
(w/ Brake)



- Light & durable aluminum body construction.



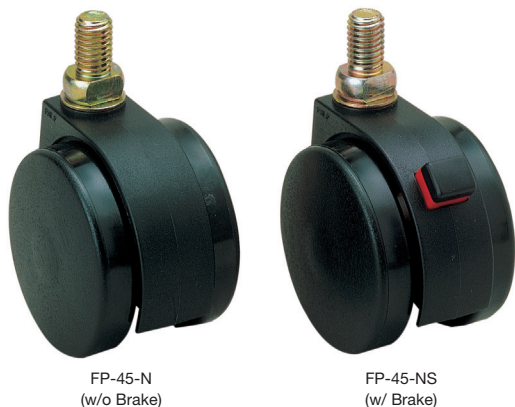
Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FA-45-NS	W3/8-16UNC	50 (110 lbs)	100	4	100
FA-45-N	W3/8-16UNC	50 (110 lbs)	97		

No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Silver
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)

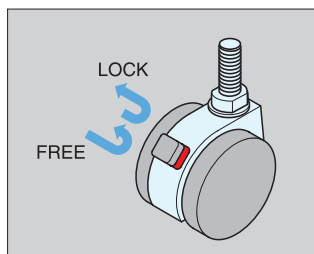
LOAD CAPACITY
40 kg
88 lbs

FP-45-NS, N

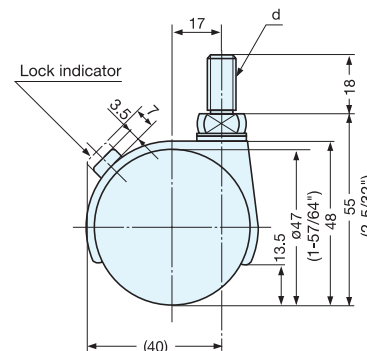
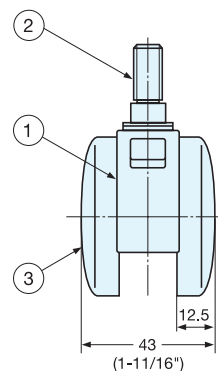


FP-45-N
(w/o Brake)

FP-45-NS
(w/ Brake)



- Caster with high quality polyamide body. Excellent durability, chemical/weather/wear resistance.



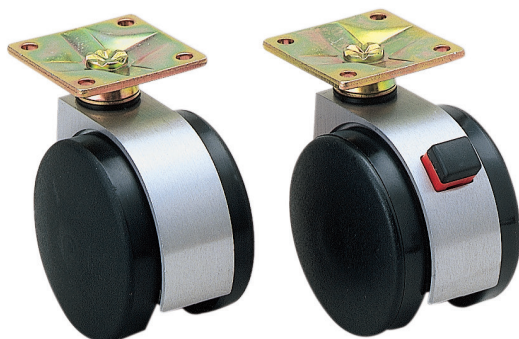
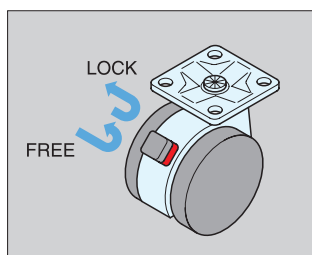
Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FP-45-NS	W3/8-16UNC	40 (88 lbs)	84	4	100
FP-45-N	W3/8-16UNC	40 (88 lbs)	79		

No.	Part Name	Material	Finish
①	Body	Polyamide	Black
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

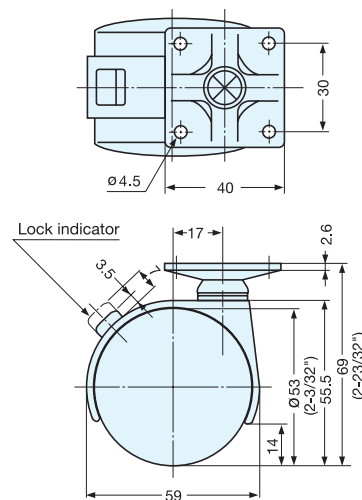
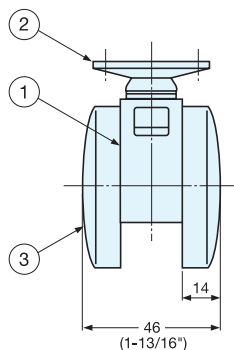
TWIN WHEEL CASTER (PLATE TYPE)



FA-55-PS, P

FA-55-P
(w/o Brake)FA-55-PS
(w/ Brake)

- Light & durable aluminum body construction.



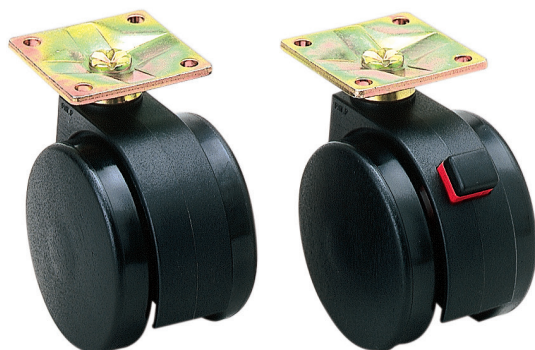
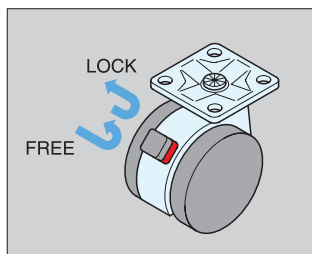
Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FA-55-PS	80 (176 lbs)	160	4	72
FA-55-P	80 (176 lbs)	155		

No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Silver
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

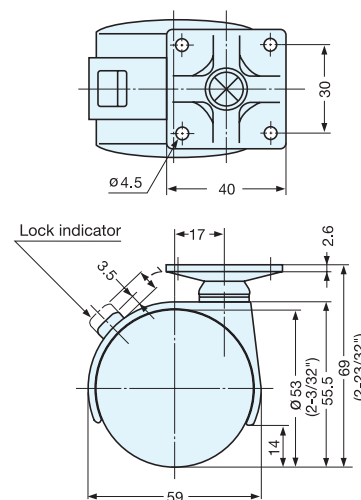
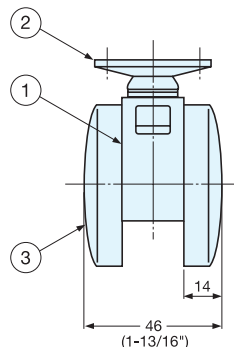
TWIN WHEEL CASTER (PLATE TYPE)



FP-55-PS, P

FP-55-P
(w/o Brake)FP-55-PS
(w/ Brake)

- Caster with high quality polyamide body. Excellent durability, chemical/weather/wear resistance.



Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FP-55-PS	50 (110 lbs)	133	4	72
FP-55-P	50 (110 lbs)	128		

No.	Part Name	Material	Finish
①	Body	Polyamide	Black
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)

LOAD CAPACITY
80 kg
176 lbs

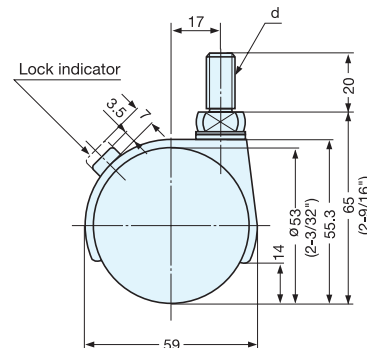
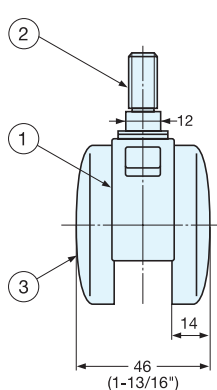
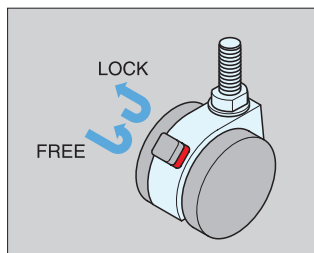
FA-55-NS, N

- Light & durable aluminum body construction.



FA-55-N
(w/o Brake)

FA-55-NS
(w/ Brake)



Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)	No.	Part Name	Material	Finish
FA-55-NS	W3/8-16UNC	80 (176 lbs)	140	4	72	①	Body	Aluminum Alloy	Silver
FA-55-N	W3/8-16UNC	80 (176 lbs)	135			②	Threaded Bolt	Steel	Yellow Zinc Chromate
						③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)

LOAD CAPACITY
50 kg
110 lbs

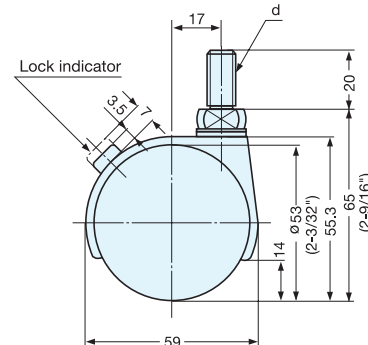
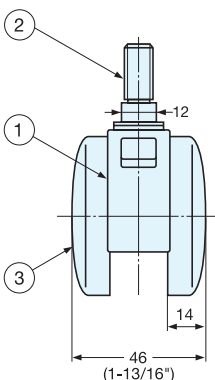
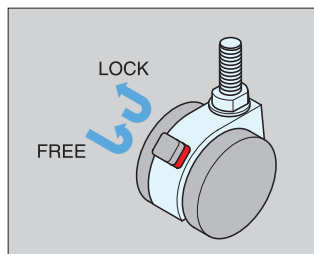
FP-55-NS, N

- Caster with high quality polyamide body. Excellent durability, chemical/weather/wear resistance.



FP-55-N
(w/o Brake)

FP-55-NS
(w/ Brake)

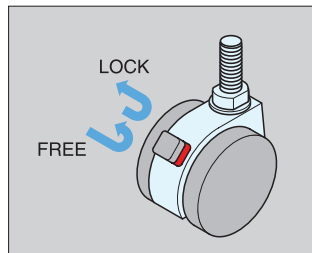


Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)	No.	Part Name	Material	Finish
FP-55-NS	W3/8-16UNC	50 (110 lbs)	115	4	72	①	Body	Polyamide	Black
FP-55-N	W3/8-16UNC	50 (110 lbs)	110			②	Threaded Bolt	Steel	Yellow Zinc Chromate
						③	Wheel	Polyamide	Black

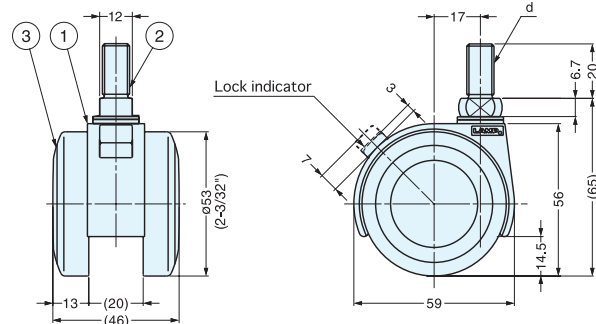
TWIN WHEEL CASTER (THREADED BOLT TYPE)

LOAD CAPACITY
 70 kg
 154 lbs

FAU-55-NS, N

FAU-55-N
(w/o Brake)FAU-55-NS
(w/ Brake)

- Wheels are covered with elastomer (rubber) for smooth and quiet movement, by absorbing vibration.
- Light & durable aluminum body construction.



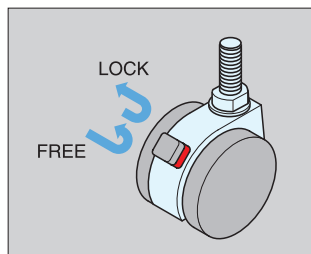
No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Silver
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide, Elastomer	Black

Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FAU-55-NS	W3/8-16UNC	70 (154 lbs)	155	4	72
FAU-55-N	W3/8-16UNC	70 (154 lbs)	151		

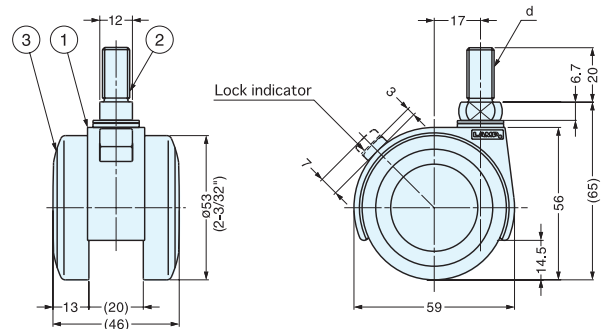
TWIN WHEEL CASTER (THREADED BOLT TYPE)

LOAD CAPACITY
 50 kg
 110 lbs

FPU-55-NS, N

FPU-55-N
(w/o Brake)FPU-55-NS
(w/ Brake)

- Wheels are covered with elastomer (rubber) for smooth and quiet movement, by absorbing vibration.
- Caster with high quality polyamide body. Excellent durability, chemical/weather/wear resistance.



No.	Part Name	Material	Finish
①	Body	Polyamide	Black
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide, Elastomer	Black

Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
FPU-55-NS	W3/8-16UNC	50 (110 lbs)	128	4	72
FPU-55-N	W3/8-16UNC	50 (110 lbs)	123		

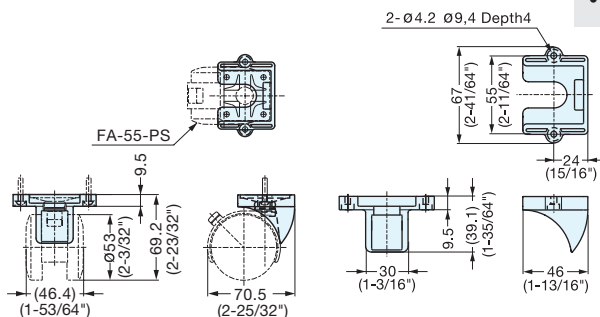
CASTER BRACKET



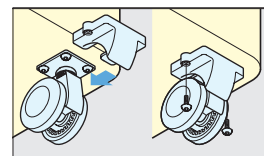
FA55-FIX



Application



- Keeps caster from swiveling.
- Use with FA-55/FAU-55/FP-55/FPU-55 casters.
- Easy to install over previously installed caster.



Installation

Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Part Name	Material	Color
FA55-FIX	23	50	500	Body	Glass Fiber Reinforced Polyamide	Black

CASTER (PLATE TYPE)

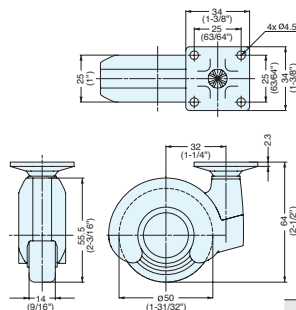


PLN50P



PLN50PCR

PLN50PBL



- Sleek contemporary design, available in Black (BL) or Chrome (CR)
- Ball-bearing type caster for exceptionally smooth movement.

Part Name	Material	Finish
Body	Zinc Alloy	BL=Black, CR=Chrome
Plate	Steel	Yellow Zinc Chromate
Wheel	Polamide	Black

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
PLN50PBL	100 (220 lbs)	220	-	-
PLN50PCR				

CASTER (THREADED BOLT TYPE)

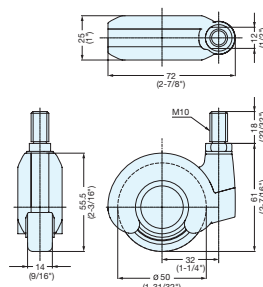


PLN50N10



PLN50N10CR

PLN50N10BL



- Sleek contemporary design, available in Black (BL) or Chrome (CR)
- Ball-bearing type caster for exceptionally smooth movement.

Part Name	Material	Finish
Body	Zinc Alloy	BL=Black, CR=Chrome
Plate	Steel	Yellow Zinc Chromate
Wheel	Polamide	Black

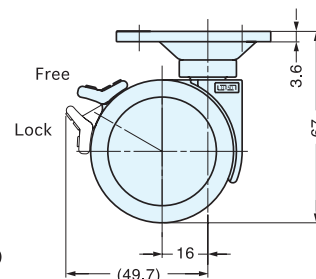
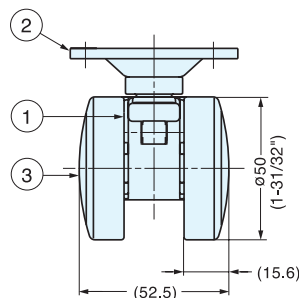
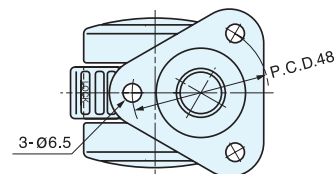
Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
PLN50N10BL	100 (220 lbs)	203	-	-
PLN50N10CR				

TWIN WHEEL CASTER (PLATE TYPE)

TEST 13
P.660LOAD CAPACITY
100 kg
220 lbs

GX-50-PS, P

- Heavy duty and low profile.
- Twin wheel caster with excellent stability.

GX-50-P
(w/o Brake)GX-50-PS
(w/ Brake)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-50-PS	100 (220 lbs)	235	4	72
GX-50-P	100 (220 lbs)	230		

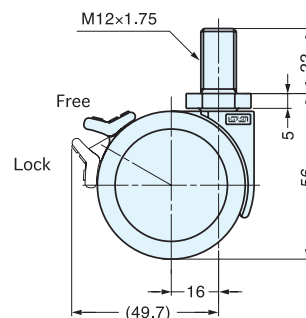
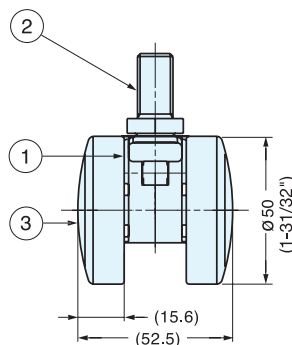
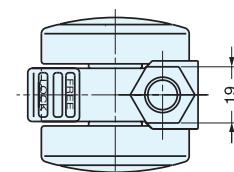
No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)

TEST 13
P.660LOAD CAPACITY
100 kg
220 lbs

GX-50-N12S, N12

- Heavy duty and low profile.
- Twin wheel caster with excellent stability.

GX-50-N12
(w/o Brake)GX-50-N12S
(w/ Brake)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-50-N12S	100 (220 lbs)	175	4	72
GX-50-N12	100 (220 lbs)	170		

No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (PLATE TYPE)



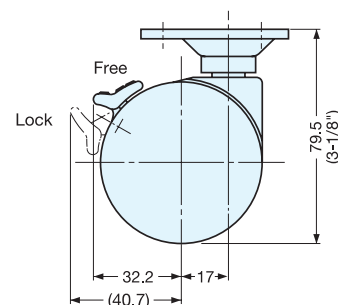
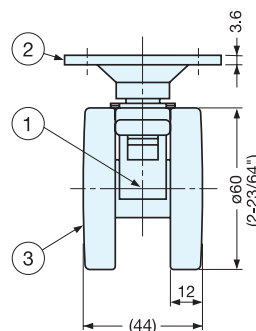
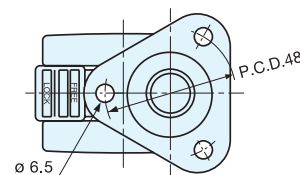
GX-60-PS, P

- Heavy duty and low profile.
- Twin wheel caster with excellent stability.



GX-60-P
(w/o Brake)

GX-60-PS
(w/ Brake)



Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-60-PS	150 (330 lbs)	234	4	60
GX-60-P	150 (330 lbs)	229		

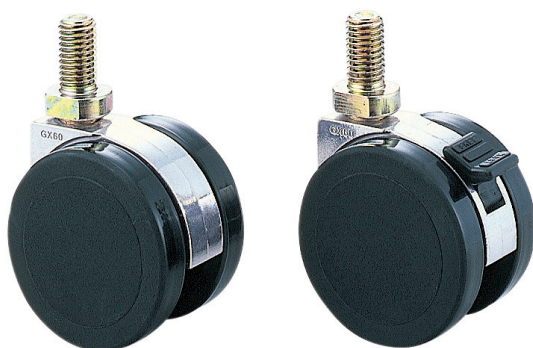
No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)



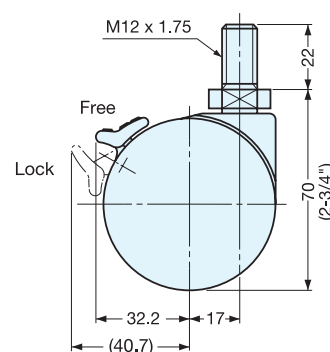
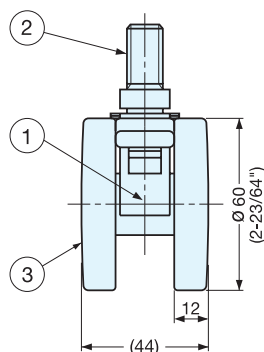
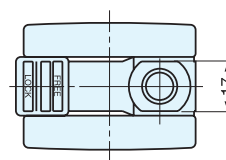
GX-60-N12S, N12

- Heavy duty and low profile.
- Twin wheel caster with excellent stability.



GX-60-N12
(w/o Brake)

GX-60-N12S
(w/ Brake)



Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-60-N12S	150 (330 lbs)	185	4	60
GX-60-N12	150 (330 lbs)	180		

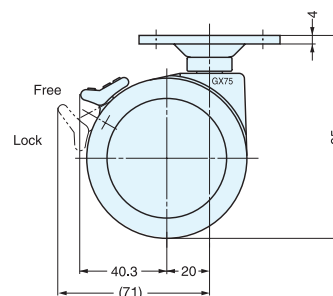
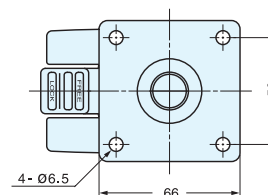
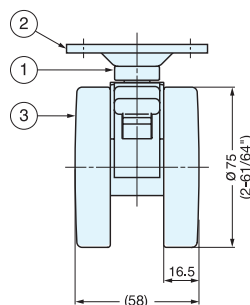
No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (PLATE TYPE)



GX-75-PS, P

- Heavy duty and low profile.
- Twin wheel caster with excellent stability.

GX-75-P
(w/o Brake)GX-75-PS
(w/ Brake)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-75-PS	200 (438 lbs)	445	2	24
GX-75-P	200 (438 lbs)	430		

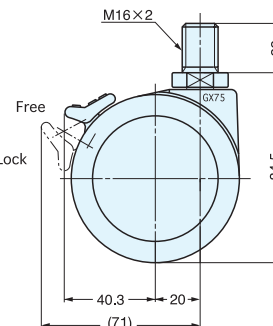
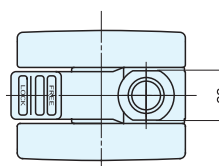
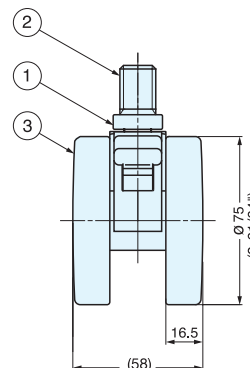
No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

TWIN WHEEL CASTER (THREADED BOLT TYPE)



GX-75-N16S, N16

- Heavy duty and low profile.
- Twin wheel caster with excellent stability.

GX-75-N16
(w/o Brake)GX-75-N16S
(w/ Brake)

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-75-N16S	200 (438 lbs)	350	2	24
GX-75-N16	200 (438 lbs)	340		

No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide	Black

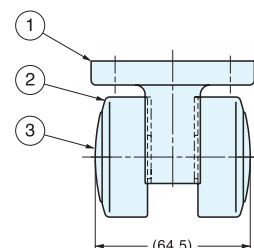
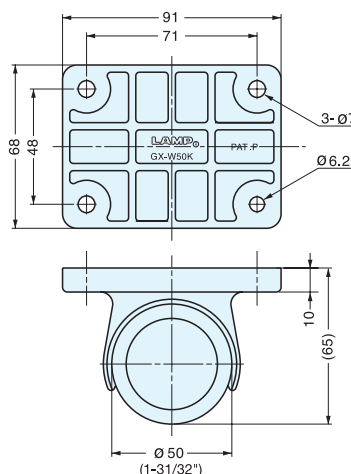
TWIN WHEEL CASTER (NON-SWIVEL)

TEST 13
P.660

LOAD CAPACITY
200 kg
441 lbs



GX-W50K



- Non-swivel (fixed) caster.
- Heavy duty and low profile.
- Twin wheel caster with excellent stability.
- Use in combination with GX-W50GN12, GN16 or GP (Swivel Type) for easy handling.

Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-W50K	200 (441 lbs)	300	2	48

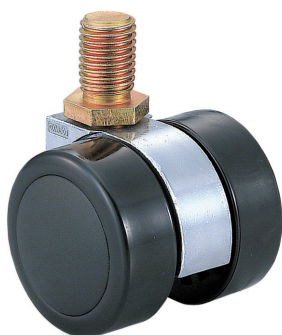
No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Wheel	Polyacetal	Black
③	Cover	Polyamide	

TWIN WHEEL CASTER (THREADED BOLT & PLATE)

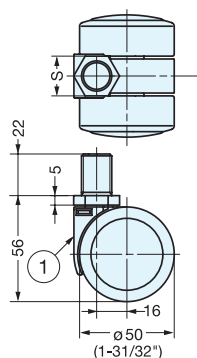
TEST 13
P.660

LOAD CAPACITY
200 kg
441 lbs

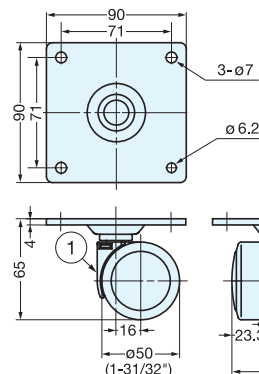
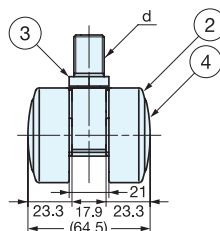
GX-W50GN12, GN16, GP



GX-W50GN12, GN16
(Threaded bolt type)



GX-W50GN12, GN16



GX-W50GP

- Swivel type, heavy duty and low profile.
- Twin wheel caster with excellent stability.
- Use in combination with GX-W50K (Non-swivel type) for easy handling.
- Threaded bolt or plate type available.

Item No.	d	S	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
GX-W50GN12	M12 x 1.75	19	200 (441 lbs)	208	4	80
GX-W50GN16	M16 x 2	21		223		
GX-W50GP	-	-		420	2	40

No.	Part Name	Material	Finish
①	Body	Aluminum Alloy	Polished
②	Wheel	Polyacetal	Black
③	Threaded Bolt Mounting Plate (GP)	Steel	Yellow Zinc Chromate
④	Cover	Polyamide	Black

DUAL BRAKE SYSTEM CASTER (PLATE TYPE)

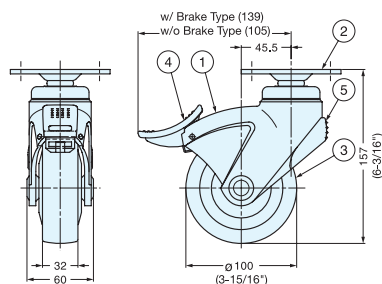
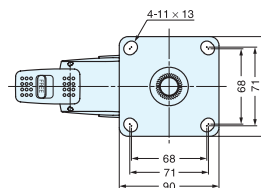
TEST 13
P.660LOAD CAPACITY
100 kg
220 lbs

EX-100PS, P

EX-100P
(w/o Brake)EX-100PS
(w/Brake)

Lock Indicator

- Locks both wheel and swivel.
- Ball bearing equipped in both swivel and wheel to provide maximum smooth movement.
- Front rubber bumper protects from impact.
- Large brake lever and indicator for easy operation.



Item No.	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
EX-100PS w/Brake	100 (220 lbs)	919	20	200
EX-100P w/o Brake		877		

No.	Part Name	Material	Finish
①	Body	Polyamide	Light Grey
②	Mounting Plate	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide Polyurethane	Grey
④	Brake	Polyamide	
⑤	Rear Bumper	Elastomer	

DUAL BRAKE SYSTEM CASTER (THREADED BOLT TYPE)

TEST 13
P.660LOAD CAPACITY
100 kg
220 lbs

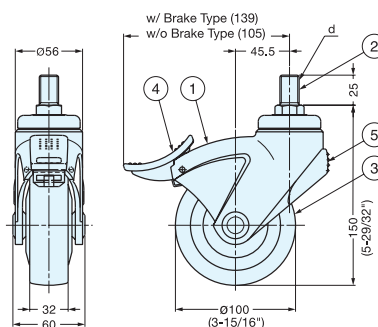
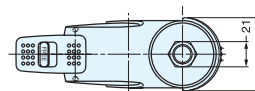
EX-100N



(w/o Brake)

(w/Brake)

- Locks both wheel and swivel.
- Ball bearing equipped in both swivel and wheel to provide maximum smooth movement.
- Front rubber bumper protects from impact.
- Large brake lever and indicator for easy operation.



Item No.	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
EX-100N12S w/Brake	M12×1.75	100 (220 lbs)	703	20	200
EX-100N12 w/o Brake	M12×1.75		658		
EX-100N16S w/Brake	M16×2		703		
EX-100N16 w/o Brake	M16×2		658		

No.	Part Name	Material	Finish
①	Body	Polyamide	Light Grey
②	Threaded Bolt	Steel	Yellow Zinc Chromate
③	Wheel	Polyamide Polyurethane	Grey
④	Brake(w/Brake type)	Polyamide	
④	Front Bumper(w/o Brake type)	Elastomer	
⑤	Rear Bumper	Elastomer	

DUAL BRAKE SYSTEM CASTER (PLATE TYPE)



LOAD CAPACITY
120 kg
264 lbs



MX-125PS, P

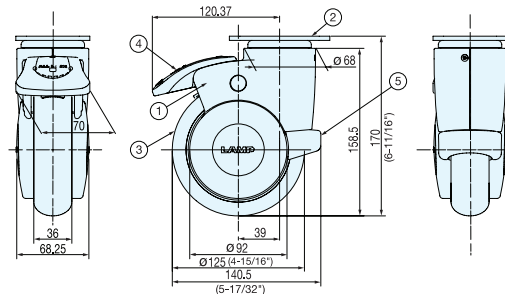
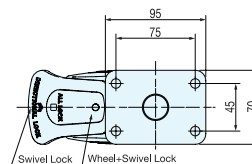


w/o Brake



w/Brake

- Caster with clean appearance.
- Dual brake system.
Can be locked on “swivel only” or “wheel and swivel” in one step.
Large lock lever for swivel, and small lock lever for wheel.
- Easy operation.
- Works as rigid type when swivel locked for easy movability.



Item No.		Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MX-125PS	w/Brake	120 (264 lbs)	1450	2	8
MX-125P	w/o Brake		1350		

No.	Part Name	Material	Finish
①	Body	Polypropylene	Light Grey
②	Mounting Plate	Steel	Chromate
③	Wheel	Nylon/Polyurethane	Dark Grey
④	Brake	Nylon	Blue
⑤	Rear Bumper	Polyurethane	Dark Grey

DUAL BRAKE SYSTEM CASTER (THREADED BOLT TYPE)



LOAD CAPACITY
120 kg
264 lbs

MX-125N

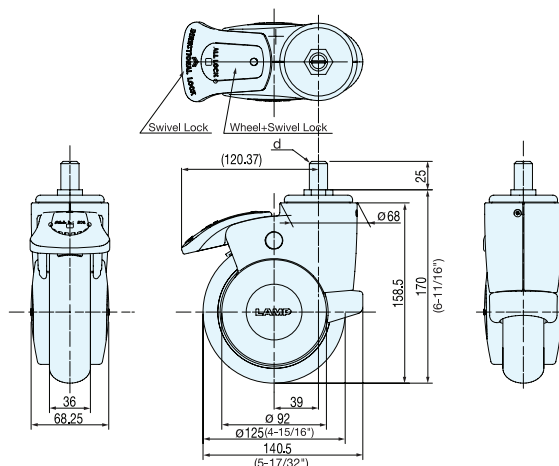


w/o Brake



w/Brake

- Caster with clean appearance.
- Dual brake system.
 - Can be locked on “swivel only” or “wheel and swivel” in one step.
 - Large lock lever for swivel, and small lock lever for wheel.
- Easy operation.
- Works as rigid type when swivel locked for easy movability.



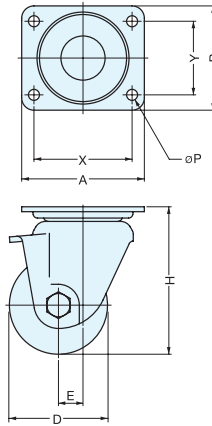
Item No.		d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MX-125N16S	w/Brake	M16x2	120 (264 lbs)	1310	2	8
MX-125N16	w/o Brake			1210		

No.	Part Name	Material	Finish
①	Body	Polypropylene	Light Grey
②	Threaded Bolt	Steel	Chromate
③	Wheel	Nylon/Polyurethane	Dark Grey
④	Brake	Nylon	Blue
⑤	Rear Bumper	Polyurethane	Dark Grey

LOW PROFILE HEAVY DUTY CASTER



UHG



- Low profile and heavy duty up to 816kg (1795 lbs), ideal for manufacturing equipment.
- Sealed ball bearing swivel assembly provides smooth and long-term service.
- Hexavalent chromium free. Using trivalent chromium for RoHS compliance.
- Choose wheel type from Phenolic, Reinforced Nylon, MC Nylon or Electro-conductive MC Nylon.
- All wheels equipped with heavy duty ball bearing.

*Please specify wheel type when ordering.

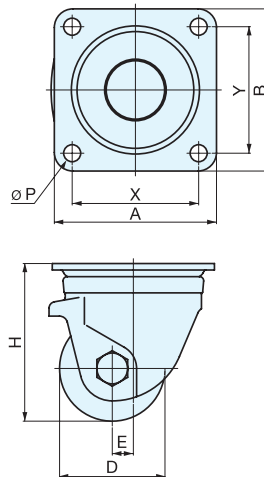
Part Name	Material	Finish
Body / Mounting Plate	Steel	Clear Zinc Chromate (Trivalent Chromium)
Wheel	Phenolic Resin (PB)	Black
	Reinforced Nylon (GFB)	
	MC Nylon (MC)	
	Electro-conductive MC Nylon (MCE)	

Item No.	Bearing in wheels	D	Wheel Width	H	A	B	X	Y	P	E	Swivel Radius	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
UHG-50 (PB,MC,MCE)	With Bearing	50	38	79	84	84	64	64	8.5	11	49	408 (898 lbs)	820	20	200
UHG-65 (PB,GFB,MC,MCE)		65	48	97	100	100	78	78	10.5	14	57	510 (1122 lbs)	1540	12	120
UHG-75 (PB,GFB,MC,MCE)		75	48	107	100	100	78	78	10.5	14	57	612 (1347 lbs)	1625	12	120
UHG-80MC		80	48	120	100	85	80	60	9	20	62	816 (1795 lbs)	1680	12	120
UHG-100MC		100	48	140	150	110	121	59	13	20	72	816 (1795 lbs)	2160	8	80

LOW PROFILE HEAVY DUTY CASTER



HG



- Low profile and heavy duty up to 255kg (561 lbs), ideal for manufacturing equipment.
- Hardened frame for maximum rigidity and strength.
- Sealed ball bearing swivel assembly provides smooth and long-term service.
- Hexavalent chromium free. Using trivalent chromium for RoHS compliance.
- Two wheel types:
 - Phenolic
 - Reinforced Nylon with ball bearing spindle
- Wheel brake available on special order.

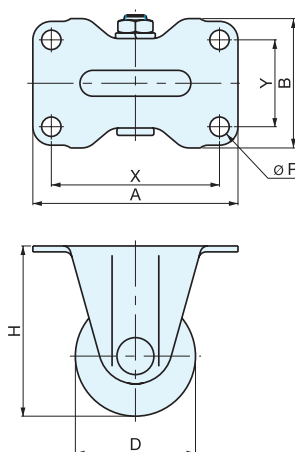
Part Name	Material	Finish
Body	Steel	Clear Zinc Chromate (Trivalent Chromium)
Mounting Plate		
Wheel	Reinforced Nylon(GNB)	Black
	Phenolic Resin(PB)	

Item No.	Bearing in wheels	D	Wheel Width	H	A	B	X	Y	P	E	Swivel Radius	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
HG-50GNB	Without Bearing	50	28	68	50	50	64	64	6.5	25	51	163 (359 lbs)	320	36	600
HG-65PB	With Bearing	65	38	92	90	90	71	71	10.5	22	57	255 (561 lbs)	880	20	200
HG-75PB		75	38	106	90	90	71	71	10.5	22	61	306 (675 lbs)	970	20	120

LOW PROFILE HEAVY DUTY CASTER



HR



- Low profile and heavy duty up to 255kg (561 lbs), ideal for manufacturing equipment.
- Hardened frame for maximum rigidity and strength.
- Hexavalent chromium free. Using trivalent chromium for RoHS compliance.
- Two wheel types:
 - Phenolic
 - Reinforced Nylon with ball bearing spindle

Part Name	Material	Finish
Body	Steel	Clear Zinc Chromate (Trivalent Chromium)
Mounting Plate		
Wheel	Reinforced Nylon(GNB)	Black
	Phenolic Resin(PB)	

Item No.	Bearing in wheels	D	Wheel Width	H	A	B	X	Y	P	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
HR-50GNB	Without Bearing	50	28	68	80	50	66	36	6.5	163 (359 lbs)	200	36	600
HR-65PB	With Bearing	65	38	92	111	67	91	47	10.5	234 (516 lbs)	615	12	120
HR-75PB		75	38	106	123	72	103	52	10.5	255 (561 lbs)	725	12	120

CASTER COMBINATION – SET UP

Better



Cost	Stability	Control	Load Capacity
A	B / C	A / B	E
B / C / D	D / E	D / E	B / C / D
E	A	C	A

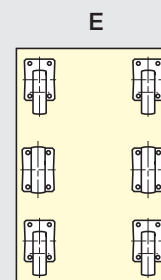
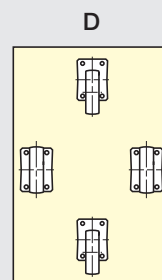
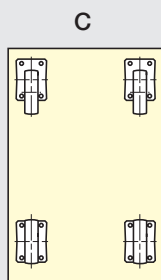
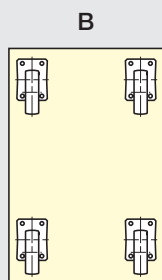
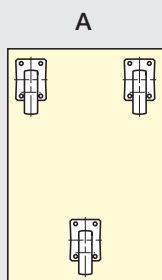
A: TYPE - 3 x Swivel
SET UP - 2 + 1 Triangle

B: TYPE - 4 x Swivel
SET UP - Square

C: TYPE - 2 x Swivel & 2 x Fix
SET UP - Square

D: TYPE - 2 x Swivel & 2 x Fix
SET UP - Rhombus

E: TYPE - 4 x Swivel & 2 x Fix (Middle)
SET UP - Square



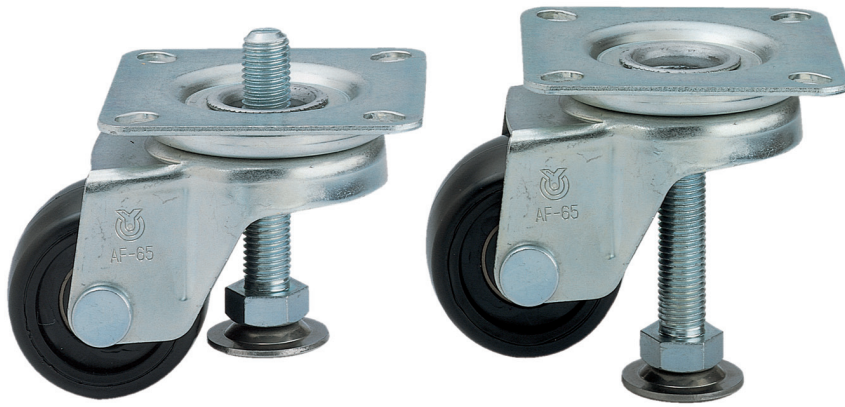
CASTER WITH LEVELING GLIDE



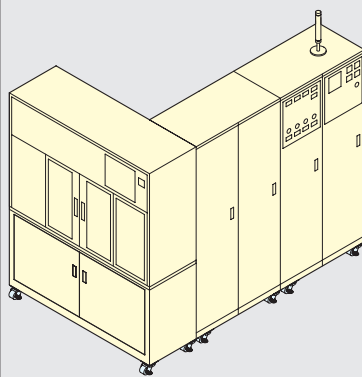
LOAD CAPACITY
255 kg
561 lbs

AF-50, 65

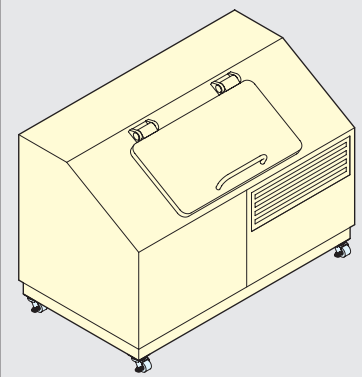
- Heavy duty, low profile caster with built-in leveling glide.
- Allows solid support by leveler once equipment is in place.
- Simplifies mounting as leveler is integrated with caster.



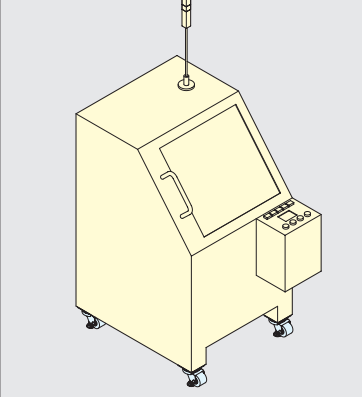
Semiconductor Equipment



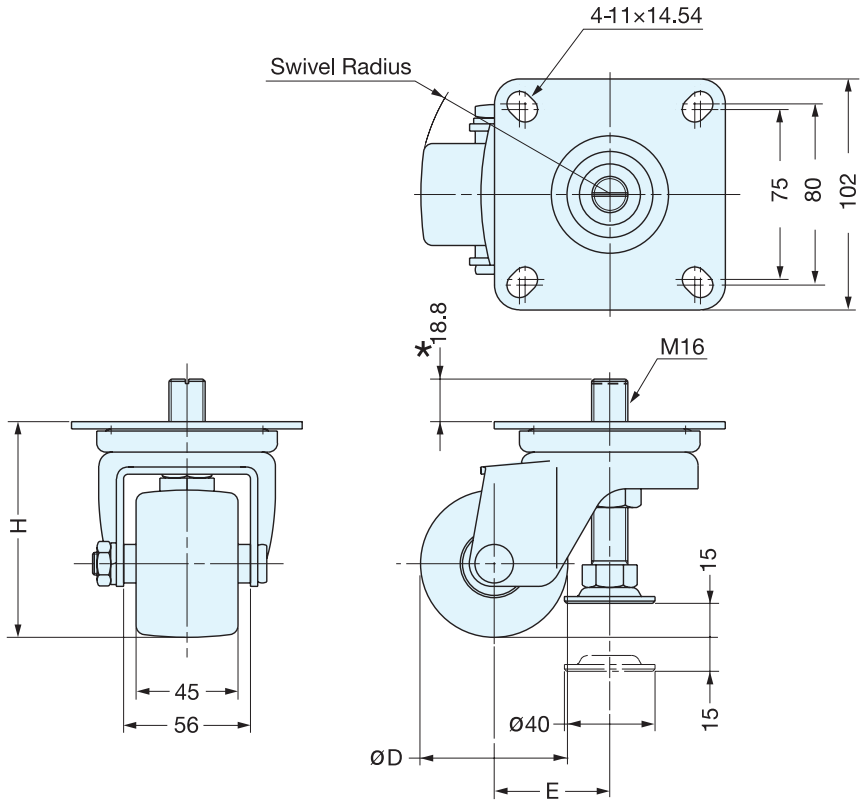
Garbage Container



Laser Equipment



Installation



*Round cut out or bore is required for bolt of leveler.

Part Name	Material	Finish
Body	Steel	Chrome
Wheel	Nylon	Black

Item No.	D	H	E	Swivel Radius	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
AF-50	50	74	46	73	255 (561 lbs)	1205	18	180
AF-65	65	95	51	85	255 (561 lbs)	1335	12	120

PARTS SEPARABLE CASTER (W/GLIDE)



CA

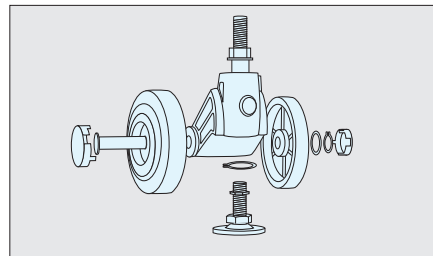
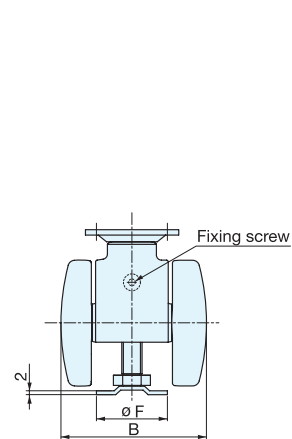
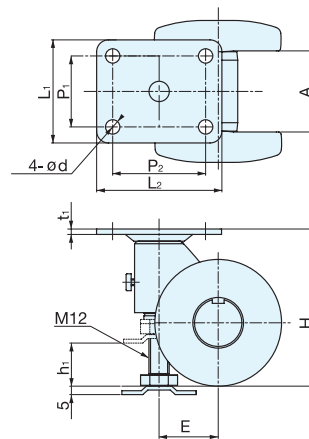
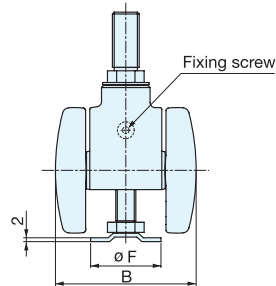
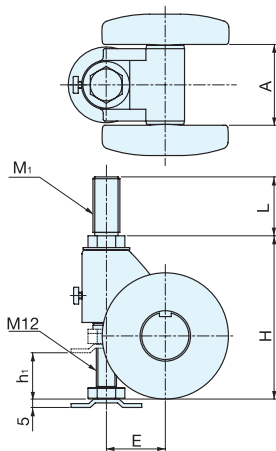


CABF-75/BLK

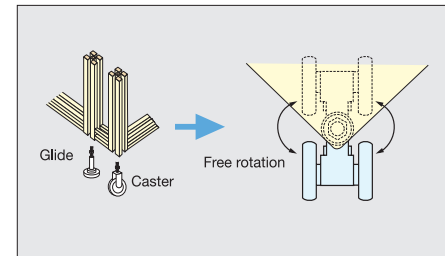


CAPS-50/WHT

- Built-in leveling glide allows easy installation rather than installing two separate parts.
- Glides provide better stability than regular caster with stopper.
- Caster body rotates freely when raised by the glide. Tighten fixing screw to fix the position.
- Parts can be easily separated for recycling purpose.



- Parts can be easily separated for recycling purpose.



- Built-in leveling glide allows easy installation rather than installing two separate parts.
- Caster body rotates freely when raised by the glide. Tighten fixing screw to fix the position.

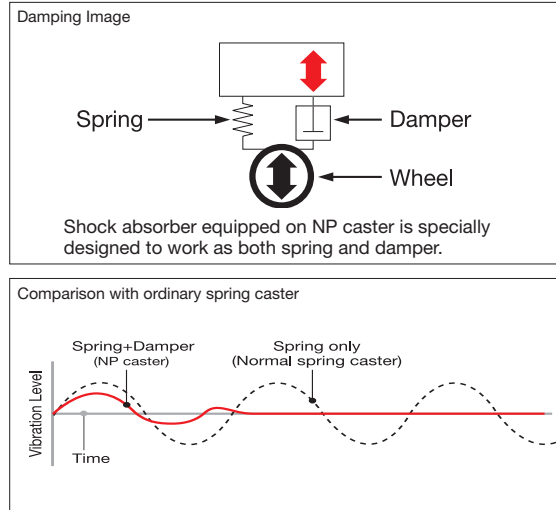
Part Name	Material	
	CABF, CAPF	CABS, CAPS
Body / Wheel	Polyamide (Black, White)	Polyamide (White)
Glide	Steel (Yellow Zinc Chromate)	304 Stainless Steel (Passivated)
Threaded Bolt		
Plate		

Item No.		Type	H	h1	E	F	A	B	L	L1	L2	P1	P2	d	t1	M1	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
Black	White	Stem	67	10	30	34	40	69	35	-	-	-	-	-	-	M12	60 (132 lbs)	260	40	400
CABF-50/BLK	CABF-50/WHT		95	24	35	42	50	84								M16	120 (264 lbs)	400	20	200
-	CABS-50/WHT		67	10	30	34	40	69								M12	60 (132 lbs)	262	40	400
-	CABS-75/WHT		95	24	35	42	50	84								M16	120 (264 lbs)	402	20	200
CAPF-50/BLK	CAPF-50/WHT		63	10	30	34	40	69								-	60 (132 lbs)	306	40	400
CAPF-75/BLK	CAPF-75/WHT	Plate	92	24	35	42	50	84	-	61	74	42	55	8.5	3.2	-	120 (264 lbs)	424	20	200
-	CAPS-50/WHT		63	10	30	34	40	69									60 (132 lbs)	300	40	400
-	CAPS-75/WHT		92	24	35	42	50	84									120 (264 lbs)	420	20	200
-	CAPS-75/WHT		92	24	35	42	50	84									120 (264 lbs)	420	20	200

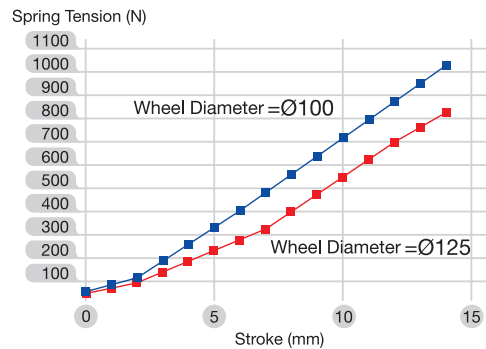
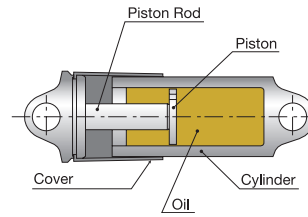
SHOCK-ABSORBING CASTER

Shock absorber reduces initial shock and also settles vibration quickly. With less shock and vibration, it reduces particles which causes air contamination up to 85%, compared to non-damping casters.

Shock Absorbing Performance



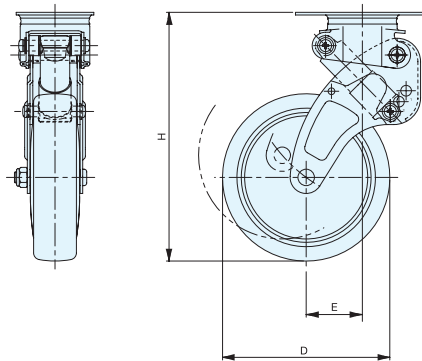
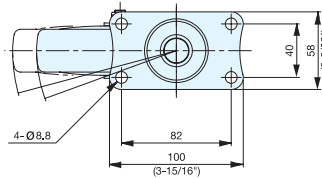
Shock Absorbing Damper



SHOCK-ABSORBING CASTER (PLATE TYPE)



NPG



"Without Brake" type shown.

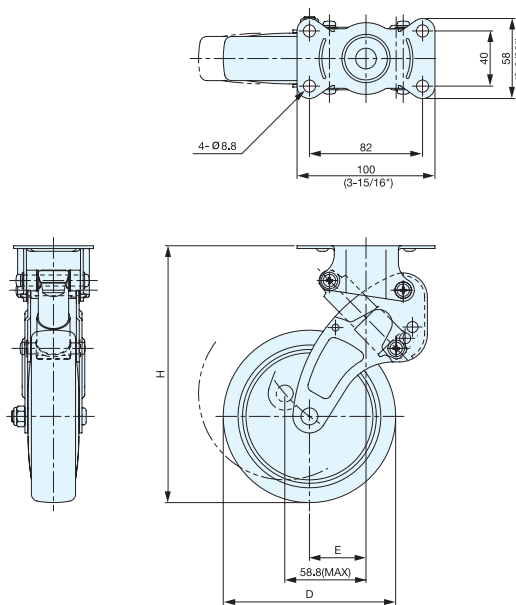
- Swivel type
- Built-in shock absorber provides less vibration and noise.
- Ideal for carts which carry delicate product such as electronic instruments.
- Stainless steel construction with antistatic polyurethane wheel, ideal for clean room application.
- Insulation resistance value: $4.8 \times 10^8 \Omega$.
- Operating temperature:
10°C~30°C (50°F~86°F)
- Available option (special order):
Steel body, wheel in Nylon or Polyurethane.

Part Name	Material	Finish/Color
Body	304 Stainless Steel	Plain
Wheel	Antistatic Polyurethane	Yellow

Item No.	Brake	D	Wheel Width	H	E	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
NPG-100SUES3	With	100	28	165~151	35~51	30 (66 lbs)	934	20	200
NPG-100SUE3	Without	100	28	165~151	35~51	30 (66 lbs)	823	25	250
NPG-125SUES3	With	125	32	186~170	42~59	30 (66 lbs)	1063	15	150
NPG-125SUE3	Without	125	32	186~170	42~59	30 (66 lbs)	947	20	200

SHOCK-ABSORBING CASTER (PLATE TYPE)

LOAD CAPACITY
30 kg
66 lbs

STAINLESS
304
STEEL
NO SCREW
NPR


- Non-swivel (fixed) type
- Built-in shock absorber provides less vibration and noise.
- Ideal for carts which carry delicate product such as electronic instruments.
- Stainless steel construction with antistatic polyurethane wheel, ideal for clean room application.
- Insulation resistance value: $4.8 \times 10^8 \Omega$.
- Operating temperature: $10^\circ\text{C} \sim 30^\circ\text{C}$ ($50^\circ\text{F} \sim 86^\circ\text{F}$)
- Available option (special order): Steel body, wheel in Nylon, or Polyurethane.

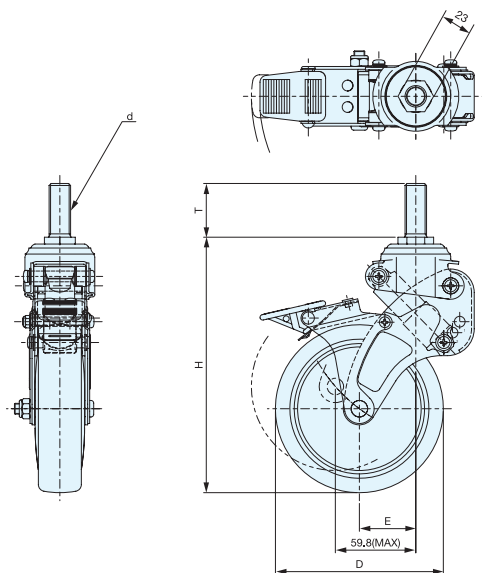
"Without Brake" type shown.

Part Name	Material	Finish/Color
Body	304 Stainless Steel	Plain
Wheel	Antistatic Polyurethane	Yellow

Item No.	Brake	D	Wheel Width	H	E	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
NPR-100SUES3	With	100	28	165~151	35~51	30 (66 lbs)	835	20	200
NPR-100SUE3	Without	100	28	165~151	35~51	30 (66 lbs)	724	25	250
NPR-125SUES3	With	125	32	186~170	42~59	30 (66 lbs)	964	15	150
NPR-125SUE3	Without	125	32	186~170	42~59	30 (66 lbs)	848	20	200

SHOCK-ABSORBING CASTER (THREADED BOLT TYPE)

LOAD CAPACITY
30 kg
66 lbs

STAINLESS
304
STEEL
NPT


- Built-in shock absorber provides less vibration and noise.
- Ideal for carts which carry delicate product such as electronic instruments.
- Stainless steel construction with antistatic polyurethane wheel, ideal for clean room application.
- Insulation resistance value: $4.8 \times 10^8 \Omega$.
- Operating temperature: $10^\circ\text{C} \sim 30^\circ\text{C}$ ($50^\circ\text{F} \sim 86^\circ\text{F}$)
- Available option (special order): Steel body, wheel in Nylon, or Polyurethane.

"With Brake" type shown.

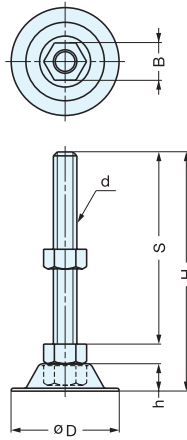
Part Name	Material	Finish/Color
Body	304 Stainless Steel	Plain
Wheel	Antistatic Polyurethane	Yellow

Item No.	Brake	D	Wheel Width	T	d	H	E	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
NPT-100SUES3	With	100	28	35	M12x1.75	169~155	35~51	30 (66 lbs)	921	20	200
NPT-100SUE3	Without	100	28	35	M12x1.75	169~155	35~51	30 (66 lbs)	809	25	250
NPT-125SUES3	With	125	32	40	M16x2.0	190~174	42~59	30 (66 lbs)	1078	15	150
NPT-125SUE3	Without	125	32	40	M16x2.0	190~174	42~59	30 (66 lbs)	962	20	200

STAINLESS STEEL LEVELING GLIDE



ADPS



- Nut on bottom of glide allows easy installation and height adjustment with socket wrench.

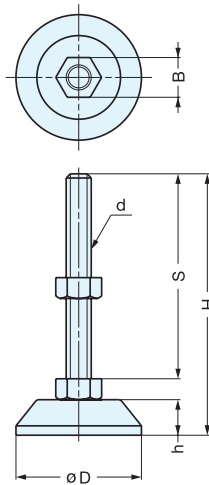
Material	Finish
304 Stainless Steel	Polished

Item No.	D	H	h	S	B	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
ADPS37- 8- 60	37 (1-26/64")	76 (3")	10.5	60	13	M 8 x 1.25	300 (660 lbs)	56	200	2000
ADPS37-10- 50	37 (1-26/64")	67.5 (2-21/32")	10.5	50	17	M10 x 1.5	300 (660 lbs)	78	200	2000
ADPS55-12-100	55 (2-5/32")	122 (4-13/16")	14	100	19	M12 x 1.75	300 (660 lbs)	174	100	1000
ADPS55-12-120	55 (2-5/32")	142 (5-19/32")	14	120	19	M12 x 1.75	300 (660 lbs)	187	80	800
ADPS55-12-150	55 (2-5/32")	172 (6-25/32")	14	150	19	M12 x 1.75	300 (660 lbs)	210	70	700
ADPS75-16-100	75 (2-61/64")	128 (5-1/32")	18	100	24	M16 x 2	560 (1233 lbs)	318	50	500
ADPS75-16-130	75 (2-61/64")	158 (6-7/32")	18	130	24	M16 x 2	560 (1233 lbs)	358	40	400
ADPS75-16-150	75 (2-61/64")	178 (7")	18	150	24	M16 x 2	560 (1233 lbs)	382	30	300
ADPS75-16-180	75 (2-61/64")	208 (8-3/16")	18	180	24	M16 x 2	560 (1233 lbs)	426	30	300
ADPS75-20-100	75 (2-61/64")	131 (5-5/32")	18	100	30	M20 x 2.5	880 (1938 lbs)	490	40	400
ADPS75-20-130	75 (2-61/64")	161 (6-11/32")	18	130	30	M20 x 2.5	880 (1938 lbs)	553	30	300
ADPS75-20-150	75 (2-61/64")	181 (7-1/8")	18	150	30	M20 x 2.5	880 (1938 lbs)	593	30	300
ADPS75-20-180	75 (2-61/64")	211 (8-5/16")	18	180	30	M20 x 2.5	880 (1938 lbs)	655	25	250

STAINLESS STEEL LEVELING GLIDE



ADCS



- Nut on bottom of glide allows easy installation and height adjustment with socket wrench.

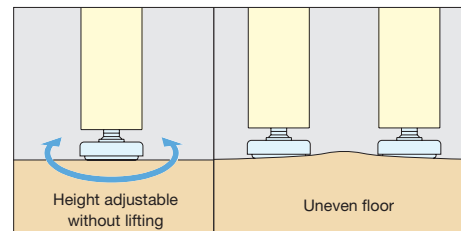
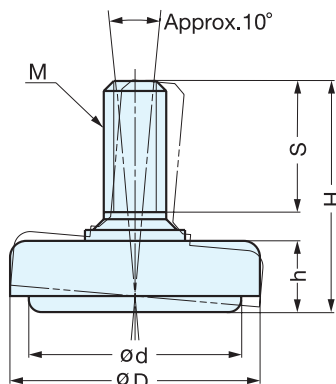
Material	Finish
304 Stainless Steel	Plain

Item No.	D	H	h	S	B	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
ADCS60-12-120	60 (2-23/64")	145 (5-45/64")	17	120	19	M12 x 1.75	300 (660 lbs)	365	60	600
ADCS60-16-100	60 (2-23/64")	127 (5")	17	100	24	M16 x 2	560 (1233 lbs)	440	50	500
ADCS60-16-130	60 (2-23/64")	157 (6-3/16")	17	130	24	M16 x 2	560 (1233 lbs)	480	50	500
ADCS60-16-180	60 (2-23/64")	207 (8-5/32")	17	180	24	M16 x 2	560 (1233 lbs)	550	35	350
ADCS60-20-100	60 (2-23/64")	130 (5-1/8")	17	100	30	M20 x 2.5	880 (1938 lbs)	590	40	400
ADCS60-20-130	60 (2-23/64")	160 (6-19/64")	17	130	30	M20 x 2.5	880 (1938 lbs)	650	40	400
ADCS60-20-150	60 (2-23/64")	180 (7-3/32")	17	150	30	M20 x 2.5	880 (1938 lbs)	690	35	350
ADCS60-20-180	60 (2-23/64")	210 (8-17/64")	17	180	30	M20 x 2.5	880 (1938 lbs)	750	30	300

LEVELING GLIDE


MKP

- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Swivels approximately 10° to compensate for uneven floors.



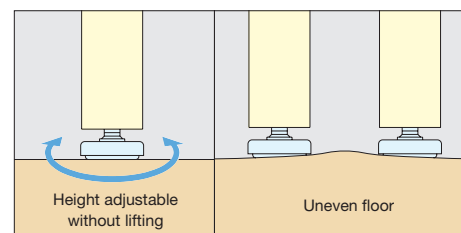
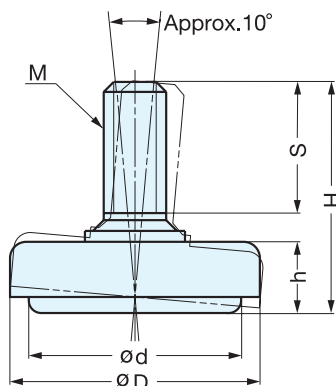
Material	Finish
Steel	Chrome

Item No.	M	D	d	H	h	S	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKP-32	W3/8-16	32 (1-17/64")	27	36 (1-27/64")	11	21	160 (352 lbs)	44	80	480
MKP-40	W3/8-16	40 (1-37/64")	34	37 (1-29/64")	11.4	21	160 (352 lbs)	65	50	300
MKP-50	W3/8-16	50 (1-31/32")	44	37.5 (1-15/32")	11.5	21	120 (264 lbs)	90	20	120

STAINLESS STEEL LEVELING GLIDE


MKPS

- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Swivels approximately 10° to compensate for uneven floors.
- 304 stainless steel construction is ideal for humid environments or application where corrosion is an issue.



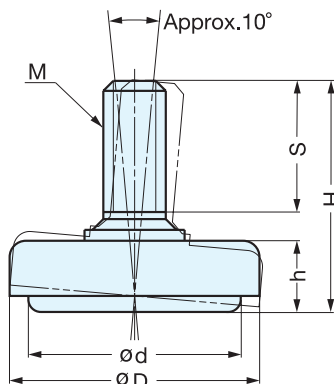
Material	Finish
Stainless Steel	Satin

Item No.	M	D	d	H	h	S	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKPS-32N3	W3/8-16	32 (1-17/64")	27	36 (1-27/64")	11	21	200 (440 lbs)	50	60	480
MKPS-40N3	W3/8-16	40 (1-37/64")	34	37 (1-29/64")	11.4	21	320 (704 lbs)	70	40	320
MKPS-50N3	W3/8-16	50 (1-31/32")	44	37.5 (1-15/32")	11.5	21	360 (792 lbs)	95	30	240
MKPS-60M12	M12x1.75	60 (2-23/64")	54	51.5 (2-1/32")	11.5	35	400 (881 lbs)	140	15	120

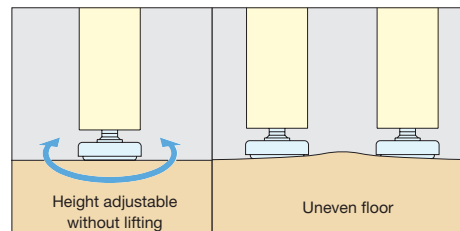
LEVELING GLIDE (W/RUBBER PAD)



MKR



- Leveling glide with elastomer base to prevent skidding.
- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Swivels approximately 10° to compensate for uneven floors.



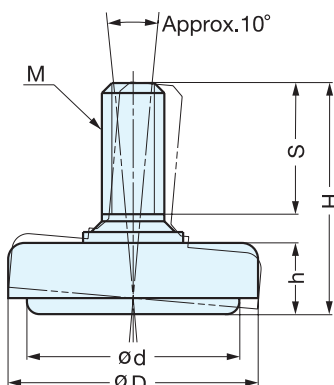
Part Name	Material	Finish
Body	Steel	Chrome
Base	Elastomer	Black

Item No.	M	D	d	H	h	S	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKR-32	W3/8-16	32 (1-17/64")	27	36 (1-27/64")	11	21	40 (88 lbs)	41	80	480
MKR-40	W3/8-16	40 (1-37/64")	34	37 (1-29/64")	11.4	21	60 (132 lbs)	60	50	300
MKR-50	W3/8-16	50 (1-31/32")	44	37.5 (1-15/32")	11.5	21	60 (132 lbs)	87	20	120

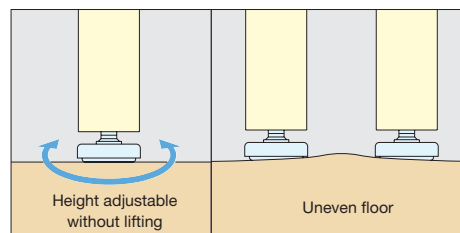
STAINLESS STEEL LEVELING GLIDE (W/RUBBER PAD)



MKRS



- Leveling glide with elastomer base to prevent skidding.
- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Swivels approximately 10° to compensate for uneven floors.
- 304 stainless steel construction is ideal for humid environments or application where corrosion is an issue.



*** Only Item No. MKRS-50N3 is not RoHS compliant.

Part Name	Material	Finish
Body	Stainless Steel	Satin
Base	Elastomer	Black

Item No.	M	D	d	H	h	S	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKRS-32N3	W3/8-16	32 (1-17/64")	27	36 (1-27/64")	11	21	40 (88 lbs)	50	60	480
MKRS-40N3	W3/8-16	40 (1-37/64")	34	37 (1-29/64")	11.4	21	80 (176 lbs)	70	40	320
MKRS-50N3	W3/8-16	50 (1-31/32")	44	37.5 (1-15/32")	11.5	21	100 (220 lbs)	90	30	240
MKRS-60M12	M12x1.75	60 (2-23/64")	54	51.5 (2-1/32")	11.5	35	100 (220 lbs)	150	15	120
MKRS-70M14	M14x2	70 (2-3/4")	64	51.5 (2-1/32")	11.5	35	100 (220 lbs)	200	15	120

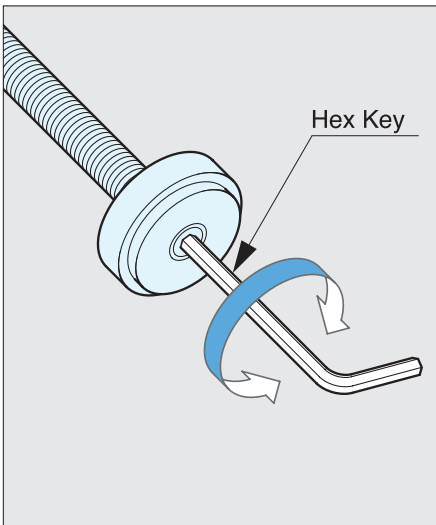
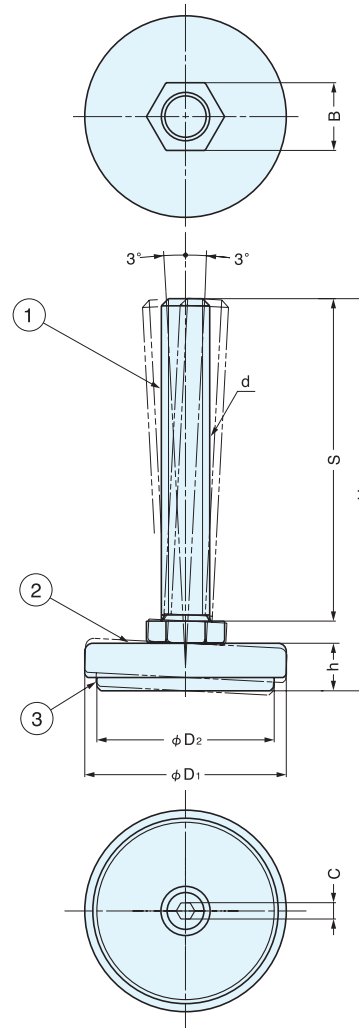
LEVELING GLIDE

TEST 12
P.660

LOAD CAPACITY
60~200 kg
132~440 lbs

MKRL

- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Has hex socket on bottom for allen key to allow easy installation.

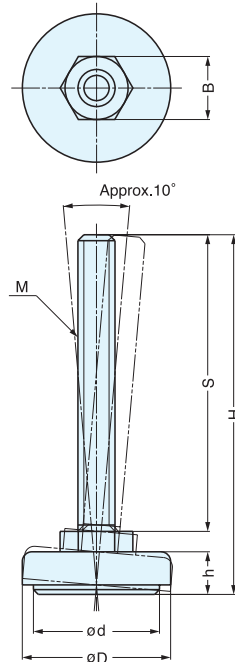


Height can be adjusted by 4mm hex key (not included)

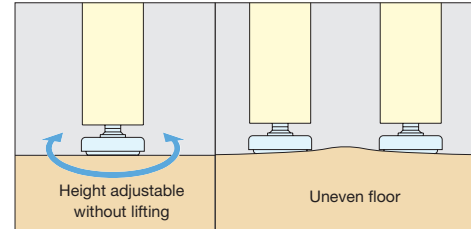
No.	Part Name	Material	Finish
①	Bolt	Steel	Black Zinc Chromate
②	Cover		
③	Base	Elastomer	Black

Item No.	D ₁	D ₂	H	h	S	B	C	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKRL- 32-10- 80 B6	32	27	95.8	10.8	80	17	4	M10x1.5	60 (132 lbs)	77	30	300
MKRL- 32-12- 66 B6	32	27	81.8	10.8	66	17	4	M12x1.75	75 (165 lbs)	84	30	300
MKRL- 32-12- 80 B6	32	27	95.8	10.8	80	17	4	M12x1.75	60 (132 lbs)	94	30	300
MKRL- 40-10- 80 B6	40	34	96.2	11.2	80	17	4	M10x1.5	60 (132 lbs)	95	25	250
MKRL- 40-12- 32 B6	40	34	48.2	11.2	32	17	4	M12x1.75	60 (132 lbs)	78	30	300
MKRL- 40-12- 43 B6	40	34	59	11.2	43	17	4	M12x1.75	60 (132 lbs)	86	25	250
MKRL- 40-12- 55 B6	40	34	71.2	11.2	55	17	4	M12x1.75	60 (132 lbs)	94	25	250
MKRL- 40-12- 80 B6	40	34	96.2	11.2	80	17	4	M12x1.75	60 (132 lbs)	112	25	250
MKRL- 50-10- 80 B6	50	44	96.8	11.8	80	17	4	M10x1.5	60 (132 lbs)	122	20	200
MKRL- 50-12- 80 B6	50	44	96.8	11.8	80	17	4	M12x1.75	60 (132 lbs)	138	20	200
MKRL- 50-12- 120 B6	50	44	136.8	11.8	120	17	4	M12x1.75	60 (132 lbs)	168	10	100
MKRL- 50-16- 78 B6	50	44	100.3	11.8	78.5	24	4	M16x2	80 (176 lbs)	214	15	120
MKRL- 70-20- 101 B6	70	64	124.5	11.5	101	30	4	M20x2.5	80 (176 lbs)	448	8	64
MKRL- 100-20- 76 B6	100	92.5	101	12.5	76	30	6	M20x2.5	200 (440 lbs)	557	6	24
MKRL- 100-20- 101 B6	100	92.5	126	12.5	101	30	6	M20x2.5	200 (440 lbs)	609	6	24

STAINLESS STEEL LONG-STEM LEVELING GLIDE

**MKPLS**

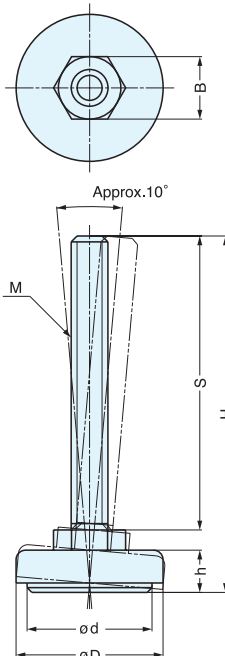
- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Swivels approximately 10° to compensate for uneven floors.
- 304 stainless steel construction is ideal for humid environments or application where corrosion is an issue.



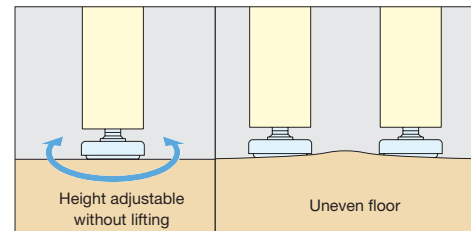
Part Name	Material	Finish
Body	Stainless Steel	Satin
Cover		Plain
Base		Plain

Item No.	M	D	d	H	h	S	B	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKPLS-32/10/80	M10x1.5	32 (1-17/64")	27	96 (3-25/32")	10.5	80	17	200 (440 lbs)	79	30	240
MKPLS-40/12/80	M12x1.75	40 (1-37/64")	34	97 (3-13/16")	11.5			300 (660 lbs)	125		
MKPLS-50/12/80		50 (1-31/32")	44					340 (748 lbs)	150		
MKPLS-50/16/78	M16x2			100 (3-15/16")		78.5	24	320 (704 lbs)	220	15	120

STAINLESS STEEL LONG-STEM LEVELING GLIDE

**MKRLS**

- Double structure of cover/bolt and base allow easy height adjustment without lifting the leg.
- Swivels approximately 10° to compensate for uneven floors.
- Leveling glide with elastomer base to prevent skidding.



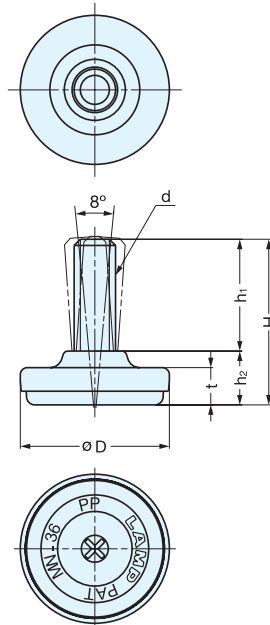
Part Name	Material	Finish
Body	Stainless Steel	Satin
Base	Elastomer	Black

Item No.	M	D	d	H	h	S	B	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKRLS-32/10/80	M10x1.5	32 (1-17/64")	27	96 (3-25/32")	11	80	17	80 (176 lbs)	76	30	240
MKRLS-40/12/80	M12x1.75	40 (1-37/64")	34	97 (3-13/16")	11.5			120			
MKRLS-50/12/80		50 (1-31/32")	44					100 (220 lbs)	140	20	160
MKRLS-50/16/78	M16x2			100 (3-15/16")			78.5	24	80 (176 lbs)	215	15

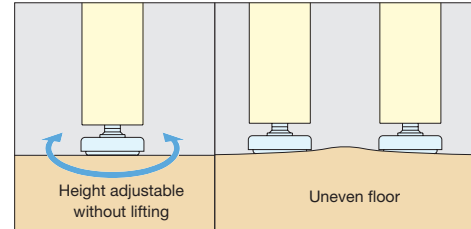
LEVELING GLIDE



MN



- Easy installation with phillips screw driver.
- Swivels approximately 8° to compensate for uneven floors.
- White polypropylene base to prevent floor damage.



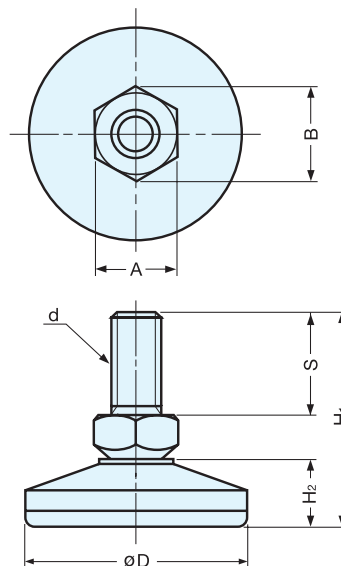
Part Name	Material	Finish
Cover	304 Stainless Steel	Satin
Bolt	Steel	Chrome
Base	Polypropylene	Natural

Item No.	D	H	h ₁	h ₂	t	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MN-25	25 (63/64")	40 (1-37/64")	27	13	9	W5/ 16-18	120 (264 lbs)	26	100	600
MN-32	32 (1-17/64")	40 (1-37/64")	27	13	9	W3/ 8-16	160 (352 lbs)	34	80	480
MN-36	36 (1-27/64")	40 (1-37/64")	27	13	9	W3/ 8-16	160 (352 lbs)	39	60	360
MN-40	40 (1-37/64")	40 (1-37/64")	27	13	9	W3/ 8-16	160 (352 lbs)	42	50	300
MN-50	50 (1-31/32")	50 (1-31/32")	34	16	11	W1/ 2-12	160 (352 lbs)	77	20	120

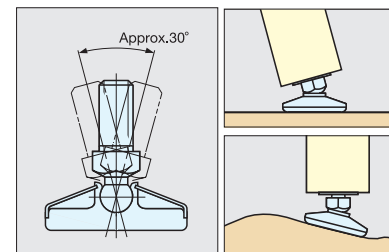
LEVELING GLIDE



RP



- Compensates for uneven of floors.



Part Name	Material	Finish
Base Cover	304 Stainless Steel	Satin
Bolt	Steel	Clear Zinc Chromate
Base	Polyamide	Natural

Item No.	A	D	B	H ₁	S	H ₂	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
RP-25M6	8 (5/16")	25 (63/64")	9.2	31 (1-7/32")	14	9.7	M6x1	60 (132 lbs)	11	50	500
RP-30M8	10 (25/64")	30 (1-3/16")	11.5	37.5 (1-15/32")	19	11.2	M8x1.25	110 (242 lbs)	21	35	350
RP-30N25							W5/16				
RP-40M10	13 (33/64")	40 (1-37/64")	15	42.5 (1-43/64")	20	13.7	M10x1.5	160 (352 lbs)	38	25	250
RP-40N3							W3/8				
RP-50M12	17 (43/64")	50 (1-31/32")	19.6	51 (2")	25	16	M12x1.75	320 (704 lbs)	70	15	
RP-70M14	19 (3/4")	70 (2-3/4")	22	66.5 (2-5/8")	30	24.7	M14x2	622 (1368 lbs)	150	10	100

LEVELING GLIDE



TG

- Low profile leveling glide.
- Knurled rim for easy adjustment.
- Easy installation with phillips screw driver.



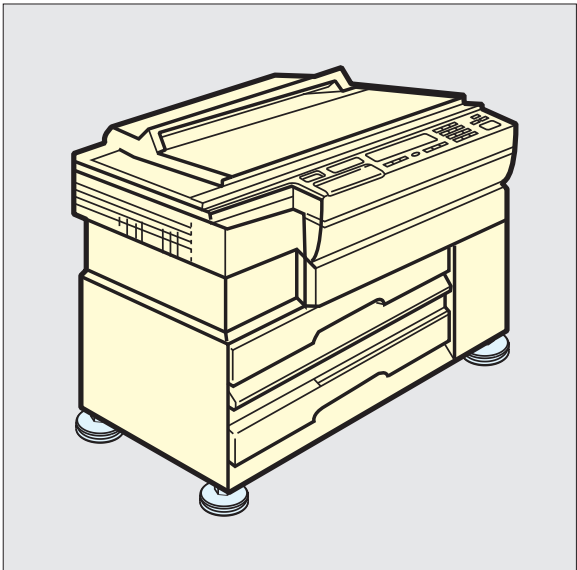
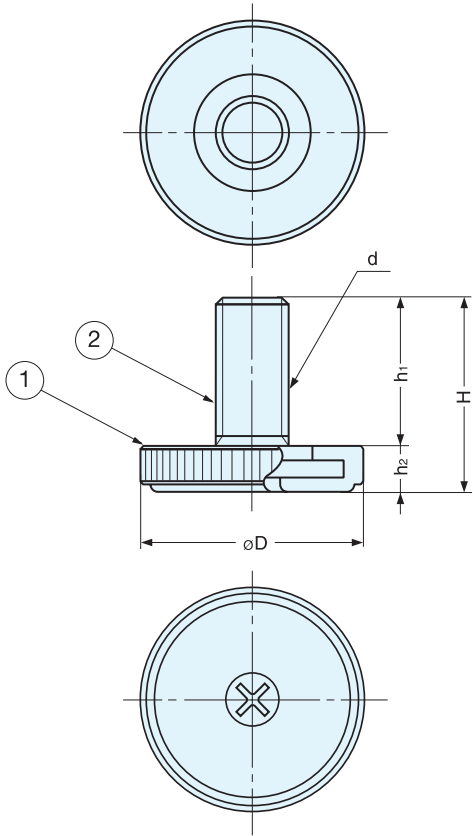
TG-40



TG-30WT



TG-20



Installation

No.	Part Name	Material	Finish
①	Base	Polyamide	Dark Grey/White
②	Bolt	Steel	Clear Zinc Chromate

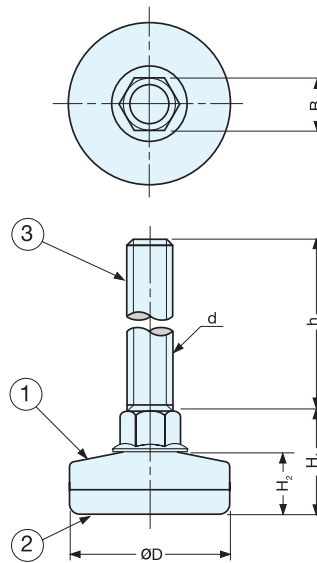
Item No.		D	H	h ₁	h ₂	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
Dark Grey	White									
TG-20	TG-20WT	20 (25/32")	21 (53/64")	15	6	M 8 x 1.25	100 (220 lbs)	11	120	720
TG-30	TG-30WT	30 (1-3/16")	26 (1-1/32")	20	6	M 10 x 1.5	150 (330 lbs)	25	100	600
TG-40	TG-40WT	40 (1-37/64")	26 (1-1/32")	20	6	M 10 x 1.5	180 (396 lbs)	36	60	360

LEVELING GLIDE



LOAD CAPACITY
140 kg
308 lbs

TN



No.	Part Name	Material	Finish
①	Body	Steel	Chrome
②	Base	Polypropylene	Natural
③	Bolt	Steel	Clear Zinc Chromate

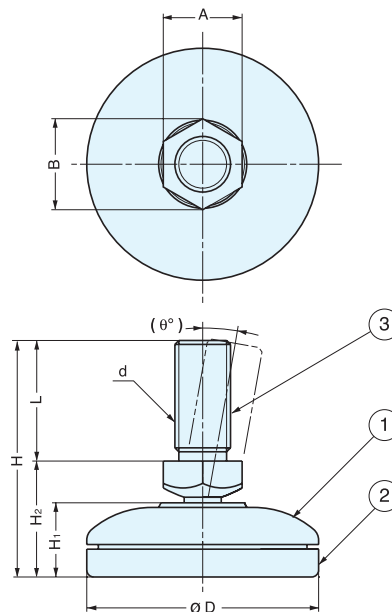
Item No.	D	H ₁	H ₂	h	d	B	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
TN-25S	25	21	12	60	M10x1.5	13	140 (308 lbs)	50	50	500
TN-35S	35	22.5	13.5					60	30	300
TN-45S	43.5							70	20	260

LEVELING GLIDE (PARTS SEPARABLE)

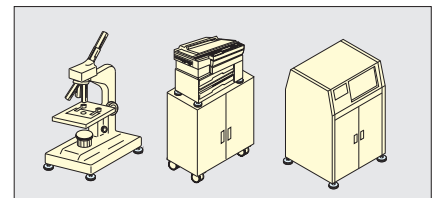
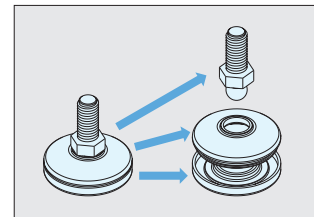


LOAD CAPACITY
50~270 kg
110~594 lbs

EA



- Bolt swivels to compensate for uneven floors.
- Parts can be easily separated for recycling purpose.



Installation

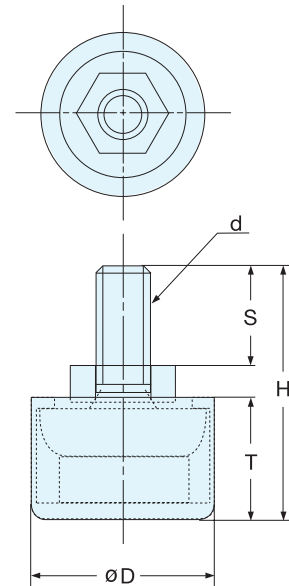
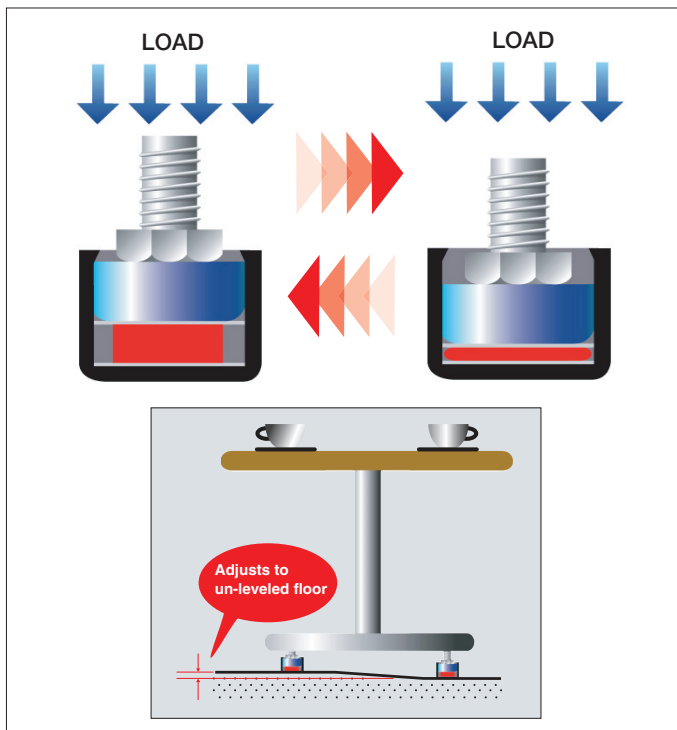
No.	Part Name	Material	Finish
①	Body	ABS	Dark Grey
②	Base		
③	Bolt	Steel	Chromate

Item No.	A	B	D	H	H ₁	H ₂	L	θ°	d	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
EA-25M 6	8	9.2	25	31	8.5	14	17	10	M 6 x 1	50 (110 lbs)	10	120	1200
EA-30M 8	10	11.5	30	37.5	10.5	17	20.5	15	M 8 x 1.25	100 (220 lbs)	20	80	800
EA-40M 10	13	15	40	42.5	13	20.5	22	12.5	M10 x1.5	130 (286 lbs)	32	40	400
EA-50M 12	17	19.6	50	51	16	25	26	10	M12 x1.75	270 (594 lbs)	60	20	200

AUTOMATIC HEIGHT ADJUSTING LEVELING GLIDE

LOAD CAPACITY
 50 kg
 110 lbs
SAJ30

- Self height adjustment feature up to 3mm (1/8") & 6mm (15/64").
- Gel inside of the glide allows for gentle adjustment to uneven surfaces.
- Automatically adjusts each time the table is moved.
- Ideal for tables which are frequently moved. (e.g. Restaurants, Cafeteria, shop etc.)



SAJ-WRENCH

Part Name	Material	Finish	Box (pcs)	Carton (pcs)
SAJ-WRENCH10 (For M6)	Steel	Yellow Znic Chromate	1	40
SAJ-WRENCH13 (For M8)				
SAJ-WRENCH14 (For N2.5)				
SAJ-WRENCH17 (For N3,M10)				

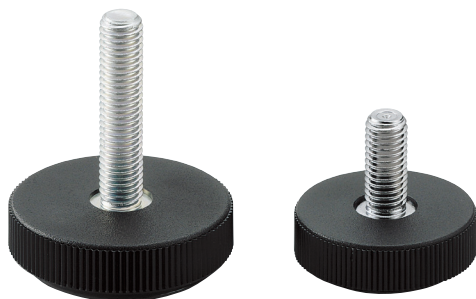
Part Name	Material	Finish / Color
Body	Polyethylene	Black
Nut (10)	Steel	Chromate
Nut (12)		
Screw		

Item No.	Height Adjustment (mm)	D	H	T	S	d	Applicable Table Weight			Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
							6 pcs use (kg)	5 pcs use (kg)	4 pcs use (kg)				
SAJ30-10N2.5	3 (1/8")	32	33	19	9	W5/16	10~18 (22~39 lbs)	8~15 (17~33 lbs)	7~12 (15~26 lbs)	50 (110 lbs)	26	40	400
SAJ30-10N3			37		12	W3/8					36		
SAJ30-10M6			34		10	M6					21		
SAJ30-10M8			33		9	M8					25		
SAJ30-10M10			37		11	M10					38		
SAJ30-12N2.5			33		9	W5/16	18~36 (39~79 lbs)	15~30 (33~66 lbs)	12~24 (26~53 lbs)		26		
SAJ30-12N3			37		12	W3/8					36		
SAJ30-12M6			34		10	M6					21		
SAJ30-12M8			33		9	M8					25		
SAJ30-12M10			37			M10					38		
SAJ30-12-6N2.5	6 (15/64")	42	24	11	W5/16				29				
SAJ30-12-6N3					W3/8				39				
SAJ30-12-6M6					M6				29				
SAJ30-12-6M8					M8				22				
SAJ30-12-6M10					41				M10	41			

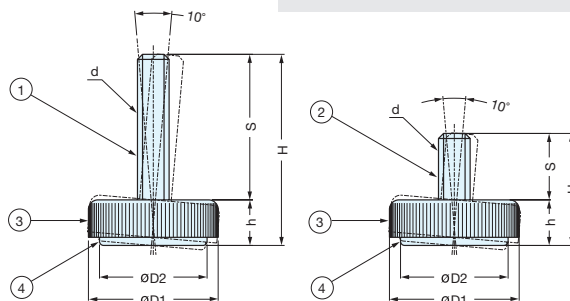
LEVELING GLIDE

LOAD CAPACITY
60~80 kg
132~176 lbs

MKR-N



- Base adjusts up to 10°, maintaining balance even on lightly sloping surfaces.
- Design allows for easy height adjustment.
- Durable unit distributes load evenly.
- Base coated with non-slip synthetic rubber that reduces floor damage.



MKR-N50M10H60

Other Glides

No.	Part Name	Material	Finish
①	Bolt	Steel	Yellow Zinc Chromate
②	Bolt	Steel	Chrome
③	Cover	Polyamide	Black
④	Base	Elastomer	Black

*For MKR-N50M10H60, Bolt is available only with a Yellow Zinc Chromate finish.

Item No.	d	D ₁	D ₂	H	h	S	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKR-N32M10	M10	33 (1-5/16")	27	36 (1-13/32")	14	22	60 (132 lbs)	35	80	480
MKR-N32N3	W3/8							45		
MKR-N40M10	M10	41 (1-5/8")	34	37 (1-29/64")	15		70 (154 lbs)	40	50	300
MKR-N40N3	W3/8							40		
MKR-N50M10	M10	51 (2")	44	37.5 (1-31/64")	15.5	44.5	80 (176 lbs)	60	20	120
MKR-N50M10H60	M10			60 (2-3/8")				55		
MKR-N50N3	W3/8			37.5 (1-31/64")				22		

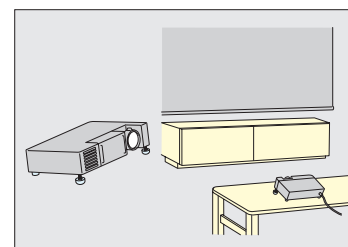
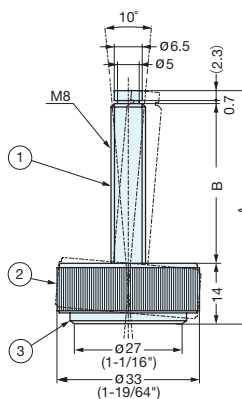
LEVELING GLIDE

LOAD CAPACITY
46 kg
100 lbs

MKR-N32



- Base adjusts up to 10°, maintaining balance even on lightly sloping surfaces.
- Design allows for easy height adjustment.
- Durable unit distributes load evenly.
- Base coated with non-slip synthetic rubber that reduces floor damage.



Application

No.	Part Name	Material	Finish
①	Bolt	Steel	Chromate
②	Cover	Polyamide	Dark Grey
③	Base	Elastomer	Black

Item No.	Color	A	B	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
MKR-N32DG32	Dark Gray	47 (1-7/8")	30 (1-3/16")	46 (100 lbs)	31	50	300
MKR-N32GR40	Gray	55 (2-3/16")	38 (1-1/2")		34		

LEVELING GLIDES

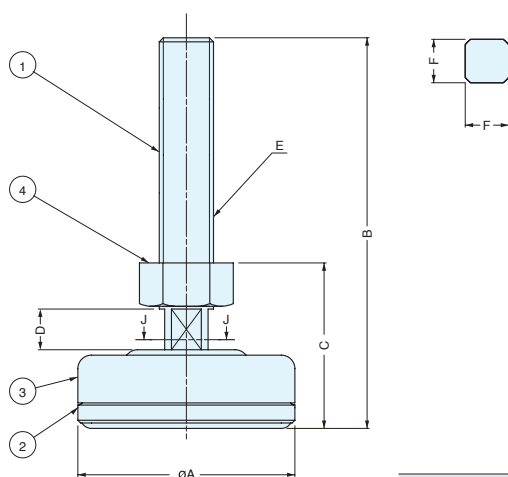
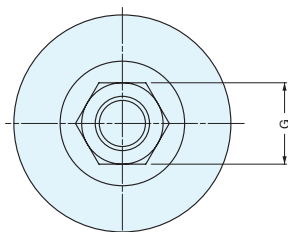
MDSF



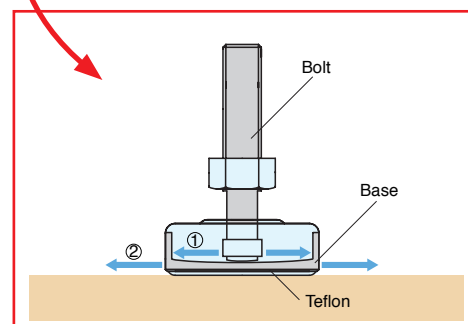
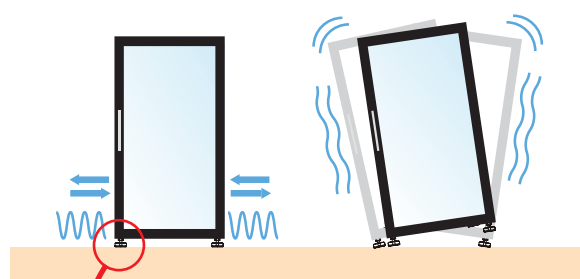
MDSF80-20-100

MDSF58-16-80

MDSF58-10-40



- Glide absorbs shock to reduce movement transmitted to cabinets and equipment, reducing damage to objects within the cabinet as well as those in the surrounding area.
- Keeps aisles and emergency exits clear by reducing the risk of falling furniture or equipment.
- Can be used in raised/access flooring where floor anchors cannot be used.
- Similar installation and appearance to traditional glides, but with value-added function and higher cost performance.
- 2-step shock absorption: internally between bolt and glide base, and externally between glide base and flooring.
- Use with computer server racks, precision equipment, medical equipment, etc.
- Sold in sets of 4 pieces.

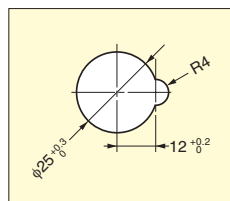
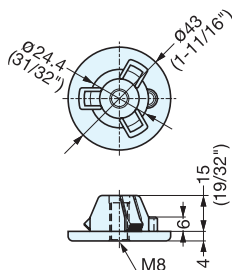
MDSF Leveling
GlideStandard Leveling
Glide

No.	Part Name	Material	Finish
①	Bolt	Steel	Nickel
②	Base	Steel, Teflon	
③	Cover	NBR	
④	Nut	Steel	Chromate

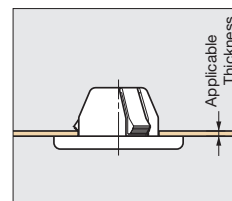
Item No.	Max. Recommended Dimensions (WxDxH)	Maximum Weight (kg)/4pcs
MDSF58-10- 40	16-1/8"x24-13/16"x15-3/8" (410x630x390mm)	204 (450 lbs)
MDSF58-16- 80	28-3/4"x28-3/4"x57-1/2" (730x730x1460mm)	510 (1122 lbs)
MDSF80-20-100	39-3/8"x39-3/8"x78-3/4" (1000x1000x2000mm)	765 (1687 lbs)

Item No.	A	B	C	D	E	F	G	Weight (g)	Box (pcs)	Carton (pcs)
MDSF58-10- 40	58 (2-5/16")	66 (2-5/8")	35	8	M10	8	17	180	4 (1 set)	40 (10 sets)
MDSF58-16- 80	58 (2-5/16")	114 (4-1/2")	48	11	M16	13	24	300		
MDSF80-20-100	80 (3-1/8")	114 (5-11/16")	61	15	M20	16	30	580		

GLIDE BASE


AD-438


Bore Dimension



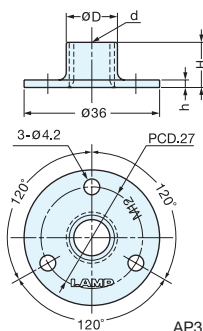
Installation

- Snap-in glide base for sheet metal 1/32" to 1/16" (0.8-1.6mm) thick.

Material	Finish
Polyacetal	Grey

Item No.	Applicable Sheet Metal Thickness (mm)	Load Capacity (kg)	Weight (g)	Box (pcs)	Carton (pcs)
AD-438	0.8~1.6 (1/32"-1/16")	50 (110lbs)	10	100	1000

STAINLESS STEEL GLIDE BASE


AP-36


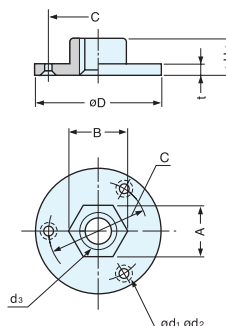
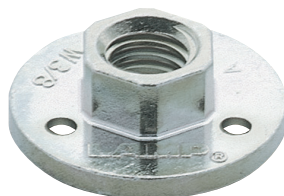
AP36-M12 is shown.

- 304 stainless steel for rust and corrosion resistance.

Material	Finish
304 Stainless Steel	Plain

Item No.	d	D	h	H	Weight (g)	Box (pcs)	Carton (pcs)
AP-36-M8	M8X1.25	(9.6)	1.5	12	16	100	1000
AP-36-M10	M10X1.5	(11.5)	1.5	12	16	100	1000
AP-36-N3	W3/8-16	(10.9)	1.5	12	16	100	1000
AP-36-M12	M12X1.75	(13.9)	2	11.5	20	80	800

GLIDE BASE


KD-555


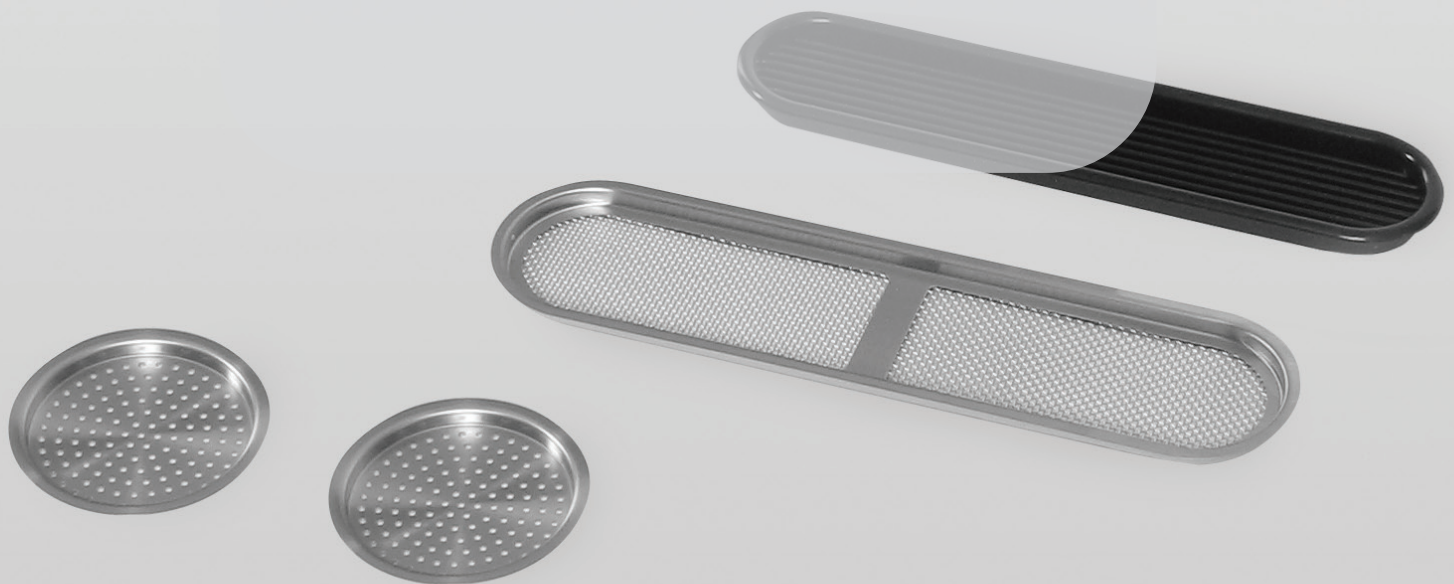
Material	Finish
Zinc Alloy	Clear Zinc Chromate

Item No.	D	C	H	t	d ₁	d ₂	d ₃	A	B	Weight (g)	Box (pcs)	Carton (pcs)
KD-555-28-M10	28 (1-3/32")	20	9	2.7	3.2	6.4	M10x1.5	13	14	15	240	1440
KD-555-25	25 (1")	19	8	2.7	3.2	5.3	W5/16-18	11.2	12.5	10	320	1920
KD-555-28	28 (1-3/32")	20	9	2.7	3.2	6.4	W3/8-16	13	14	15	240	1440
KD-555-39	39 (1-17/32")	30	11	3	3.2	6.4	W1/2-12	15.8	16.8	30	100	600



MISCELLANEOUS

CABLE GROMMETS
VENTILATORS
BATHROOM ACCESSORIES
MULTI-PURPOSE DOORS, LIDS
TOWEL BARS, RACKS



VENTILATORS

Picture	Item No.		Page
	SAM (FINE MESH)		636
	SAD (FINE MESH)		636
	ASM		636
	ASD		637
	AST		637
	AST-160, 210		637
	1-1122		638
	1-1212		638
	1-2211		639
	1-2222		639
	APK, APKL		640
	APD, APDL		640
	APD-KH		641
	APM		642
	APB		642

CABLE GROMMETS

Picture	Item No.		Page
	S445, S51, S60, S76, S89		643
	S165-76		643
	V60, V80		644
	V2000		644
	LSU, LS		645
	CHC		645
	LN72D		646
	LN72S		646

BATHROOM ACCESSORIES

Picture	Item No.	Page
	ZL-3201 (TOWEL BAR)	647
	ZL-3202 (TOWEL BAR)	647
	KB-T (TOWEL BAR)	648
	DSR-01/18 (TOWEL BAR)	648
	DST-06 (TOWEL BAR)	649
	DSR-02 (TOWEL BAR)	649
	DSR-08 (TOWEL RACK)	650
	DSD-80 (TOWEL RACK)	650
	DSB-01 (TOILET PAPER HOLDER)	651
	DSB-03 (TOILET PAPER HOLDER)	651
	DSB-04 (TOILET PAPER HOLDER)	651
	DSB-07, 09 (TOILET BRUSH & PAPER HOLDER)	652

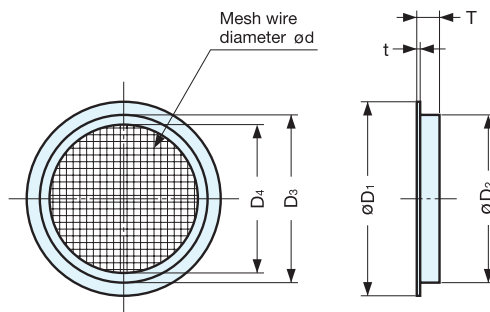
MULTI-PURPOSE DOORS, LIDS & GROMMETS

Picture	Item No.	Page
	AZ-GD230/HL	653
	AZ-SD310/HL	653
	AZ-ND230	653
	AZ-HD230/HL	654
	AZ-HD310/HL	654
	AZ-DD310/HL	654
	AN-DH020	655
	AN-KH017	655
	AD-DH017	656
	AD-DH015	656
	AN-DH, LH	657
	AD-KH017	657

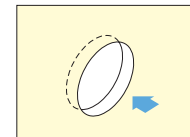
DOOR ACCESSORIES

Picture	Item No.	Details	Page
	LDD-S (DOOR DAMPER)	Maximum door weight: 88 lbs	200
	LDD-V (DOOR DAMPER)	Maximum door weight: 88 lbs	202
	ZL-1801 (DOOR STOPPER)	-	204
	ZL-1802 (DOOR STOPPER)	-	204
	ZL-1803 (DOOR STOPPER)	-	204
	HT-32P (DOOR STOPPER)	-	205
	DSD (DOOR STOPPER)	-	205
	SMDH (DOOR STOPPER)	Magnetic Force: 30.8 lbs	206
	KMDH (DOOR STOPPER)	Magnetic Force: 26.4 lbs	206
	SODH (DOOR HOLDER)	-	206
	JFR (DOOR CLOSER)	Maximum door weight: 176 lbs	207

VENTILATOR


SAM


- 0.4 mm mesh wire diameter.

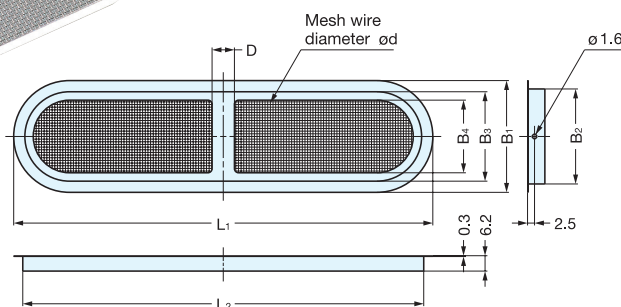
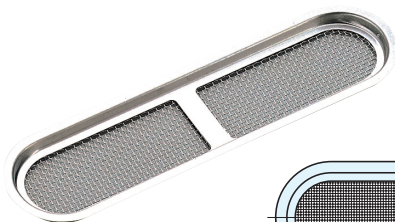


Installation

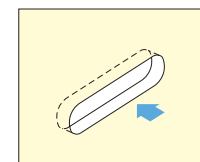
Material	Finish
304 Stainless Steel	Satin

Item No.	D ₁	D ₂	D ₃	D ₄	T	t	d	Weight (g)	Box (pcs)	Carton (pcs)
SAM- 37	36 (1-27/64")	31.5 (1-1/4")	30	25	5.7	0.3	0.4	4.5	70	1400
SAM- 45	46 (1-13/16")	41.5 (1-41/64")	40	35	5.2			6	60	1200
SAM- 60	60 (2-23/64")	53.5 (2-7/64")	52	46	6.0			9.5	50	1000
SAM- 85	85 (3-11/32")	77.8 (3-1/16")	76.5	68	6.2			16.5	30	600
SAM-120	120 (4-23/32")	110.5 (4-23/64")	108	99	7.2	0.5		46.5	20	200

VENTILATOR


SAD


- 0.4 mm mesh wire diameter.

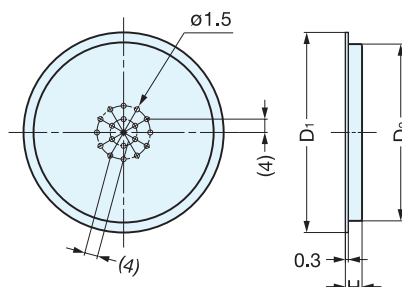


Installation

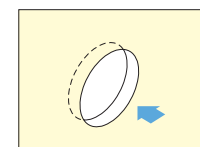
Material	Finish
304 Stainless Steel	Satin

Item No.	L ₁	B ₁	B ₃	B ₄	L ₂	B ₂	D	d	Weight (g)	Box (pcs)	Carton (pcs)
SAD-150	150 (5-29/32")	40 (1-37/64")	32	26	143.5	34	8	0.4	18.5	30	600
SAD-200	200.5 (7-57/64")	50 (1-31/32")	42	35	194	44	10		30		300

VENTILATOR


ASM


- 1.5 mm (1/16") diameter holes.



Installation

Material	Finish
304 Stainless Steel	Satin

Item No.	D ₁	D ₂	H	Holes	Weight (g)	Box (pcs)	Carton (pcs)
ASM-37	36 (1-27/64")	31 (1-7/32")	4.5	37	3	100	3600
ASM-45	46 (1-13/16")	41 (1-39/64")		59	5		
ASM-60	60 (2-23/64")	53 (2-3/32")	5	127	8		
ASM-85	85 (3-11/32")	77 (3-1/32")		271	13.5	50	1000

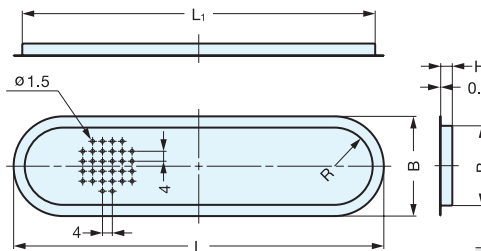
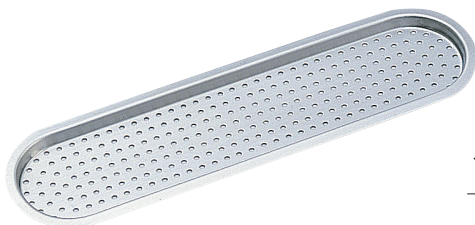
VENTILATOR



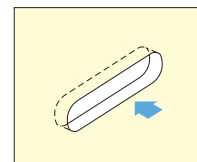
ASD

MISCELLANEOUS

VENTILATORS



- 1.5 mm (1/16") diameter holes.



Installation

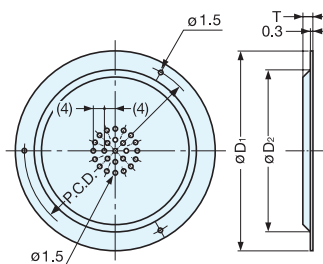
Material	Finish
304 Stainless Steel	Satin

Item No.	L	L ₁	H	B	B ₁	R	Holes	Weight (g)	Box (pcs)	Carton (pcs)
ASD-150	150 (5-29/32")	143	5	40 (1-37/64")	33	16	268	14.5	80	1920
ASD-200	200 (7-7/8")	193		50 (1-31/32")	42.8	21	450	23	40	960

VENTILATOR



AST



- 1.5 mm (1/16") diameter holes.
- Supplied with tacks.

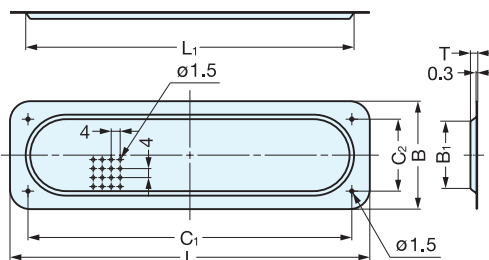
Material	Finish
304 Stainless Steel	Satin

Item No.	D ₁	D ₂	T	P.C.D.	Holes	Weight (g)	Box (pcs)	Carton (pcs)
AST-45	45 (1-25/32")	34 (1-11/32")	3	40	37	4	100	3600
AST-55	55 (2-5/32")	44 (1-47/64")		50	59	5		2400
AST-70	70 (2-3/4")	55 (2-5/32")		64	127	9		500
AST-100	100 (3-15/16")	81 (3-3/16")	4	91	271	19	50	

VENTILATOR



AST-160, 210



- 1.5 mm (1/16") diameter holes.
- Supplied with tacks.

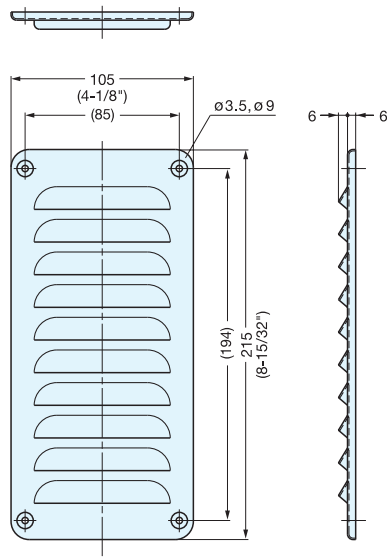
Material	Finish
304 Stainless Steel	Satin

Item No.	L	L ₁	B	B ₁	C ₁	C ₂	T	Holes	Weight (g)	Box (pcs)	Carton (pcs)
AST-160	160 (6-19/64")	146	48 (1-57/64")	36	144	32	3	268	18	50	1000
AST-210	210 (8-17/64")	196	58 (2-9/32")	46	194	42	4	450	28		200

VENTILATOR



1-1122



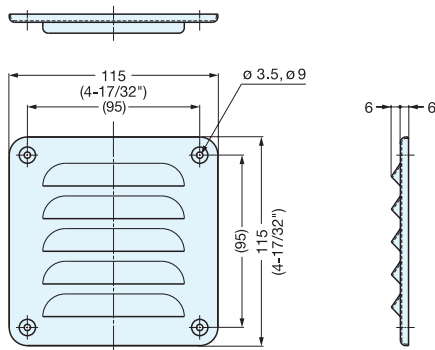
Item No.	Weight (g)	Box (pcs)	Carton (pcs)
1-1122	165	10	100

Material	Finish
316 Stainless Steel	Satin

VENTILATOR



1-1212



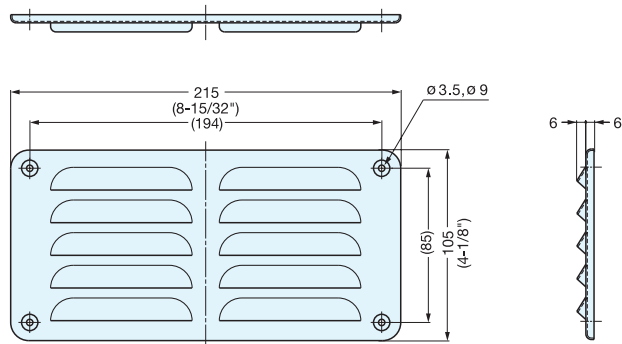
Item No.	Weight (g)	Box (pcs)	Carton (pcs)
1-1212	165	10	100

Material	Finish
316 Stainless Steel	Satin

VENTILATOR



1-2211



MISCELLANEOUS

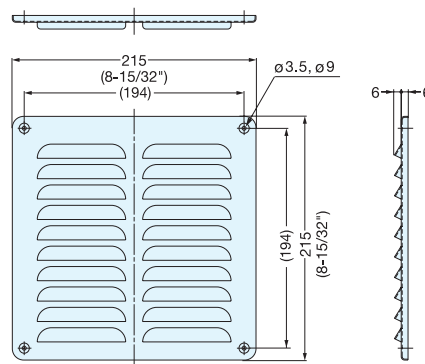
VENTILATORS

Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
1-2211	165	10	100	316 Stainless Steel	Satin

VENTILATOR



1-2222



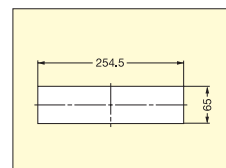
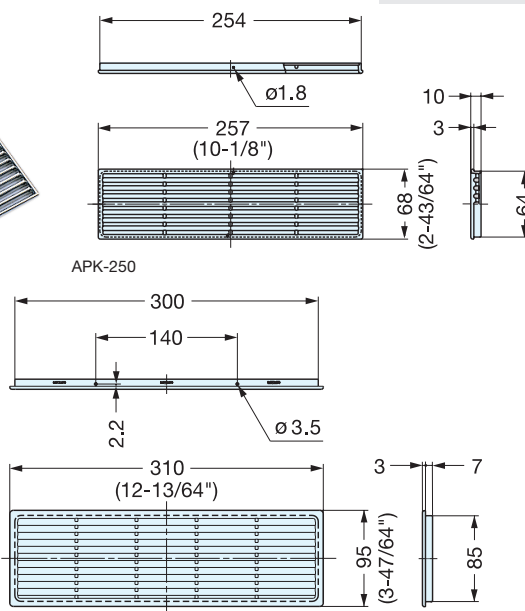
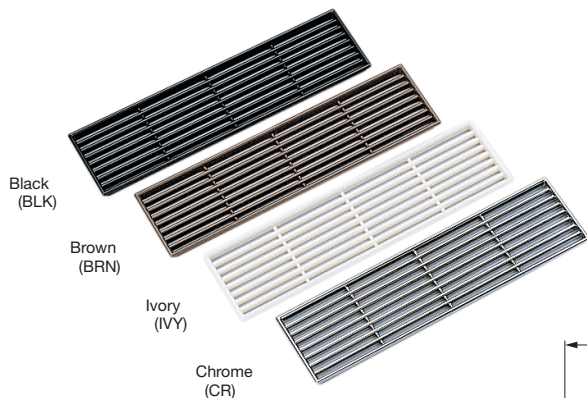
Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
1-2222	295	10	100	316 Stainless Steel	Satin

VENTILATOR

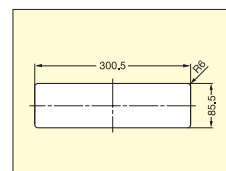


APK, APKL

• ABS ventilator.



APK-250 Cut Out Dimensions



APKL-310 Cut Out Dimensions

Please specify the finish when ordering.

Item No.	Weight (g)	Box (pcs)	Carton (pcs)
APK -250	57	20	160
APKL -310	100	10	80

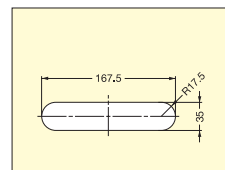
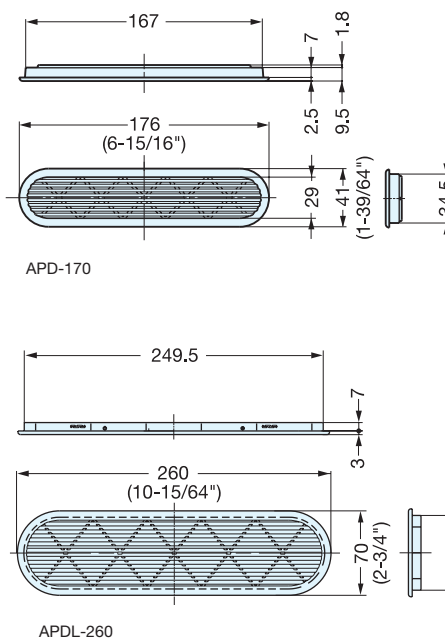
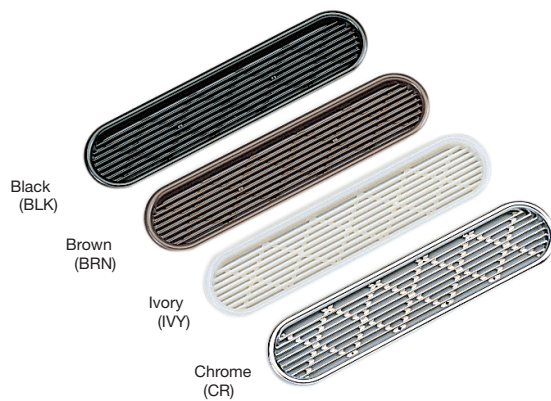
Material	Finish
ABS	Black (BLK), Brown (BRN), Ivory (IVY), Chrome (CR)-APK-250 type only

VENTILATOR

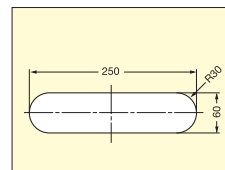


APD, APDL

• ABS ventilator.



APD-170 Cut Out Dimensions



APDL-260 Cut Out Dimensions

Please specify the finish when ordering.

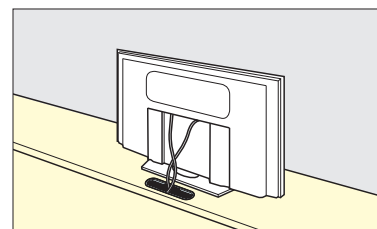
Item No.	Weight (g)	Box (pcs)	Carton (pcs)
APD -170	22	40	320
APDL -260	60	10	80

Material	Finish
ABS	Black (BLK), Brown (BRN), Ivory (IVY), Chrome (CR)-APD-170 type only

VENTILATOR

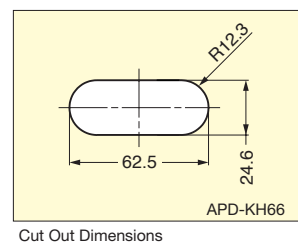
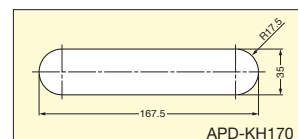
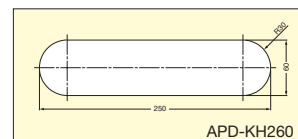
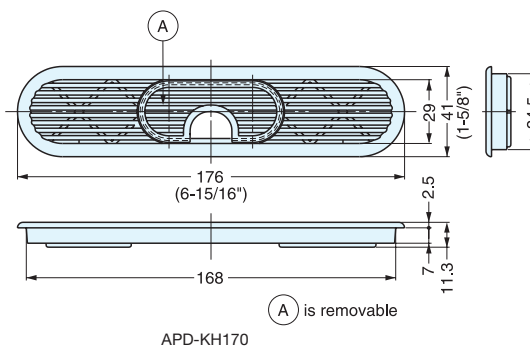
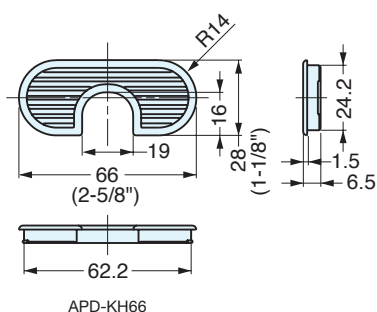
APD-KH

- ABS ventilator.

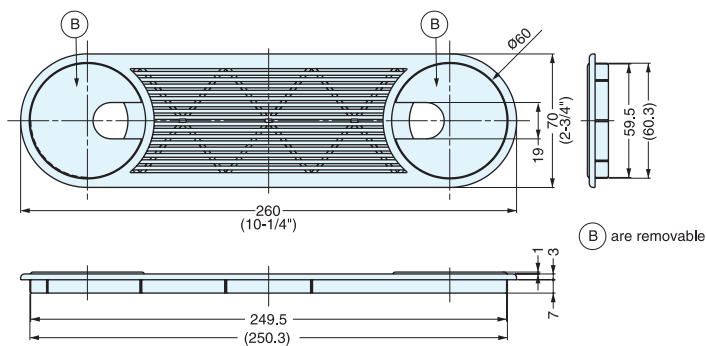


MISCELLANEOUS

VENTILATOR



Cut Out Dimensions



APD-KH260

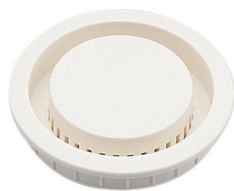
Item No.	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
APD-KH66-CR	ABS	Chrome	3.7	100	500
APD-KH66-IV		Ivory	3		
APD-KH66-BL		Black			
APD-KH66-BR		Brown			
APD-KH66-WT		White	24		
APD-KH170-CR		Chrome		40	320
APD-KH170-IV		Ivory			
APD-KH170-BL		Black			
APD-KH170-BR		Brown			
APD-KH170-WT		White			
APD-KH260-IV		Ivory	55	10	80
APD-KH260-BL		Black			
APD-KH260-BR		Brown			

VENTILATOR

APM

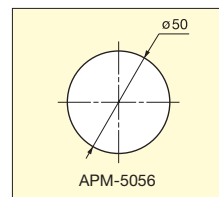


APM-5056/BRN

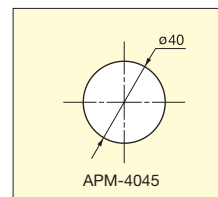


APM-5056/WHT

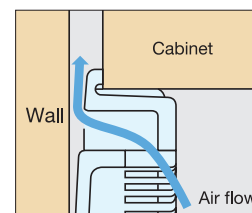
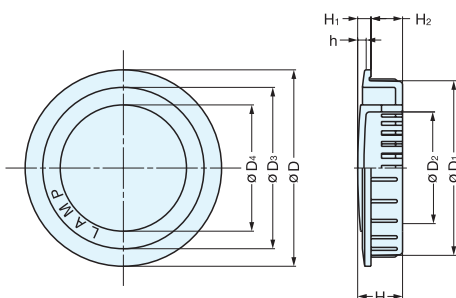
- Slits for ventilation cannot be seen from outside.



Bore Dimensions



APM-4045



Allows air flow even if the surface of the ventilator is directly on the wall.

Please specify the finish when ordering.

Item No.	D	D ₁	D ₂	D ₃	D ₄	H	H ₁	H ₂	h	Bore Dimension	Material			Finish	
											ABS			White (WHT), Brown (BRN)	
APM-4045	45 (1-25/32")	39.8 (1-9/16")	24.6	36.2	28.2	10.3	3.3	7	1.6	40	Weight (g)	Box (pcs)	Carton (pcs)		
APM-5056	56 (2-13/64")	49.8 (1-31/32")	32	46	36	12.8	3.8	9	1.8	50	5	150	900		

VENTILATOR

APB



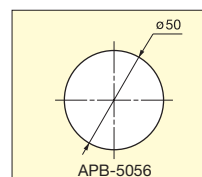
APB-5056/WHT



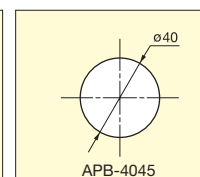
APB-4045/WHT



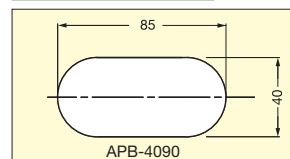
APB-4090/WHT



APB-5056

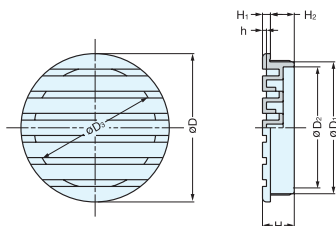


APB-4045

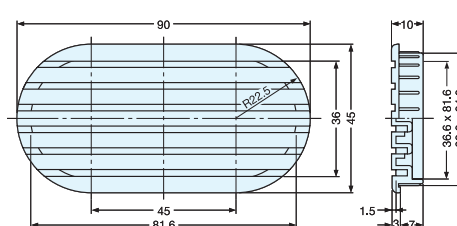


APB-4090

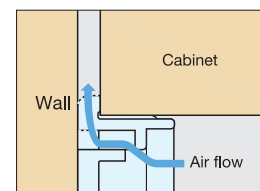
Bore Dimensions



APB-4045, APB-5056



APB-4090



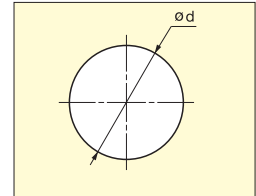
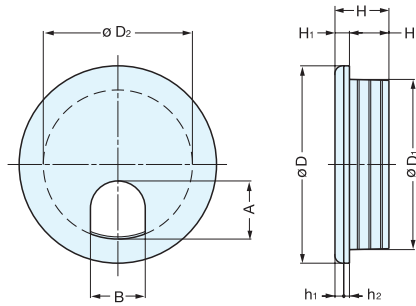
Allows air flow even if the surface of the ventilator is directly on the wall.

Item No.	D	D ₁	D ₂	D ₃	H	H ₁	H ₂	h	Bore Dimension	Weight (g)	Material			Finish	
											ABS			White (WHT)	
APB-4045	45 (1-25/32")	39.8 (1-9/16")	36.6	36.6	10	3	7	1.5	40	7	Box (pcs)	Carton (pcs)			
APB-5056	56 (2-13/64")	49.8 (1-31/32")	46	46	12		9		50	11					
APB-4090	-	-	-	-	-	-	-	-	40 x 85	16	80	480			

CABLE GROMMET



S445, S51, S60, S76, S89



Bore Dimensions

MISCELLANEOUS

CABLE GROMMETS

Please specify the finish when ordering.

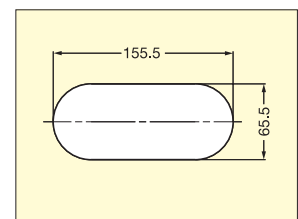
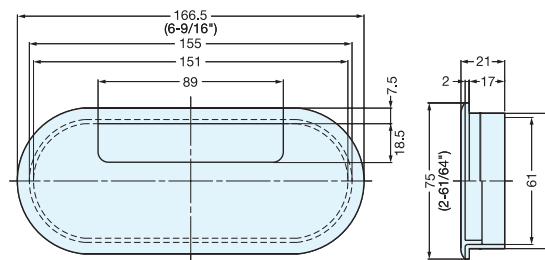
Material	Finish
ABS	White (WHT), Black (BLK)

Item No.	D	D ₁	D ₂	H	H ₁	H ₂	h ₁	h ₂	A	B	d	Weight (g)	Box (pcs)	Carton (pcs)
S445	45 (1-25/32")	38.8 (1-17/32")	34	19.7	3.3	16.4	2	1.3	16.7	12.5	38.5	8.7	100	1200
S 51	51 (2")	44.5 (1-3/4")	39.7	19.9	3.6	16.3		1.6	19	15.5	44.2	11.1		800
S 60	60.5 (2-3/8")	48.8 (1-59/64")	44	19.8		16.2			20.8	19	48.5	13.7		600
S 76	76.5 (3-1/64")	64.4 (2-17/32")	59	20.3	4.2	16.1	2.6	1.5	21.5	21.5	64.2	21.8	50	350
S 89	89.4 (3-33/64")	76.5 (3-1/64")	71.4	20.6	4.1	16.5	2.6		25	22	76.5	30.3		250

CABLE GROMMET



S165-76



Bore Dimensions

Please specify the finish when ordering.

Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
S165-76	47.7	150	1500	ABS	White (WHT), Black (BLK)

CABLE GROMMET

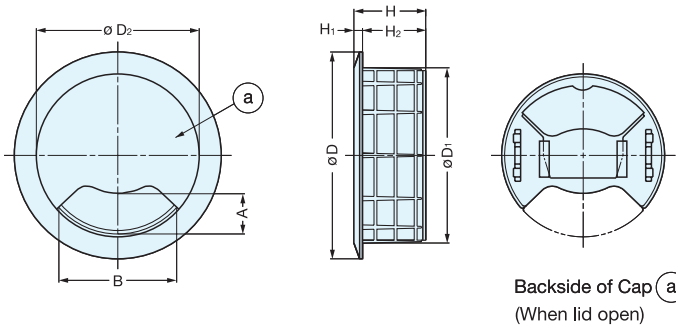


V60, V80

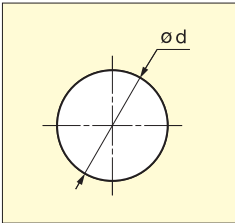


V60/WHT

V60/BLK



Backside of Cap (a)
(When lid open)



Bore Dimensions

Please specify the finish when ordering.

Material	Finish
Plastic	White (WHT), Black (BLK)

Item No.	D	D ₁	D ₂	H	H ₁	H ₂	A	B	d	Weight (g)	Box (pcs)	Carton (pcs)
V60	72 (2-27/32")	61 (2-13/32")	56.7	25	3	22	14	41	60.5	26.7	90	900
V80	92 (3-5/8")	80.5 (3-11/64")	77					50	80	37.9	88	880

CABLE GROMMET

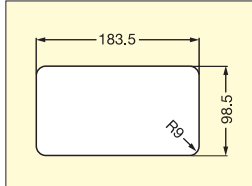
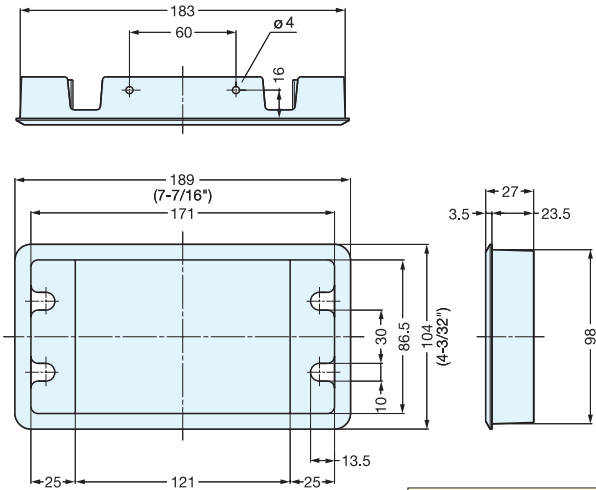


V2000



V2000/BLK

V 2000/WHT



Bore Dimensions

Please specify the finish when ordering.

Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
V2000	102	33	330	Plastic	White (WHT), Black (BLK)

CABLE GROMMET

LSU, LS

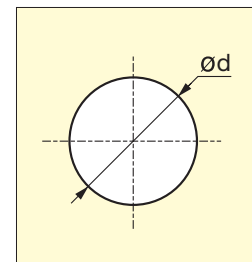
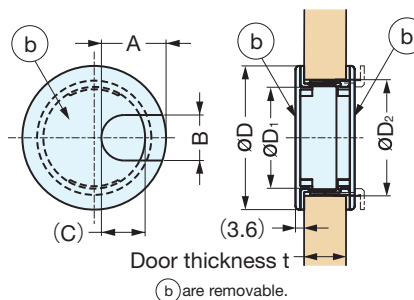
- Double-sided grommets.



LSU60WHT



LSU60BLK



Bore Dimensions

Item No.	Finish	Material	D	D ₁	D ₂	A	B	C	t	d	Weight (g)	Box (pcs)	Carton (pcs)
LSU60WT	White	ABS	60 (2-3/8")	42.5 (1-43/64")	48.5	27	19	18	12~18 (1/2"~3/4")	48.5	19	20	160
LSU60BL	Black								18~24 (3/4"~1")		20		
LS60WT	White												
LS60BL	Black												
LS76WT	White		76 (3")	58.2 (2-19/64")	64.2	34	22	25.1	25~40 (1"~1-9/16")	64.2	25	12	96
LS76BL	Black												

CABLE GROMMET

CHC

- Choose from 1/2" (12 mm) or 19/32" (15 mm) grommets, perfect for phone, fax, or LAN data cables.

Weight: CHC-18 8.3(g)
CHC-22 14.5(g)



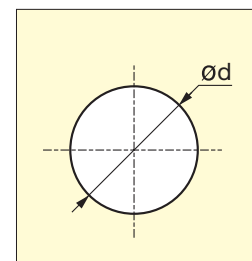
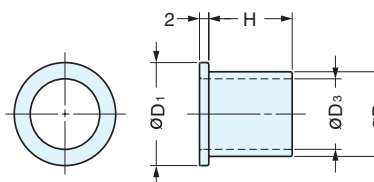
CHC-22/GB



CHC-18/NI



CHC-18/GA



Bore Dimensions

Item No.	Material	Finish	H	D ₁	D ₂	D ₃	d	Box (pcs)
CHC-18/NI	Brass	Satin Nickel	16 (5/8")	18 (11/16")	14 (9/16")	12 (1/2")	14.5 (9/16")	120
CHC-18/GA		Gold						
CHC-18/GB		Antique Brass						
CHC-22/NI		Satin Nickel	18 (11/16")	22 (7/8")	18 (11/16")	15 (19/32")	18.5 (11/16")	60
CHC-22/GA		Gold						
CHC-22/GB		Antique Brass						

CABLE GROMMET

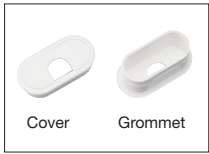
LN72D



LN72D/WT



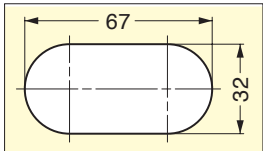
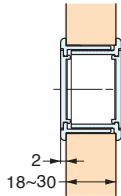
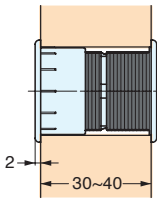
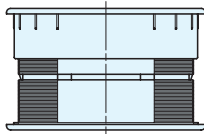
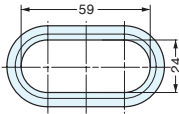
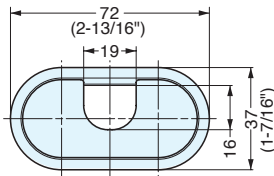
LN72D/BL



Cover

Grommet

- Double-sided adjustable grommet
- For panel thickness 1-3/16" to 1-9/16" (30 to 40 mm); also for 11/16" to 1-9/16" (18 to 30 mm) by snapping off edge.
- Cover can be removed to increase the grommet opening.



Bore Dimensions

Item No.	Color	Material	Weight (g)	Box (pcs)	Carton (ocs)
LN72D/WT	White	ABS	19	40	320
LN72D/BL	Black				

CABLE GROMMET

LN72S

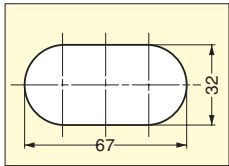
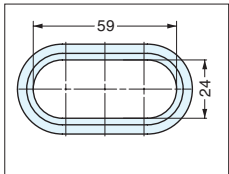
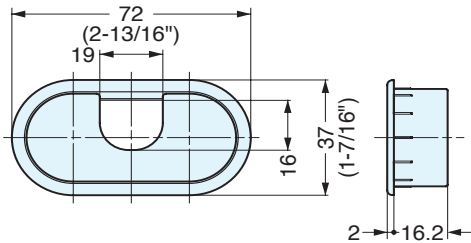


LN72S/WT



LN72S/BL

- Cover can be removed to increase the grommet opening.



Bore Dimensions

Item No.	Color	Material	Weight (g)	Box (pcs)	Carton (ocs)
LN72S/WT	White	ABS	8	40	200
LN72S/BL	Black				

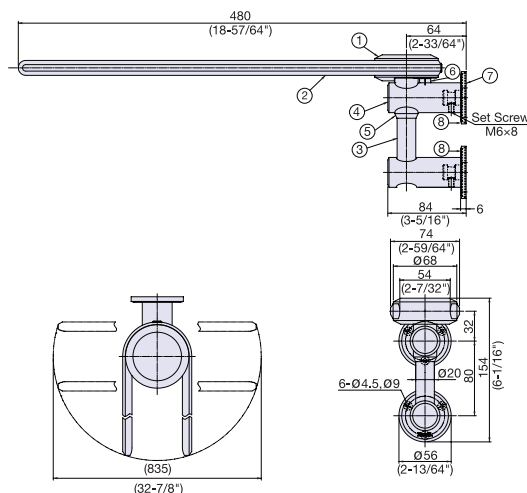
ZweiL Towel Bar

**STAINLESS
316
STEEL**

ZL-3201



- Supplied with stainless steel wood screw (4.1 x 32), anchor plug and 3 mm allen key.



Item No.	Weight (g)	Box (pcs)
ZL-3201	-	1

No.	Part Name	Material	Finish
①	Bracket	316 Stainless Steel	Zwei L
②	Arm		Mirror
③	Pin		Zwei L
④	Post		
⑤	Bushing	Polyacetal	Black
⑥	Swivel Stopper		
⑦	Base Plate	316 Stainless Steel	Plain
⑧	Cover		Zwei L

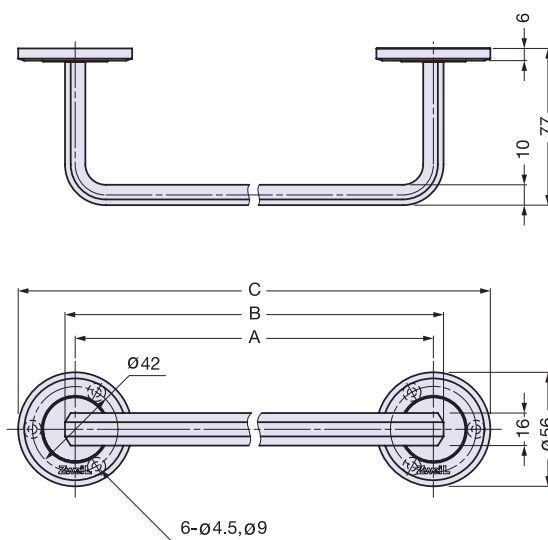
Zwei L Towel Bar

**STAINLESS
316
STEEL**

ZL-3202



- Supplied with stainless steel wood screws (4.1 x 25) and concrete anchor (for wood screw 4.1, ø6 mm hole).



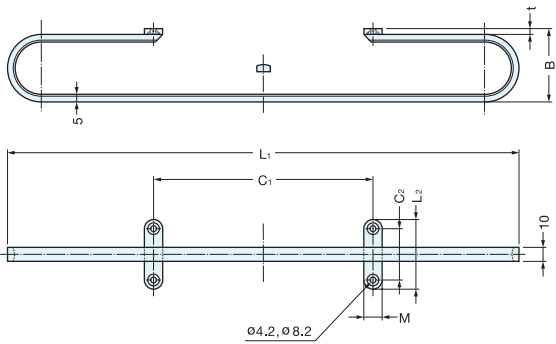
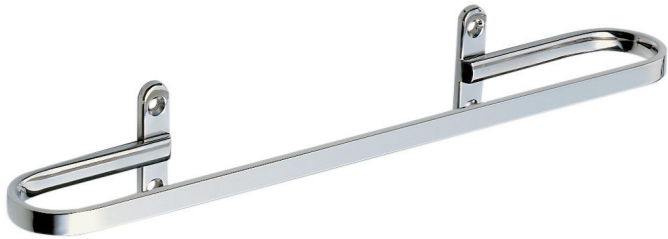
Item No.	Material	Finish/Color	A	B	C
ZL-3202-480	316 Stainless Steel	Zwei L	480	490	536 (21-7/64")
ZL-3202-640			640	650	696 (27-13/32")

TOWEL BAR



KB-T

• Supplied with 4 x 20 stainless steel wood screws.



Material	Finish
303 Stainless Steel	Mirror

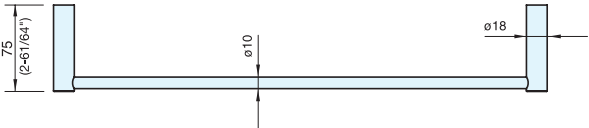
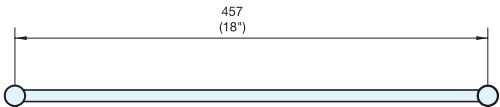
Item No.	B	C ₁	C ₂	L ₁	L ₂	M	t	Weight (g)	Box (pcs)	Carton (pcs)
KB-T-350	50	150	35	350 (13-25/32")	48	13	4	240	1	10
KB-T-450		250		450 (17-23/32")				275		

TOWEL BAR



DSR-01/18

• Supplied with screws, brackets, plastic expansion anchors and allen key.



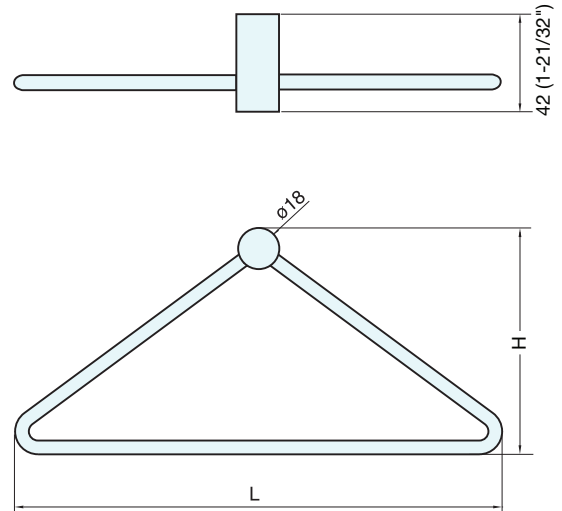
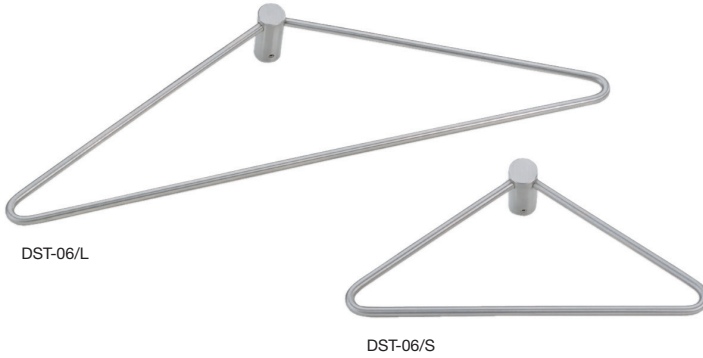
Item No.	Weight (g)	Box (pcs)	Carton (pcs)	Material	Finish
DSR-01/18	580	1	10	303/304 Stainless Steel	Satin

TOWEL BAR



DST-06

- Supplied with screw, bracket, plastic expansion anchor and allen key.



Item No.	L	H	Weight (g)	Box (pcs)	Carton (pcs)
DST-06/S	213 (8-25/64")	108 (4-1/4")	173	1	10
DST-06/L	390 (15- 3/8")	125 (4-15/16")	241		

Material	Finish
303/304 Stainless Steel	Satin

TOWEL BAR

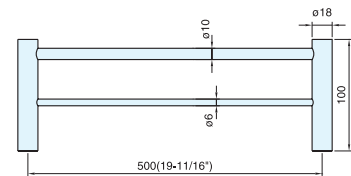


DSR-02

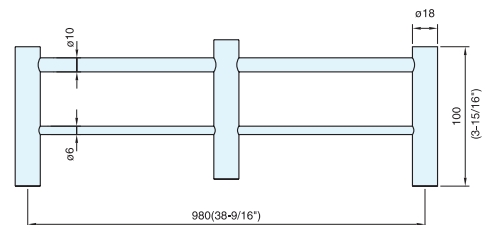
- Supplied with screws, brackets, plastic expansion anchors and allen key.



DSR-02/50



DSR-02/98



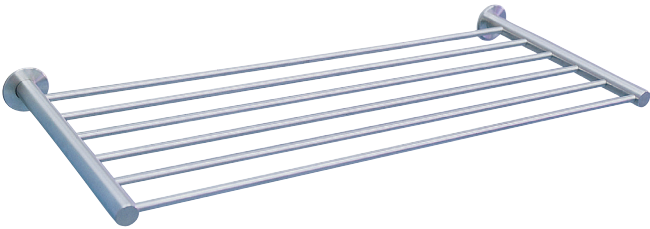
Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSR-02/50	777	1	10
DSR-02/98	1352		

Material	Finish
303/304 Stainless Steel	Satin

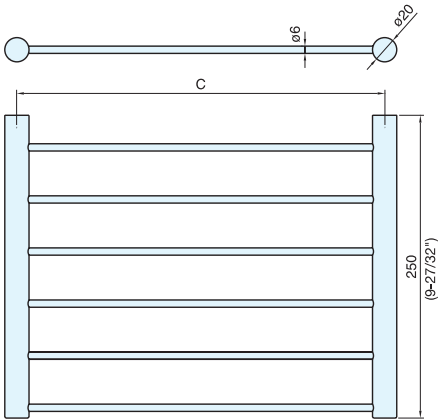
TOWEL RACK



DSR-08



- Supplied with screws, brackets, plastic expansion anchors and allen key.



Item No.	C	Weight (g)	Box (pcs)	Carton (pcs)
DSR-08/45	450 (17-3/4")	1423	1	10
DSR-08/60	600 (23-5/8")	1778		

Material	Finish
303/304 Stainless Steel	Satin

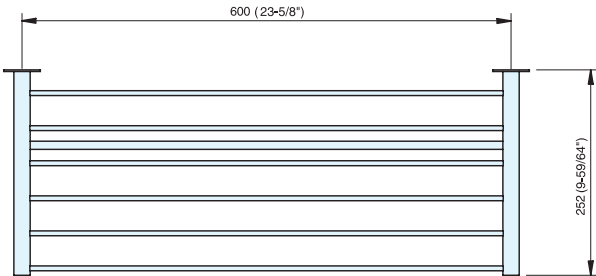
TOWEL RACK



DSD-80



- Supplied with screws, brackets, plastic expansion anchors and allen key.



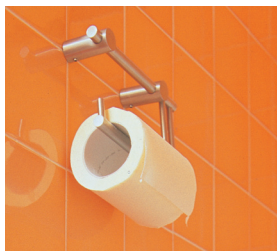
Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSD-80	2700	1	10

Material	Finish
303/304 Stainless Steel	Satin

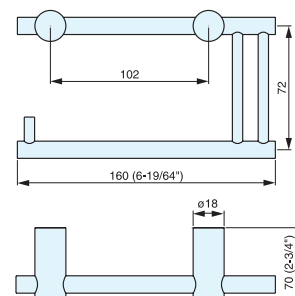
TOILET PAPER HOLDER



DSB-01



- Supplied with screws, brackets, plastic expansion anchors and allen key.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSB-01	456	1	10

Material	Finish
303/304 Stainless Steel	Satin

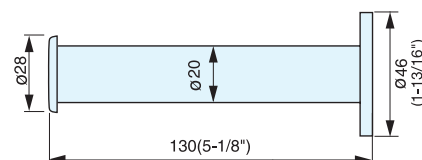
TOILET PAPER HOLDER



DSB-03



- Toilet paper holder for side-wall mount.
- Supplied with screw and plastic expansion anchor.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSB-03	201	5	50

Material	Finish
303/304 Stainless Steel	Satin

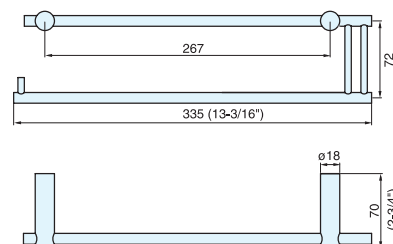
PAPER TOWEL HOLDER



DSB-04



- Paper towel holder, also can be used as towel bar.
- Supplied with screws, brackets, plastic expansion anchors and allen key.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSB-04	669	1	10

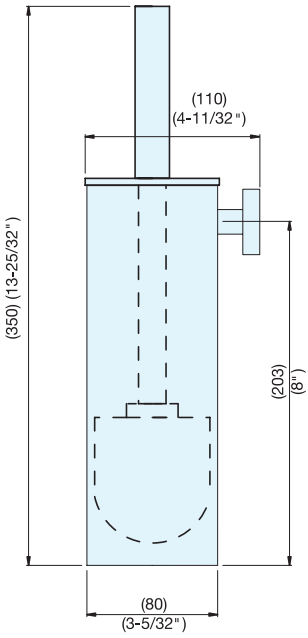
Material	Finish
303/304 Stainless Steel	Satin

TOILET BRUSH/HOLDER



DSB-09

- Removable plastic basket for easy cleaning.
- Supplied with screws, brackets, plastic expansion anchors and allen key.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSB-09	748	1	10

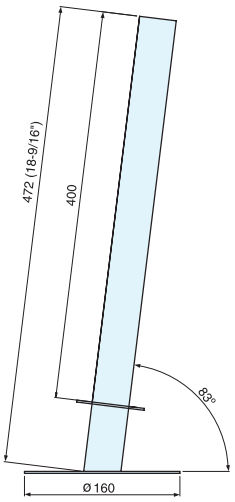
Material	Finish
303/304 Stainless Steel	Satin

TOILET PAPER HOLDER



DSB-07

- Toilet paper stand ideal to keep stock organized.



Item No.	Weight (g)	Box (pcs)	Carton (pcs)
DSB-07	1009	1	10

Material	Finish
304 Stainless Steel	Satin

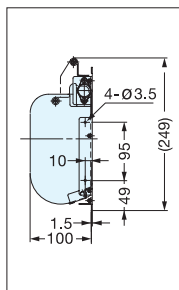
MULTI-PURPOSE DOOR (W/DAMPER)



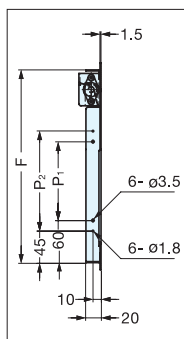
AZ-GD230/HL, AZ-SD310/HL



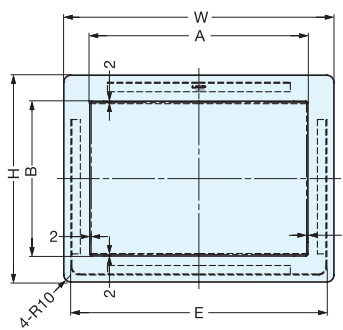
AZ-GD230/HL



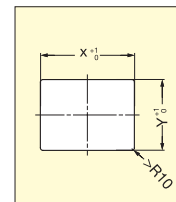
AZ-GD230/HL



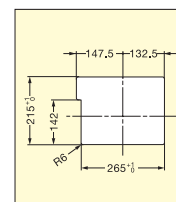
AZ-SD310/HL



- Soft and slow closing movement with a unique damper mechanism.
- Vertical use only.



Cut Out Dimensions
AZ-SD310/HL



Cut Out Dimensions
AZ-GD230/HL

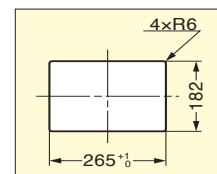
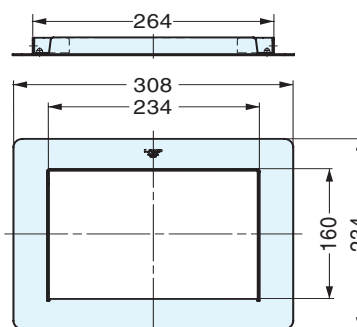
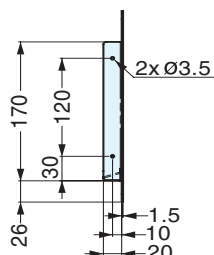
Material	Finish
304 Stainless Steel	Satin

Item No.	A	B	W	H	E	F	P ₁	P ₂	X	Y	Weight (kg)	Box (pcs)	Carton (pcs)
AZ-GD230/HL	234	160	308	234	-	-	-	-	-	-	1.5	1	10
AZ-SD310/HL	310	220	384	294	364	274	112	142	365	275	2.2		

MULTI-PURPOSE GROMMET



AZ-ND230



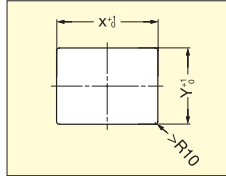
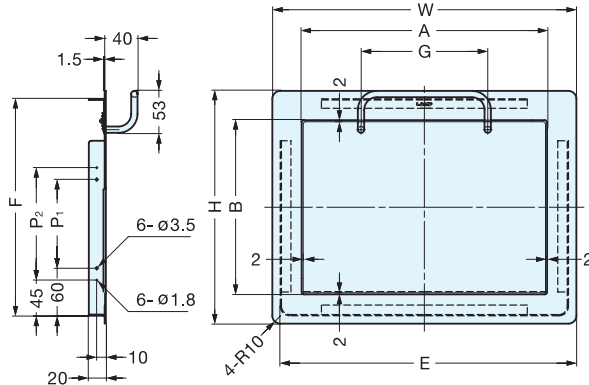
Cut Out Dimensions

Item No.	Weight (kg)	Box (pcs)	Carton (pcs)	Material	Finish
AZ-ND230	719	1	10	304 Stainless Steel	Satin

MULTI-PURPOSE DOOR (W/HANDLE)

STAINLESS
304
STEEL

AZ-HD230/HL, HD310/HL



Cut Out Dimensions

- Easy to open with the handle.
- No need to put hands in trash.
- 304 Stainless Steel lid, frame and handle.
- Vertical use only.

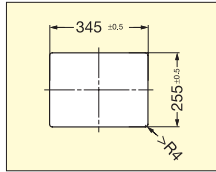
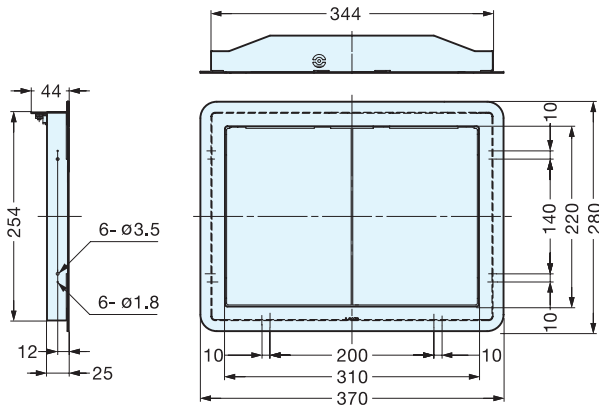
Material	Finish
304 Stainless Steel	Satin

Item No.	A	B	W	H	E	F	G	P ₁	P ₂	X	Y	Weight (kg)	Box (pcs)	Carton (pcs)
AZ-HD230/HL	234	160	308	234	288	214	120	60	90	289	215	1.8	1	10
AZ-HD310/HL	310	220	384	294	364	274	160	112	142	365	275	2.2		

MULTI-PURPOSE DOOR (DOUBLE DOOR)

STAINLESS
304
STEEL

AZ-DD310/HL



Cut Out Dimensions

- Synchronized doors allow for easy opening.
- 304 Stainless Steel lid and frame.
- Vertical use only.

Item No.	Weight (kg)	Box (pcs)	Carton (pcs)	Material	Finish
AZ-DD310/HL	2.2	1	10	304 Stainless Steel	Satin

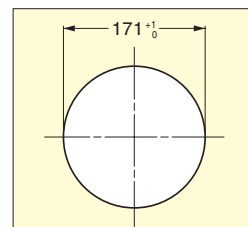
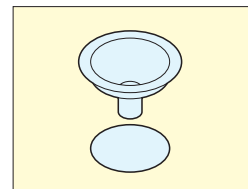
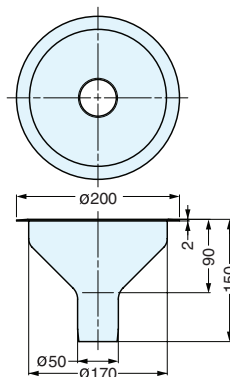
DRAIN SPOUT

STAINLESS
304
STEEL

AN-DH020



- Wide 6-11/16" diameter drain spout for use in food service environments.
- Lip outer diameter 7-7/8".
- Stainless steel construction for easy cleaning.
- 2" diameter tubing can be attached to the spout.



Cut Out Dimensions

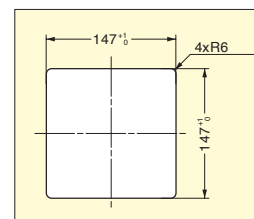
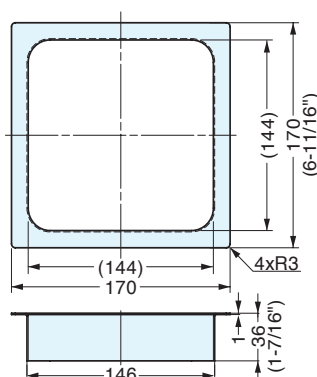
Item No.	Weight (g)	Box (pcs)	Carton (pcs)
AN-DH020	490	1	10

Material	Finish
304 Stainless Steel	Polished Mirror/Satin

MULTI-PURPOSE GROMMET

STAINLESS
304
STEEL

AN-KH017



Cut Out Dimensions

Item No.	Weight (g)	Box (pcs)	Carton (pcs)
AN-KH017	269	1	10

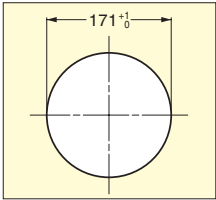
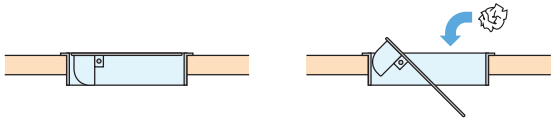
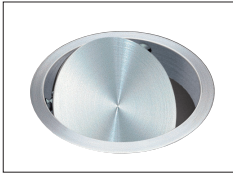
Material	Finish
304 Stainless Steel	Satin

MULTI-PURPOSE LID

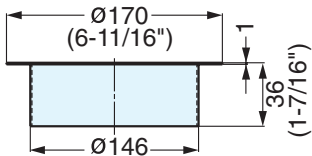
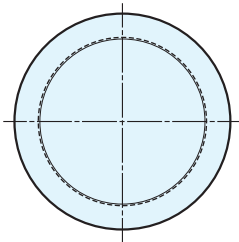
STAINLESS
304
STEEL

AD-DH017

- Self-leveling lid.
- Horizontal use only.



Cut Out Dimensions



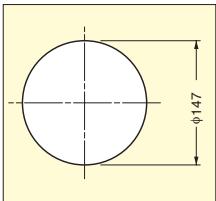
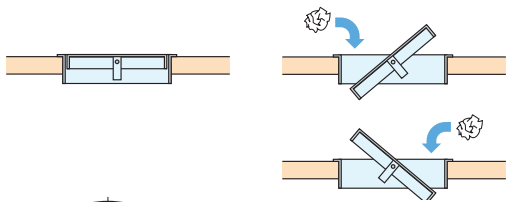
Item No.	Weight (kg)	Box (pcs)	Carton (pcs)	Material	Finish
AD-DH017	977	1	10	304 Stainless Steel	Satin

MULTI-PURPOSE LID

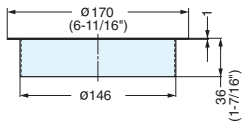
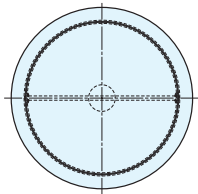
STAINLESS
304
STEEL

AD-DH015

- Self-leveling lid.
- Horizontal use only.



Cut Out Dimensions



Item No.	Weight (kg)	Box (pcs)	Carton (pcs)	Material	Finish
AD-DH015	554	1	10	304 Stainless Steel	Satin

MULTI-PURPOSE GROMMET

STAINLESS
304
STEEL

AN-DH, LH

- Stainless steel construction, available with mirror (-M) or satin finish (-S).



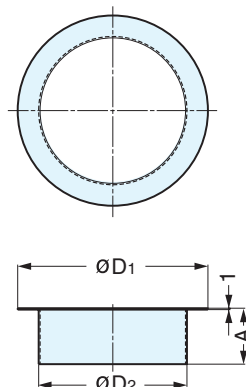
Mirror (M)



Satin (S)



Installation



Material	Finish
304 Stainless Steel	Satin (S)/Mirror (M)

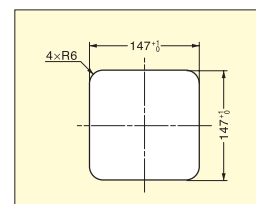
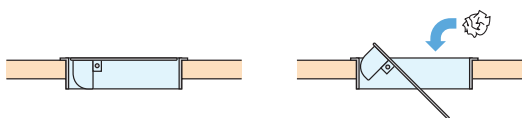
Item No.	A	D1	D2	Weight (kg)	Box (pcs)	Carton (pcs)
AN-DH001	36 (1-7/16")	112 (4-7/16")	82 (3-1/4")	102	1	10
AN-DH011	40 (1-9/16")	136 (5-3/8")	106 (4-3/16")	187		
AN-DH015	36 (1-7/16")	170 (6-11/16")	146 (5-3/4")	233		
AN-LH001	22 (7/8")	112 (4-7/16")	82 (3-1/4")	79		
AN-LH011		136 (5-3/8")	106 (4-3/16")	95		
AN-LH015		170 (6-11/16")	146 (5-3/4")	125		

MULTI-PURPOSE LID

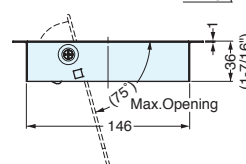
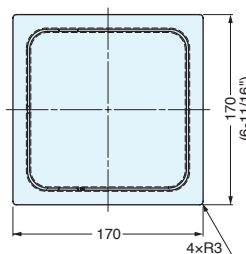
STAINLESS
304
STEEL

AD-KH017

- Self-leveling lid.
- Horizontal use only.



Cut Out Dimensions



Item No.	Weight (kg)	Box (pcs)	Carton (pcs)
AD-KH017	967	1	10

Material	Finish
304 Stainless Steel	Satin