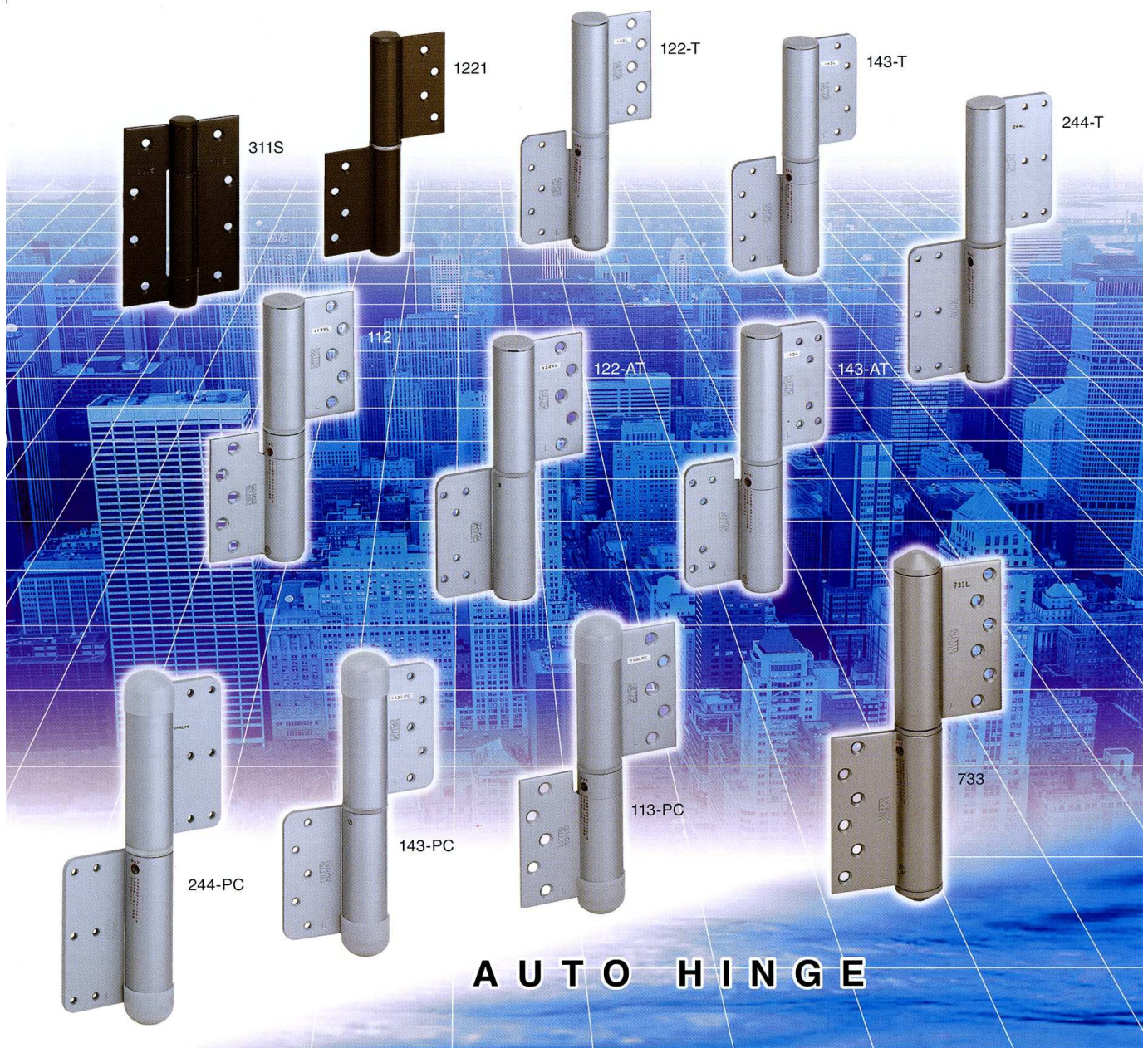


# NITTO KOHKI AUTO HINGES

## FLAG TYPE



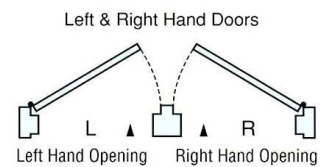
**A U T O H I N G E**

## Flag type series (Table of models with specifications)

Model number		Type of door	Door size applicable (mm)			Door weight (kg) (Max)	Closing force (N·m)	Stop mechanics	Stop angle	Max. Opening angle	Color												
Right hand opening	Left hand opening		W (Max)	H (Max)	D (Min)																		
300 Series	311S (Available for both right and left)	Wood, aluminum (Indoor use)	800	2000	30	30	5.0	○	85°~180°	180° Left or right one side opening	Silver Bronze Ivory Gold												
	Empty hinge 310 (Available for both right and left)											—	—	—									
1000 Series	1111R	1111L	850	2000	30	35	7.9	—	—	180° Left or right one side opening	Silver												
	1111SR	1111SL										○	85°										
	1121R	1121L										—	—										
	1121SR	1121SL										○	85°										
	1211R	1211L										—	—										
	1211SR	1211SL										○	85°										
	1221R	1221L										—	—										
	1221SR	1221SL										○	85°										
	Empty hinge	1110R										1110L	—	—	—	—	—	—	—	—	Silver		
		1120R										1120L										Bronze	
		1210R										1210L											Silver
		1220R										1220L											
100 Series	112R	112L	900	2100	30	40	10.0	—	—	180° Left or right one side opening	Silver or Bronze												
	112SR	112SL										Wooden door Light steel door (122T for steel frame)	○	85° and 150°									
	122R-T	122L-T											—	—									
	122SR-T	122SL-T										○	85° and 150°										
	113R	113L	1000	2200		60	15.0	—	—			—	—										
	113SR	113SL												Wooden door Aluminum door	○	85° and 150°							
	113R TRISET	113L TRISET				80	20.0	—	—			—	—										
	113SR TRISET	113SL TRISET												○	85° and 150°								
	122R-AT	122L-AT	Wooden door Light steel door (122T for steel frame)	900		2100	40	10.0	—			—	—	—	Silver								
	122SR-AT	122SL-AT														○	85° and 150°						
	132R	132L	Aluminum door Light steel door Partition door	900		2100	40	10.0	—			—	—	—	—								
	132SR	132SL														○	85° and 150°						
	143R-T	143L-T	Steel door	900		2100	60	15.0	—			—	—	—	—								
	143SR-T	143SL-T														○	85° and 150°						
	143R-AT	143L-AT																—	—				
	143SR-AT	143SL-AT																		○	85° and 150°		
	Empty hinge	110R	110L	900		2100	30	40	—			—	—	—	Silver or Bronze								
		120R-T	120L-T													Wooden door Light steel door (120T for steel frame)	—	—	—				
120R-AT		120L-AT	Aluminum door Light steel door Partition door																				
130R		130L			Steel door					60													
140R-T		140L-T	—								—												
140R-AT		140L-AT			—											—							
200 Series	244R-T	244L-T	1200	2100	40	120	22.6	—	—		180° Left or right one side opening	Silver											
	244SR-T	244SL-T											Steel door	○	85° and 150°								
	Empty hinge 240R-T	240L-T														—	—						

Model number		Type of door	Door size applicable (mm)			Door weight (kg) (Max)	Closing force (N·m)	Stop mechanics	Stop angle	Max. Opening angle	Color								
Right hand opening	Left hand opening		W (Max)	H (Max)	D (Min)														
700 Series	733R	733L	900	2100	40	120	15.0	—	—	180° Left or right one side opening	Silver								
	733SR	733SL						○	85° and 150°										
	Empty hinge 730R	730L						—	—										
PC Series	113R-PC	113L-PC	900	2100	30	40	15.0	—	—	180° Left or right one side opening	Silver								
	113SR-PC	113SL-PC						○	85° and 150°										
	133R-PC	133L-PC						—	—										
	133SR-PC	133SL-PC						○	85° and 150°										
	143R-T-PC	143L-T-PC						—	—										
	143SR-T-PC	143SL-T-PC						○	85° and 150°										
	244R-T-PC	244L-T-PC						—	—										
	244SR-T-PC	244SL-T-PC						○	85° and 150°										
	Empty hinge	110R-PC						110L-PC	900			2100	30	40	—	—	—	—	—
		130R-PC						130L-PC											
140R-T-PC		140L-T-PC																	
240R-T-PC		240L-T-PC	900	2100	40	120													
153 Series	NK153R	NK153L	900	2100	8 10 12	60	15.0	—	—	180° Left or right one side opening	Silver								
	NK153SR	NK153SL						○	85° and 150°										
	NK153R TRISET	NK153L TRISET						—	—										
	NK153SR TRISET	NK153SL TRISET						○	85° and 150°										
	Empty hinge NK150R	NK150L						1000	2200			8 / 10 / 12	80	—	—				

- Each article is a combination of a spring hinge and a damper hinge (except for empty hinges).
- For opening orientation, each article designation gives an R to represent right-handed opening, and an L to represent left-handed opening. The opening orientation of the 300 series is for both right- and left-handed opening.
- The "S" in an article designation means that the product has a stop (with an internal stop mechanism).
- Every model with a -T or an -AT at the end of its article designation has a tap hole (M6) for installing it on a hinge flap. Nitto Kohki is ready to produce products of the same model but without such tap holes. (Examples: with tap hole, 143R-T; without tap hole, 143-R)
- The 300 and 1000 series with empty hinges are in packages of two pairs each, and the 100, 200, 700 and PC series come in packages of one pair each.



# Comfort in a widening range of applications

## Nitto Kohki's Auto Hinges of the flag type

They match all kinds of doors and make their images stand out beautifully.

### Flag type

#### 300, 1000, 100, and 200 series

**Simple design**

The hinges double as door closers, thus giving the doors a neat-looking finish. Their simple and beautiful designs match all kinds of doors.

**A wide range of uses**

They can also be used on arch doors that are not readily compatible with other door closers and doors with no head rails.

**Sufficient door-closing power**

The 100 and 200 series incorporate two springs (weak and strong) and a switching mechanism (clutch) for them, thus giving a small but sufficient door-closing power.

**An internal stop mechanism**

The 300 series comes with an automatic mechanism for stopping closings at 85° to 180° (free stops), the 1000 series at 85°, and the 100 and 200 series at 85° and 150°.

**Simple adjustment of closing speed**

The speed can easily be adjusted with the mere use of a screwdriver.

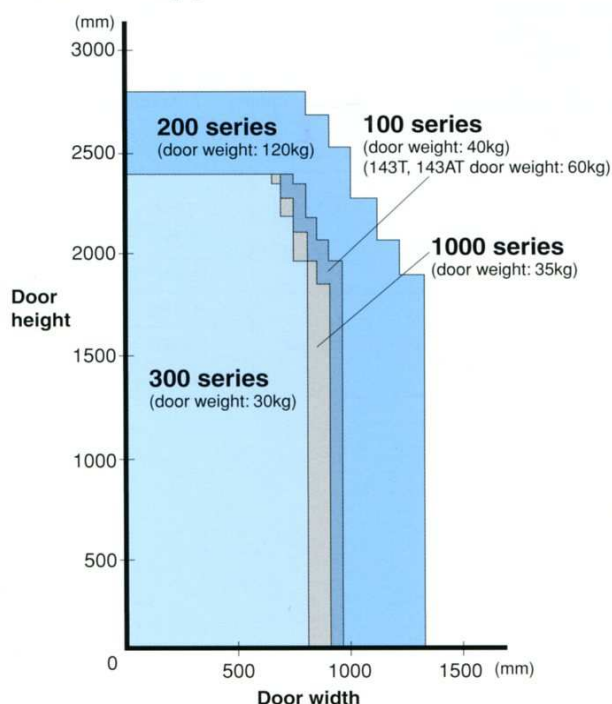
**Easy to install**

These hinges are installed in exactly the same manner as conventional flag-type hinges. They do not require much labor. They are easy to handle.

**Outstanding durability**

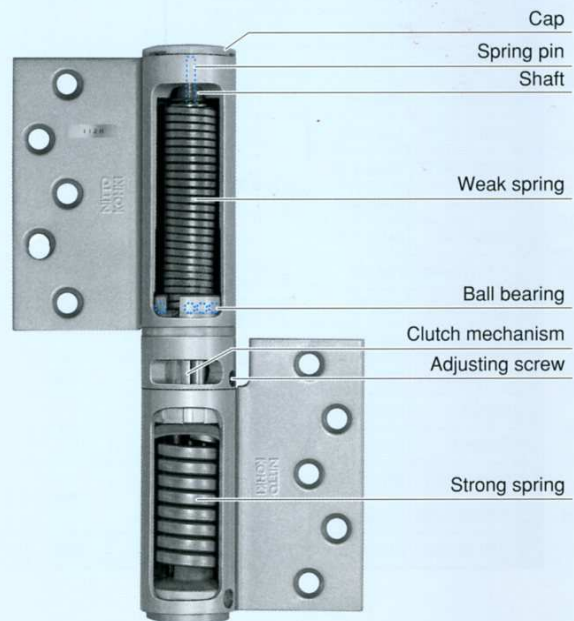
They are so structured as to undergo little friction, thus achieving outstanding durability.

### Table of applicable doors



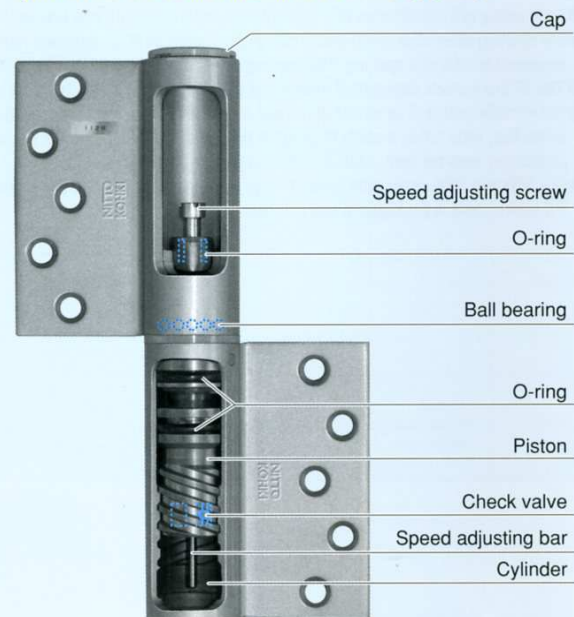
**Spring hinge**

(with an internal self-closing and stop mechanism)



**Damper hinge**

(with an internal control mechanism for closing speed)



- Each model consists of a spring hinge and a damper hinge.
- This diagram represents the structure of the 100 series.

WOODEN DOORS-ALUMINIUM DOORS-STEEL DOORS

## 300series

## Model 311S

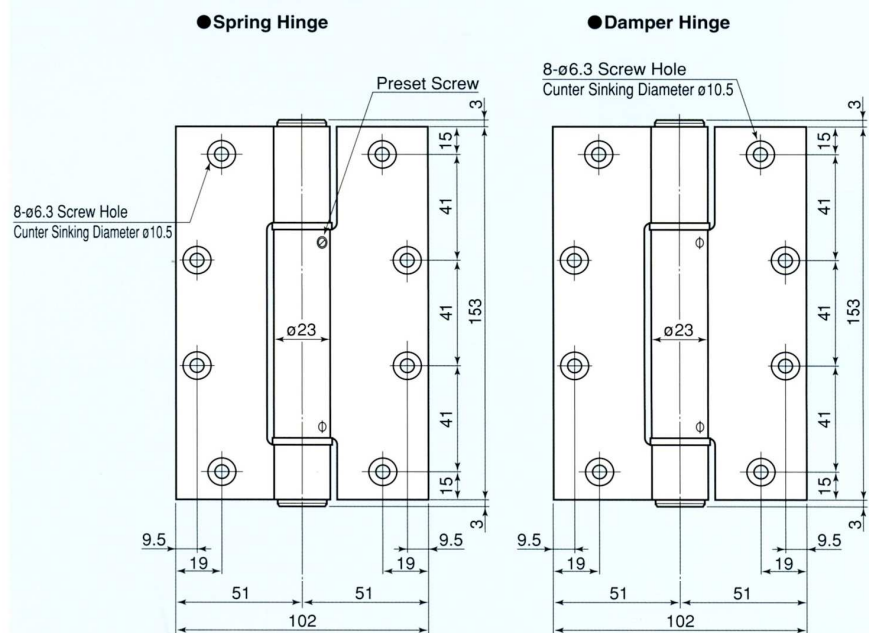
In House Use

Model Number		Door Size Applicable (mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
		W	H	D						
	311S	800(Max)	2000(Max)	30(Min)	30(Max)	5.0	○	85°~180°	180° Left or Right One-side Opening	Silver Bronze ivory gold
Empty Hinge	310					—	—	—		

● Available for both right-opening and left-opening doors.



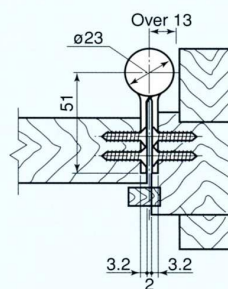
### EXTERNAL DIMENSIONS



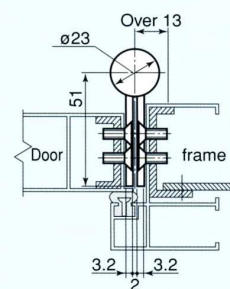
### Remarks

1. Surface treatment is by a baked coating of melamine resin.
2. When using them on wooden doors, use lauan or harder wood.
3. The tapping screws furnished with the products and designed specifically for installation are 25mm long. If the frame is wooden, use a frame at least 25mm thick. If an aluminum, lightweight steel door is involved, use steel screws (flat screws M5).
4. Allow at least 3mm of space between outer edge of door and frame.

### FITTING DIAGRAMS



Wooden Doors



Aluminium Doors

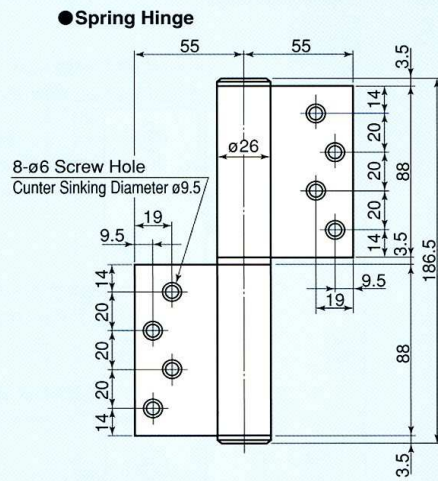
WOODEN DOORS-ALUMINIUM DOORS-STEEL DOORS

## 1000series Model 1100

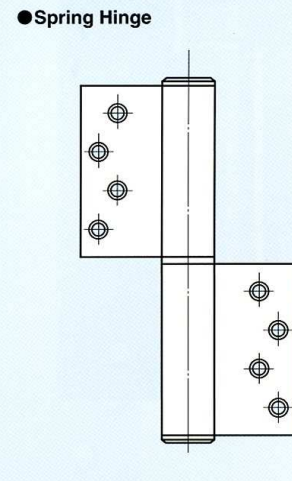
Model Number		Door Size Applicable(mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
Right hand door	Left hand door	W	H	D						
1111R	1111L	850(Max)	2000(Max)	30(Min)	35(Max)	7.9	—	85°	180° Left or Right One-side Opening	Silver
1111SR	1111SL									Bronze
1121R	1121L									Silver
1121SR	1121SL									Bronze
Empty Hinge	1110R	1110L	850(Max)	2000(Max)	30(Min)	—	—	—	—	Silver
	1120R	1120L								Bronze



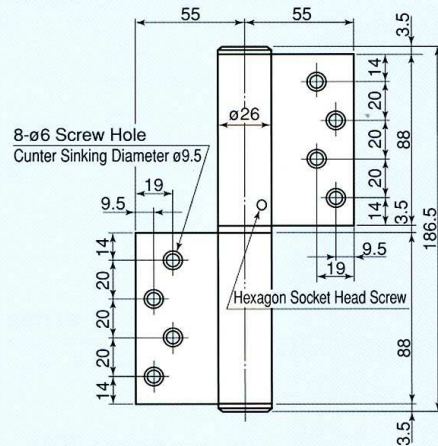
### EXTERNAL DIMENSIONS Left Hand Door



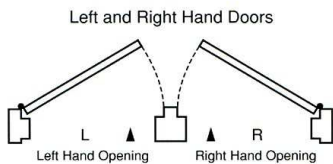
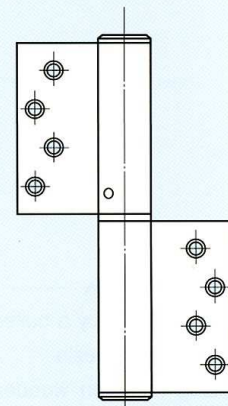
### Right Hand Door



### ● Damper Hinge



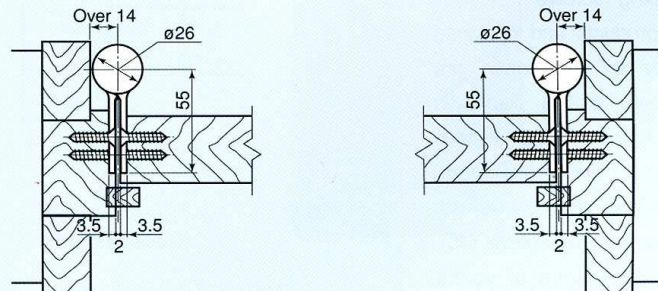
### ● Damper Hinge



### Remarks

1. The door and frame materials to which the hinge is to be fitted should be of hard wood such as lauan or harder.
2. Because the attached screws for fitting are 25mm long, the thickness of the frame should be over 25mm.
3. Allow at least 5mm of space between outer edge of door and frame.
4. Body material : Aluminum  
Surface treatment :  
Silver(anodic oxide coating)  
Bronze(baked epoxy resin coating)

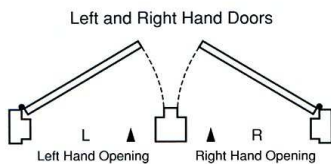
### FITTING DIAGRAMS



## 100 series

## Model 113

Model Number		Door Size Applicable(mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
Right hand door	Left hand door	W	H	D						
113R	113L	900(Max)	2100(Max)	30(Min)	60(Max)	15.0	—	85° & 150°	180° Left or Right One-side Opening	Silver
113SR	113SL									
Empty Hinge	110R	110L				—	—	—		

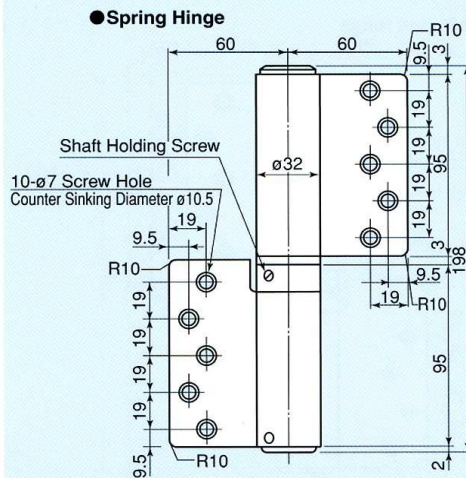


### Remarks

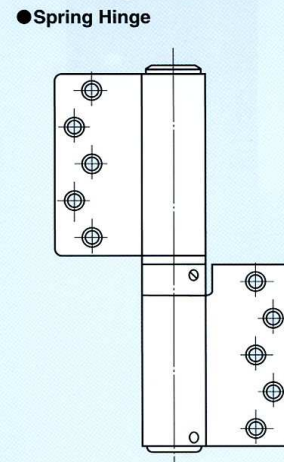
1. The door and frame materials to which the hinge is to be fitted should be of hard wood such as lauan or harder.
2. Because the attached screws for fitting are 25mm long, the thickness of the frame should be over 25mm.
3. Allow at least 5mm of space between outer edge of door and frame.
4. The edge type is also available for the corner of leaves.
5. Surface treatment is by a baked coating of melamine resin.
6. Always allow for a door stopper to prevent the door from opening wider than 180°.

### EXTERNAL DIMENSIONS

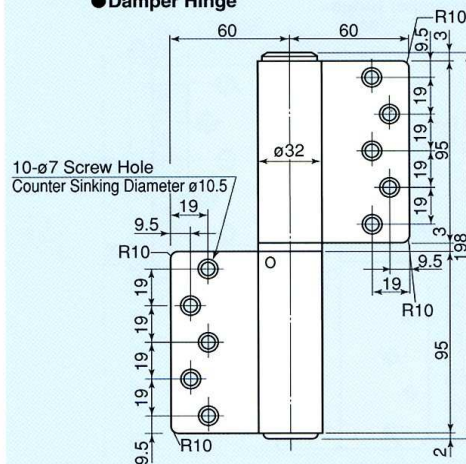
#### Left Hand Door



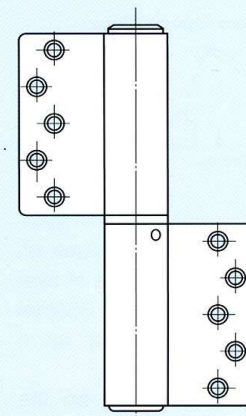
#### Right Hand Door



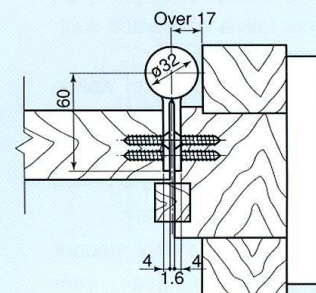
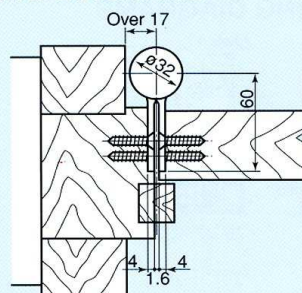
#### ● Damper Hinge



#### ● Damper Hinge



### FITTING DIAGRAMS



## WOODEN DOORS

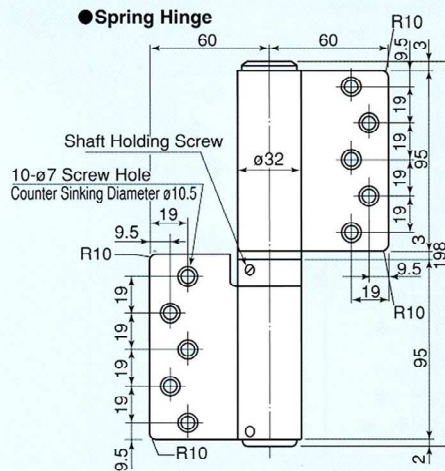
# 100series

## Model 113 (TRI-SET)

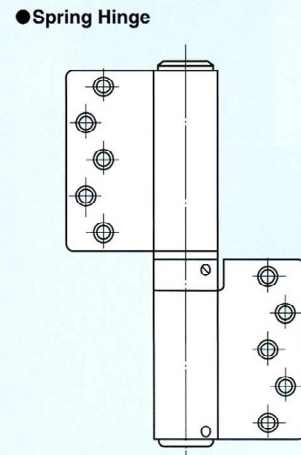
Model Number		Door Size Applicable(mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
Right hand door	Left hand door	W	H	D						
113R (TRI-SET)	113L (TRI-SET)	1000(Max)	2200(Max)	30(Min)	80(Max)	20.0	—	—	180° Left or Right One-side Opening	Silver
113SR (TRI-SET)	113SL (TRI-SET)									
—		—			—		—		—	



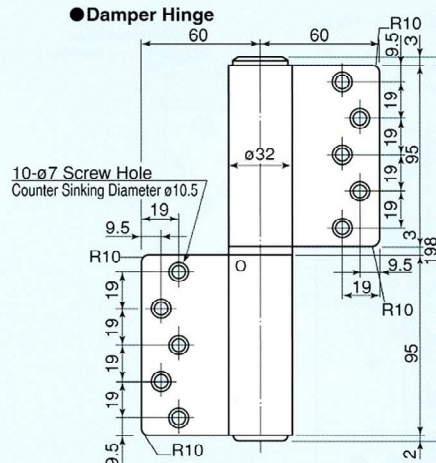
### EXTERNAL DIMENSIONS Left Hand Door



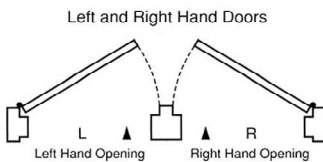
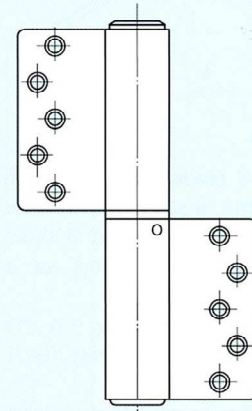
### Right Hand Door



### Damper Hinge



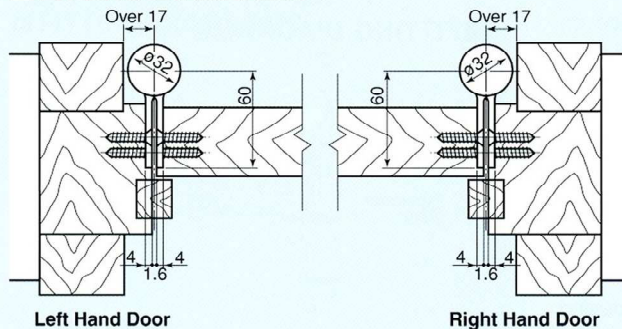
### Damper Hinge



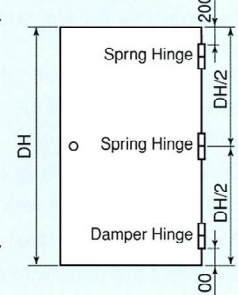
### Remarks

1. The door and frame materials to which the hinge is to be fitted should be of hard wood such as lauan or harder.
2. Because the attached screws for fitting are 30mm long, the thickness of the frame should be over 30mm.
3. Allow at least 5mm of space between outer edge of door and frame.
4. The edge type is also available for the corner of leaves.
5. Surface treatment is by a baked coating of melamine resin.
6. Always allow for a door stopper to prevent the door from opening wider than 180°.

### FITTING DIAGRAMS



### Installation



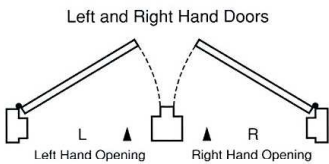




## 100series

## Model 143AT

Model Number		Door Size Applicable(mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
Right hand door	Left hand door	W	H	D						
143R-AT	143L-AT	900(Max)	2100(Max)	30(Min)	60(Max)	15.0	—	—	180° Left or Right One-side Opening	Silver
143SR-AT	143SL-AT									
Empty Hinge	140R-AT / 140L-AT					—	—	—		

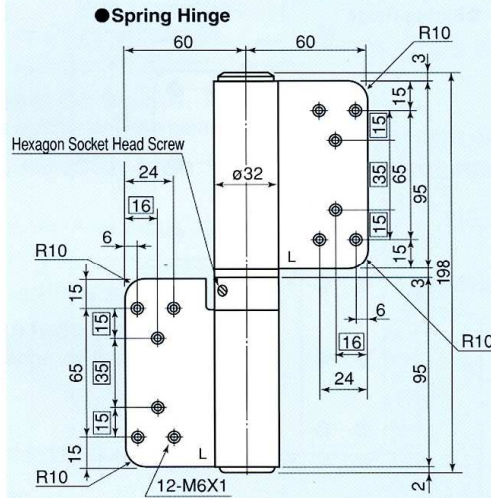


### Remarks

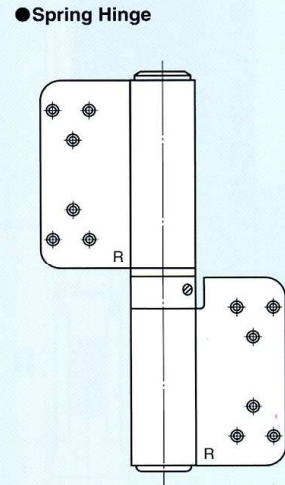
- For the blade fitting place on the frame, a steel plate of over 2.3mm thickness and 300mm length must be used as a reinforcing material.
- For the blade fitting on the frame, use M6 flat screw X5 pcs. (NOT include)   
 □ dimension can be used. when cut the blade. (Avoid installation by welding.)
- For the blade fitting place on the door use a hard wood such as lauan or harder.
- Allow at least 5mm of space between at outer edge of door and frame.
- Surface treatment is by a baked coating of melamine resin.
- Always allow for a door stopper to prevent the door from opening wider than 180°.

### EXTERNAL DIMENSIONS

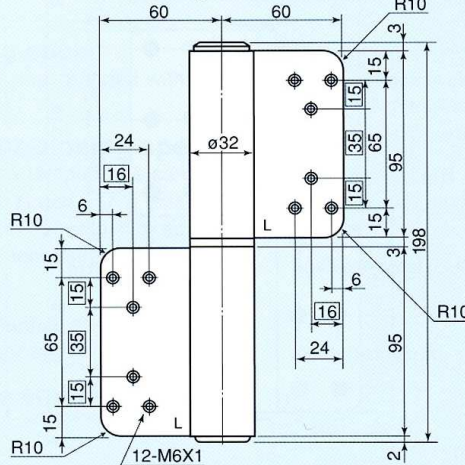
#### Left Hand Door



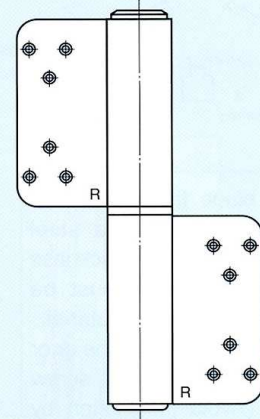
#### Right Hand Door



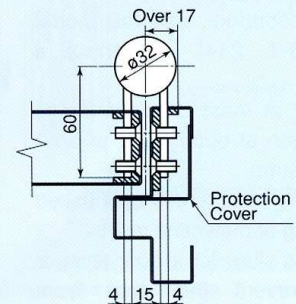
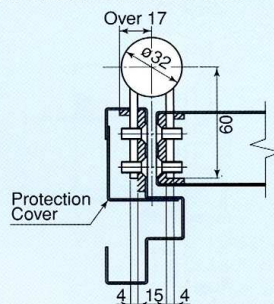
#### ● Damper Hinge



#### ● Damper Hinge



### FITTING DIAGRAMS



ALUMINIUM DOORS-STEEL DOORS

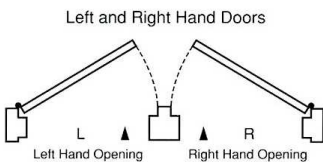
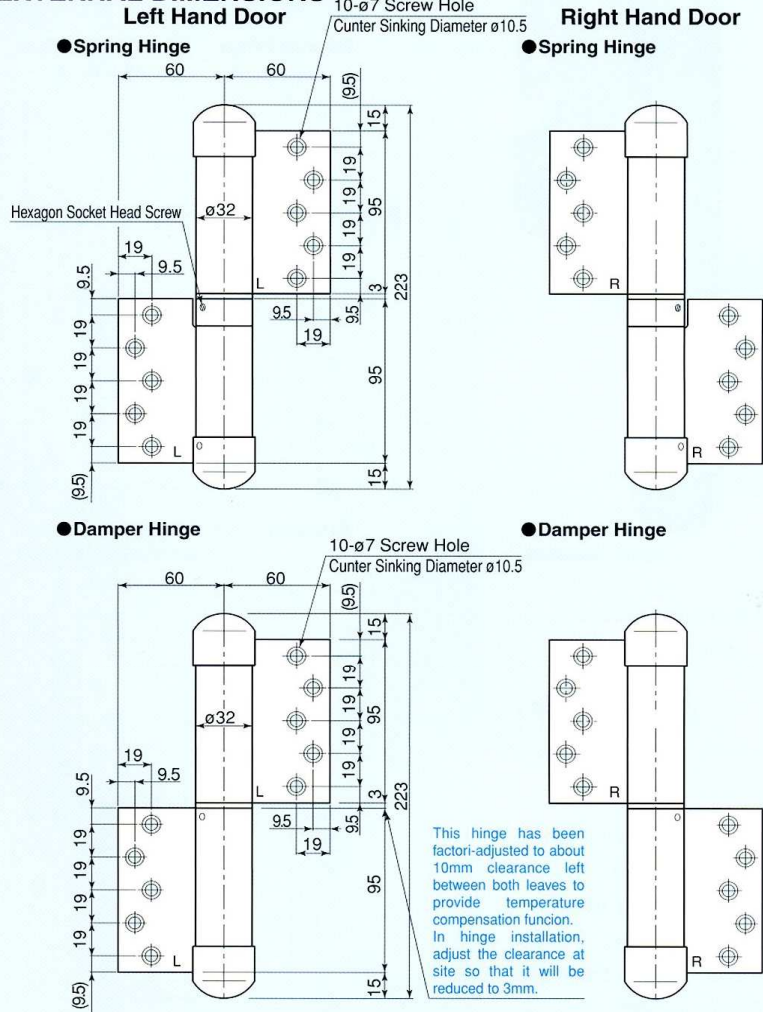
## 100PC series Model 133-PC

Model Number		Door Size Applicable(mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
Right hand door	Left hand door	W	H	D						
133R-PC	133L-PC	900(Max)	2100(Max)	30(Min)	40(Max)	15.0	—	85° & 150°	180° Left or Right One-side Opening	Silver ※ Black ※ Bronze
133SR-PC	133SL-PC									
Empty Hinge	130R-PC / 130L-PC					—	—	—		

※ Optional Color



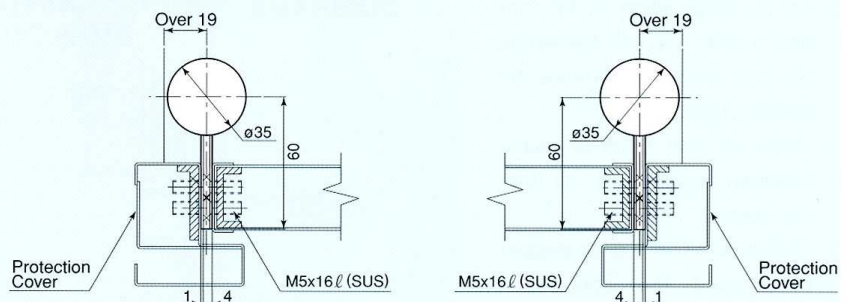
### EXTERNAL DIMENSIONS



### Remarks

1. Surface treatment is by a baked coating of acrylic resin.
2. On the mounts of the flaps for both the door and frame, always use a reinforcing steel plate at least 3.2mm and 300mm long. Fix the reinforcement directly on the framework.
3. They come with flat head screws M5 x 16L (P = 0.8) as mounting screws.
4. Always allow for a clearance of at least 5mm for the door.
5. Always allow for a door stopper to prevent the door from opening wider than 180°.
6. Avoid using them in sauna rooms.

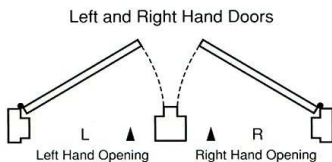
### FITTING DIAGRAMS



## 200series

## Model 244T

Model Number		Door Size Applicable(mm)			Door Weight (kg)	Closing Force (N·m)	Stop Mechanism	Location of Stop	Max. Opening Angle	Surface Color
Right hand door	Left hand door	W	H	D						
244R-T	244L-T	1200(Max)	2100(Max)	40(Min)	120(Max)	22.6	—	—	180° Left or Right One-side Opening	Silver
244SR-T	244SL-T									
Empty Hinge	240R-T					240L-T	—	—		

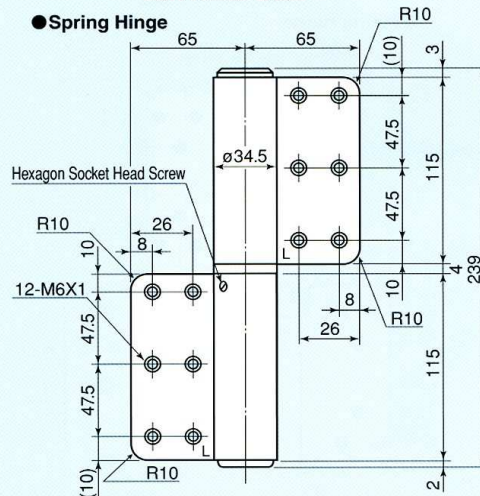


### Remarks

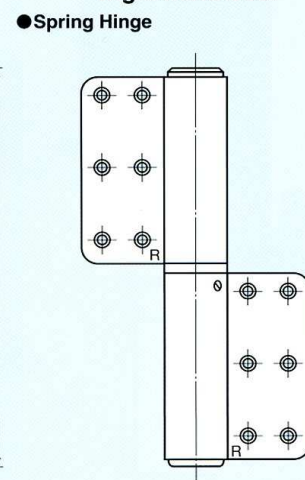
1. For the blade fitting place on the door and frame, a steel plate of over 3.2mm thickness and 300mm length must be used as a reinforcing material.
2. For the blade fitting on the door and frame, use M6 flat screw X6 pcs. (Avoid installation by welding.) (Not include)
3. In case of applying to a fire protection door, use the model (244R-T, 244L-T) without a stop.
4. Allow at least 5mm of space between at outer edge of door and frame.
5. Surface treatment is by a baked coating of melamine resin.
6. Always allow for a door stopper to prevent the door from opening wider than 180°.

### EXTERNAL DIMENSIONS

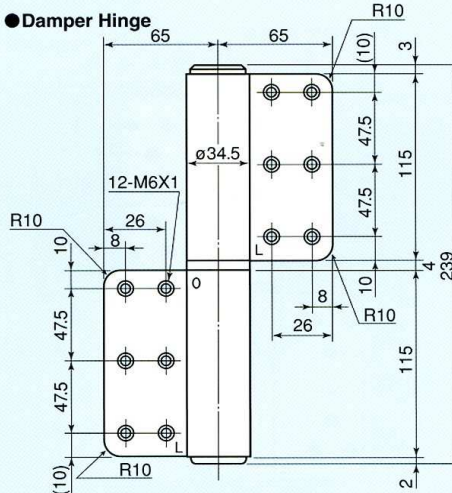
#### Left Hand Door



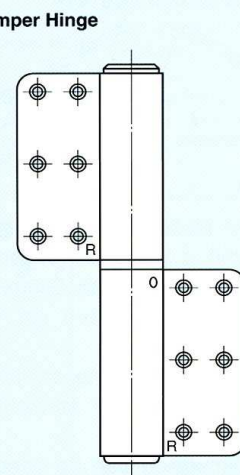
#### Right Hand Door



#### ● Damper Hinge



#### ● Damper Hinge



### FITTING DIAGRAMS

