User-friendly technology

NITTO KOHKI AUTO HINGES

Cat.NO.Kk117b

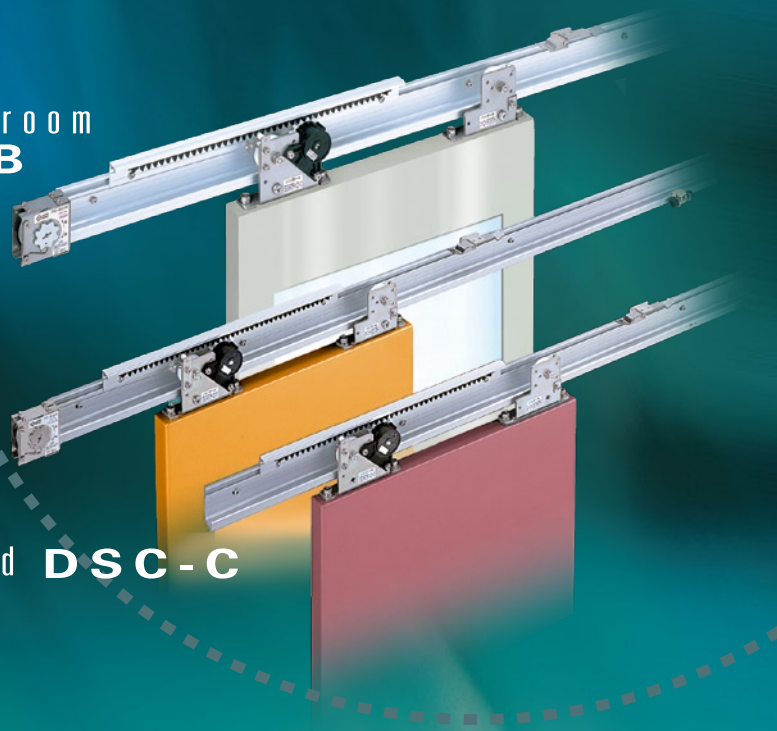
New-generation sliding door closers developedwith user-friendly technologies.

NITTO KOHKI Sliding Closer

Horizontal For bathroom
NSC-CB

Horizontal **NSC-C**

Inclined **DSC-C**



We propose a new style of door opening/closing.

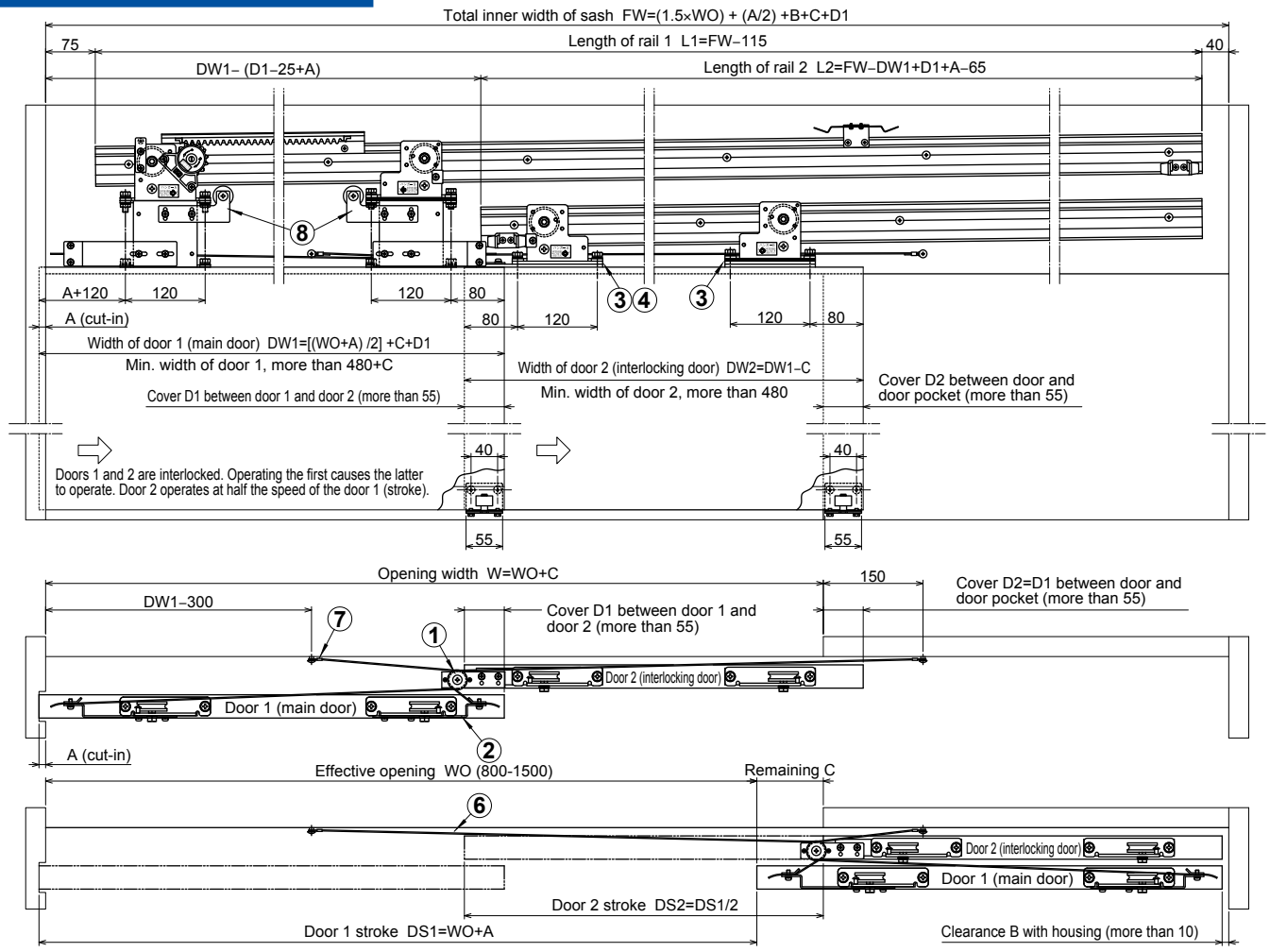
NITTO KOHKI CO.,LTD.

ISO 14001
JQA-EM4057
NITTO KOHKI CO.,LTD. Headquarters Research Center

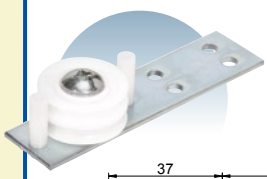
ISO 9001
SHIRAKAWA NITTO KOHKI CO.,LTD.

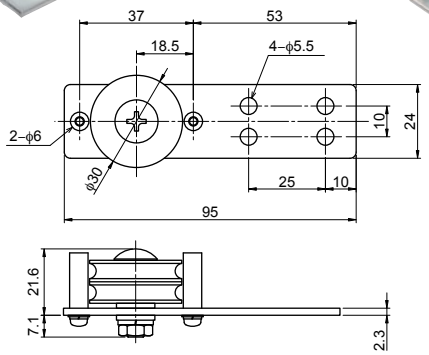
Option Single action Double sliding system, SC-2S

Installation diagrams



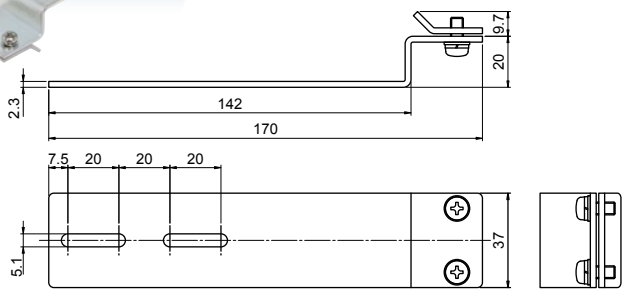
① Pulley fitting





Fitting: Steel
Pulley: Polyacetal

② Wire fitting



Fitting: Steel

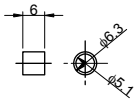
③ Liner S

Liner: Steel

④ Liner L

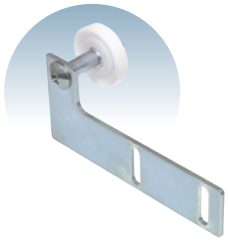
Liner: Steel

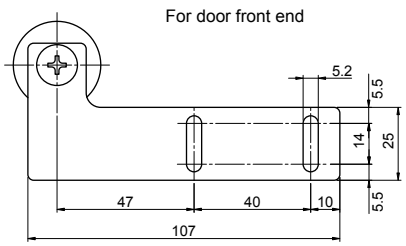
⑦ Wire fastener on frame

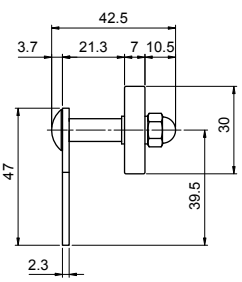


Fitting: Steel

⑧ Rebound-preventive fitting



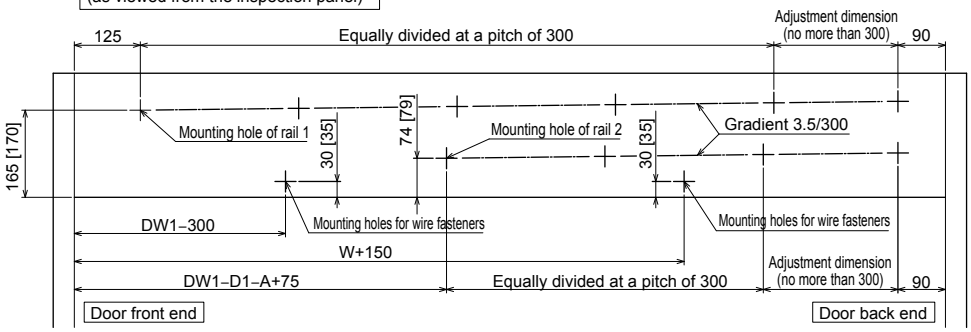


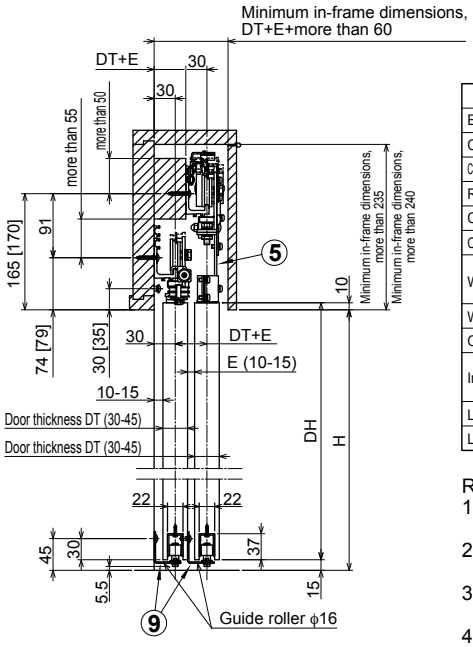


Fitting: Steel
Pulley: Polyacetal

Position diagram of holes on the frame (as viewed from the inspection panel)

*When handling a steel frame, tap M5 holes (P = 0.8).





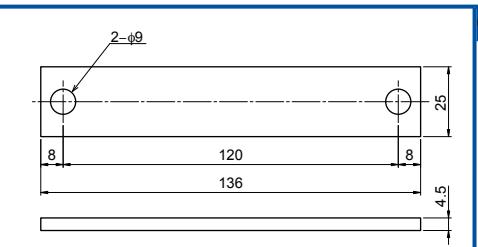
Formulae for calculating main dimensions

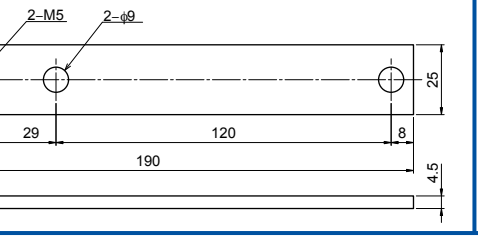
Item	Code	Formula
Effective opening	WO	Specify (800-1,500)
Cut-in of door front end	A	Specify
Clearance between housing and door when door is open	B	Specify (more than 10)
Remaining	C	Specify
Cover between doors 1 and 2	D1	Specify (more than 55)
Cover between door 2 and door pocket	D2	D2=D1 (more than 55)
Width of door 1	DW1	$\frac{WO+A}{2}$ +C+D1
Width of door 2	DW2	DW1−C (more than 480)
Opening width	W	WO+C
Inner width of sash	FW	(1.5×WO)+ $\frac{A}{2}$ +B+C+D1
Length of rail 1	L1	FW−115
Length of rail 2	L2	FW−DW1+D1+A−65

Constituents of single action Double sliding system

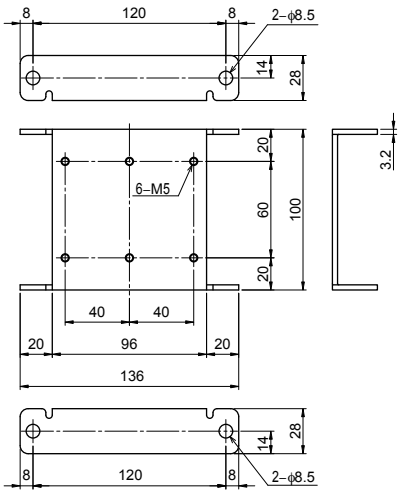
Item	Part	Q'ty of 1 set	Remark
①	Pulley fitting	1	
②	Wire fastener	2	
③	Liner S	3	
④	Liner L	1	
⑤	Hanger base	2	
⑥	Wire rope	2	
⑦	Wire fastener on frame	2	
⑧	Rebound-preventive fitting	2	1 pc. each for door front end and for door back end
⑨	Guide roller AJ	2	4 types, D = 16, 25, 30, 35
⑩	Hexagon head bolt (M8×25)	4	For installing hanger bracket and hanger
⑪	Hexagon head nut (M8)	4	For installing hanger bracket and hanger
⑫	Flat washer (for M8)	4	For installing hanger bracket and hanger
⑬	Pan head screw (M5×12)	8	Wire fitting, for installing rebound-preventive fitting
⑭	Hexagon head screw(M5×8)	2	For installing pulley fitting
⑮	Truss screw (M5×12)	2	For installing wire fitting on frame
⑯	Truss screw (M5×12 SUS)	2	For installing guide roller

Remarks
1. These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams.
2. The dimensions in [ ] are used when the wooden door plate is used (DSC-CW08 and NSC-CW36/48).
3. These diagrams show how an inclined DSC is typically installed. The inclined and horizontal types incorporate identical parts.
4. This system is required SC-2S, Standard set, Hanger(A.B), Rail and Door stopper.



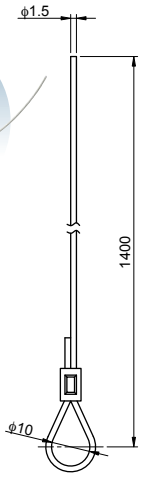


⑤ Hanger base



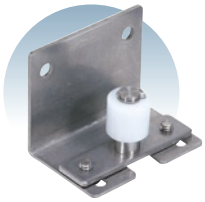
Base: Steel

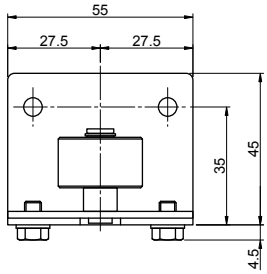
⑥ Wire rope

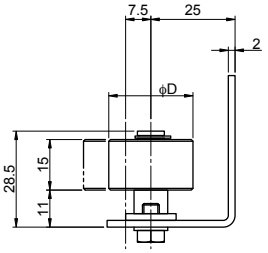


Wire: Stainless steel

⑨ Guide roller AJ

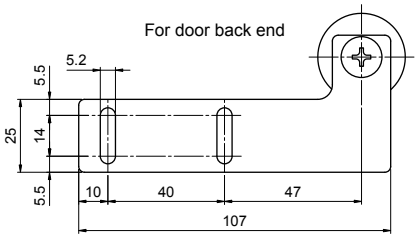


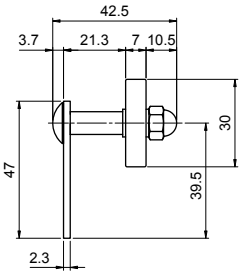




Fitting: Steel
Roller: Polyacetal

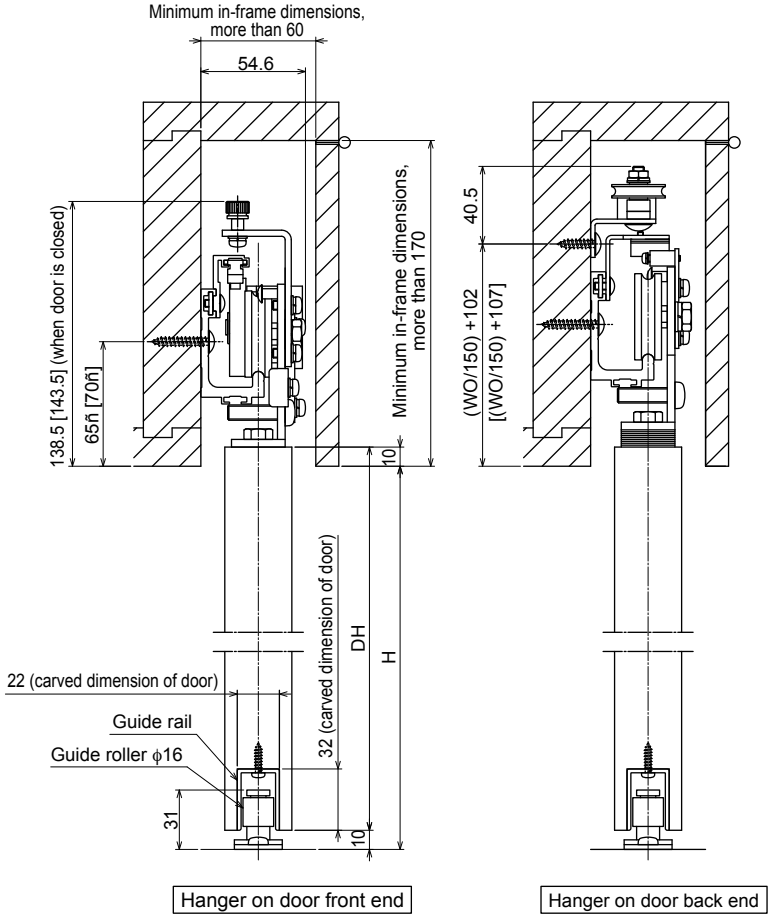
*4 types, ϕD = 16, 25, 30, 35





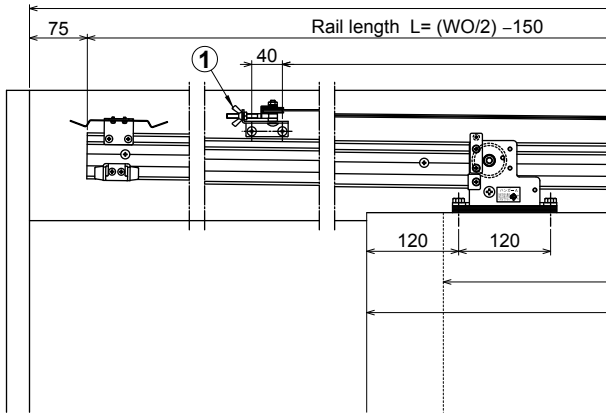
Option Bi-Parting system, SC-W

Installation diagrams



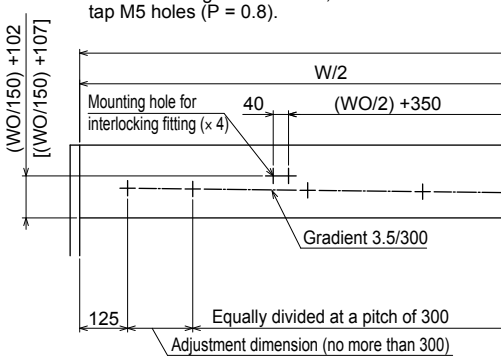
Hanger on door front end

Hanger on door back end

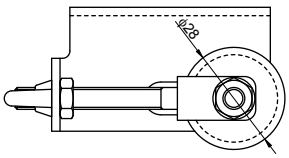


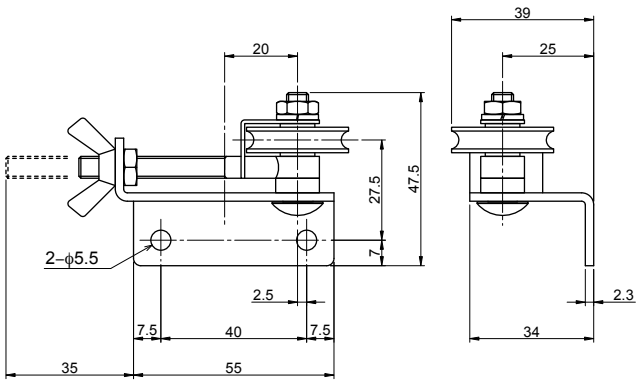
Position diagram of holes on the frame (as viewed from the maintenance cover)

*When handling a steel frame, tap M5 holes (P = 0.8).

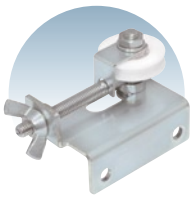


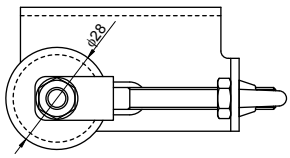
1 Adjustment fitting L

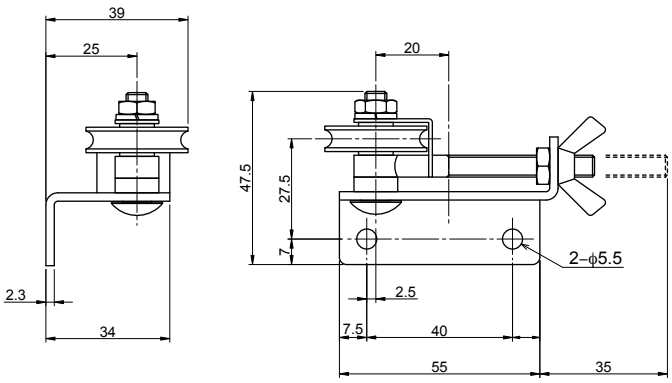




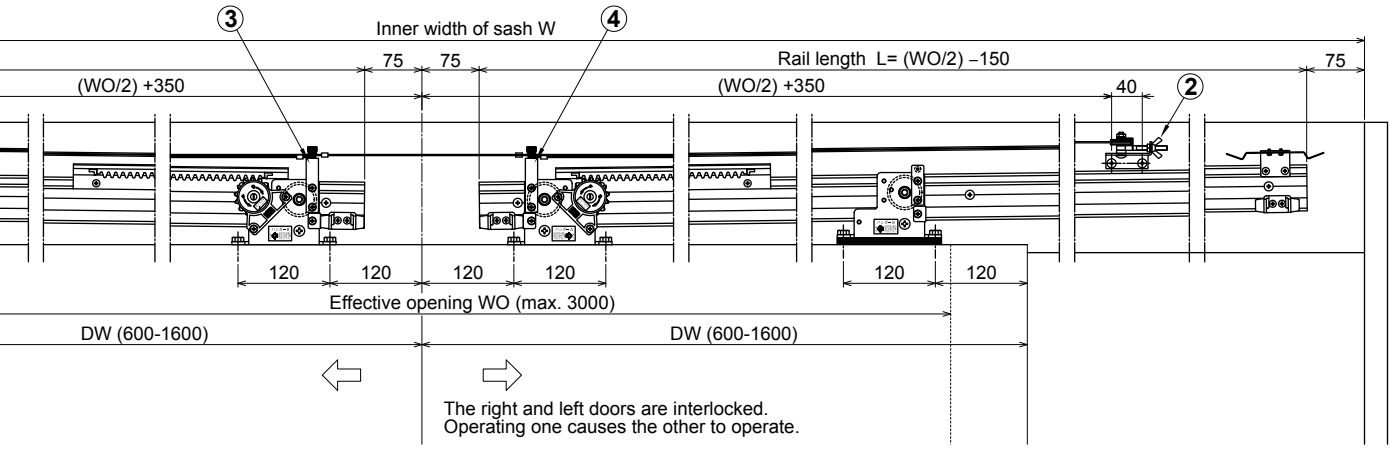
2 Adjustment fitting R

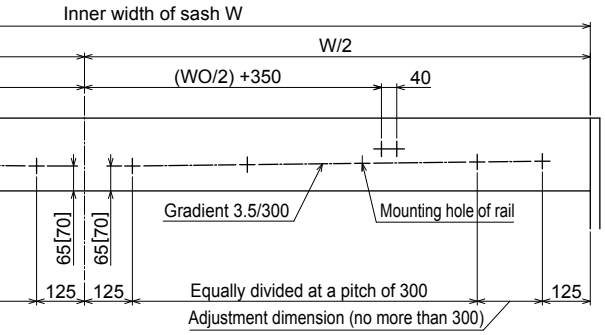






Fitting: Steel
Roller: Polyacetal



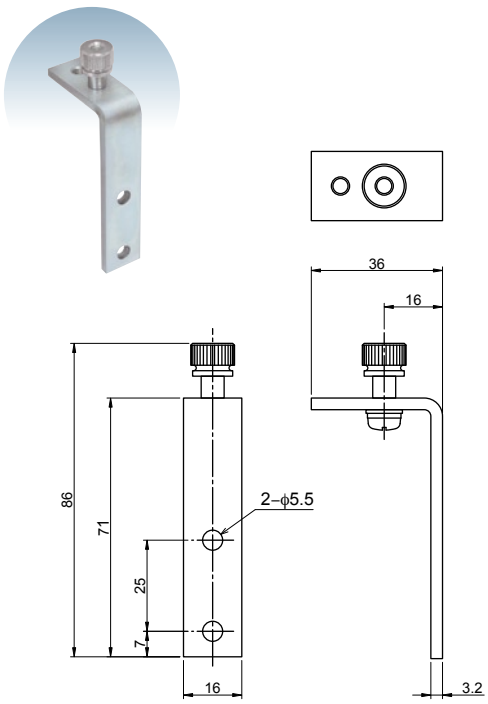


Constituents of Bi-Parting system

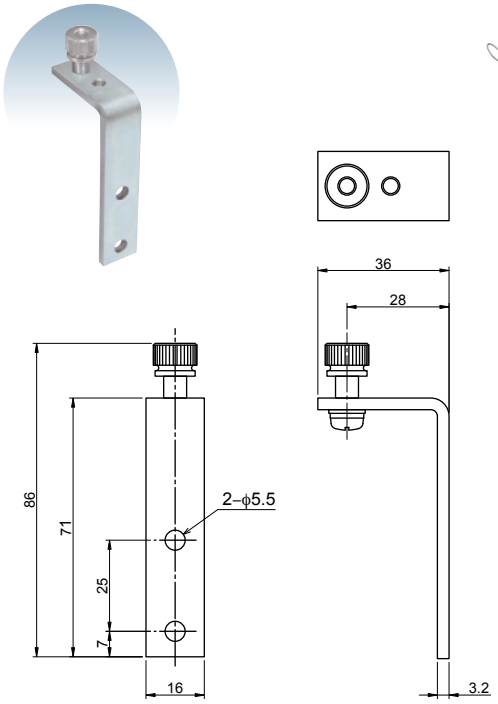
Item	Part	Qity of 1 set	Remark
1	Adjustment fitting L	1	
2	Adjustment fitting R	1	
3	Angle L	1	
4	Angle R	1	
5	Wire rope	2	
6	Pan head screw (M5×12)	4	For installing adjustment fitting
7	Aluminum sleeve	2	Wire rope for crimping

Remarks
1. These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams.
2. The dimensions in [ ] are used when the wooden door plate is used (DSC-CW08 and NSC-CW36/48).
3. These diagrams show how an inclined DSC is typically installed. The inclined and horizontal types incorporate identical parts.
4. This system is required SC-W, two set of standard model and two set of door stopper.

③ Angle L

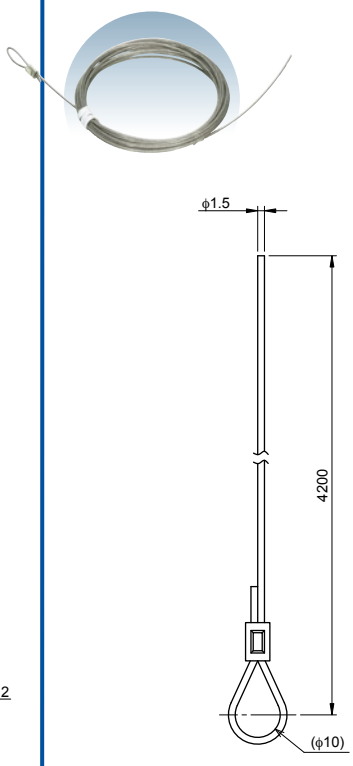


④ Angle R



Angle: Steel

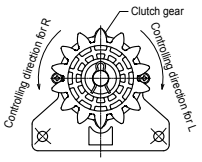
⑤ Wire rope

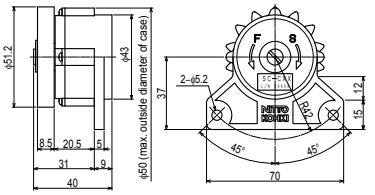


Wire: Stainless steel

List of parts NSC-C/DSC-C

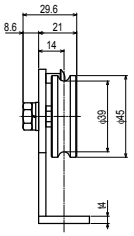
Control device

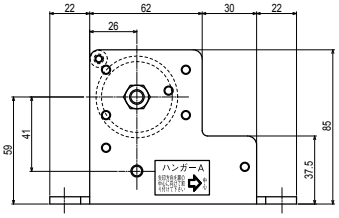




Shaft: Steel
Case: Polyacetal
Clutch gear: Polyacetal

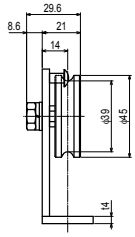
Hanger A

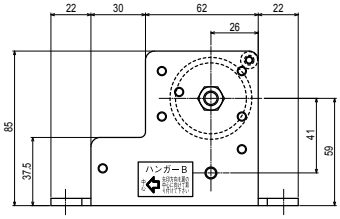




Bracket: Steel
Door roller: Polyacetal

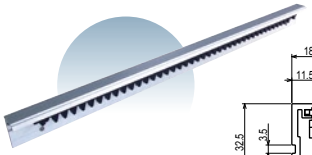
Hanger B

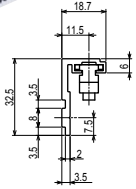


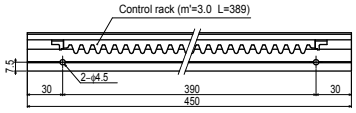


Bracket: Steel
Door roller: Polyacetal

Control rack set



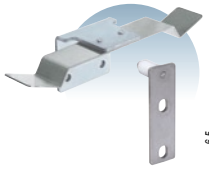


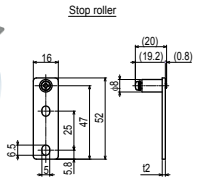


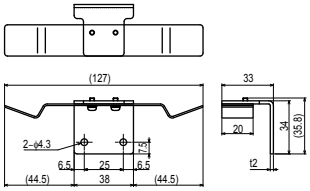
Control rack: Nylon
Rack retainer: Steel
Noise suppression rubber: Nitrile rubber

*The cross section is an enlarged view.

Stop device

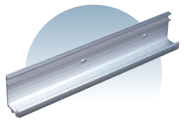


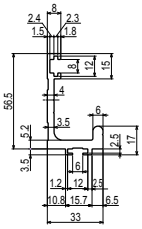


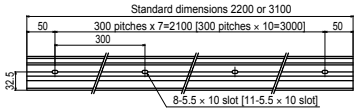


Spring: Stainless steel
Other metal: Steel

Rail



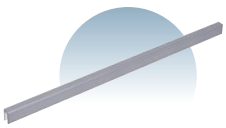


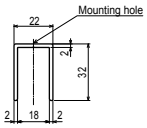


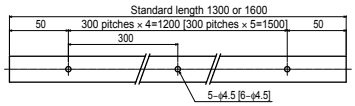
Rail: Aluminum section (alumite-treated)

*The cross section is an enlarged view

Guide rail

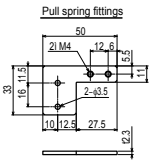


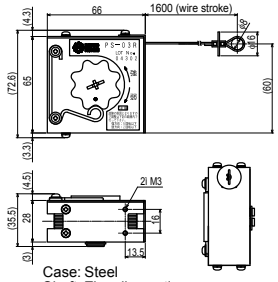




Guide rail: Aluminum section (alumite-treated)
*The cross section is an enlarged view.

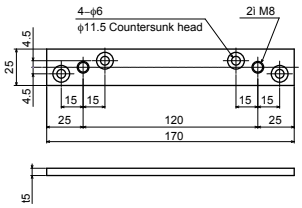
Pull spring



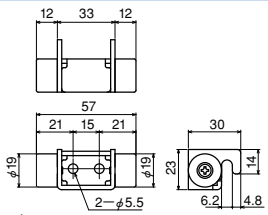


Case: Steel
Shaft: Zinc die-casting
Spiral spring: Stainless steel

Wooden door plate

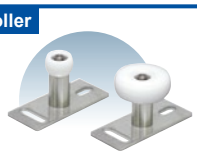


Door stopper



Bracket : Stainless steel
Rubber door stopper : Synthetic rubber

Guide roller



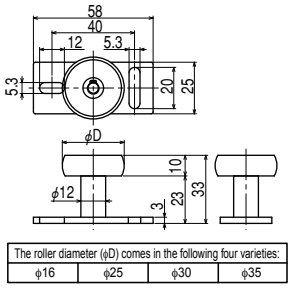
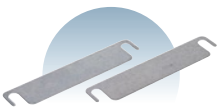
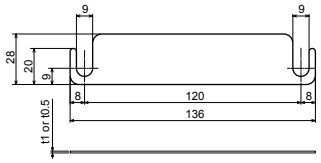


Plate: Stainless steel
Roller: Polyacetal

Height adjusting plate

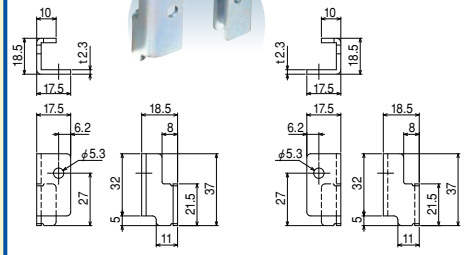




Door retaining fitting

Hanger A

Hanger B



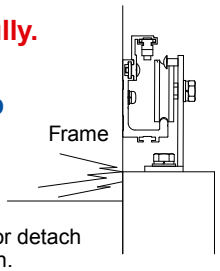
Steel

Sliding Closer

Q&A on Troubleshooting

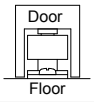
Q: The door does not close fully.

A: The door, hanger, or other component contact the top cover or door pocket.



Action: Check the contact, then either reposition the hanger and/or guide roller in a different position or detach it and reinstall it in another position.

A: The guide roller contacts the top surface of the guide rail at the bottom of the door.

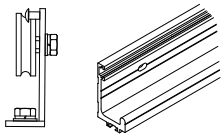


Action: Reinstall the door at the top. Slide the rail and/or other component.

A: The door is not installed vertically.

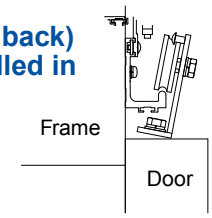
Action: Reinstall the hanger or guide roller in another position.

A: The door rollers of the hanger and the rail runway are scratched and dirty.



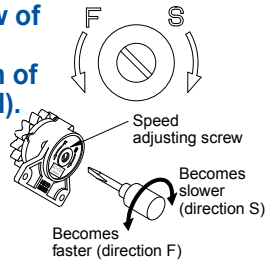
Action: Clean or replace the door rollers of the hanger and the rail.

A: The door rollers (front and back) of the hanger are not installed in parallel with the rail.



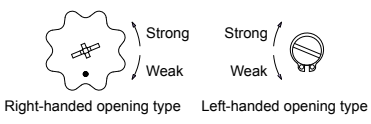
Action: Reinstall them in different positions to make them parallel.

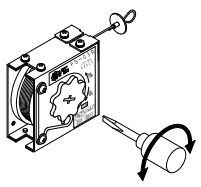
A: The speed adjusting screw of the control device is overturned in the direction of slow (direction S indicated). (An excessive controlling force is applied.)



Action: Turn the speed adjusting screw counterclockwise (direction F indicated) to adjust the speed.

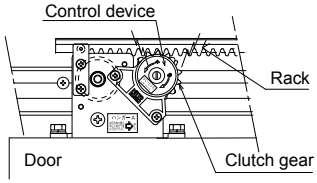
A: The pull spring is unadjusted (a horizontal type).





Action: Adjust the spring force.

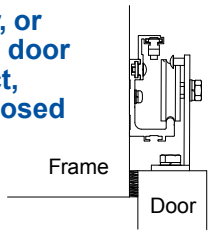
A: The clutch gear of the control device is too strongly engaged with the control rack of the rail.



Action: Reinstall the hanger or guide roller at different positions.

Q: The door does not close fully or will not close stably.

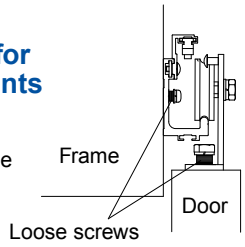
A: The airtight rubber, mohair, or other material between the door and frame gets into contact, resulting in resistance imposed to the closing of the door.



Action: Alleviate the contact.
Example: Cut the rubber or take another appropriate action.

Q: The door rattles.

A: Check that the screws for mounting the components remain tight enough.



Action: Further tighten or retighten the mounting screws.

Precautions for preventing accidents

1. Do not use the product for unspecified door dimensions or door weight.
2. If the control device of the product becomes ineffective, the door will close vigorously, possibly catching one of your fingers or getting into contact or turning over. Should an oil leak occur, component damage or incidents will result in ineffective control, despite speed adjustment, replace the product promptly.
3. Do not disassemble or remodel the product. Should you do so, we will not guarantee the subsequent performance of the product.
4. Securely tighten the screws that mount the product. Failure to observe this precaution may cause product damage or accident.
5. Be sure to install the door-retaining screws. Failure to observe this instruction may derail or turn the door over.
6. Be sure to install the door stopper on the door back end.
7. Do not drop or strike any of the components. Failure to follow this precaution may cause a breakdown.
8. The closer incorporated in the product causes the door to close on its own. Therefore do not close the door fast with force. Any such practice may cause the door to close vigorously, resulting in an unexpected accident.
9. Take care not to let a child play by hanging on the door.
10. In case of rough operation, Be sure to install door stoper on the floor or door back end.

Precautions to be taken to ensure a long service life

1. Wipe off dust and dirt from the rail and door rollers.
2. Conduct periodic checks for loose screws and other anomalies.

User-friendly technology

NITTO KOHKI AUTO HINGES

OTHER RELATED PRODUCTS

FLAG TYPE

- Armless closer making a boast of Nitto Kohki, being easily installed on an arch door, etc.
- Various models according to types and sizes of doors (wooden, aluminum, lightweight steel, steel doors) are available form us.

PC series

- Dripproof design
- Adopts an actuator with unique temperature sensor, thus assuring constant closing speed all the year round.

700 series

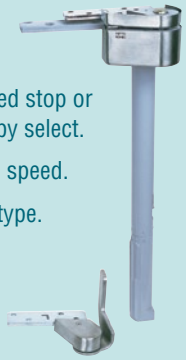
- They come with special sealing and stainless steel.
- A much wider range of uses including bathrooms and seashores.

CENTER HANG TYPE

- Most suitable for fire protection, open smoke ventilation and normally-opened / closed doors snd air supply doors.
- Concealed type (door built-in type.)

CONCEALED

- Can be selected stop or without stop by select.
- 2 way closing speed.
- Door built-in type.



CREATE

- Projecting type door closer Automatically closes a door with quiet in combined use of a capsule with built-in spring and hydraulic device and a special pivot hinge.
- Simple design Provided with arm-free construction, presenting simple design and beauty fit for any door.

⚠ Safety precautions

- To avoid personal injury and other accidents, thoroughly read the precautions set forth in the "Instruction Manual" or "Catalog" and properly complete the installation and adjustment procedures before use.
- Ensure that the door closing speed is properly adjusted at all times. If it is too high, personal injury may result.

Driving Inventive Technologies Too Open Up Tomorrows

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DISTRIBUTED BY

- This catalog is printed using environmentally friendly paper and vegetable oil inks.
- The contents of this catalog are effective as of April 2011. For product improvement purposes, the specifications and designs are subject to change without prior notice.

Printed in Japan 11DW01-①