

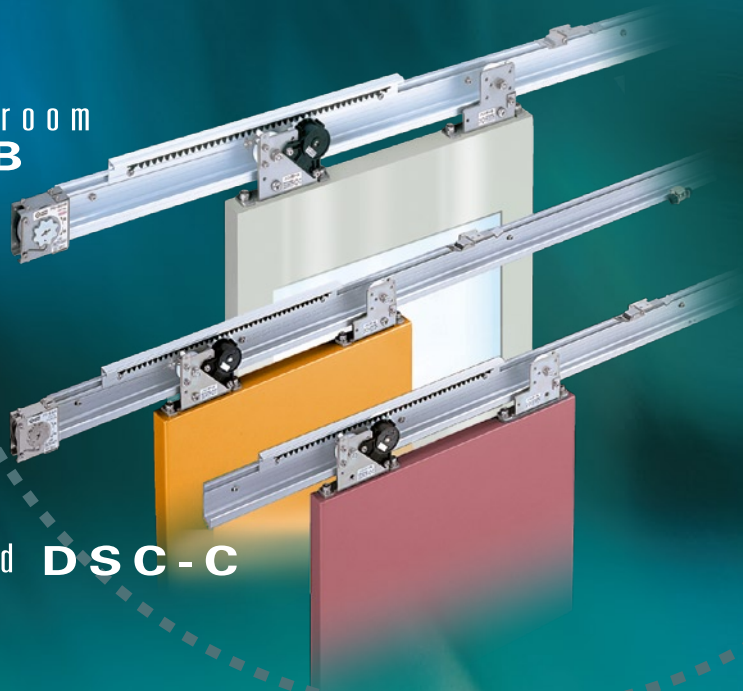
New-generation sliding door closers developed with user-friendly technologies.

NITTO KOHKI Sliding Closer

Horizontal For bathroom
NSC-CB

Horizontal **NSC-C**

Inclined **DSC-C**



We propose a new style of door opening/closing.



New sliding closers **DSC-C** (inclined) series "Innovation and" (horizontal)

Long service life

- The control device incorporates a fluid friction resistance, one-way clutch mechanism to ensure secure control, small size, and a long service life.

Light door-opening force

- Since door resistance is low, the door can be opened easily even by elderly citizens, young children, and people with disabilities.
Initial door-opening force at a door weight of 40kg
DSC-C08 type, 6.7N; NSC-C36 type, 5.7N

A large variety of models

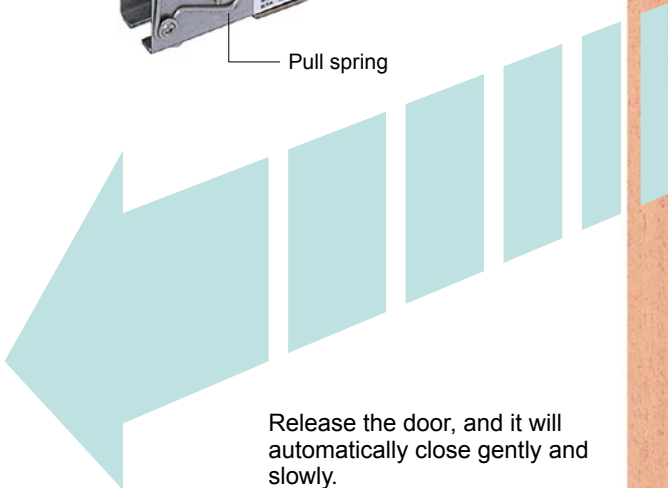
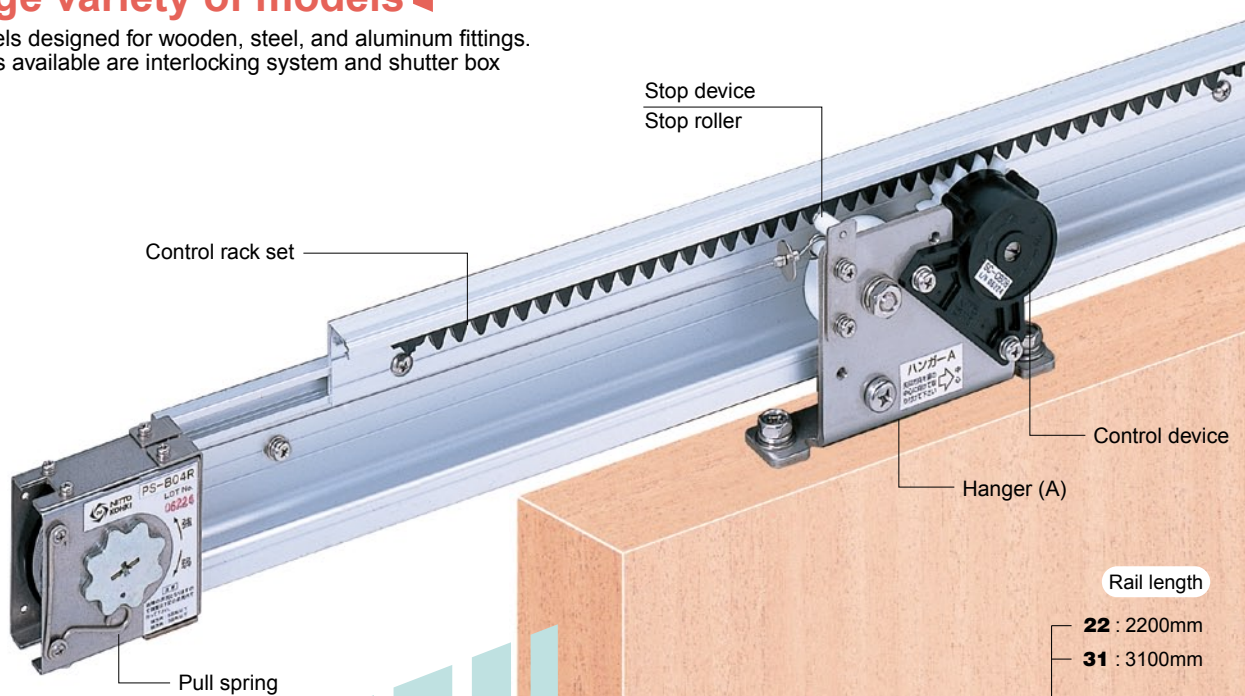
- Many models designed for wooden, steel, and aluminum fittings. The options available are interlocking system and shutter box type.

Easy to install

- The only modifications made on the frame are the making of rail-mounting holes. All parts can be installed on the rail with a screwdriver. The product is therefore easy to install.

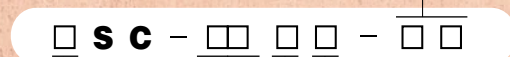
Both for right- and left-handed opening

- The product can be converted between the right- and left-handed opening types by a simple operation.



Rail length

- 22** : 2200mm
- 31** : 3100mm



Model

- D** : Inclined
- N** : Horizontal

Door weight

- 3** : 10-30kg
- 6** : 30-60kg (Horizontal)
- 8** : 60-80kg (Horizontal)
- 30-80kg (Inclined)
- 15** : 80-150kg

Pull spring

- 0** : Inclined
- 2** : PS-02
- 3** : PS-03
- 4** : PS-04
- 12** : PS-12

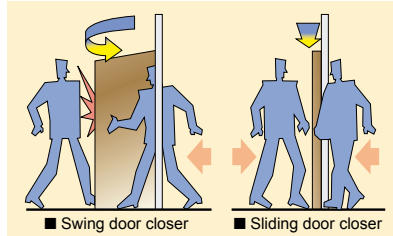
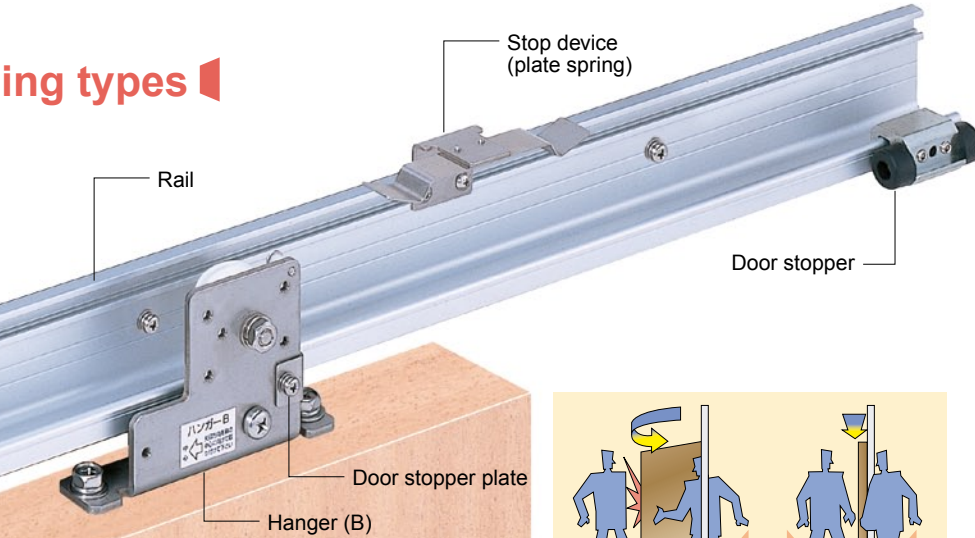
Applicable doors

- CW** : for wooden fittings
- C** : for steel lightweight fittings
- CB** : for lightweight fittings in bathrooms



med) and NSC-C and Simplicity"

ing types



The sliding door closer system eliminates dead space and ensures high safety.

■ Application

● Wooden fittings, inclined **DSC-CW** series

Applicable door	Model	Door weight (kg)	Applicable door width (mm)
Wooden doors	DSC-CW03	10-30	700-1600
	DSC-CW08	30-80	

● Wooden fittings, horizontal **NSC-CW** series

Applicable door	Model	Door weight (kg)	Applicable door width (mm)
Wooden doors	NSC-CW23	10-30	700-1600
	NSC-CW36	30-60	
	NSC-CW48	60-80	

● Steel lightweight fittings, inclined **DSC-C** series

Applicable door	Model	Door weight (kg)	Applicable door width (mm)
Steel doors	DSC-C03	10-30	700-1600
	DSC-C08	30-80	
	DSC-C015	80-150	

● Steel lightweight fittings, horizontal **NSC-C** series

Applicable door	Model	Door weight (kg)	Applicable door width (mm)
Steel doors	NSC-C23	10-30	700-1600
	NSC-C36	30-60	
	NSC-C48	60-80	
	NSC-C1215	80-150	

● Lightweight fittings in bathrooms, horizontal type for bathrooms **NSC-CB** series

Applicable door	Model	Door weight (kg)	Applicable door width (mm)
Steel light-weight doors Aluminum doors	NSC-CB23	10-30	700-1600
	NSC-CB36	30-60	
	NSC-CB48	60-80	

Application

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● Wooden fittings

DSC-CW03/specifications
DSC-CW08/specifications

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DSC-CW03・08/Installation diagrams

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NSC-CW23/specifications
NSC-CW36・48/specifications

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NSC-CW23・36・48/Installation diagrams

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● Steel lightweight fittings

DSC-C03・08/specifications
DSC-C03・08/Installation diagrams

11-12

DSC-C015/Installation diagrams

13-14

NSC-C23・36・48/specifications
NSC-C23・36・48/Installation diagrams

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NSC-C1215/Installation diagrams

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● Option

Single action double Sliding system

19-20

Bi-Parting system,SC-W

21-22

Free stopper (SFS-A)

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Back checker

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Delayed device

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Maintenance cover

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● Lightweight fittings in bathrooms

NSC-CB/Installation diagrams

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● List of parts

DSC-C015/NSC-C1215

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NSC-CB

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NSC-C/DSC-C

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● Q&A on Troubleshooting

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For lightweight fittings in bathrooms, horizontal type for
bathrooms with door weights of 10-30kg, 30-60kg and 60-80kg

NSC-CB23·36·48 series

The use of stainless steel and a unique sealing technology has created corrosion-resistant, long-life products.

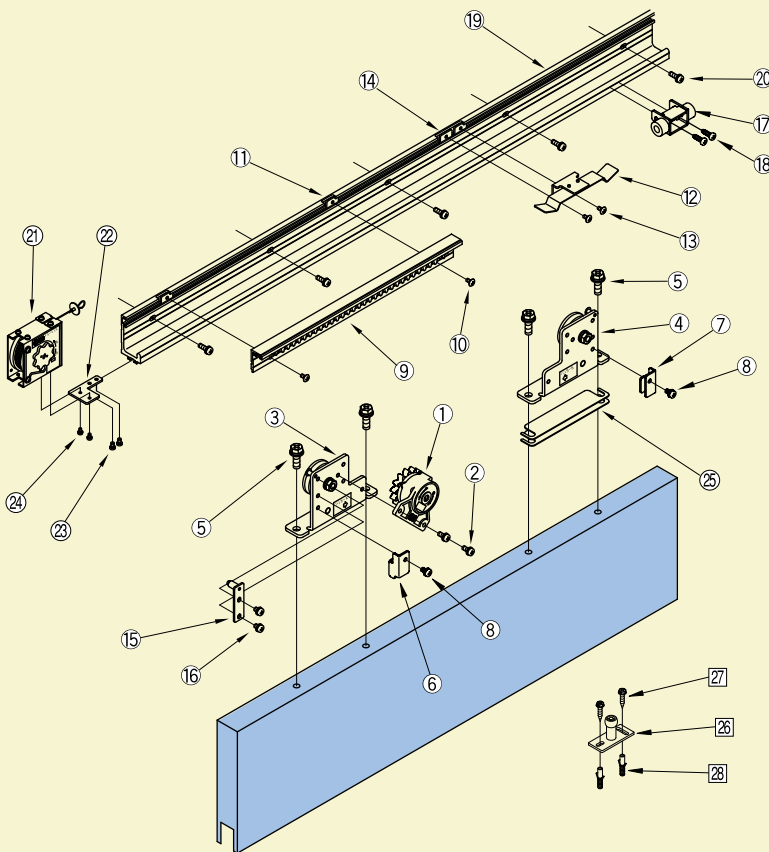
Features

- These products can be used for long periods even in bathrooms and other hot corrosive environments. (They cannot be used in sauna rooms or other very hot environments.)
- The rotary part of the door roller is so designed as to be independent of dust or moisture, thus ensuring high corrosion-resistance and long stability.
- These products apply to doors weighing 10-80kg with openings not exceeding 1,500mm.
- The control device consists of a controlling-force centrifuge structure based on fluid friction resistance, thus ensuring high reliability.
- These products use a pull spring giving excellent performance and high durability (1 million operations) to close the door securely with a light force.

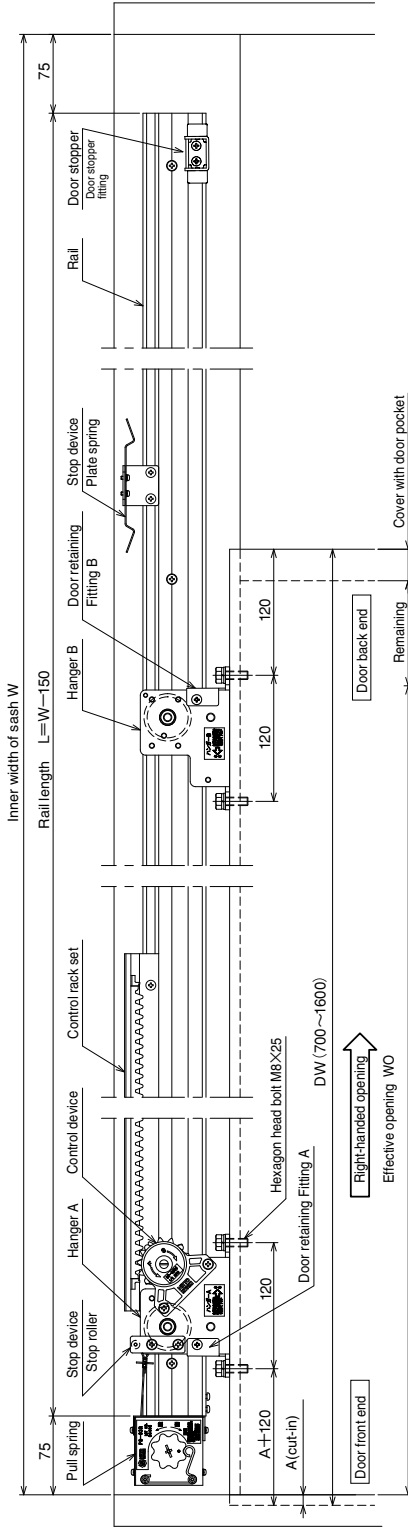
Specifications

Model	NSC-CB23-22/NSC-CB23-22-31			NSC-CB36-22/NSC-CB36-31			NSC-CB48-22/NSC-CB48-31			
Applicable doors	Weight [kg]	10-30			30-60			60-80		
	Width [mm]	700-1200	1200-1400	1400-1600	700-1200	1200-1400	1400-1600	700-1200	1200-1400	1400-1600
Max. stroke [mm]	1500									
Closing drive system	Spiral spring type									
Controlling system	Fluid friction resistance type									
Controlling time	8-15 seconds (with a door-opening distance of 900mm)									
Initial opening force [N]	3.5-4.6			4.7-6.9			7.0-8.0			
Durability	More than 1 million open/close operations									
Pull spring	PS-B02			PS-B03			PS-B04			
Rail length [m]	2.2	2.8	3.4	2.2	2.8	3.4	2.2	2.8	3.4	

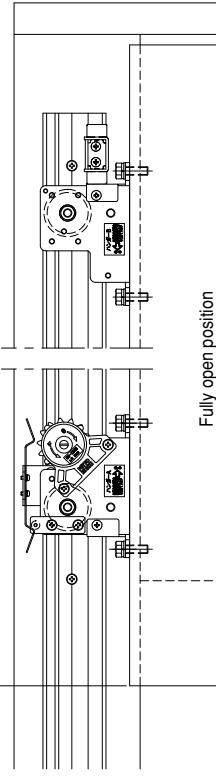
Parts details



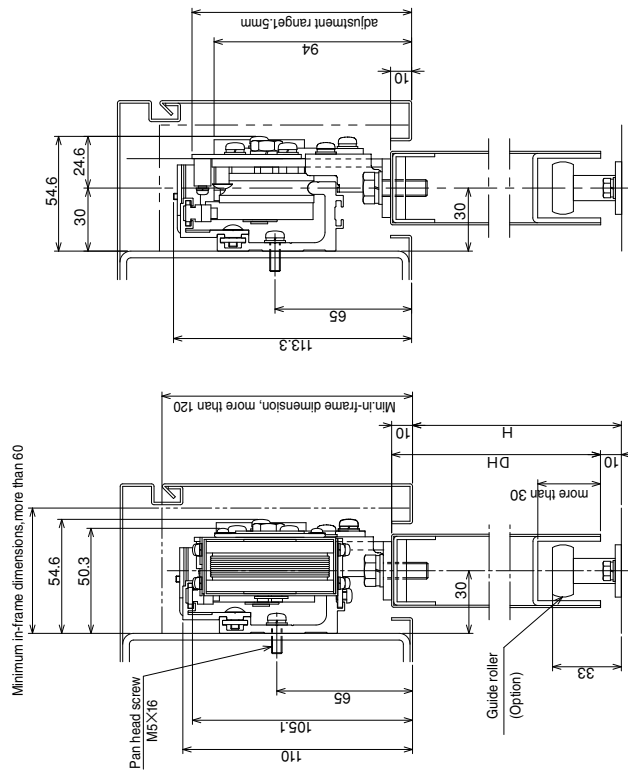
Part	No.	Remark	Q'ty
Control device	①	SC-CB03/SC-CB08	1
	②	M5×12 pan head screw	2
Hanger	③	Hanger A	1
	④	Hanger B	1
	⑤	M8×25 hexagon head bolt	4
Door retention	⑥	Door retention fitting Hanger A	1
	⑦	Door retention fitting Hanger B	1
Control rack set	⑧	Pan head screw M5 × 8	2
	⑨	Control rack set	1
	⑩	M4×8 truss screw	2
	⑪	Plate nut	2
Stop device	⑫	Plate spring	1
	⑬	M4×8 truss screw	2
	⑭	Plate nut	2
	⑮	Stop roller	1
	⑯	M5×8 pan head screw	2
	⑰	Door stopper fitting	1
Door stopper	⑱	φ5×16 pan head tapping screw	2
	⑲	Rail L=2200 [L=3100]	
Rail	⑳	M5×16 pan head screw	8 [11]
		5×30 truss tapping screw	8 [11]
Pull spring	㉑	Pull spring	1
	㉒	Pull spring fitting	1
	㉓	M4×5 pan head screw	2
	㉔	M3×8 pan head screw	2
Height adjusting plate	㉕	(T=1.0)	4
Guide roller (Option)	㉖	Guide roller	1
	㉗	5×25 hexagon tapping screw	2
		M5×12 hexagon head bolt	2
	㉘	Curl plug 6×30	2



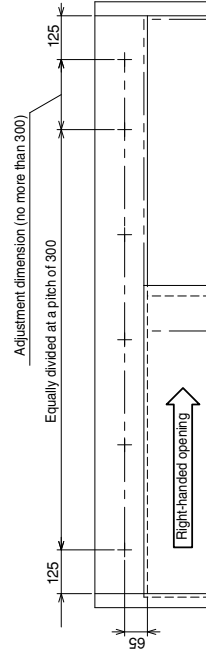
Fully close position



Fully open position

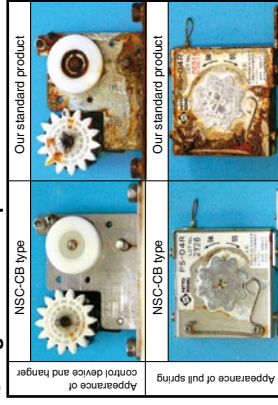


Position diagram for rail-mounting holes (as viewed from inspection panel) (M5(P=0.8))



1. These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams.
2. Door orientation is right-handed if the door is opened rightwards as viewed from the inspection panel, and left-handed if the door is opened leftwards
3. If slam the door many times, install the another door stopper with door back end.

● High Corrosion proof evaluation

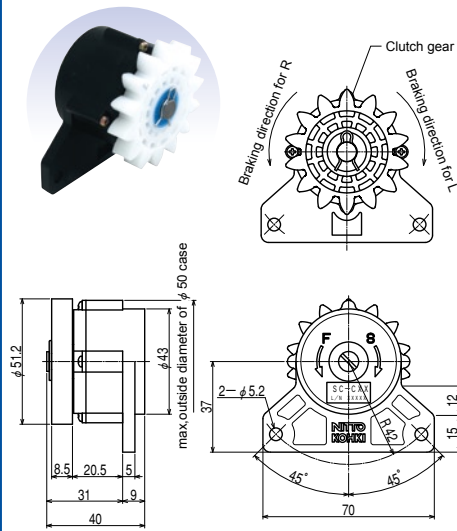


Rust becomes a problem when these products are used in bathrooms. The use of stainless steel makes these products dramatically more corrosion proof.

Test method : CASS test (JIS H 8502)

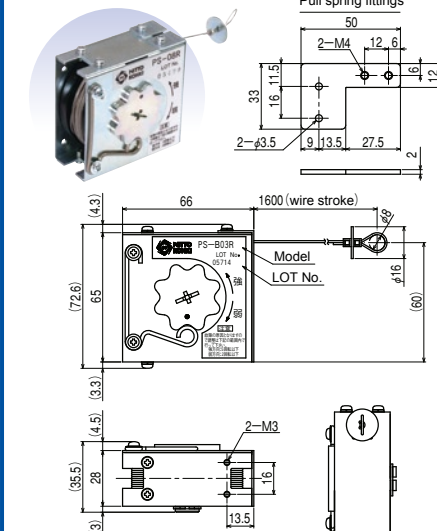
This test evaluates corrosion of specimens by adding small quantities of acetic acid and copper (II) chloride (cupric chloride) to a solution of sodium chloride used in a salt spray test, thus increasing the specimens resistance to corrosion. This method is used mainly to evaluate the corrosion of automotive parts and other plated products. A corrosion test in acid environments is greater than salt spray tests. 48 hour x 3 times (144 hours in total)

Control device SC-CB03/SC-CB08



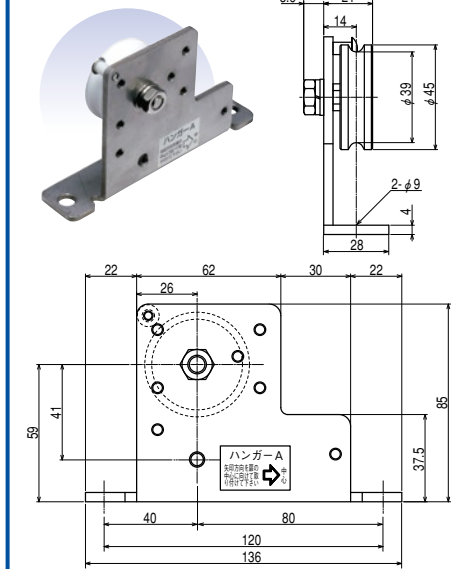
Shaft : Stainless steel
Case : Polyacetal
Clutch gear : Polyacetal

Pull spring PS-B02/PS-B03/PS-B04



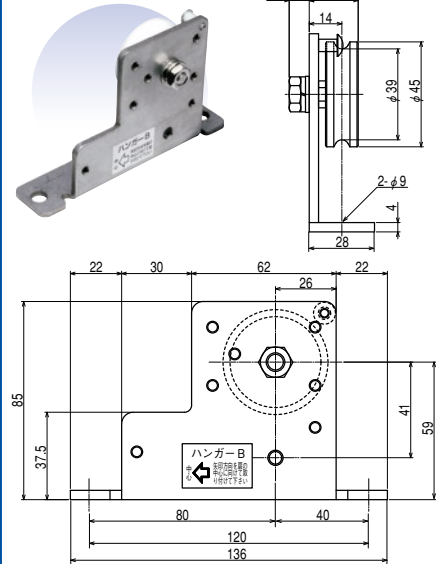
Case : Stainless steel
Shaft : Zinc die-casting
Spiral spring : Stainless steel

Hanger A



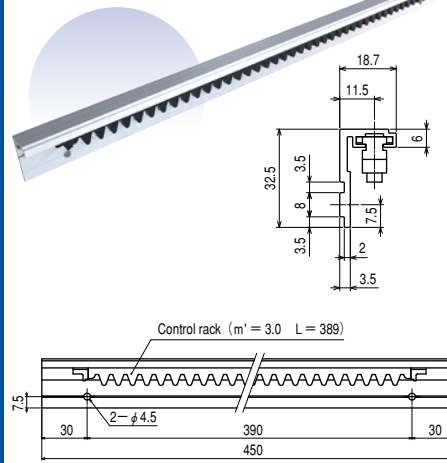
Bracket : Stainless steel
Door roller : Polyacetal

Hanger B



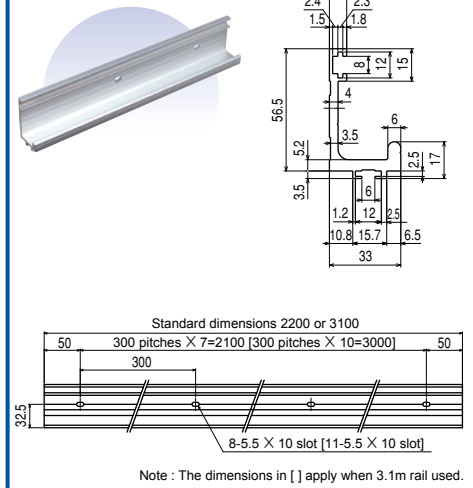
Bracket : Stainless steel
Door roller : Polyacetal

Control rack set



Control rack : Nylon
Rack retainer : Stainless steel
Noise suppression rubber : Nitrile rubber

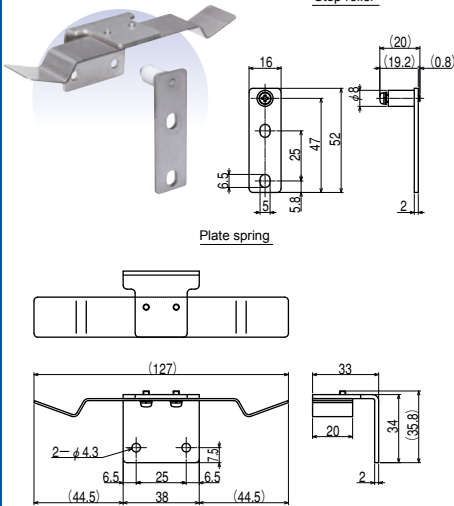
Rail



Note : The dimensions in [] apply when 3.1m rail used.

Rail : Aluminum section (Alumite-treated)

Stop device



Spring : Stainless steel
Other metal : Stainless steel

Door stopper



Bracket : Stainless steel
Rubber door stopper : Synthetic rubber

Guide roller (Option)

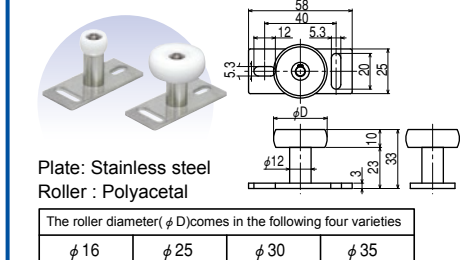
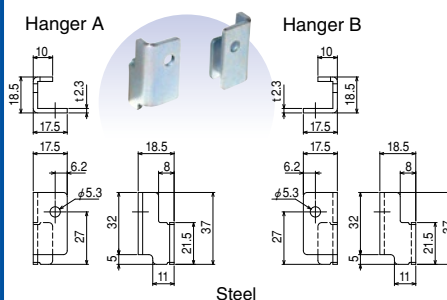


Plate : Stainless steel
Roller : Polyacetal

The roller diameter (φD) comes in the following four varieties

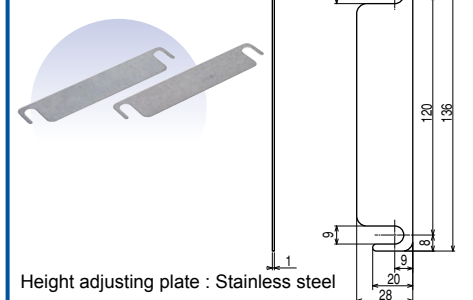
φ16	φ25	φ30	φ35
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Door retaining fitting for CB type



Steel

Height adjusting plate



Height adjusting plate : Stainless steel

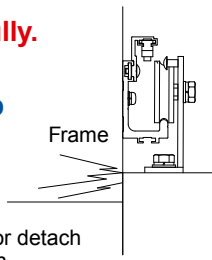
Sliding Closer

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.



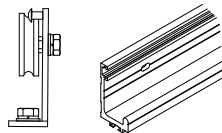
A: The door is not installed vertically.

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



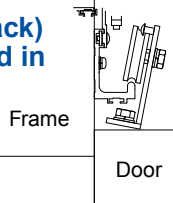
A: The door rollers of the hanger and the rail runway are scratched and dirty.

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



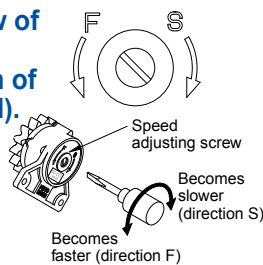
A: The door rollers (front and back) of the hanger are not installed in parallel with the rail.

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

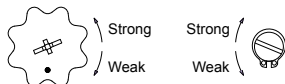


A: The speed adjusting screw of the control device is overturned in the direction of slow (direction S indicated). (An excessive controlling force is applied.)

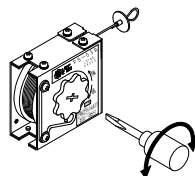
Action: Turn the speed adjusting screw counterclockwise (direction F indicated) to adjust the speed.



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

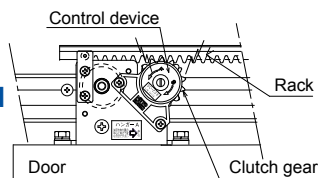


Action: Adjust the spring force.



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

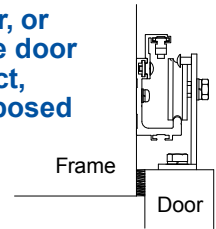
Action: Reinstall the hanger or guide roller at different positions.



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.

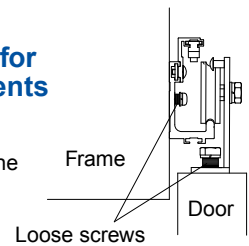
Action: Alleviate the contact.
Example: Cut the rubber or take another appropriate action.



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 stopper on the floor or door back end.

Precautions to be taken to ensure a long service life

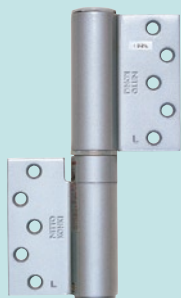
1. Wipe off dust and dirt from the rail and door rollers.
2. Conduct periodic checks for loose screws and other anomalies.

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 from 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.



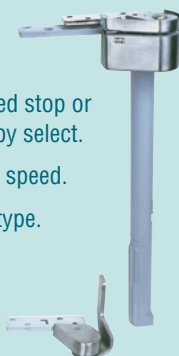
CENTER HANG TYPE

- Most suitable for fire protection, open smoke ventilation and normally-opened / closed doors and 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



Contact us

Kentokyo@nitto-kohki.co.jp

Product Info

www.nitto-kohki.co.jp/e/

Head Office and Research Center

Nakaikogami 2-9-4, Ohta-ku, Tokyo
146-8555 Japan
Phone : +81-3-3755-1111 Fax : +81-3-3753-8791

Overseas Auto Hinge Sales Division

Yokoyama Bldg. 7F, Nishi-Nippori 2-40-3,
Arakawa-ku, Tokyo 116-0013 Japan
146-8555 Japan
Phone : +81-3-5850-5781 Fax : +81-3-3801-6001

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