

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

# **NITTO KOHKI Sliding Closer**

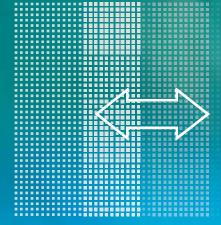
Horizontal For bathroom **NSC-CB** 

Horizontal NSC-C

Inclined DSC-C



We propose a new style of door opening/closing.











# New sliding closers **DSC-C** (incle) (horizontal) series "Innovation a

## Long service life

 The control device incorporates a fluid friction resistance, oneway 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.

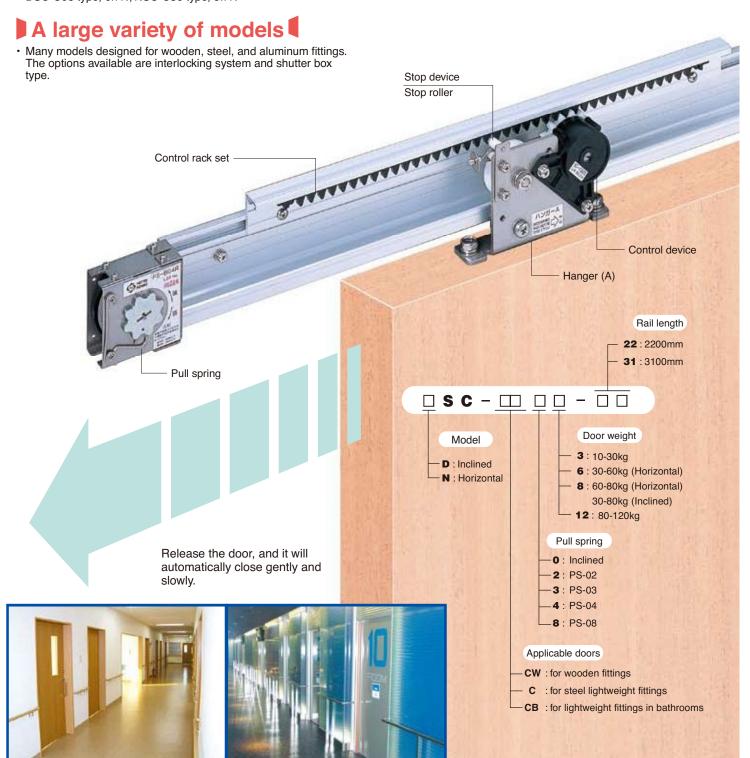
Initial door-opening force at a door weight of 40kg DSC-C08 type, 6.7N; NSC-C36 type, 5.7N

## Easy to install

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

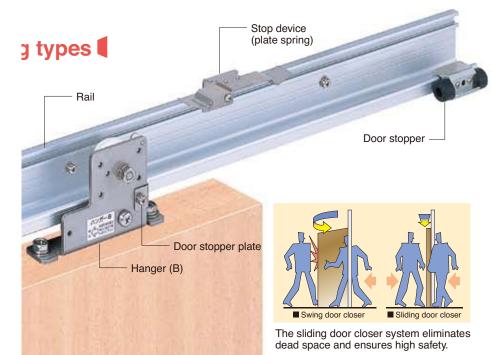
# ■ Both for right- and left-handed op

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



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# ed) and **NSC-C** Simplicity"



#### ■ Application

#### Wooden fittings, inclined DSC-CW series

	Applicable door	Model	Door weight (kg)	Applicable door width (mm)
	Wooden	DSC-CW03	10-30	700-1600
	doors	DSC-CW08	30-80	700-1000

#### Wooden fittings, horizontal NSC-CW series

	Applicable door	Model	Door weight (kg)	Applicable door width (mm)
	Wooden doors	NSC-CW23	10-30	
		NSC-CW36	30-60	700-1600
	00013	NSC-CW48	60-80	

#### • Steel lightweight fittings, inclined DSC-C series

	Applicable door	Model	Door weight (kg)	Applicable door width (mm)
Steel doors	Ctool	DSC-C03 10-30		700-1600
	DSC-C08	30-80		
	400.0	DSC-C12	80-120	

#### Steel lightweight fittings, horizontal NSC-C series

Applicable door	Model	Door weight (kg)	Applicable door width (mm)
	NSC-C23	10-30	
Steel	NSC-C36	30-60	700 1000
doors	NSC-C48	60-80	700-1600
	NSC-C812	80-120	
	1430-0612	00-120	

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

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

#### .. ..

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# DSC-CW03 series

# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

#### Features ]

- A standardized set of parts required for inclined wooden fitting types.
   (The product comes standard with a guide rail, guide roller, stop device, and other equipment.)
- Coach screws allow the hanger to be attached directly to the door.
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a screwdriver.

#### Specifications

Model		DSC-CW03-22	DSC-CW03-31	
Applicable	Weight [kg]	10-	30	
doors	Width [mm]	700-1200	1200-1600	
Max. stroke [mm]		15	1500	
Closing drive system		Rail inclination (3.5/300)		
Controlling	system	Fluid friction resistance type		
Controlling	time	7-11 seconds (with a door-opening distance of 900mm)		
Initial opening force [N]		2.3-5.4		
Durability		More than 1 million o	More than 1 million open/close operations	
Rail length [m]		2.2	3.1	



Part details	
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No.	Part	Q'ty	Remark
1	Control device	1	For control device
2	M5 × 12 pan head screw	2	For control device
3	Hanger A	1	
4	Hanger B	1	For hanger
(5)	$\phi 8 \times 50 \; coach \; screw$	4	
6	M8 × 30 pan head screw	2	For door retention
7	Control rack set	1	
8	M4 × 8 truss screw	2	For control rack set
9	Plate nut	2	
10	Plate spring	1	
10	M4 × 8 truss screw	2	
12	Plate nut	2	For stop device
13	Stop roller	1	
14)	M5 × 8 pan head screw	2	
15	Door stopper fitting	1	
16	Door stopper plate	1	For door stopper
17	M5 × 8 pan head screw	1	
18	Height adjusting plate (t = 1.0, 0.5)	15+1	
19	Rail L = 2200 [L = 3100]	1	
20	M5 × 16 pan head screw	8[11]	For rail
-	$\phi 5 \times 30$ truss tapping screw	8[11]	
21)	Guide rail L = 1300 [L = 1600]*	1	For guide rail
2	$\phi4\times16$ pan head tapping screw	5[6]	i oi guide fall
23	Guide roller $\phi$ 16	1	

# For wooden fittings, inclined, with door weights of 30-80kg

# DSC-CW08 series

# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

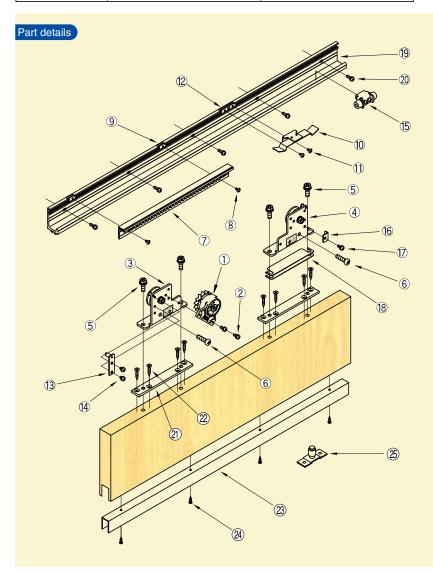
#### Features

- A standardized set of parts required for inclined wooden fitting types.
   (The product comes standard with a guide rail, guide roller, stop device, and other equipment.)
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a screwdriver.



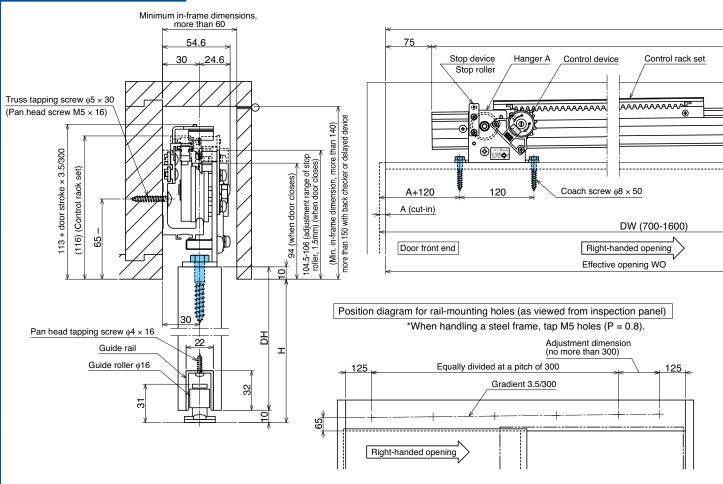
Mo	odel	DSC-CW08-22	DSC-CW08-31	
Applicable	Weight [kg]	30-	-80	
doors	Width [mm]	700-1200	1200-1600	
Max. stroke [mm]		15	1500	
Closing drive system		Rail inclination (3.5/300)		
Controlling system		Fluid friction resistance type		
Controlling	time	7-11 seconds (with a door-opening distance of 900mm)		
Initial opening force [N]		5.4-12.5		
Durability		More than 1 million o	pen/close operations	
Rail length [m]		2.2	3.1	



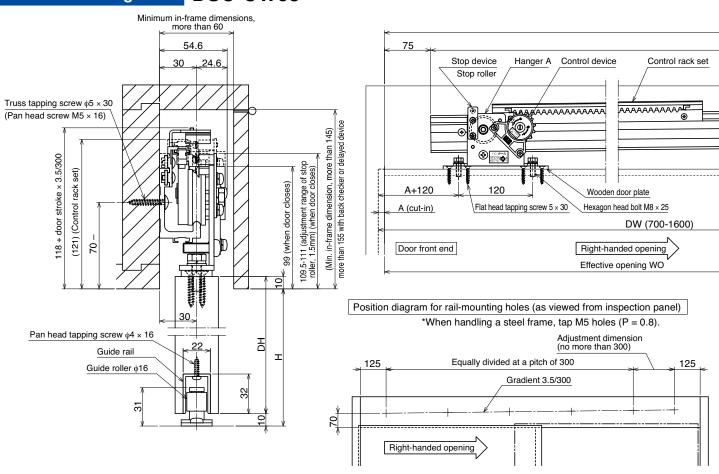


No.	Part	Q'ty	Remark	
1	Control device	1	For control device	
2	M5 × 12 pan head screw	2	For control device	
3	Hanger A	1		
4	Hanger B	1	For hanger	
(5)	$M8 \times 25$ hexagon head bolt	2	For nanger	
9	M8 × 30 hexagon head bolt	2		
6	M8 × 30 pan head screw	2	For door retention	
7	Control rack set	1		
8	M4 × 8 truss screw	2	For control rack set	
9	Plate nut	2		
10	Plate spring	1		
11	M4 × 8 truss screw	2	For stop device	
12	Plate nut	2		
13	Stop roller	1		
14)	M5 × 8 pan head screw	2		
15	Door stopper fitting	1		
16	Door stopper plate	1	For door stopper	
17	$M5 \times 8$ pan head screw	1		
18	Height adjusting plate (t = 1.0, 0.5)	15+1		
19	Rail L = 2200 [L = 3100]	1		
20	M5 × 16 pan head screw	8[11]	For rail	
***	$\phi 5 \times 30$ truss tapping screw	8[11]		
21)	Wooden door plate	2	For wooden door	
2	$\phi 5 \times 30$ flat head tapping screw	8	plate	
23	Guide rail L = 1300 [L = 1600]**	1	For guide rail	
24)	φ4 × 16 pan head tapping screw	5[6]	I of guide fall	
25	Guide roller	1		

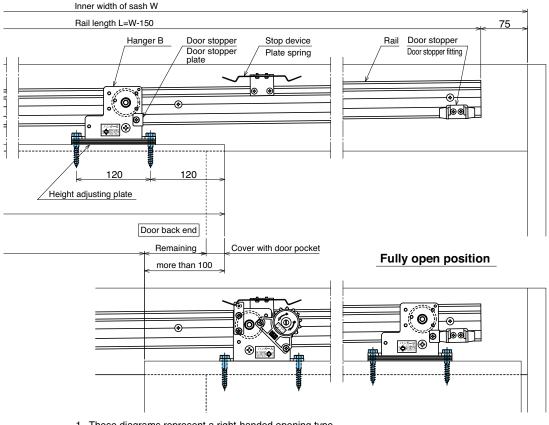
# Installation diagrams DSC-CW03



## Installation diagrams DSC-CW08



#### DSC-CW03



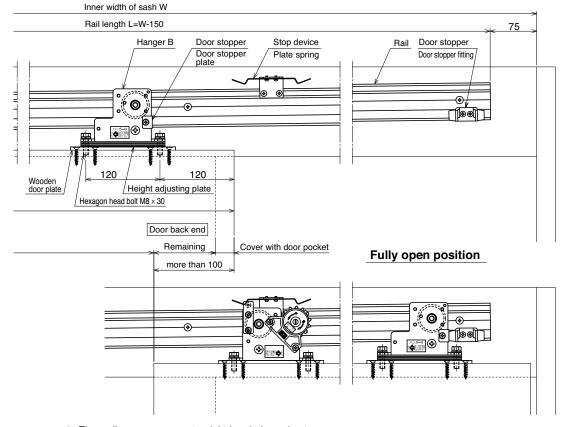
Number of height adjusting plates (reference)

adjusting plates (reference)		
Door width [mm]	No. of plates used	
700-800 or less	6 pcs.	
800-900 or less	7 pcs.	
900-1000 or less	8 pcs.	
1000-1100 or less	9 pcs.	
1100-1200 or less	10 pcs.	
1200-1300 or less	12 pcs.	
1300-1400 or less	13 pcs.	
1400-1500 or less	14 pcs.	
1500-1600 or less	15 pcs.	

- These diagrams represent a right-handed opening type.
   The left-handed opening type is a mirror image of these diagrams.

   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. The hanger is installed directly with coach screws.

DSC-CW08



Number of height adjusting plates (reference)

,	/
Door width [mm]	No. of plates used
700-800 or less	6 pcs.
800-900 or less	7 pcs.
900-1000 or less	8 pcs.
1000-1100 or less	9 pcs.
1100-1200 or less	10 pcs.
1200-1300 or less	12 pcs.
1300-1400 or less	13 pcs.
1400-1500 or less	14 pcs.
1500-1600 or less	15 pcs.

- These diagrams represent a right-handed opening type.
   The left-handed opening type is a mirror image of these diagrams.

   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.



For wooden fittings, horizontal, with door weights of 10-30kg

# NSC-CW23 series

# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

#### Features )

- A standardized set of parts required for horizontal wooden fitting types.

  (The product comes standard with a guide rail, guide roller, stop device, and other equipment.)
- Coach screws allow the hanger to be attached directly to the door.
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a screwdriver.

#### Specifications

Model		NSC-CW23-22	NSC-CW23-31		
Applicable	Weight [kg]	10-	30		
doors	Width [mm]	700-1200	1200-1600		
Max. stroke [mm]		1500			
Closing driv	e system	Spiral spring type			
Controlling	system	Fluid friction resistance type			
Controlling	time	7-11 seconds (with a door-opening distance of 900mm)			
Initial openi	ing force [N]	3.5-4.6			
Durability		more than 1 million open/close operations			
Lead-in spring		PS-02			
Rail length [m]		2.2	3.1		



Part details	
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No.	Part	Q'ty	Remark		
1	Control device	1	Fan acceptant decides		
2	M5 x 12 pan head screw	2	For control device		
3	Hanger A	1			
4	Hanger B	1	For hanger		
(5)	$\phi 8 \times 50 \; coach \; screw$	4			
6	M8 × 30 pan head screw	2	For door retention		
7	Control rack set	1			
8	M4 × 8 truss screw	2	For control rack set		
9	Plate nut	2	001		
10	Plate spring	1			
1	M4 × 8 truss screw	2			
12	Plate nut	2	For stop device		
13	Stop roller	1			
14)	$M5 \times 8$ pan head screw	2			
15)	Door stopper fitting	1			
16)	Door stopper plate	1	For door stopper		
17)	$M5 \times 8$ pan head screw	1			
18)	Rail L = 2200 [L = 3100]	1			
9	M5 x 16 truss screw	8[11]	For rail		
19	$\phi 5 \times 30$ truss tapping screw	8[11]			
20	Pull spring	1			
21	Pull spring fitting	1	For pull spring		
2	M4 × 5 pan head screw	2	i oi puii spiilig		
23	$M3 \times 8$ pan head screw	2			
24	Guide rail L = 1300 [L = 1600]**	1	For guido roil		
8	$\phi 4 \times 16$ pan head tapping screw	5[6]	For guide rail		
<b>8</b>	Guide roller $\phi$ 16	1			
27	Height adjusting plate (t=1.0, 0.5)	_	Option		



# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

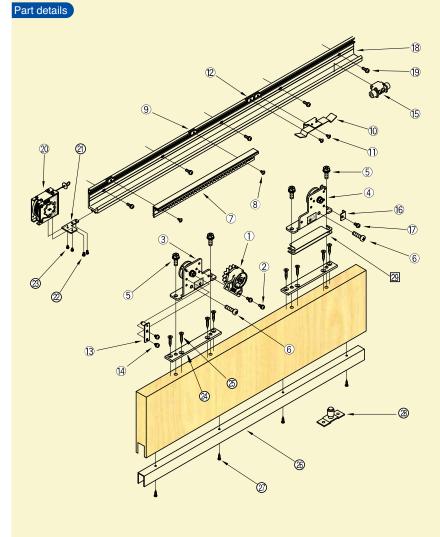
#### **Features**

- A standardized set of parts required for horizontal wooden fitting types.
  (The product comes standard with a guide rail, guide roller, stop device, and other equipment.)
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a screwdriver.



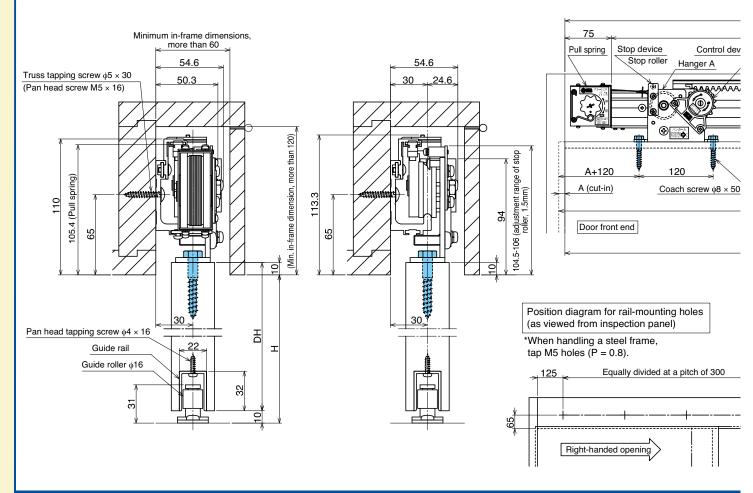
#### Specifications

Model		NSC-CW36-22	NSC-CW36-31	NSC-CW48-22	NSC-CW48-31		
Applicable	Weight [kg]	30-	-60	60-	-80		
doors	Width [mm]	700-1200 1200-1600 700-1200		700-1200	1200-1600		
Max. stroke	e [mm]		15	00			
Closing drive system			Spiral spring type				
Controlling	system		Fluid friction re	ion resistance type			
Controlling	time		7-11 seconds (with a door-o	-opening distance of 900mm)			
Initial openi	ing force [N]	4.7	-6.9	7.0-8.0			
Durability			more than 1 million open/close operations				
Pull spring		PS	-03	PS-04			
Rail length	[m]	2.2	3.1	2.2	3.1		

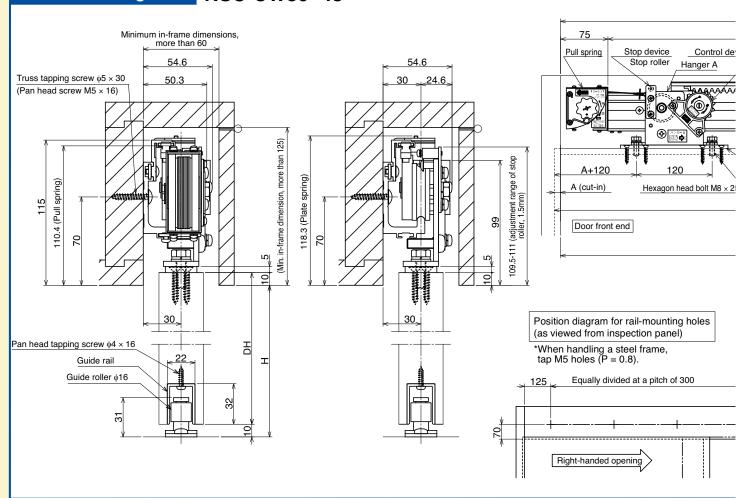


No.	Part	Q'ty	Remark		
1	Control device	1	Far control device		
2	M5 × 12 pan head screw	2	For control device		
3	Hanger A	1			
4	Hanger B	1	For hanger		
(5)	$M8 \times 25$ hexagon head bolt	4			
6	$M8 \times 30$ pan head screw	2	For door retention		
7	Control rack set	1			
8	M4 × 8 truss screw	2	For control rack set		
9	Plate nut	2	001		
10	Plate spring	1			
11	M4 × 8 truss screw	2			
12	Plate nut	2	For stop device		
13	Stop roller	1			
14)	$M5 \times 8$ pan head screw	2			
15	Door stopper fitting	1			
16	Door stopper plate	1	For door stopper		
17	M5 × 8 pan head screw	1			
18	Rail L = 2200 [L = 3100]	1			
	M5 × 16 truss screw	8[11]	For rail		
19	$\phi 5 \times 30$ truss tapping screw	8[11]			
20	Pull spring	1			
21)	Pull spring fitting	1	For pull spring		
22	$M4 \times 5$ pan head screw	2	For pull spring		
23	$M3 \times 8$ pan head screw	2			
24)	Wooden door plate	2	For wooden door		
25)	$\phi 5 \times 30$ flat head tapping screw	8	plate		
26	Guide rail L = 1300 [L = 1600]**	1	For guide rail		
27)	$\phi4 \times 16$ pan head tapping screw	5[6]	Tor guide rail		
28	Guide roller $\phi$ 16	1			
291	Height adjusting plate (t=1.0, 0.5)	_	Option		

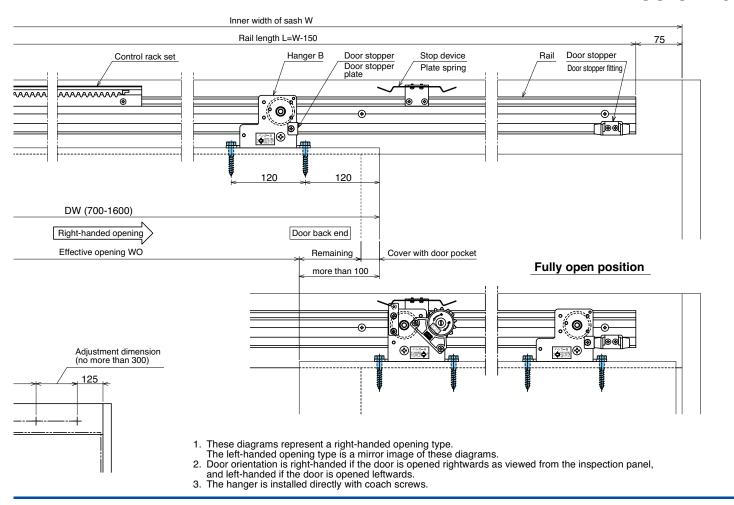
### Installation diagrams NSC-CW23



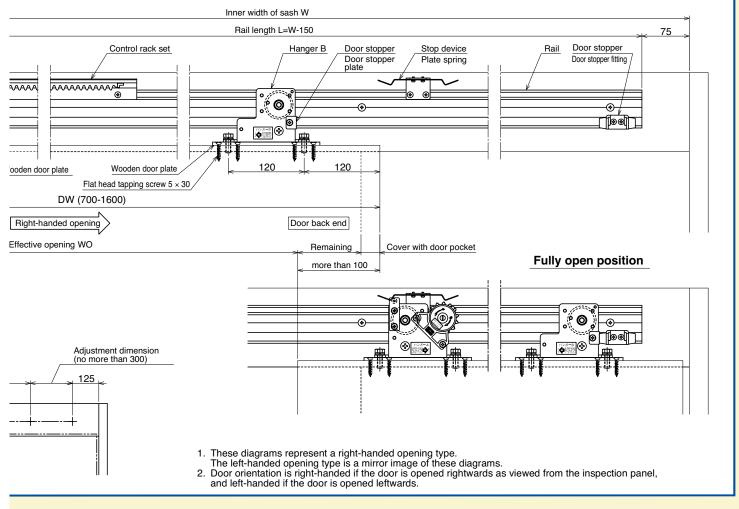
## Installation diagrams NSC-CW36 · 48



#### NSC-CW23







# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

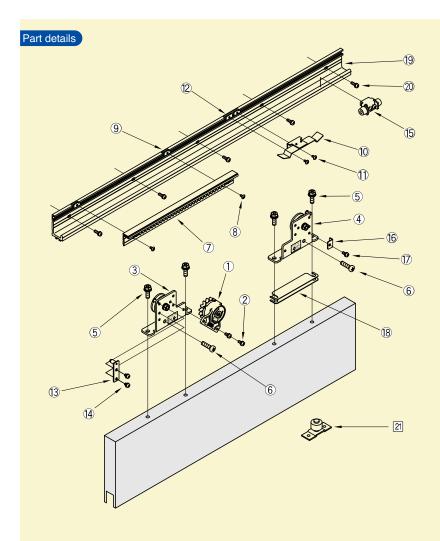
#### Features ]

- A standardized set of parts required for inclined steel lightweight fitting types.
   (The product comes standard with stop device, and other equipment.)
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a screwdriver.

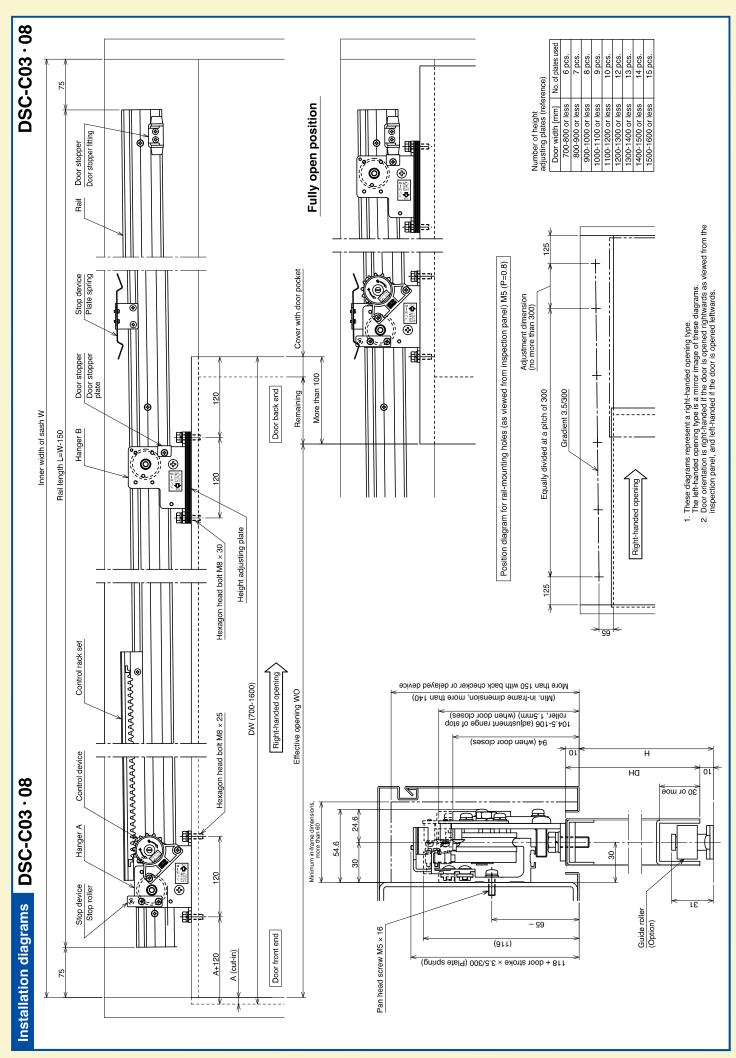
#### Specifications

Model		DSC-C03-22	DSC-C03-31	DSC-C08-22	DSC-C08-31		
Applicable	Weight [kg]	10-30		30-80			
doors	Width [mm]	700-1200	1200-1600	700-1200	1200-1600		
Max. stroke	[mm]		15	00			
Closing driv	e system	Rail inclination (3.5/300)					
Controlling	system	Fluid friction resistance type					
Controlling	time	7-11 seconds (with a door-opening distance of 900mm)					
Initial openi	ing force [N]	2.3-5.4 5.4-12.5					
Durability		More	More than 1 million open/close operations				
Rail length [m]		2.2	3.1	2.2	3.1		





No.	Part	Q'ty	Remark		
1	Control device	1	For control device		
2	M5 × 12 pan head screw	2	For control device		
3	Hanger A	1	For hanger		
4	Hanger B	1			
(5)	$M8 \times 25$ hexagon head bolt	2	For hanger		
3	M8 × 30 hexagon head bolt	2			
6	M8 × 30 pan head screw	2	For door retention		
7	Control rack set	1			
8	M4 × 8 truss screw	2	For control rack set		
9	Plate nut	2			
10	Plate spring	1			
11	M4 × 8 truss screw	2			
12	Plate nut	2	For stop device		
13	Stop roller	1			
14)	M5 × 8 pan head screw	2			
15	Door stopper fitting	1			
16	Door stopper plate	1	For door stopper		
17	M5 × 8 pan head screw	1			
18	Height adjusting plate (t = 1.0, 0.5)	15+1			
19	Rail L = 2200 [L = 3100]	1			
20	M5 × 16 truss screw	8[11]	For rail		
-50	$\phi 5 \times 30$ truss tapping screw	8[11]			
21	Guide roller	1	Option		





For steel lightweight fittings, inclined, with door weights of  $80 \sim 120 \text{kg}$ 

DSC-C012 series

# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

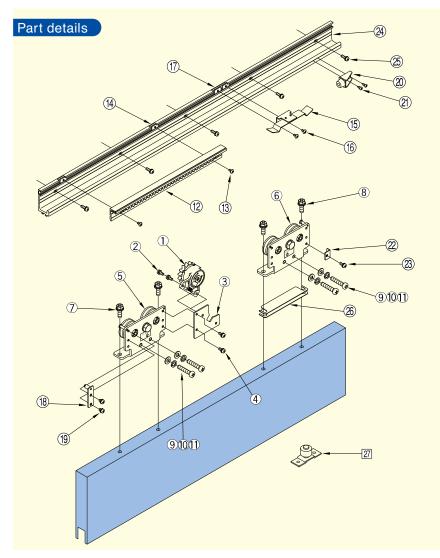


- A standardized set of parts required for inclined steel lightweight fitting types. (The product comes standard with stop device, and other equipment.)
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a screwdriver.

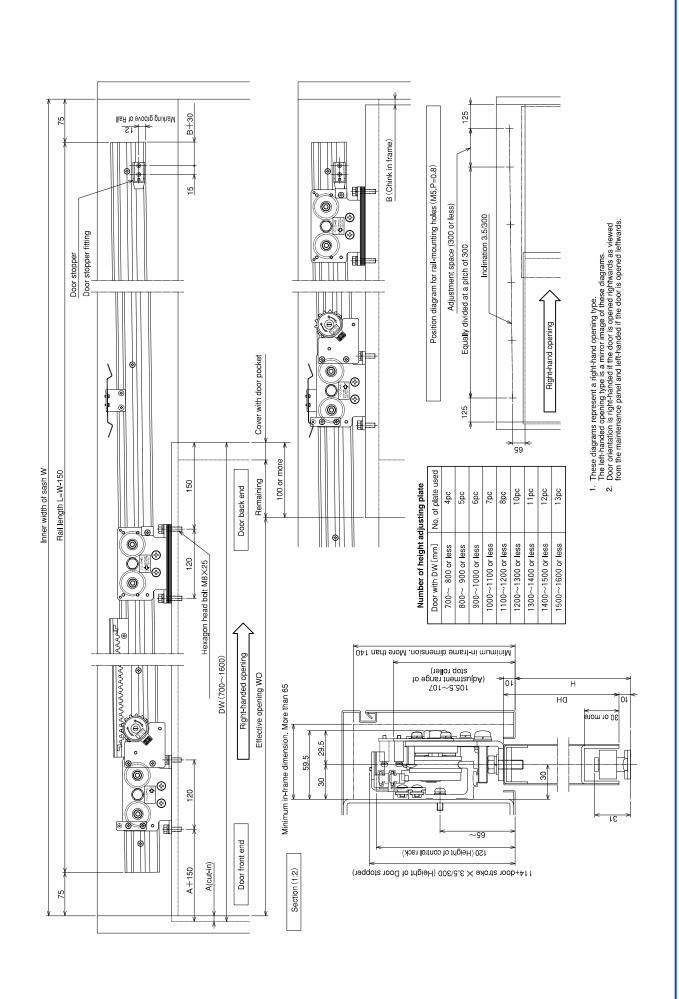
#### Specifications

Model		Inclined type			
		DSC-C012-22	DSC-C012-31		
Applicable	Weight (kg)	80~	120		
doors	Width (mm)	700~1200	1200~1600		
Max. stroke	(mm)	1500			
Closing driv	e system	Rail inclination(3.5/300)			
Controlling	system	Fluid friction resistance type			
Controlling	time	7~11seconds (with a door-opening distance of 900mm)			
Initial openi	ng force (N)	12.5~17.7			
Durability		More than 1 million open/close operations			
Rail length (m)		2,2	3.1		





No.	Part	Q'ty	Remark
1	Control device	1	
2	M5×12 pan head screw	2	For control device
3	Control device bracket	1	For control device
4	M5×12 pan head screw	2	
(5)	HangerA	1	
6	HangerB	1	For hanger
7	M8×25 hexagon head bolt	2	1 of flaffger
8	M8×30 hexagon head bolt	2	
9	M8×40 pan head screw	4	
10	Spring washer M8	4	For door retention
11)	Plean washer M8	4	
12	Control rack set	1	
13	M4X8 truss screw	2	For control rack
14)	Plate nut	2	
15	Plate spring	1	
16	M4X8 truss screw	2	
17)	Plate nut	2	For stop device
18	Stop roller	1	
19	M5×8 pan head screw	2	
20	Door stopper fitting	1	
21	$\phi$ 4×10 pan head screw	2	For door stopper
2	Door stopper plate	1	i oi dooi stoppei
23	M5×8 pan head screw	1	
24)	Rail L=2200 [L=3100]	1	
<u></u>	M5×16 truss screw	8[11]	For Rail
25	$\phi$ 5 $\times$ 30 truss tapping screw	8[11]	FUI MAII
26	Height adjusting plate (t=1.0,0.5)	15+1	
27	Guide roller	1	Option





For steel lightweight fittings, horizontal, with door weights of 10-30kg, 30-60kg and 60-80kg

# series

# Reliable, Cost Effective, Sliding Doors Closers - Simple to Use & Install

#### Features

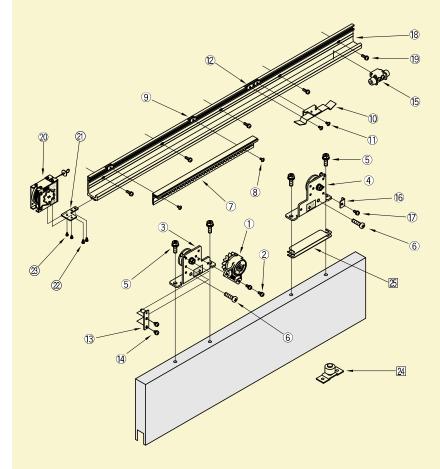
- A standardized set of parts required for horizontal steel lightweight fitting types. (The product comes standard with a stop device, and other equipment.)
  An endless fluid friction resistance system ensures a long life.
  The product can be converted to the right- and left-handed opening types by simple convertion.
- simple operation.
- It is easy to install with a screwdriver.



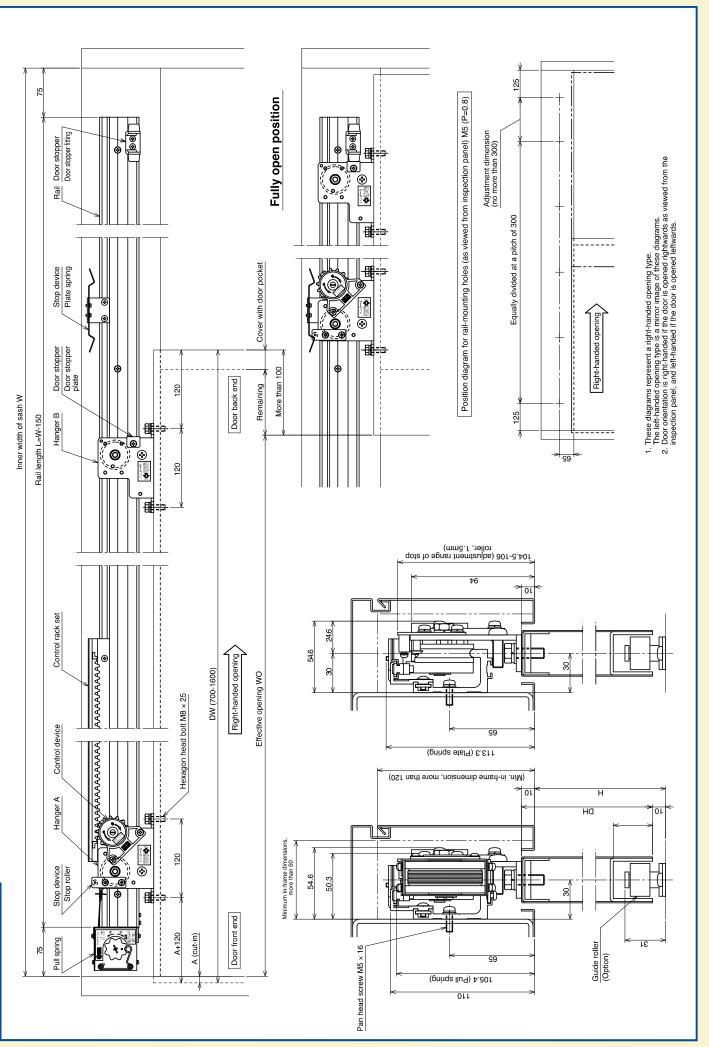
#### Specifications

Мо	odel	NSC-C23-22	NSC-C23-31	NSC-C36-22	NSC-C36-31	NSC-C48-22	NSC-C48-31
Applicable Weight [kg]		10-	30	30-60		30-60 60-80	
doors	Width [mm]	700-1200	1200-1600	700-1200	1200-1600	700-1200	1200-1600
Max. stroke	e [mm]			15	500		
Closing driv	Closing drive system Spiral spring type						
Controlling	system			Fluid friction re	esistance type		
Controlling	time		7-11 s	econds (with a door-c	pening distance of 90	00mm)	
Initial open	ing 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	-02	PS-03		PS	-04
Rail length	[m]	2.2	3.1	2.2	3.1	2.2	3.1

#### Part details



No.	Part	Q'ty	Remark		
1	Control device	1	For control device		
2	M5 x 12 pan head screw	2	For control device		
3	Hanger A	1			
4	Hanger B	1	For hanger		
<u>(5)</u>	M8 × 25 hexagon head bolt	4			
6	M8 × 30 pan head screw	2	For door retention		
7	Control rack set	1			
8	M4 × 8 truss screw	2	For control rack		
9	Plate nut	2	001		
10	Plate spring	1			
1	M4 × 8 truss screw	2			
12	Plate nut	2	For stop device		
13	Stop roller	1			
14)	$M5 \times 8$ pan head screw	2			
15	Door stopper fitting	1			
16	Door stopper plate	1	For door stopper		
17	M5 × 8 pan head screw	1			
18	Rail L = 2200 [L = 3100]	1			
	M5 × 16 truss screw	8[11]	For rail		
19	$\varphi 5 \times 30$ truss tapping screw	8[11]			
20	Pull spring	1			
21	Pull spring fitting	1	For pull enring		
2	M4 × 5 truss screw	2	For pull spring		
23	M3 × 8 truss screw	2			
24	Guide roller	1	Option		
25	Height adjusting plate (t=1.0, 0.5)	_	Option		





For steel lightweight fittings, horizontal, with door weights of  $80\sim120$ kg

NSC-C812 series

# Reliable, Cost Effective, Sliding Doors Closers – Simple to Use & Install

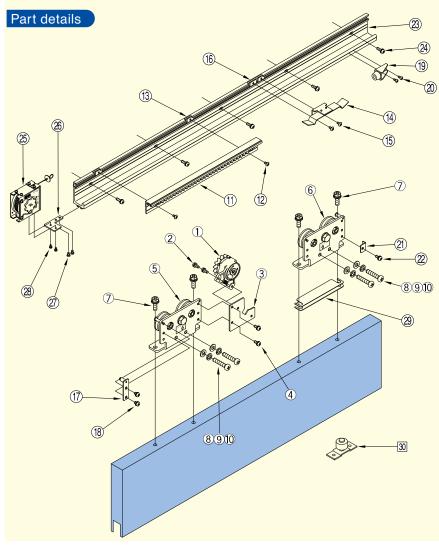
#### Features

- A standardized set of parts required for horizontal steel lightweight fitting types.
   (The product comes standard with a stop device, and other equipment.)
- An endless fluid friction resistance system ensures a long life.
- The product can be converted to the right- and left-handed opening types by simple operation.
- It is easy to install with a single screwdriver.

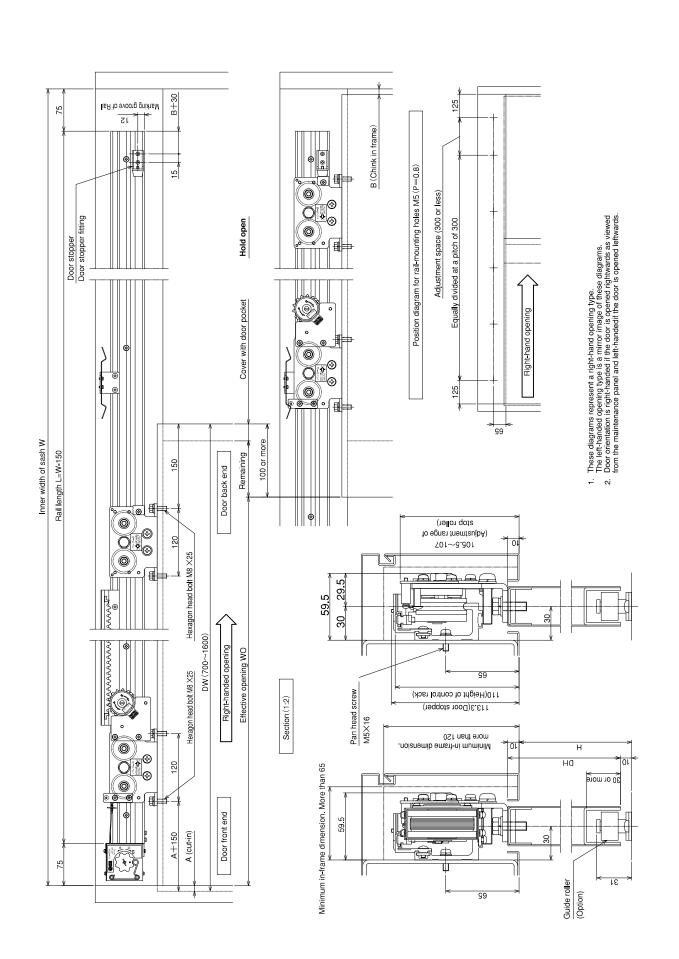
#### Specifications

Model		Horizontal type				
		NSC-C812-22	NSC-C812-31			
Applicable	Weight (kg)	80~120				
doors	Width (mm)	700~1200	1200~1600			
Max. stroke (mm)		1500				
Closing drive system		Spiral spring type				
Controlling system		Fluid friction resistance type				
Controlling time		7~11seconds (with a door-opening distance of 900mm)				
Initial opening force (N)		13.8~16.5				
Durability		More than 1 million open/close operations				
Pull spring		PS-08				
Rail length (m)		2.2	3.1			

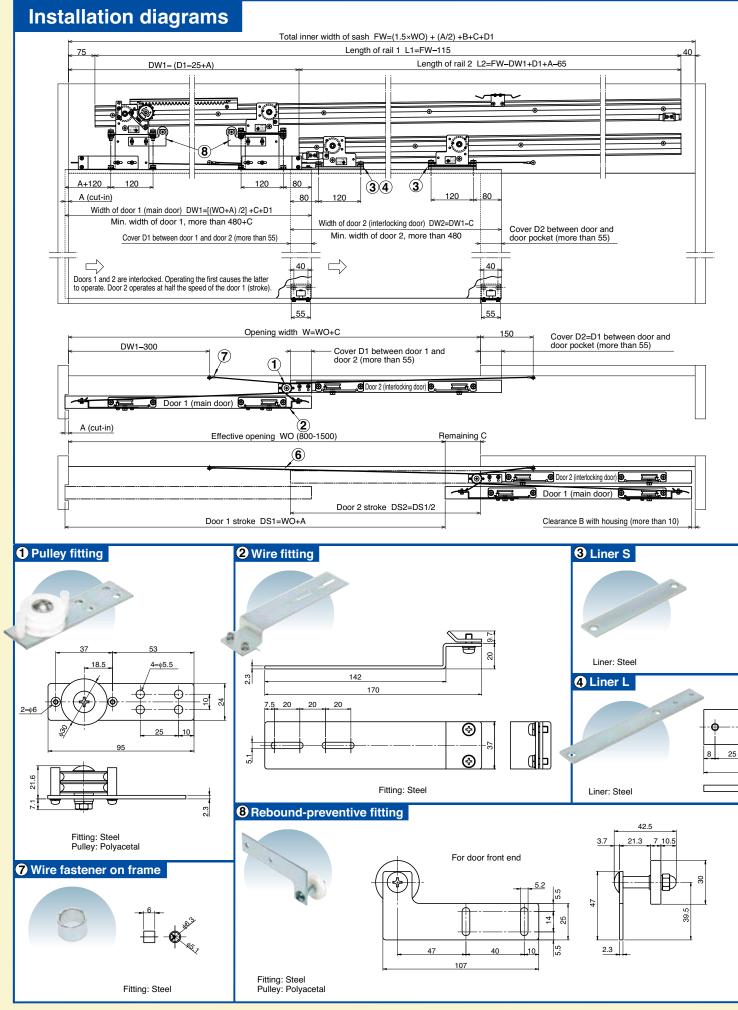




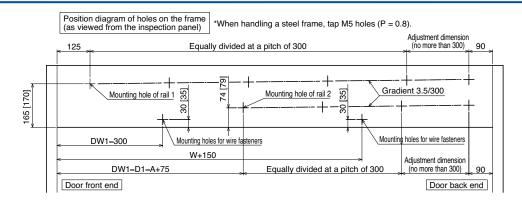
No.	Part	Q'ty	Remark			
0	Control device	1				
2	M5×12 pan head screw	2	For control device			
3	Control device bracket	1	For control device			
4	M5×12 pan head screw	2				
⑤	HangerA	1				
6	HangerB	1	For hanger			
7	M8×25 hexagon head bolt	4	1			
8	M8×40 pan head screw	4				
9	Spring washer M8	4	For door retention			
10	Plean washer M8	4				
11)	Control rack set	1				
12	M4×8 truss screw	2	For control rack			
13	Plate nut	2	Set			
14)	Plate spring	1				
15	M4×8 truss screw	2				
16	Plate nut	2	For stop device			
17	Stop roller	1				
18	M5×8 pan head screw	2				
19	Door stopper fitting	1				
20	φ4×10 pan head tapping screw	2	Far daar atanaar			
21)	Door stopper bearing plate	1	For door stopper			
8	M5×8 pan head screw	1				
23	Rail L=2200 [L=3100]	1				
24)	M5×16 truss screw	8[11]	For rail			
<u>(4)</u>	$\phi$ 5×30 truss tapping screw	8[11]				
25)	Pull spring	1				
26	Pull spring fitting	1				
27)	M4×5 pan head screw	2	For pull spring			
28)	M3×8 pan head screw	2				
29	Height adjusting plate (t=1.0)	4				
30	Guide roller	1	Option			

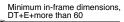


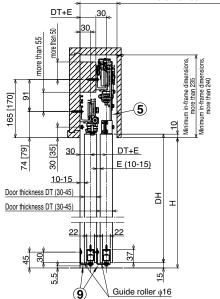
# **Option** Single action Double sliding system, SC-2S



# Single action Double sliding system, SC-2S







#### Formulae for calculating main dimensions

Item	Code	Formula
Effective opening	wo	Specify (800-1,500)
Cut-in of door front end	Α	Specify
Clearance between housing and door when door is open	В	Specify (more than 10)
Remaining	С	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	<u>WO+A</u> +C+D1
Width of door 2	DW2	DW1-C (more than 480)
Opening width	W	WO+C
Inner width of sash	FW	$(1.5 \times WO) + \frac{A}{2} + B + C + D1$
Length of rail 1	L1	FW-115
Length of rail 2	L2	FW-DW1+D1+A-65

#### Constituents of single action Double sliding system

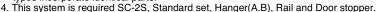
OU	ilistituents of single	uotioi	i bouble sharing system
Item	Part	Q'ty of 1 set	Remark
1	Pulley fitting	1	
@	Wire fastener	2	
(3)	Liner S	3	
4	Liner L	1	
(9)	Hanger base	2	
6	Wire rope	2	
7	Wire fastener on frame	2	
8	Rebound-preventive fitting	2	1 pc. each for door front end and for door back end
9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

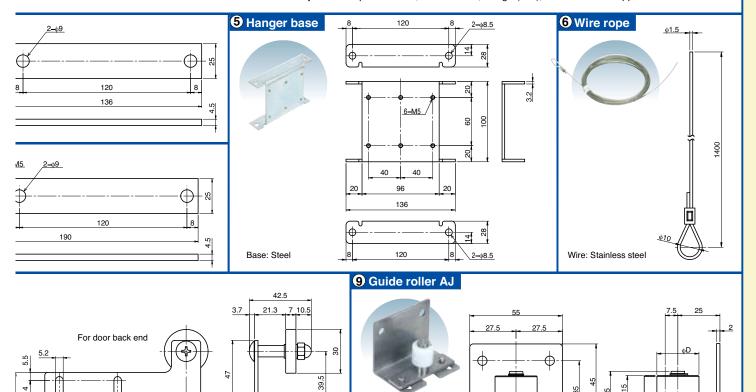
2.3

107

- 1. These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams.
- 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.



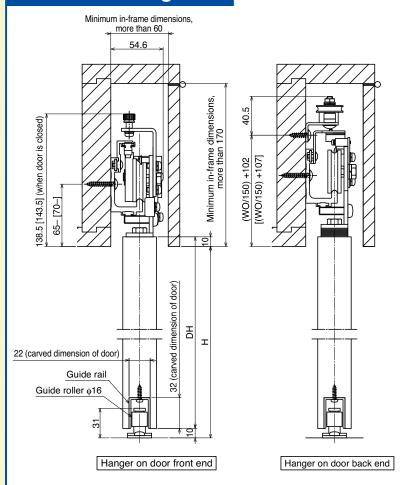


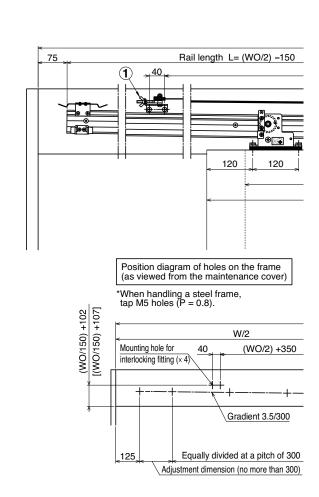
Fitting: Steel Roller: Polyacetal

\*4 types,  $\phi D = 16, 25, 30, 35$ 

# **Option** Bi-Parting system, SC-W

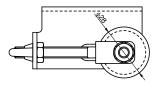
# **Installation diagrams**

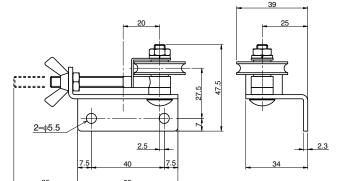




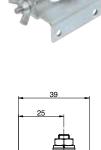
# 1 Adjustment fitting L

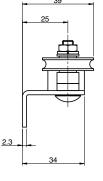


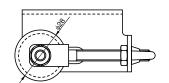


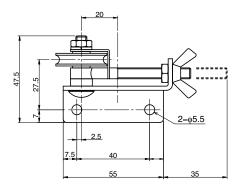


## 2 Adjustment fitting R



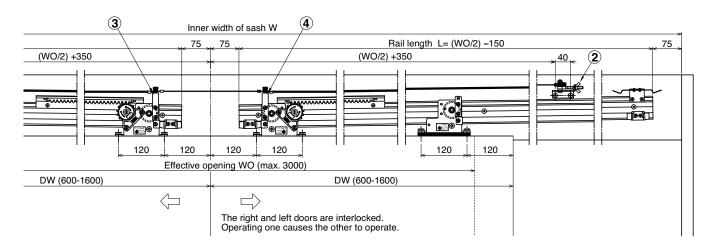






Fitting: Steel Roller: Polyacetal

# **Bi-Parting system, SC-W**



#### Inner width of sash W W/2 (WO/2) +350 40 Gradient 3.5/300 Mounting hole of rail Equally divided at a pitch of 300 125 125 Adjustment dimension (no more than 300)/

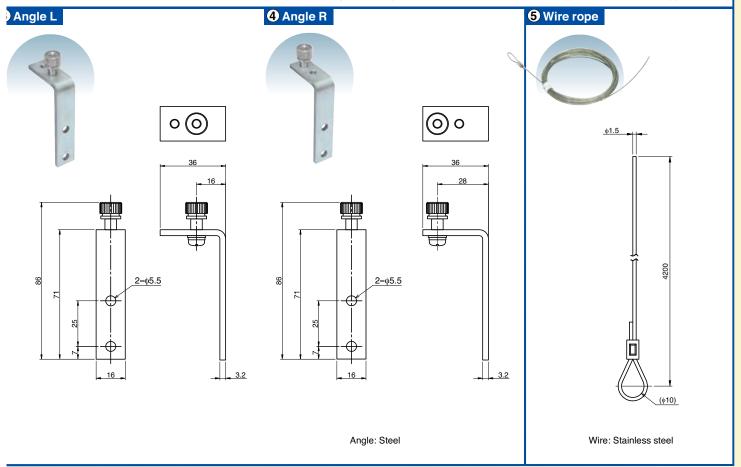
#### Constituents of Bi-Parting system

Item	Part	Q'ty 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

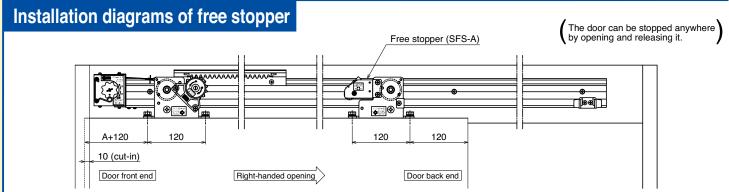
- 1. These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams.

  2. The dimensions in [ ] are used when the wooden door plate is used (DSC-CW08 and
- 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.



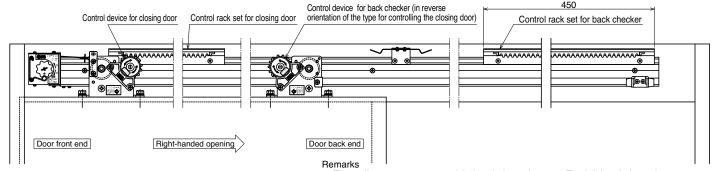
# **Option** Free stopper, Back checker, Delayed device, Maintenance cove



#### Remarks

- 1. These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams
- This diagram shows how a model of the horizontal NSC-C series is typically installed.
   Models of the inclined DSC-C series are installed in the same way as in this diagram.

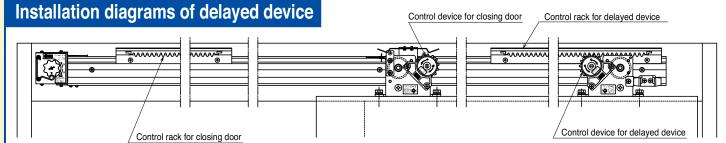
## Installation diagrams of back checker



- 1. These diagrams represent a right-handed opening type. The left-handed opening type
- is a mirror image of these diagrams.

  This diagram shows how a model of the horizontal NSC-C series is typically installed.

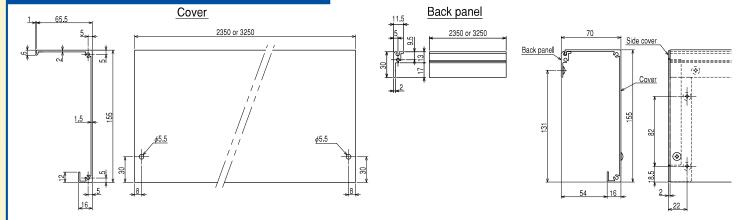


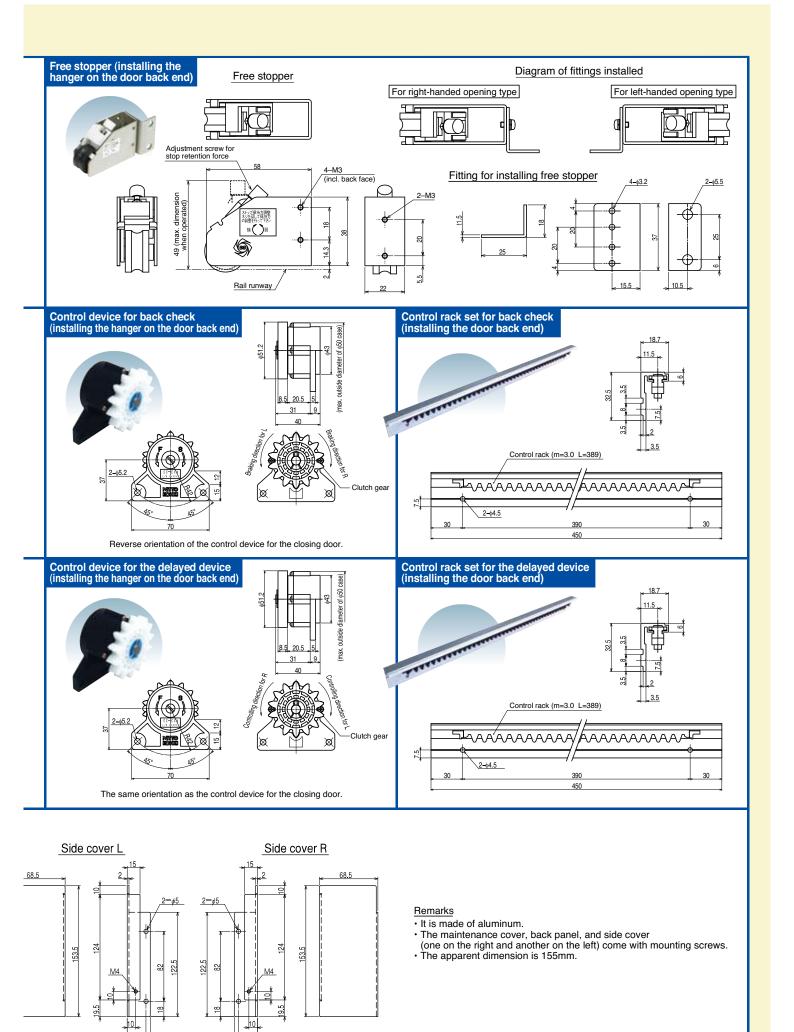


#### Remarks

- These diagrams represent a right-handed opening type. The left-handed opening type is a mirror image of these diagrams
- This diagram shows how a model of the horizontal NSC-C series is typically installed.
- 3. Models of the inclined DSC-C series are installed in a similar way
- 4. A back checker or a delayed device cannot be combined with a free stopper.

## External diagrams of maintenance cover and side cover







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

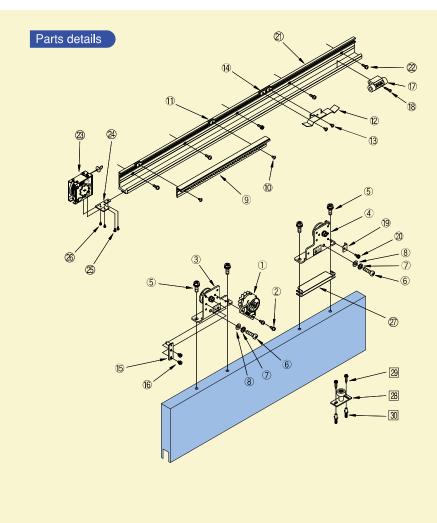
### The use of stainless steel and a unique sealing technology has created corrosionresistant, long-life products.

#### Features

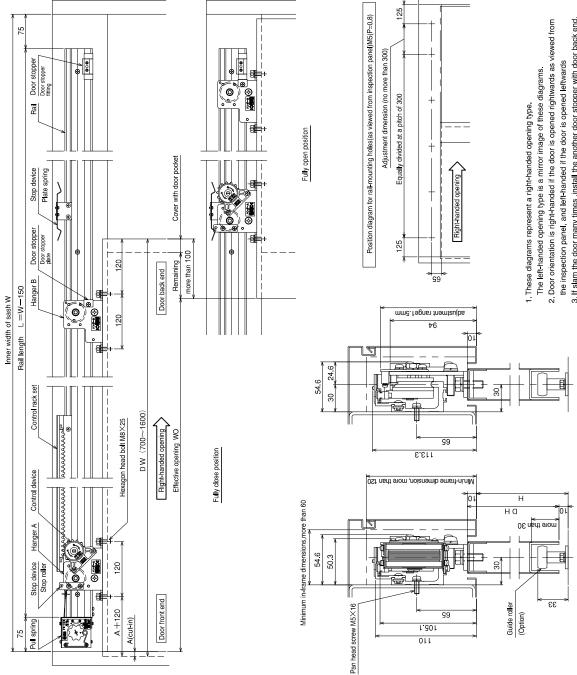
- These products can be used for long periods even in bathrooms and other hot corrosive environments. (They cannot be used in sauna rooms or other very hot environments.)
   The rotary part of the door roller is so designed as to be independent of dust or moisture,
- thus ensuring high corrosion-resistance 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	Weight [kg]	10-30			30-60			60-80		
doors	Width [mm]	700-1200	1200-1400	1400-1600	700-1200	1200-1400	1400-1600	700-1200	1200-1400	1400-1600
Max. stroke	e [mm]	1500								
Closing driv	ve system	Spiral spring type								
Controlling	system	Fluid friction resistance type								
Controlling	time	8-15 seconds (with a door-opening distance of 900mm)								
Initial open	ing 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	



Part	No.	Remark	
Control device	1	SC-CB03/SC-CB08	1
Control device	2	M5×12 pan head screw	2
	3	Hanger A	1
	4	Hanger B	1
Hanger	(5)	M8×25 hexagon head bolt	4
Tidilger	6	M8×30 pan head screw	2
	7	Spring washer M8	2
	8	Plain wasaher M8	2
	9	Control rack set	1
Control rack set	10	M4×8 truss screw	2
	11)	Plate nut	2
	12	Plate spring	1
	13	M4×8 truss screw	2
Stop device	14)	Plate nut	2
	15	Stop roller	1
	16	M5×8 pan head screw	2
	17)	Door stopper fitting	1
	18	$\phi$ 4×20 pan head tapping screw	1
Door stopper	19	Door stopper plate	1
	20	M5×8 pan head screw	1
	2	Rail L=2200 [L=3100]	1
Rail	(2)	M5×16 pan head screw	8 [11]
	"	5×30 truss tapping screw	8 [11]
	23	Pull spring	1
Pull spring	24	Pull spring fitting	1
Full spring	25	M4×5 pan head screw	2
	<b>26</b>	M3×8 pan head screw	2
Height adjusting plate 2 (T=1.0		(T=1.0)	4
	28	Guide roller	1
Guide roller	29	5×25 hexagon tapping screw	2
(Option)		M5×12 hexagon head bolt	2
	30	Curl plug 6×30	2



# High Corrosion proof evaluation

Our standard product Our standard product NSC-CB type NSC-CB type Appearance of control device and hanger Appearance of pull spring

Rust becomes a problem when these products are used in bathrooms.

The use stainless steel makes these products dramatically more corrosion proof.

# Test method: CASS test (JIS H 8502)

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

If slam the door many times, install the another door stopper with door back end.

# User-friendly technology

# NITTO 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.



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



- ■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.)







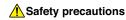
■ Door built-in type.



# 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.





- ●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 resul

#### **Driving Inventive Technologies Too Open Up Tomorrows**



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