

## GS-STAR One Way Free Stop Stay

Top opening · Downward opening · Upward opening

Opening Direction	Description	Torque
<p>Top-opening   Downward-opening   Upward-opening</p>	Free stop	0~7 N · m (0~71 kgf · cm)

### Features

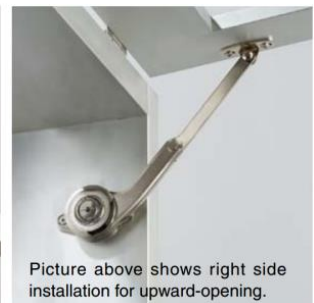
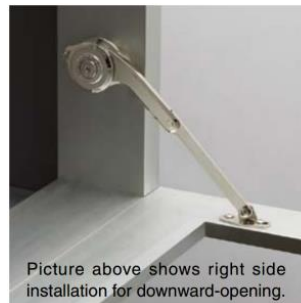
- Torque stay for top-opening, upward-opening, and downward-opening
- Free stop in any position when lifting up the door
- Friction in one direction only, provides smooth opening
- Optional mounting plates available (mounting plate, mounting plate for aluminium frame and glass door, etc.)
- Torque adjustable with a hex key (included)
- Passed 30,000 life cycle test

### Notes

- Handed: Specific left and right-handed
- Use **GS-TAR-2030** for upward-opening / top-opening and **GS-TAR-10** for downward-opening
- For downward-opening, when placing objects or working on the surface of opened door, install a brace or reinforcement material to support the door in addition to the stay
- When using 2 pcs, adjust free stop mechanisms evenly. Over loosening may cause free stop-function failure
- Install a catch (sold separately) to keep the door closed

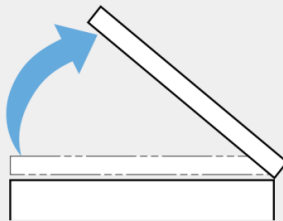
### Parts Included

- Countersunk head tapping screw 4×20
- Binding head tapping screw 3.5×15
- Hex key 4
- Mounting plate



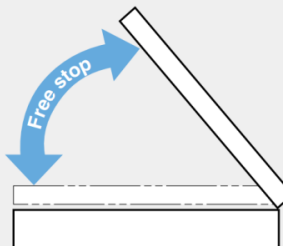
#### ● One way torque

Door can be opened lightly by reducing unnecessary torque.

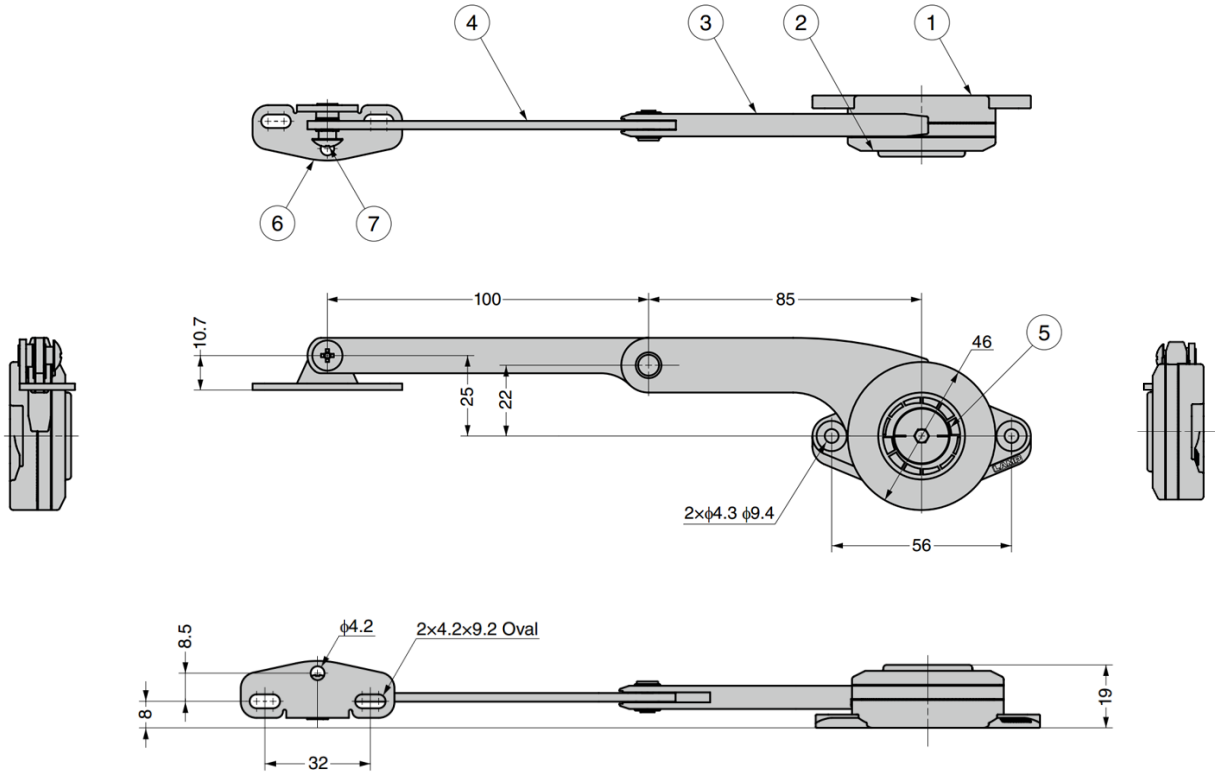


#### ● Free stop

Door can be stopped in any position.

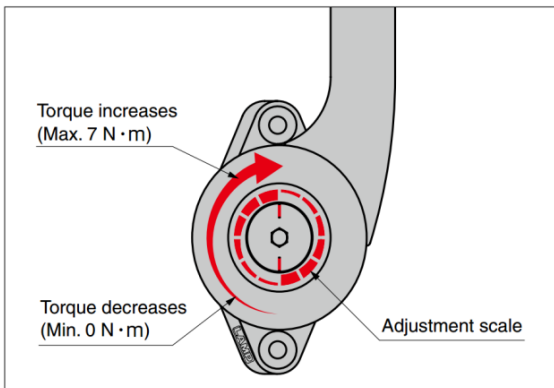


GS-TAR-2030R and GS-TAR-10L shown  
GS-TAR-2030L and GS-TAR-10R are symmetrical



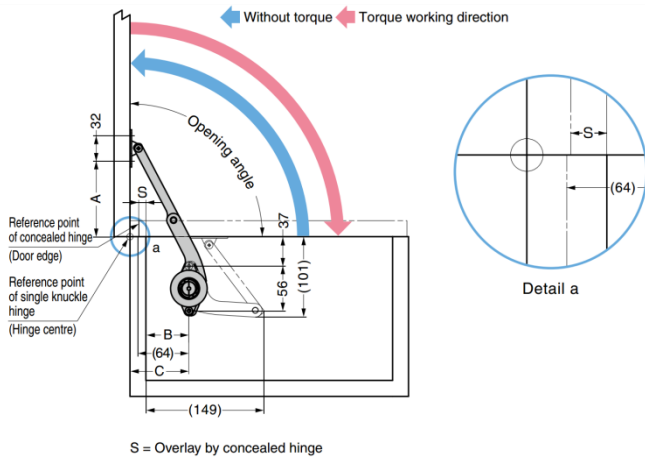
No.	Part Name	Material	Finish
①	Body	Zinc Alloy (ZDC)	Nickel
②	Cover		
③	Root Arm		
④	Tip Arm	Steel (SPCC)	
⑤	Torque Adjustment Screw	Steel	
⑥	Mounting Plate	Steel (SPCC)	
⑦	Truss Head Screw	Steel	

### How to Adjust Torque



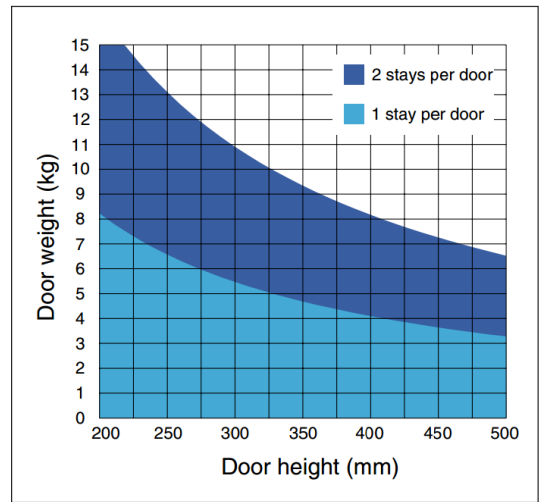
Adjustable with the supplied hex key.  
By using adjustment scale, you can easily match the left torque with the right one when using 2 pcs.

### Top-Opening Installation: For right side board



Hinge	Opening Angle	A	B	C
Concealed Hinge	70°	114	73-S	-
Concealed Hinge	90°	98		-
Single Knuckle Hinge	70°	115	-	77
Single Knuckle Hinge	90°	93	-	

### Door Size Ranges (Top-Opening)

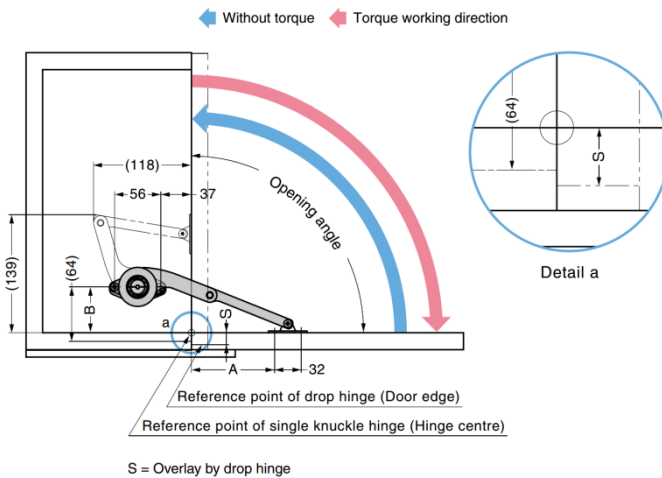


### Maximum Door Moment

- With 1 stay:  
Maximum door moment = 8.1 N.m
- With 2 stays, the maximum door moment will be doubled

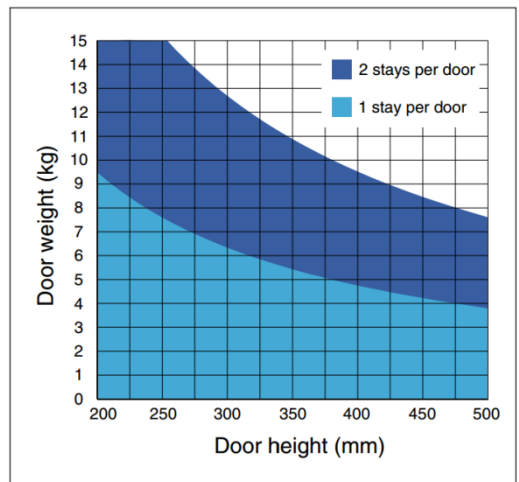
$$\text{Maximum Door Moment (N.m)} = \text{Door weight (kg)} \times 9.80665 \times \text{Distance from rotation centre to door centre of gravity (m)}$$

### Downward-Opening Installation: For right side board



Hinge	Opening angle	A	B
Drop Hinge	90°	99	70-S
Single Knuckle Hinge		100	51

### Door Size Ranges (Downward-Opening)

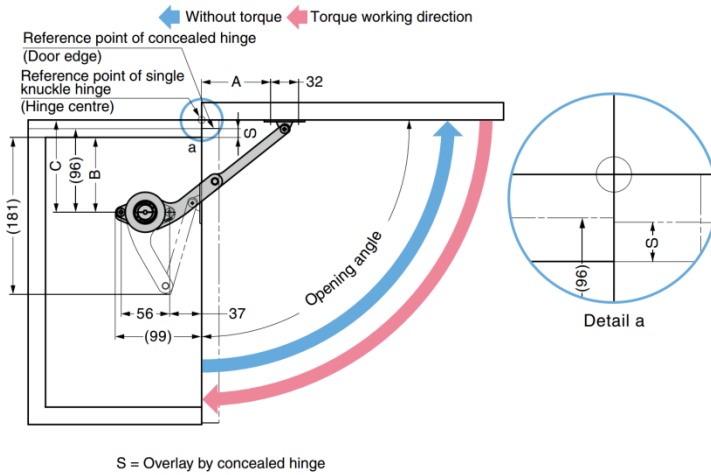


### Maximum Door Moment

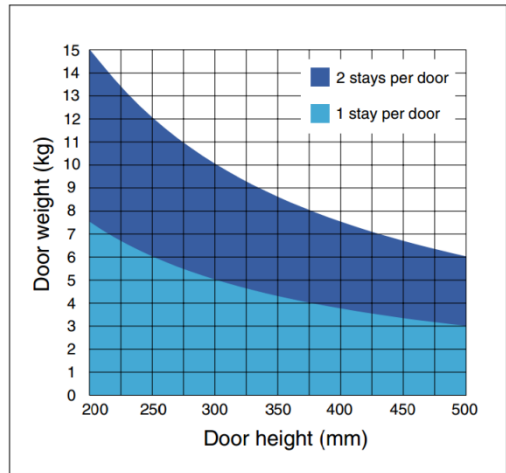
- With 1 stay:  
Maximum door moment = 9.3 N.m
- With 2 stays, the maximum door moment will be doubled

$$\text{Maximum Door Moment (N.m)} = \text{Door weight (kg)} \times 9.80665 \times \text{Distance from rotation centre to door centre of gravity (m)}$$

## Upward-Opening Installation: For right side board



## Door Size Ranges (Upward-Opening)



Hinge	Opening Angle	A	B	C
Concealed Hinge	80°	98	105-S	-
Concealed Hinge	90°	88		
Concealed Hinge	100°	80		
Single Knuckle Hinge	80°	90	-	109
Single Knuckle Hinge	90°	77		
Single Knuckle Hinge	100°	66		

### Maximum Door Moment

- With 1 stay:  
Maximum door moment = 7.4 N.m
- With 2 stays, the maximum door moment will be doubled

$$\text{Maximum Door Moment (N.m)} = \text{Door weight (kg)} \times 9.80665 \times \text{Distance from rotation centre to door centre of gravity (m)}$$

### Body

Part No.	Type	Opening Direction	Torque (per piece)	
GS-TAR-2030R	Right-handed	Upward-opening / Top-opening	0 ~ 7 N.m	0 ~ 71 kgf.cm
GS-TAR-2030L	Left-handed			
GS-TAR-10R	Right-handed	Downward-opening	0 ~ 7 N.m	0 ~ 71 kgf.cm
GS-TAR-10L	Left-handed			

### Optional Mounting Plate

Part No.	Type
GNSDX-CZ	Clip-on
GNSDX-AZ	Clip-on for 20 mm aluminium frame door
GNSDX-GZ	Clip-on for glass door

### GSDS Face Plate and Spacer for Glass Door (Please use with mounting plate GNSDX-GZ)

Part No.	Material	Finish / Colour
GSDS-50G-CR	Zinc Alloy (ZDC) / ABS	Chrome / Black
GSDS-50G-BL		Black Enamel Finish

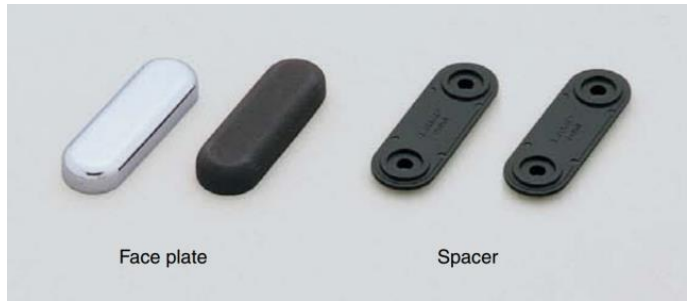
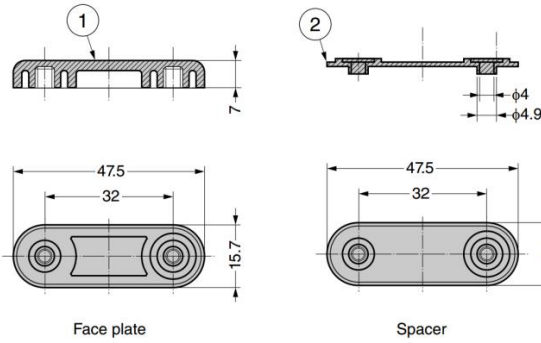
## GSDS-50G Face Plate And Spacer For Glass Door

### Features

- Glass door face plate for **GSDS** and **GNSDX** lid supports

### Parts Included

- Countersunk head screw M4×14 (2 pcs)



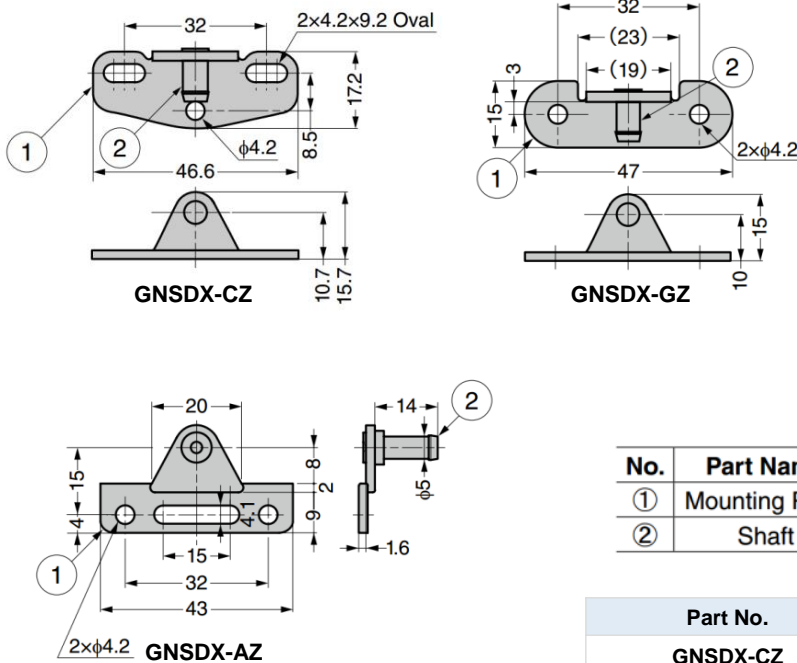
No.	Part Name	Material	Finish
①	Face Plate	Zinc Alloy (ZDC)	Chrome (CR), Black (BL)
②	Spacer	ABS	Black

Part No.	Finish
<b>GSDS-50G-CR</b>	Chrome
<b>GSDS-50G-BL</b>	Black

## GNSDX Mounting Plate

### Features

- Mounting plate for quick installation of **GNSDX** lid supports / stays
- Three types available



No.	Part Name	Material	Finish
①	Mounting Plate	Steel (SPCC)	Nickel
②	Shaft	Steel (SWCH)	

Part No.	Finish
<b>GNSDX-CZ</b>	Clip-on
<b>GNSDX-AZ</b>	Clip-on for 20 mm aluminium frame
<b>GNSDX-GZ</b>	Clip-on for glass door