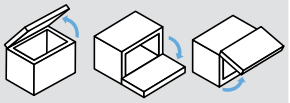
FREE-STOP STAY (ONE WAY) GS-S-TAR

INSTRUCTION HEX KEY VIDEO

Right side installation for top-opening shown.


Picture above shows right side installation for downward-opening.


Picture above shows right side installation for upward-opening.

Opening Direction	Description	Torque
 Top-opening Downward-opening Upward-opening	Free stop	0~7 N・m (0~71 kgf・cm)

- Torque stay for upward-opening, downward-opening and top-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 mounting plate for glass door)
- Torque adjustable with a hex key (included).

[Remarks]

- Be sure to read the "Cautions"
- Refer to the graph for applicable doors.
- Handed: Specific left and right-handed.
- Use GS-S-TAR-2030 for upward-opening/top-opening and GS-S-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.
- Without soft-close function.
- Install a catch (sold separately) to keep the door closed.
- Operating temperature : 0℃～40℃
- The torque may vary depending on the temperature of the operating environment. Torque adjustment should be done at room temperature.
- If there is a reduction in the torque, please readjust it.

[Parts Included]

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

[Sold Separately]

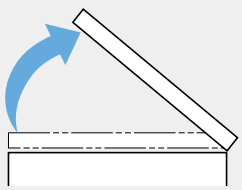
- Mounting plate
- Face plate and spacer for GS-SDS glass door

Video Link

Selection Tool
Sasuga-kun
Applicable Products
Used for Product Selection & Simulation. Available on Web!

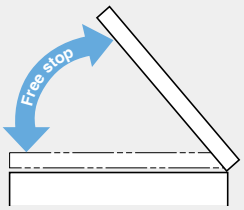
●One way torque

Door can be opened lightly by reducing unnecessary torque.

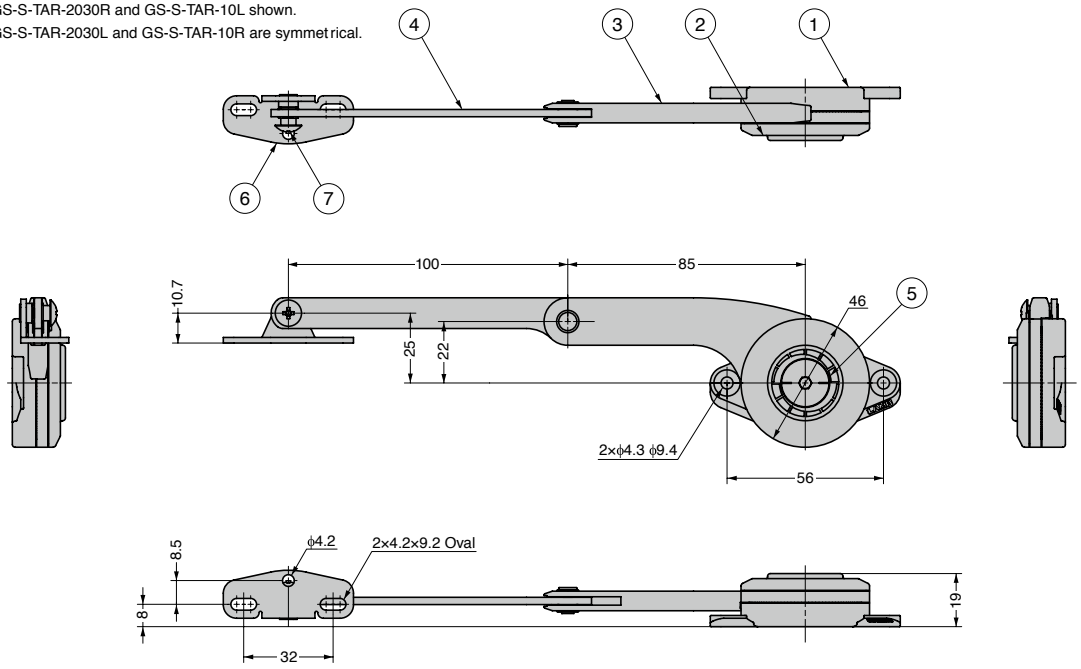


●Free stop

Door can be stopped in any position.

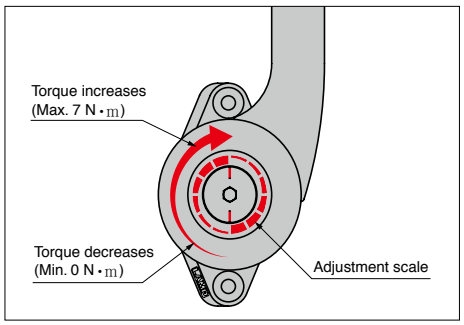


GS-S-TAR-2030R and GS-S-TAR-10L shown.
GS-S-TAR-2030L and GS-S-TAR-10R are symmetrical.



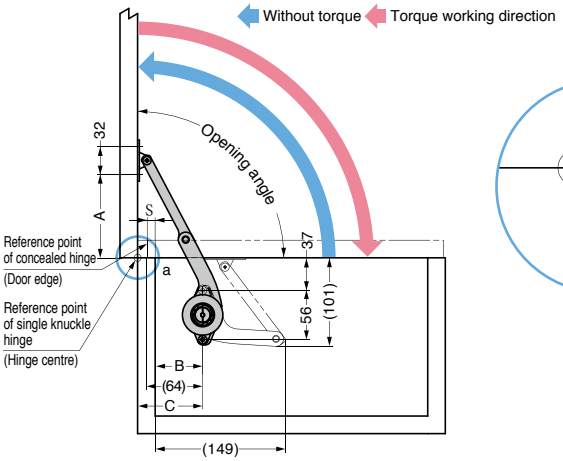
No.	Part Name	Material	Finish
①	Body	Zinc Alloy (ZDC)	Nickel
②	Cover		
③	Root Arm		
④	Tip Arm	Steel (SPCC)	
⑤	Torque Adjustment Screw	Steel	
⑥	Mounting Plate	Steel (SPCC)	
⑦	Truss Head Screw	Steel	

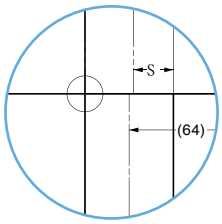
[How to Adjust Torque]



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.

[Installation (Top-opening)] For right side board

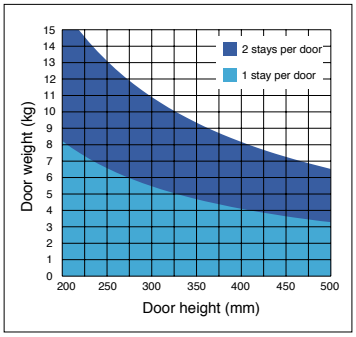




Detail a

S = Overlay by concealed hinge

[Door Size Ranges (Top-opening)]



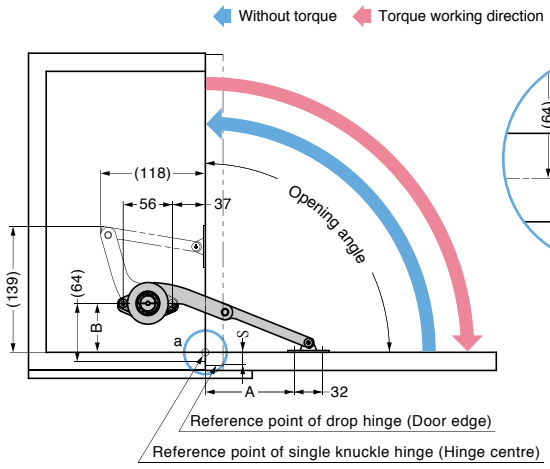
Hinge	Opening Angle	A	B	C
Concealed Hinge	70°	114	73-S	—
Concealed Hinge	90°	98		
Single Knuckle Hinge	70°	115	—	77
Single Knuckle Hinge	90°	93		

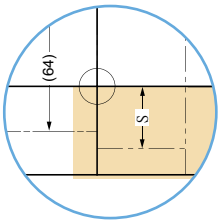
[Maximum Door Moment]

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

Maximum door moment (N・m) = Door weight (kg)× 9.80665× Distance from rotation centre to door centre of gravity (m)

[Installation (Downward-opening)] For right side board

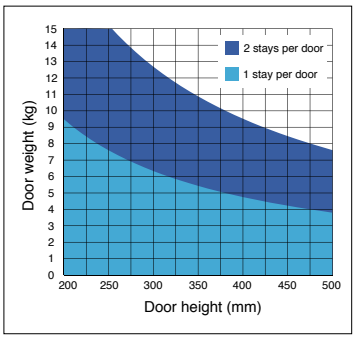




Detail a

S = Overlay by drop hinge

[Door Size Ranges (Downward-opening)]



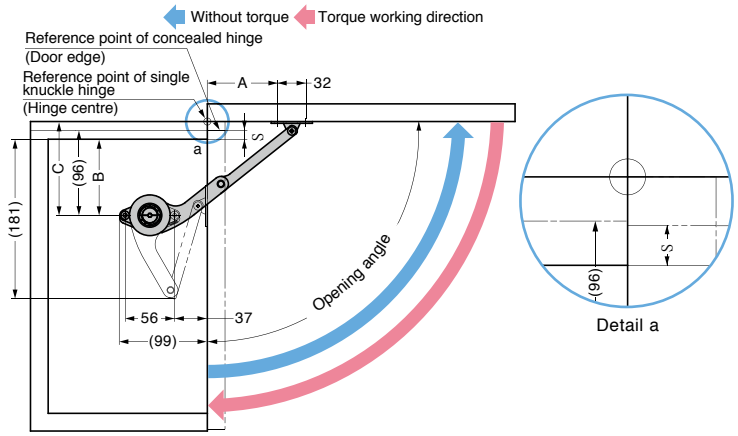
Hinge	Opening angle	A	B
Drop Hinge	90°	99	70-S
Single Knuckle Hinge		100	51

[Maximum Door Moment]

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

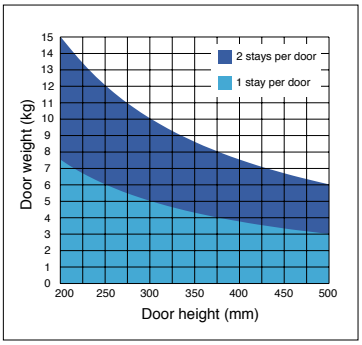
Maximum door moment (N・m) = Door weight (kg)× 9.80665× Distance from rotation centre to door centre of gravity (m)

[Installation (Upward-opening)] For right side board



S = Overlay by concealed hinge

[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 = Max. 7.4 N・m
- With 2 stays, the maximum door moment will be doubled.

Maximum door moment (N・m) = Door weight (kg)× 9.80665× Distance from rotation centre to door centre of gravity (m)

Item Name	Torque N·m/pc	Torque kgf·cm/pc	Type	Opening Direction	Weight (g)
GS-S-TAR-2030R	0~7	0~71	Right-handed	Upward-opening, Top-opening	234
GS-S-TAR-2030L			Left-handed		
GS-S-TAR-10R			Right-handed	Downward-opening	
GS-S-TAR-10L			Left-handed		