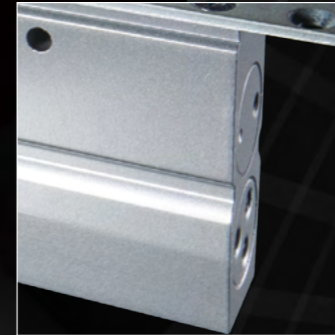


RYOBI



GEOPRO

DOOR CLOSER

RYOBI LIMITED

5-2-8 Toshima, Kita-ku Tokyo 114-8518, Japan
Tel. 81-3-3927-5536 Fax. 81-3-3927-5527
RYOBI is a registered trade mark of Ryobi Limited

A

TRACK-RAIL

GEOPRO

CONCEALED

CONCEALED

DOUBLE
CYLINDER

TWIN-CAM

Advanced and sophisticated GEOPRO series.

In the ever-evolving world of architecture, the harmony of door closers whose beauty never changes.

The GEOPRO series has been launched from the perspective of rebuilding current architecture.

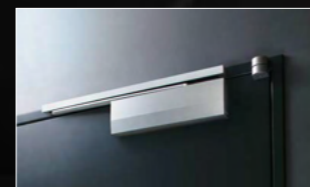
Simple design with precise control over speed and strong closing force.

This is a door closer for those who truly understand their value.



CONCEALED

Concealed design that fits into the space.



TRACK-RAIL

Slimmer and more simple.

Make doors more comfortable, High-spec door closer.



Promising strong closing strength suitable for air-tight door

The GEOPRO series provides the high-level functions required for door closers. The arm link type specifications have of course achieved 500,000 times durability performance, even for the concealed specification. The strong closing force that closes any door completely can be used in a wide range of applications from combination with electrical lock to air-tight doors.

We aim for stability that cares for everyone from children to senior citizens.

By using a rack & pinion mechanism that provides precise control, we make stable closing speed possible. The door closers always close with a stable speed, so anybody from children to senior citizens can safely pass through. GEOPRO series realizes a safe and comfortable office environment.

GEOPRO Series Function

Application	Concealed						Track-Rail				
	GC-4V	GCS-4V	GCA-4V	GCAS-4V	GC-6V	GCS-6V	GT-4V	GTS-4V	GT-4PV	GTS-4PV	
hold-open	—	○	—	○	—	○	—	○	—	○	
Mechanism	Double Cylinder			Twin Cam			Double Cylinder				
Installation	Concealed-in			Concealed-in			Pull side		Push side		
Specifications Application Door size	Width(mm)	Weight(kg)									
	800	15 to 30	○	○			○		○		
	900	25 to 45	○	○			○		○		
	950	40 to 65	○	○		○	○		○		
	1050	60 to 85	○*	○*		○	○*		○*		
	1200	80 to 120				○					
	1500	100 to 140 up to 180				○					
					180kg (Max.Weight)						
Handing	Right hand or Left hand										
Material	Aluminum Alloy			Iron Casting			Aluminum Alloy				
Max. Opening angle	Standard						Offset hung: 105° Center hung: 110° Offset hung: 180° opening		160°		140°
Durability	500,000 cycles										
Standard function	1st closing speed	○	○	○	○	○	○	○	○	○	
	2nd closing speed	○	○	○	○	○	○	○	○	○	
	Latching action	○	○	○	○	○	○	○	○	○	
	Delayed action	—	○	—	—	—	—	—	—	—	
	Back check	—	—	—	—	—	—	—	—	—	
	Closing force adjustment (#1~4)	○	○	—	—	—	—	○	○	○	
	Closing force adjustment (#3~6)	—	—	—	—	○	—	—	—	—	

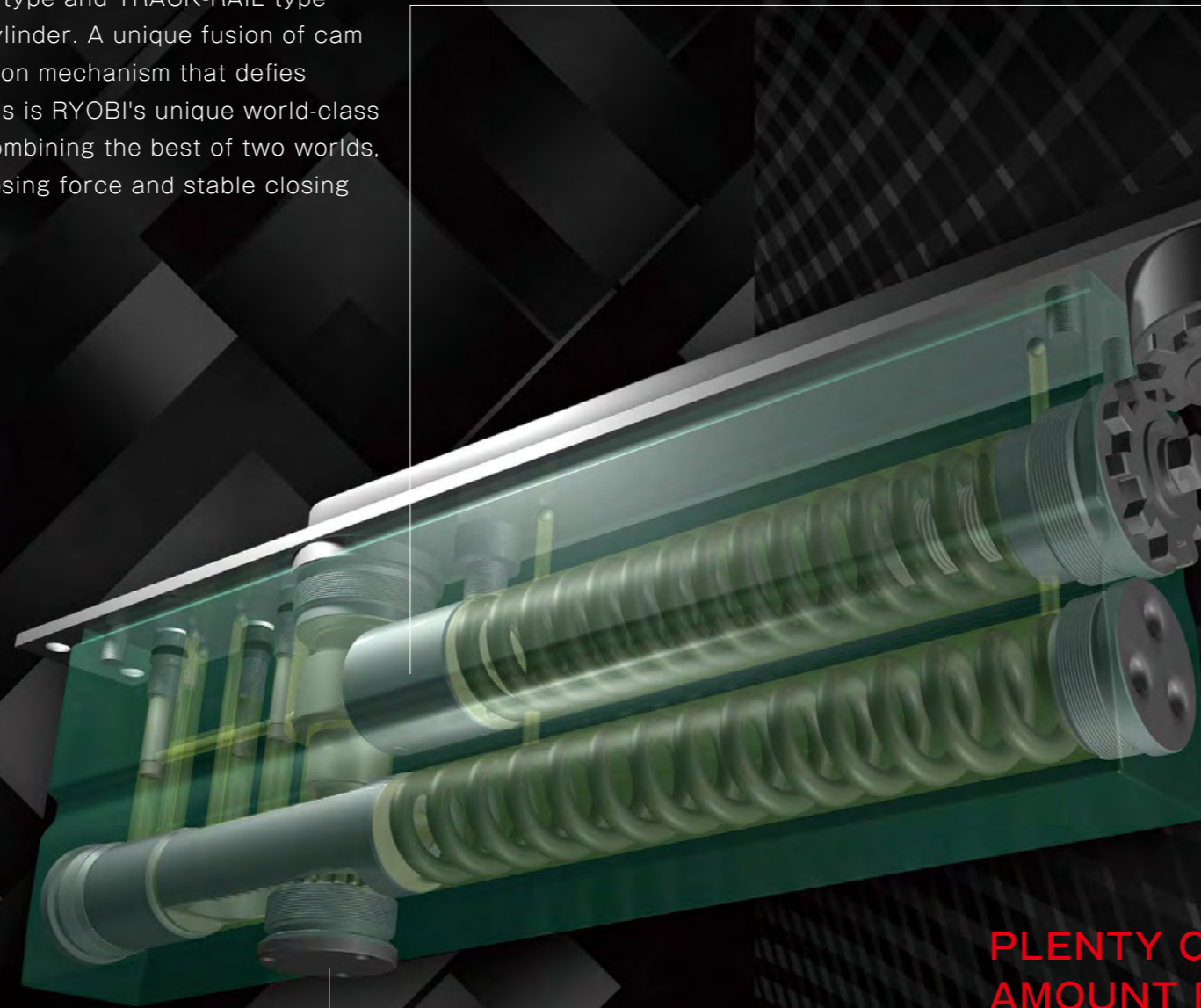
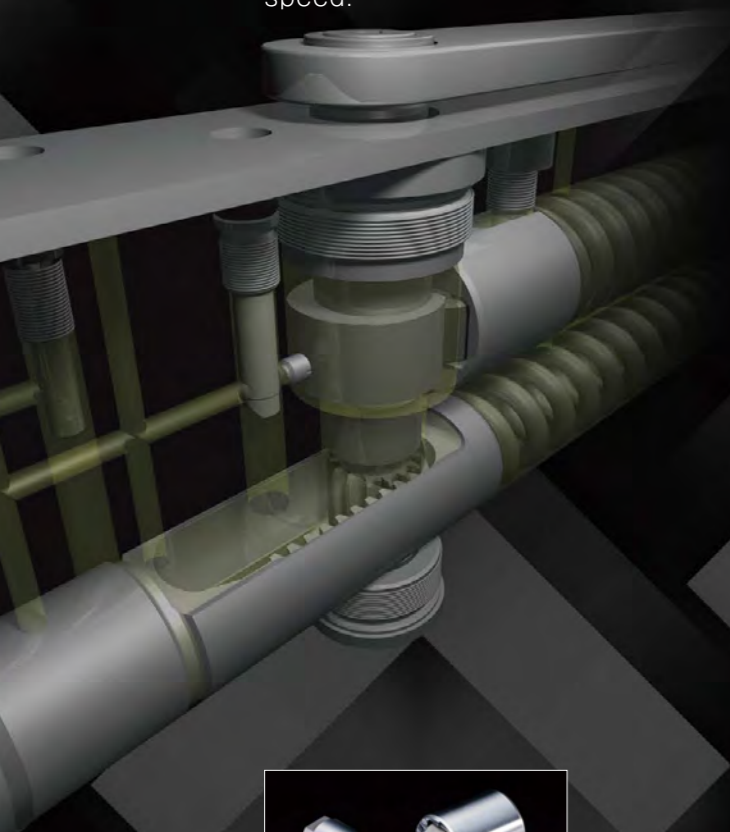
* 100Kg (Max.Weight)

THE DOUBLE CYLINDER

World's only double cylinder that changes conventional wisdom.

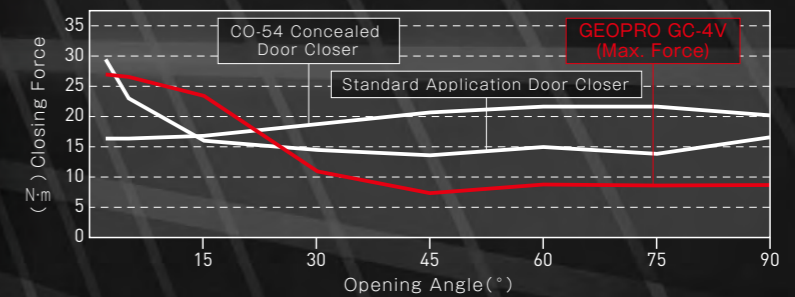
The GEOPRO series CONCEALED type and TRACK-RAIL type feature the world's only double cylinder. A unique fusion of cam action mechanism and rack & pinion mechanism that defies conventional industry wisdom. This is RYOBI's unique world-class double cylinder mechanism. By combining the best of two worlds, we have achieved both strong closing force and stable closing speed.

CAM ACTION MECHANISM



STRONG CLOSING FORCE

In spite of concealed closer, strong closing force are achieved like the one for the conventional arm and link type surface mounted door closer.



RACK & PINION MECHANISM

CAM ACTION MECHANISM

DOUBLE CYLINDERS TYPE CONCEALED CLOSER

MERIT

Strong closing force can be achieved in spite of concealed door closer

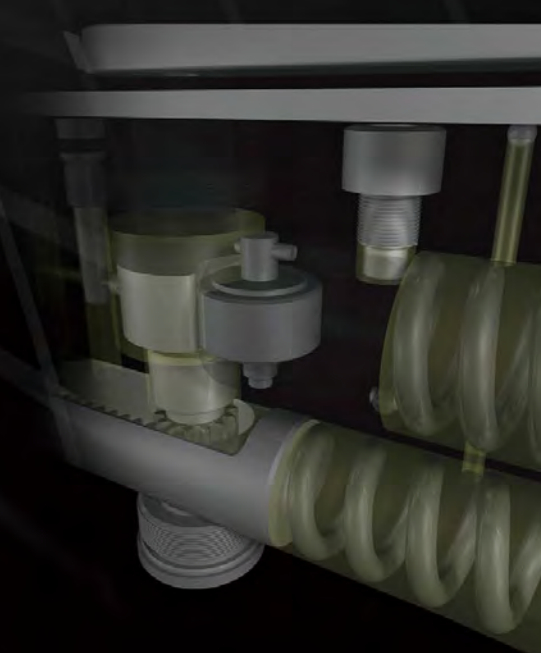
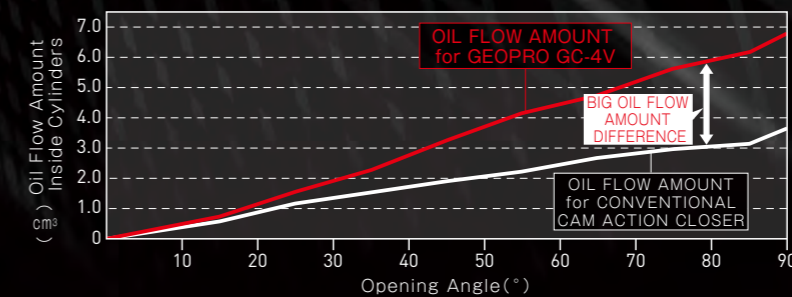
RACK & PINION MECHANISM

MERIT

Stable closing speed
Better condition against overload

PLENTY OF OIL FLOW AMOUNT FOR PRECISE AND STABLE CLOSING SPEED

The below graph shows the comparison of oil flow amount. GC-4V controls the closing speed at Rack & Pinion mechanism section. As hydraulic control is done with plenty of oil, precise, smooth, and stable closing speed can be achieved. This greatly improves the unstable speed control, which is often happened on door closers only with cam action mechanism.



FUNCTION OF THE DOUBLE CYLINDER

High quality features and benefits that make stable closing speed possible

Spring Power Adjustment

1st Closing Speed Control Valve

Latching Action Control Valve

2nd Closing Speed Control Valve

One Touch Joint Function

CONCEALED TYPE
GC-4V

One Touch Joint Function

Arm and Slider can be jointed by hand without tool. This shortens the installation time.



Spring Power Adjustment

By this function, you can set the best closing power according to the usage circumstances.

Latching Action

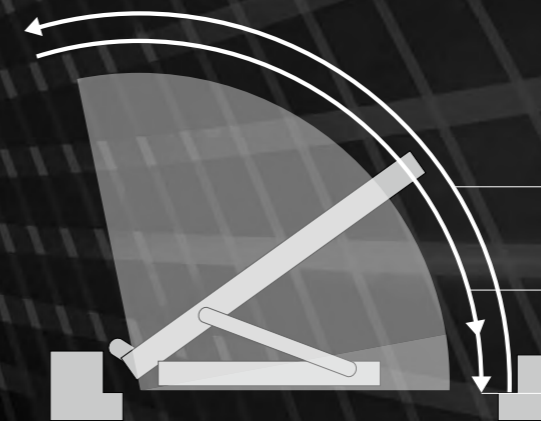
This ensure to close the door firmly by increasing the closing speed at 2 degree before closed position.

1st and 2nd Speed Control Valves

These independent valves enable you to adjust the closing speed according to the usage circumstances.

Delayed Action

An optional delayed action feature adjusted by means of an independent valve. Once set, the door-when opened beyond to degrees enters into a delayed mode allowing additional time before the closing.



The door can be opened with small force, and can be surely closed with ideal and stable closing speed.

Light opening Force

Stable closing speed

Reliable Latching Action

TRACK-RAIL TYPE
GT-4V



- ▣ "Concealed" - the ultimate in design
- ▣ "Strong closing force" and "Stable closing speed"
- ▣ Safe and comfortable barrier-free design
- ▣ Quiet operation
- ▣ Easier installation by one touch joint function
- ▣ Stronger and stable hold-open

"Concealed" - the ultimate in design. Concealed door closer*

In order to achieve the ultimate concealed design, we upgraded the form and function to a level higher than ever before.



GC-4V



- ▣ Produces a flat appearance you will never tire of looking at
- ▣ “Strong closing force” and “Stable closing speed”
- ▣ Safe and comfortable barrier-free design
- ▣ Three color variations
- ▣ Quiet operation

Slimmer and more simple. **TRACK-RAIL** type door closer

Beautiful form with a limited protrusion from the door and frame. Equipped with design and functionality to adapt to various types of modern architecture.



White

Black

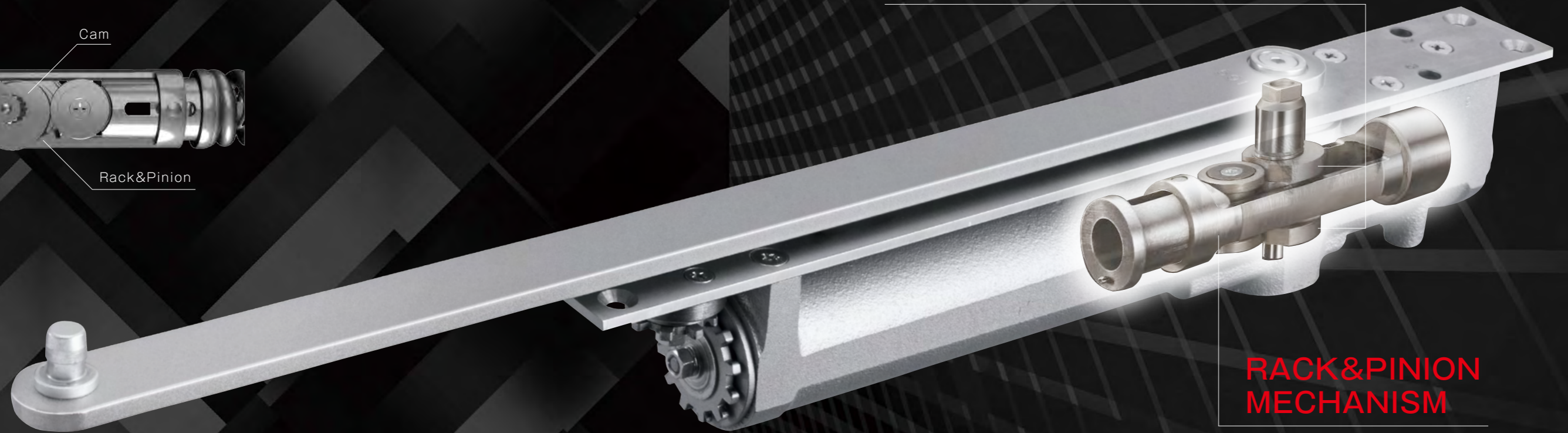
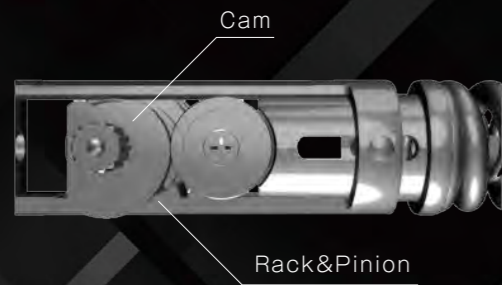
Silver

GT-4V

THE TWIN-CAM

Newly developed technology cam & pinion mechanism realizes new world for door operation.

Following to GC-4V carrying double cylinder, GC-6V carrying World's only Twin-Cam mechanism is announced. Harmonization of Twin-Cam action and rack & pinion realize "Stronger closing force", "Less required opening force", and "Stable operation" GC-6V meets 180Kg heavy duty door used at theater, museum, hall, and etc.



CAM ACTION MECHANISM

RACK&PINION MECHANISM

TWIN-CAM TYPE CONCEALED DOORCLOSER

MERIT

Stronger closing force can be achieved in spite of concealed door closer

MERIT

Stable closing speed
Better condition against overload

CAM ACTION MECHANISM

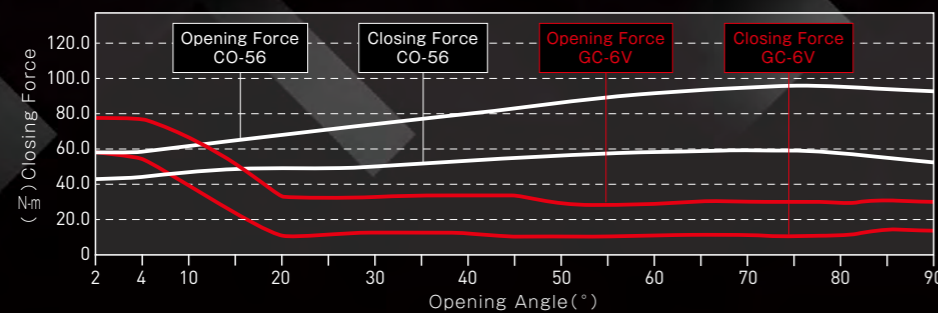
RACK&PINION MECHANISM

Less required opening force

Required opening force is less by 60% than rack & pinion concealed closer CO-56 at 45 degrees door opening angle.

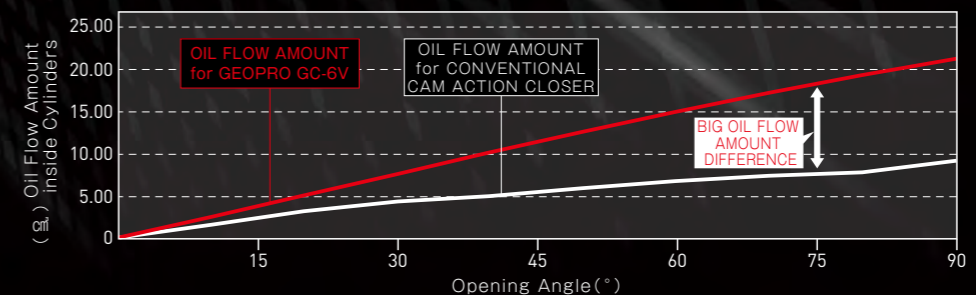
Stronger closing force

Closing force is increase by 36% than rack & pinion concealed closer CO-56 at 2 degrees door opening angle.



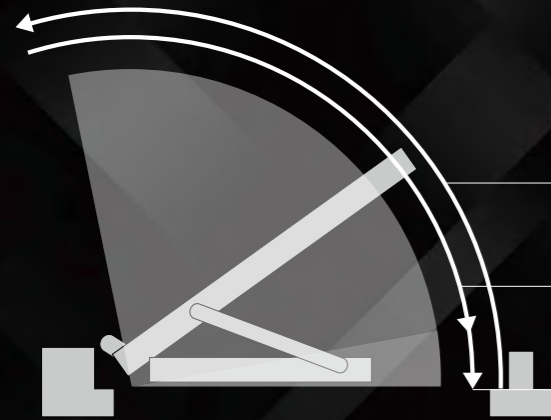
PLENTY OF OIL FLOW AMOUNT FOR PRICISE AND STABLE CLOSING SPEED

The bellow graph shows the comparison of oil flow amount. GC-6V controls the closing speed at Rack & Pinion mechanism section. As hydraulic control is done with plenty of oil, precise, smooth, and stable closing speed can be achieved. This greatly improves the unstable speed control, which is often happened on door closers only with can action mechanism.



FUNCTION OF THE TWIN-CAM

High quality features and benefits that make stable closing speed possible



The door can be opened with small force, and be surely closed with ideal and stable closing speed.

Light opening Force

Stable closing speed

Reliable Latching Action

One Touch Joint Function

Arm and Slider can be jointed by hand without tool. This shortens the installation time.



Spring Power Adjustment

By this function, you can set the best closing power according to the usage circumstances.

1st and 2nd Speed Control Valves

These independent valves enable you to adjust the closing speed according to the usage circumstances.

Latching Action (3rd speed)

This ensure to close door firmly by increasing the closing speed at 5 degrees before closed position.

Latching Action (3rd speed) Control Valve

2nd Closing Speed Control Valve

One Touch Joint Function

1st Closing Speed Control Valve

Spring Power Adjustment



CONCEALED TYPE
GC-6V



Heavy Duty "Concealed" up to 180Kg - the ultimate in design.

In order to achieve the ultimate concealed design, we upgraded the form and function to a level higher than ever.

- ▣ "Concealed" - the ultimate design
- ▣ "Strong closing force" and "Stable closing speed"
- ▣ Safe and comfortable barrier-free design
- ▣ Quiet operation
- ▣ Easier installation by one touch joint function
- ▣ Stronger and stable hold-open



GC-6V

CONCEALED TYPE

Model Chart

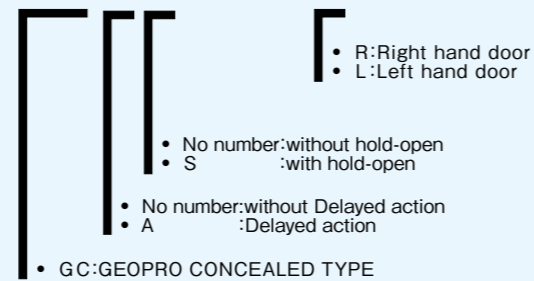
Standard Application

Model No.				Applicable door size		Thickness of applicable door (mm)			
Without hold-open		With hold-open		Width (mm)	Weight (kg)	Steel door		Wooden door	
Right hand	Left hand	Right hand	Left hand			Standard installation	Top Jamb installation	Standard installation	Top Jamb installation
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	800 to 1050	15 to 100	40 or more	40 or more	45 or more	40 or more
GCA-4V-R	GCA-4V-L	GCAS-4V-R	GCAS-4V-L						

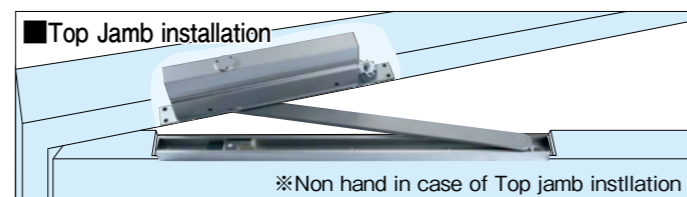
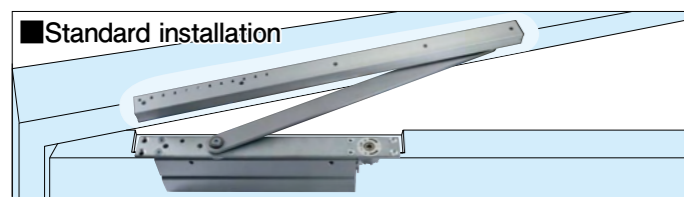
Function

Specification	Installation		Standard	Top Jamb
	Handing		Select handing, Right hand or Left hand.	
	Material		Aluminum Alloy	
Adjustable range of Max. opening angle	Offset hung	case: 18 to 25mm offset	75° to 105°	68° to 105°
		Center hung	73° to 109°	73° to 109°
	Offset hung (180° opening)	98° to 180°	92° to 180°	
Performance	Durability		500,000 cycles	
Standard function		1st speed Adjustment 2nd speed Adjustment Latching action Delayed action ※ GCA-4V GCAS-4V Closing force adjustment		

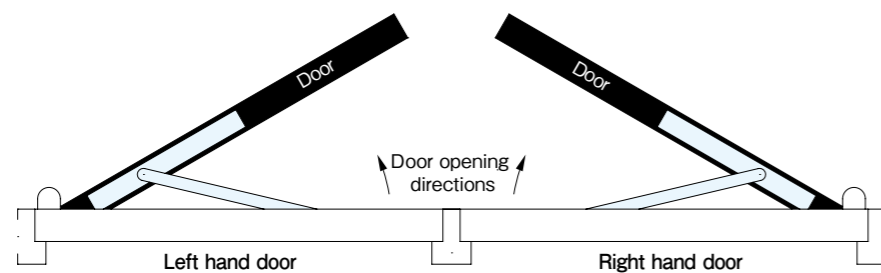
No. GCAS-4V-L



Standard installation and Top Jamb installation



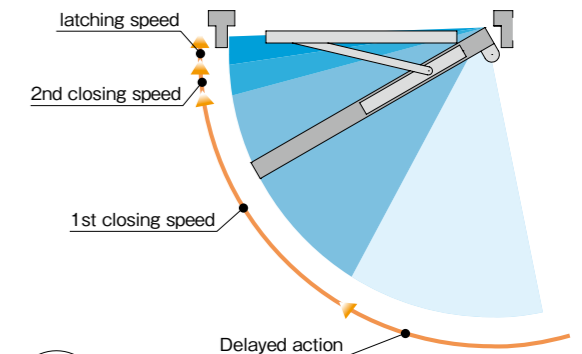
Left hand or Right hand



Specification and Adjustment

1st and 2nd speed control valves

- These independent valves enable you to adjust the closing speed according to the usage circumstances.

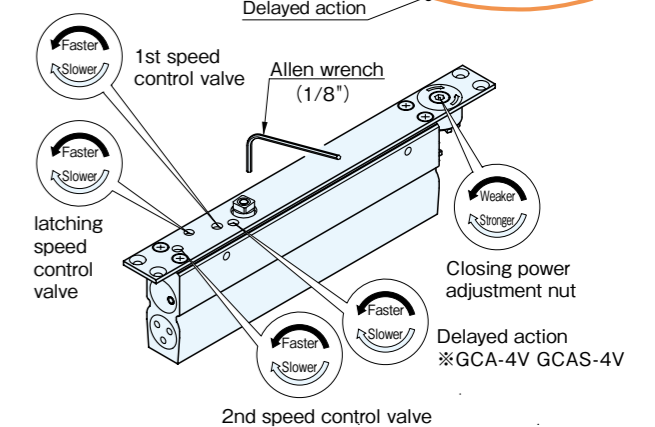


Latching action

- This ensure to close the door firmly by increasing the closing speed at 2 degree before closed position.

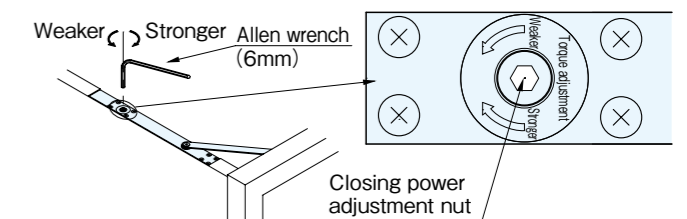
Delayed action

- An optional delayed action feature adjusted by means of an independent valve. Once set, the door when opened beyond to degrees enters into a delayed mode allowing additional time before the closing.



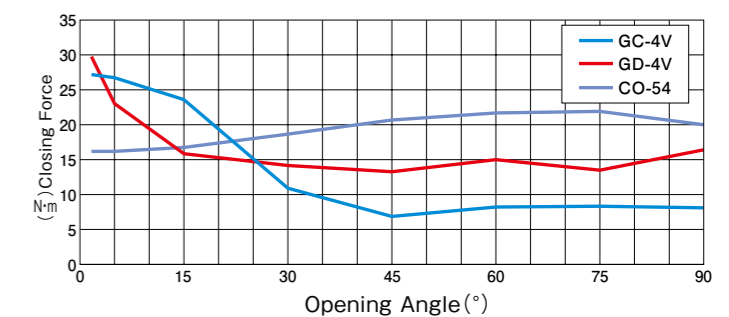
Torque adjustment function

- Closing force appropriate to size, weight and environment of the door is obtained by this function.
- This function is operated only by turning the torque adjustment nut.
- Factory preset torque has been adjusted for door size of 950 x 2100 (mm).
- When increasing the closing force, turn the torque adjustment nut clockwise, and when decreasing the force, turn the nut counterclockwise.



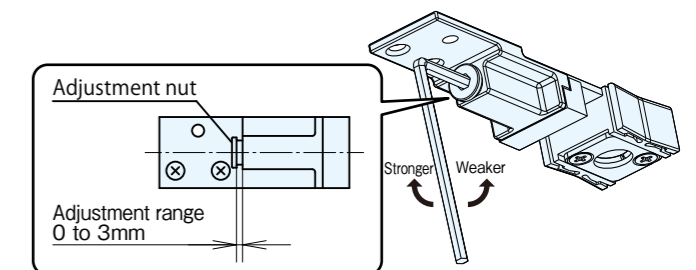
- Adjusting closing power according to table.

Max. Door Width (mm)	Max. Door Weight (kg)	Turns of closing power adjustment nut	
		from Preset	from Min.
800	30	-6	0
900	45	-4	+2
950	65	0	+6
1050	100	+6	+12



Hold-open device (ES stopper)

- More strength and more hold-open power is realized with newly developed ES stopper.
- Hold-open force can be adjusted by turning the adjustment nut.
- Reference for adjustment.
- Adjustable range of hold-open force is between 50 and 90N·m in case of 950 x 2100mm (W X H). Turn the adjustable nut clockwise to increase hold-open force, counterclockwise to decrease the force.

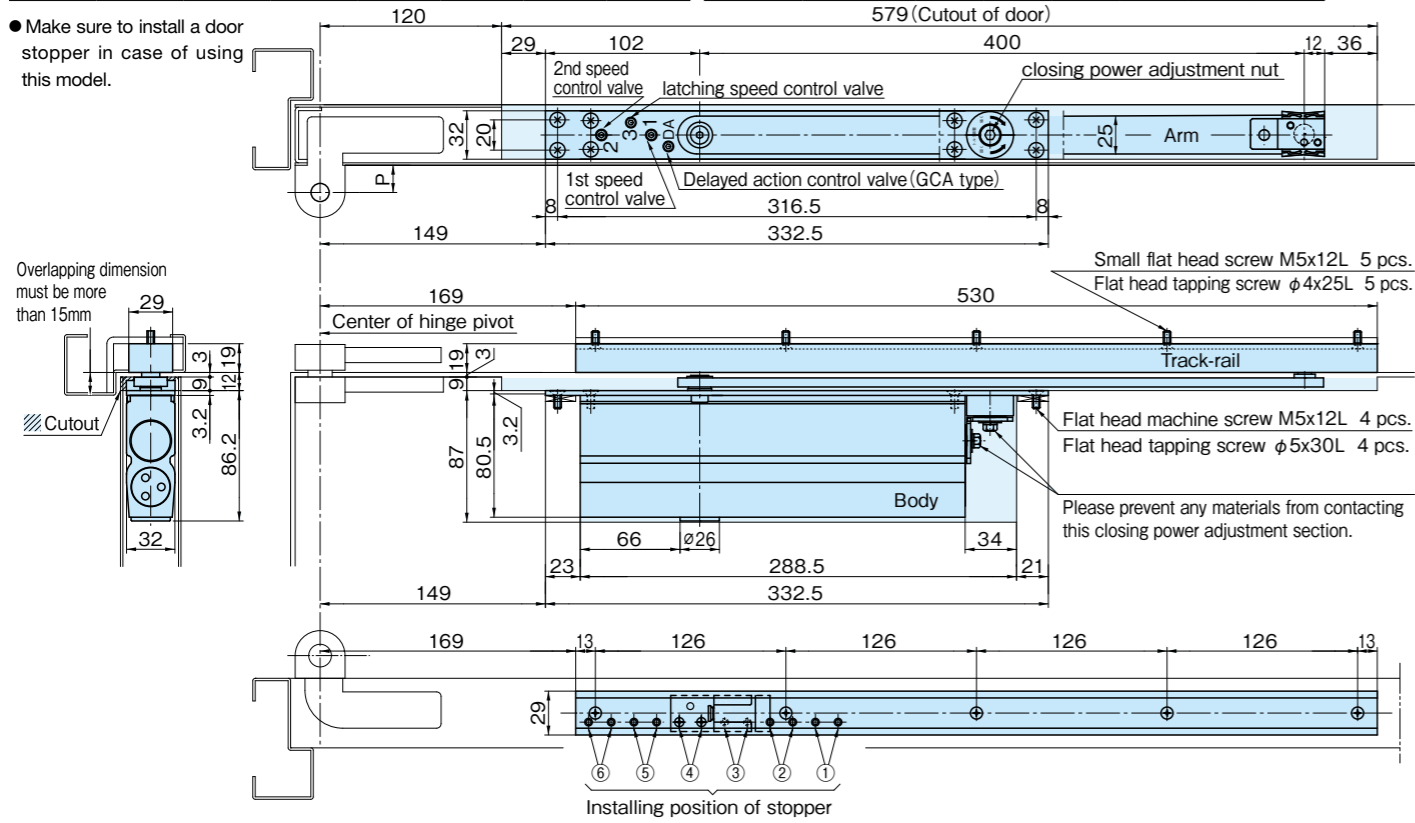


Offset hung (105° opening)

Standard installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P* dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width (mm)	Weight (kg)	Steel door	Wooden door			①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand	800	15	40	45	Maximum	18	75°	80°	86°	91°	98°	105°
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	to 1050	to 100	or more	or more	Opening angle	25	75°	81°	86°	92°	98°	105°
GCA-4V-R	GCA-4V-L	GCAS-4V-R	GCAS-4V-L						20	75°	81°	86°	91°	98°	105°

● Make sure to install a door stopper in case of using this model.

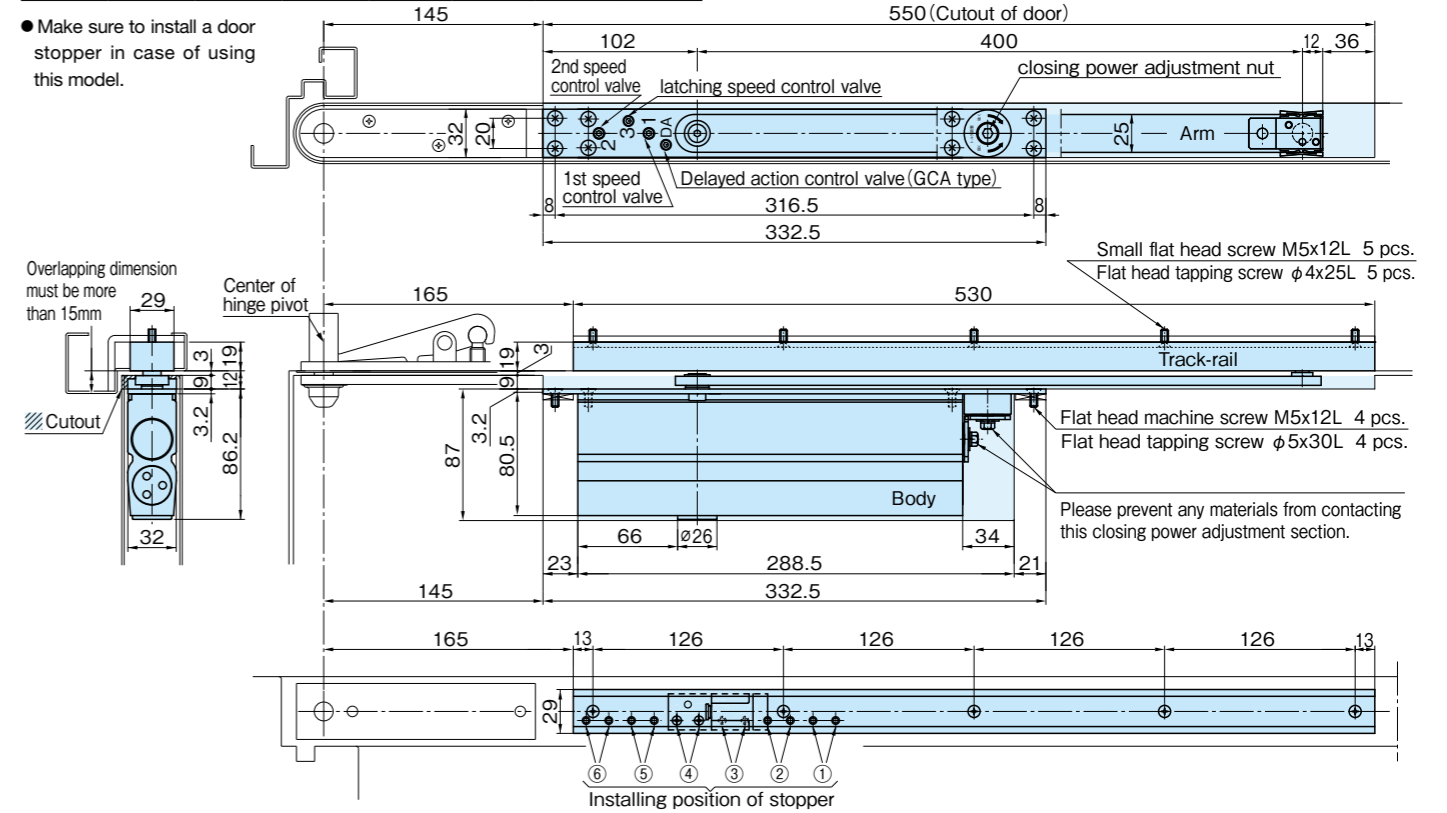


Center hung (110° opening)

Standard installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width (mm)	Weight (kg)	Steel door	Wooden door			①	②	③	④	⑤
Right hand	Left hand	Right hand	Left hand	800	15	40	45	Maximum	73°	79°	86°	93°	100°	109°
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	to 1050	to 100	or more	or more	Opening angle						
GCA-4V-R	GCA-4V-L	GCAS-4V-R	GCAS-4V-L											

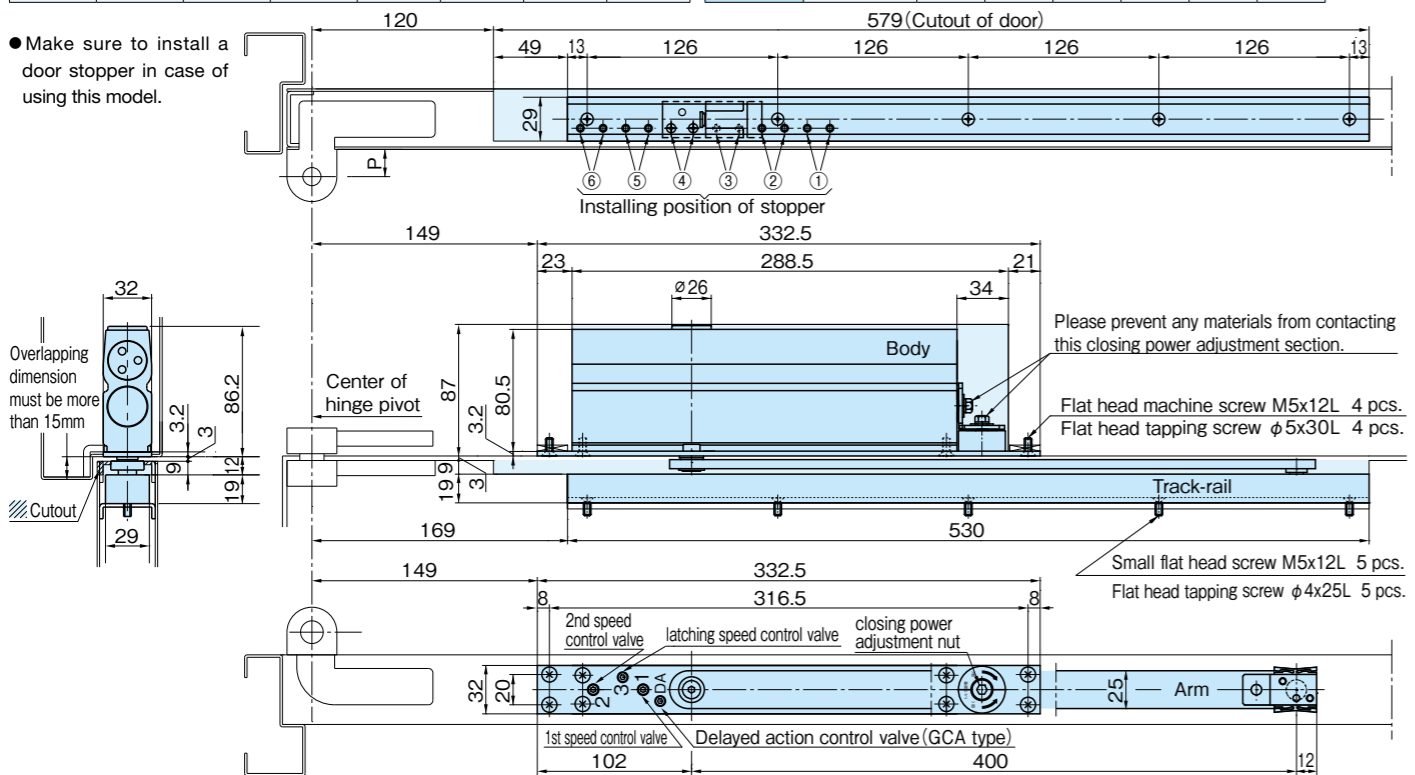
● Make sure to install a door stopper in case of using this model.



Top Jamb installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P* dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width (mm)	Weight (kg)	Steel door	Wooden door			①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand	800	15	40	40	Maximum	18	68°	74°	81°	88°	96°	105°
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	to 1050	to 100	or more	or more	Opening angle	25	68°	74°	80°	87°	95°	104°
GCA-4V-R	GCA-4V-L	GCAS-4V-R	GCAS-4V-L						20	68°	74°	81°	88°	96°	105°

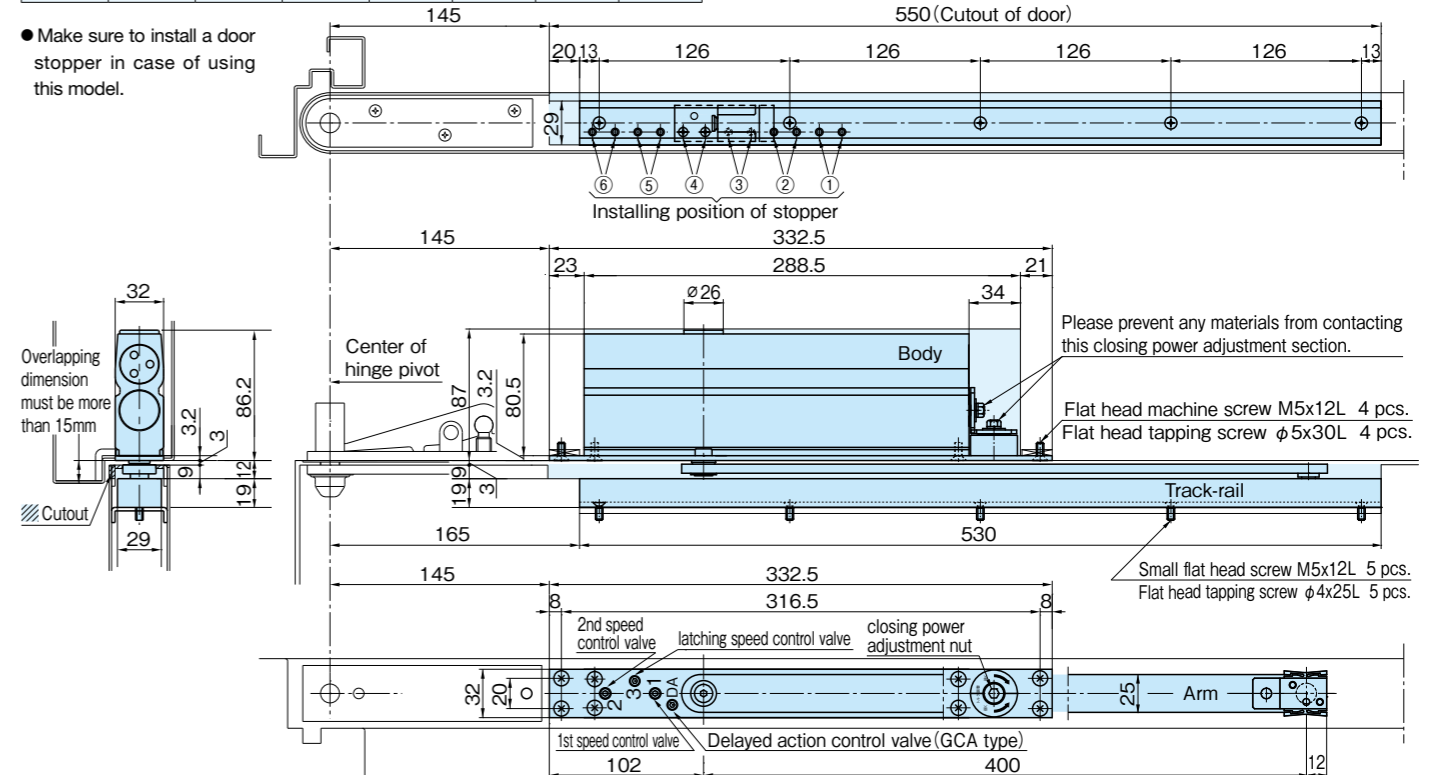
● Make sure to install a door stopper in case of using this model.



Top Jamb installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width (mm)	Weight (kg)	Steel door	Wooden door			①	②	③	④	⑤
Right hand	Left hand	Right hand	Left hand	800	15	40	40	Maximum	73°	79°	86°	93°	100°	109°
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	to 1050	to 100	or more	or more	Opening angle						
GCA-4V-R	GCA-4V-L	GCAS-4V-R	GCAS-4V-L											

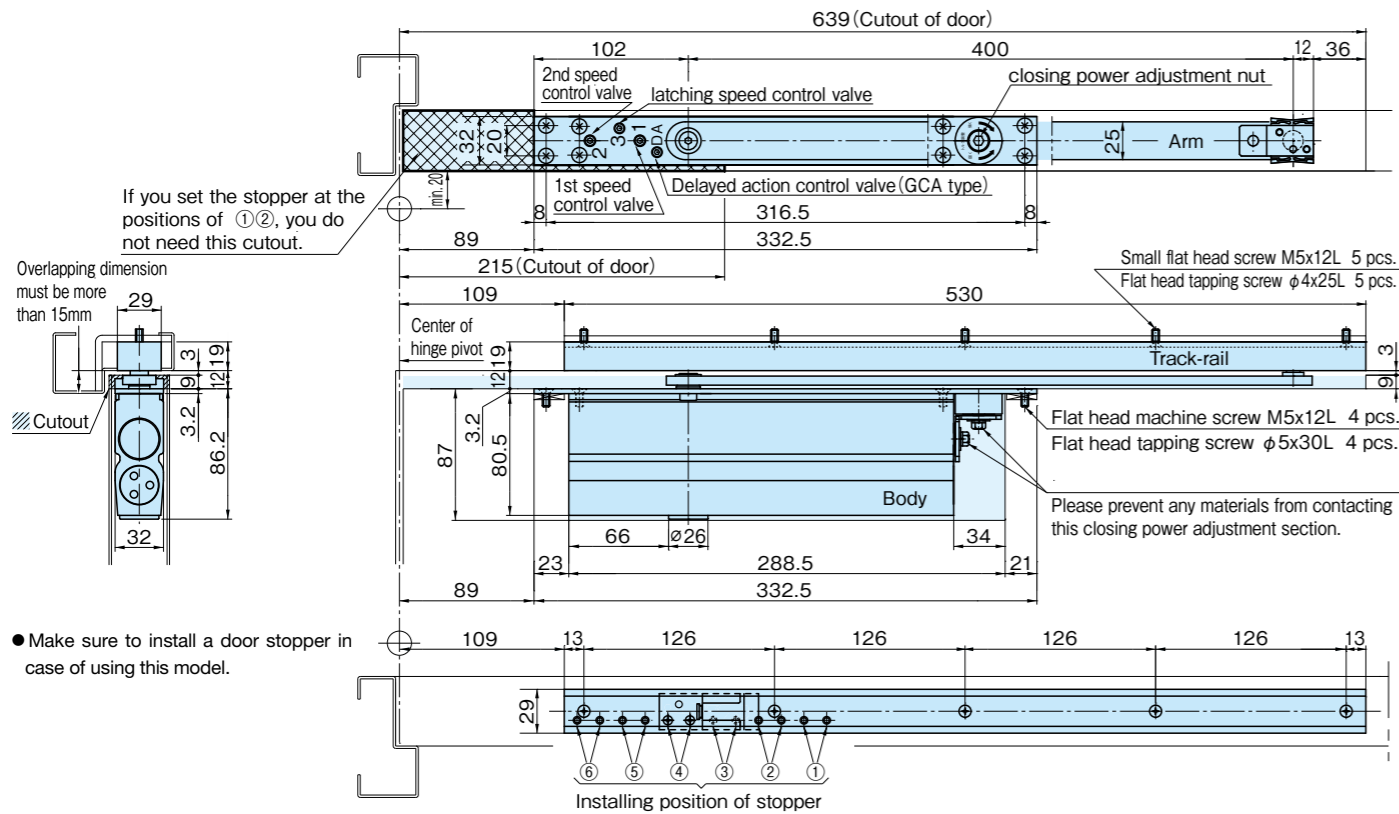
● Make sure to install a door stopper in case of using this model.



Offset hung (180° opening)

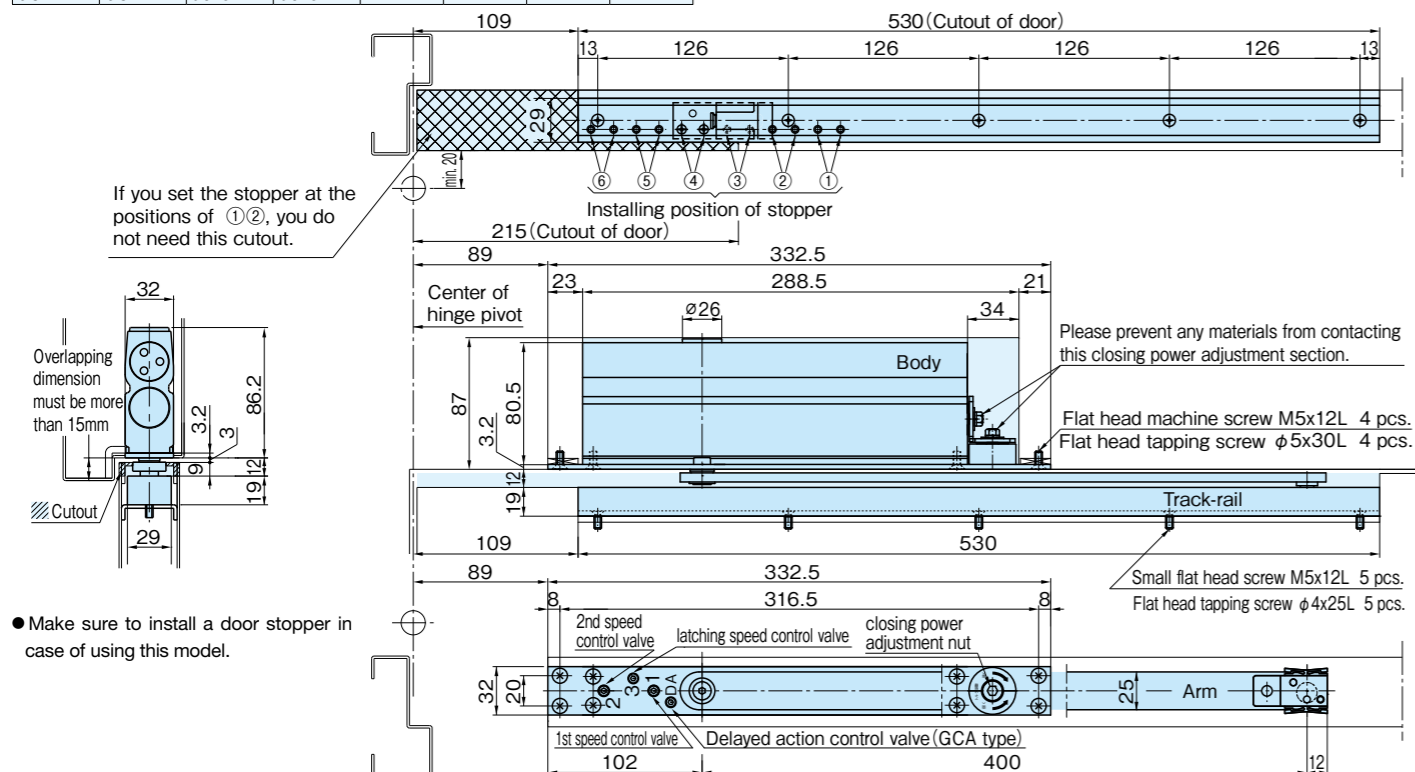
Standard installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	Hold-open device, stopper device installation position					
Without hold-open	With hold-open			Width (mm)	Weight (kg)	Steel door	Wooden door		①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand					Maximum Opening angle	98°	107°	117°	129°	147°	More than 180°
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	800	15	40	45							
GCA-4V-R	GCA-4V-L	GCA-4V-R	GCA-4V-L	to 1050	to 100	or more	or more							

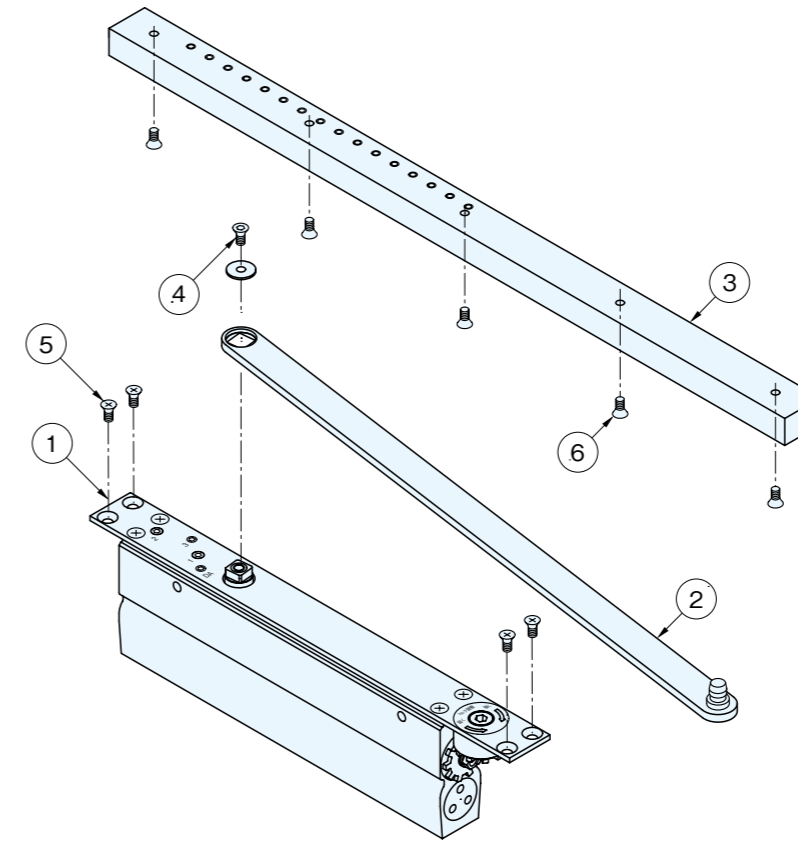


Top Jamb installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	Hold-open device, stopper device installation position					
Without hold-open	With hold-open			Width (mm)	Weight (kg)	Steel door	Wooden door		①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand					Maximum Opening angle	92°	102°	113°	127°	147°	More than 180°
GC-4V-R	GC-4V-L	GCS-4V-R	GCS-4V-L	800	15	40	40							
GCA-4V-R	GCA-4V-L	GCA-4V-R	GCA-4V-L	to 1050	to 100	or more	or more							



Components



①	Closer body
②	Arm
③	Track-rail
④	Hexagon socket head screw M6 x 16L
⑤	Flat head machine screw M5x12L 4 pcs. Flat head tapping screw φ 5x30L 4 pcs.
⑥	Small flat head screw M5x12L 5 pcs. Flat head tapping screw φ 4x25L 5 pcs.

CONCEALED TYPE

Model Chart

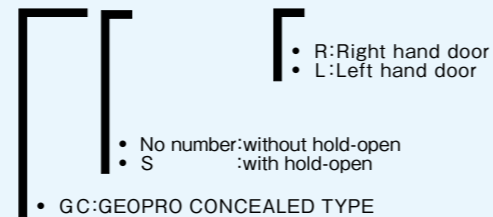
Standard Application

Model No.				Applicable door size		Thickness of applicable door (mm)			
Without hold-open		With hold-open				Steel door		Wooden door	
Right hand	Left hand	Right hand	Left hand	Width (mm)	Weight (Kg)	Standard installation	Top jamb installation	Standard installation	Top jamb installation
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L	950 to 1500	40 to 180	50 or more	45 or more	50 or more	45 or more

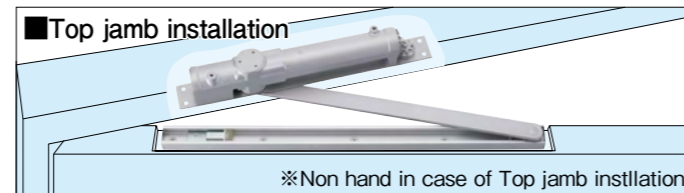
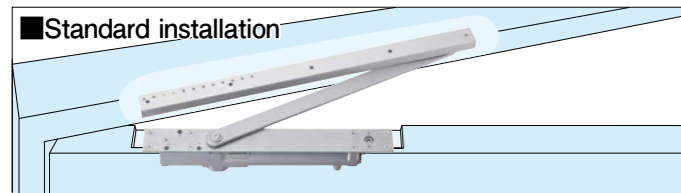
Function

Specification	Application		Standard	Top jamb
	Handing		Select handing, Right hand or Left hand.	
	Material		Iron casting	
Adjustable range of Max. opening angle	Offset hung	case: 20 to 40mm offset	75° to 106°	67° to 107°
	Center hung		73° to 107°	73° to 107°
	offset hung (180° opening)		100° to 180°	100° to 180°
Performance	Durability		500,000 cycles	
Standard Function		1st speed Adjustment 2nd speed Adjustment Latching action (3rd speed Adjustment) Closing Force adjustment		

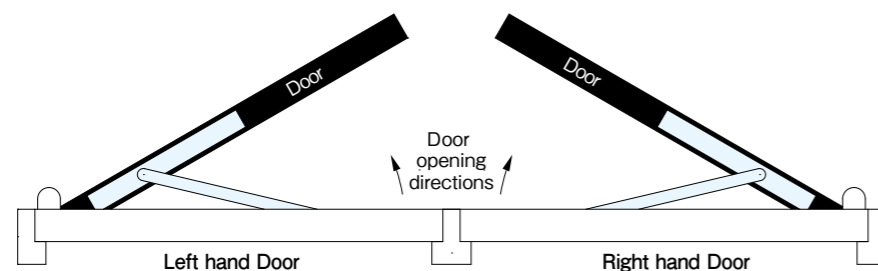
No. GCS-6V-L



Standard installation and Top jamb installation



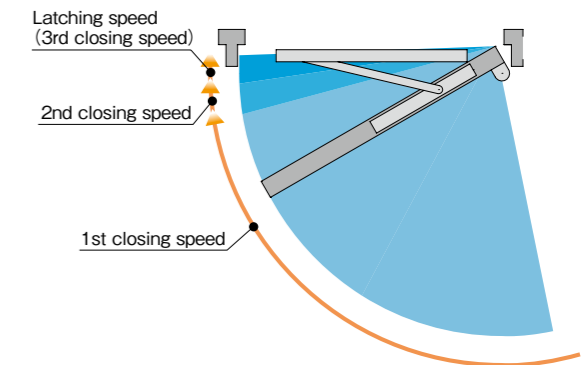
Left hand or Right hand



Specification and Adjustment

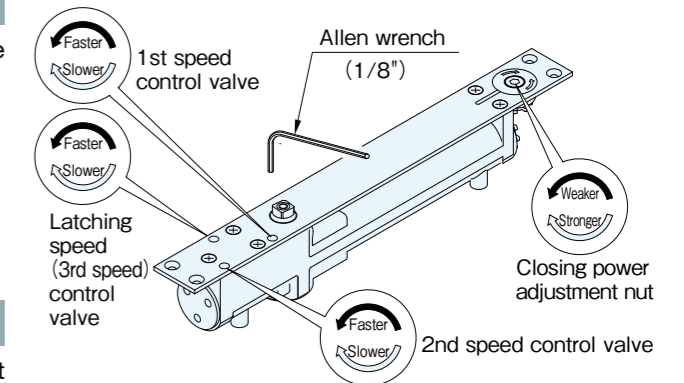
1st and 2nd speed control valves

- These independent valves enable you to adjust the closing speed according to the usage circumstances.



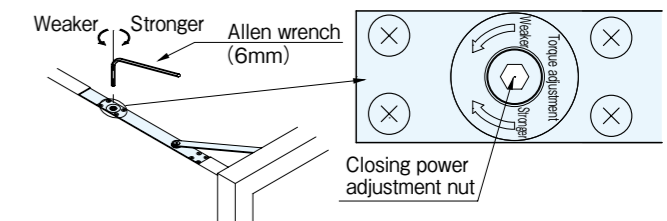
Latching action

- This ensure to close the door firmly by increasing the closing speed at 5 degree before closed position.



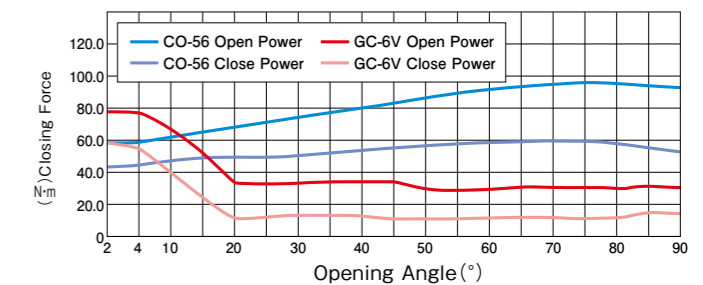
Torque adjustment function

- Closing force appropriate to size, weight and environment of the door is obtained by this function.
- This function is operated only by turning the torque adjustment nut.
- Factory preset torque has been adjusted for door size of 1050 x 2400 (mm)
- When increasing the closing force, turn the torque adjustment nut clockwise, and when decreasing the force, turn the nut counterclockwise.



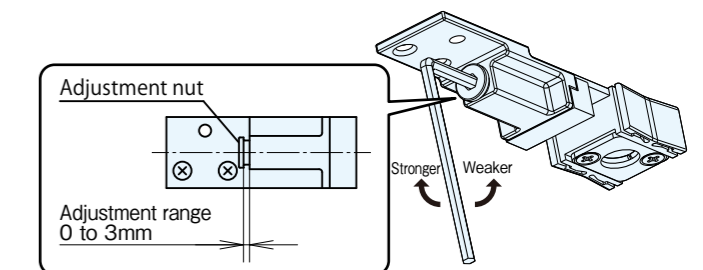
- Adjusting closing power according to table

Max. Door Width (mm)	Max. Door Weight (Kg)	Turns of closing power adjustment bolt	
		from Preset	from Min.
950	65	-7	0
1050	85	0	7
1200	120	9	16
1500	180	26	33



Hold-open device (ES stopper)

- More strength and more hold-open power is realized with newly developed ES stopper.
- Hold-open force can be adjusted by turning the adjustment nut.
- Reference for adjustment.
- Adjustable range of hold-open force is between 50 and 90N·m in case of 950 x 2100mm (W x H). Turn the adjustable nut clockwise to increase hold-open force, counterclockwise to decrease the force.

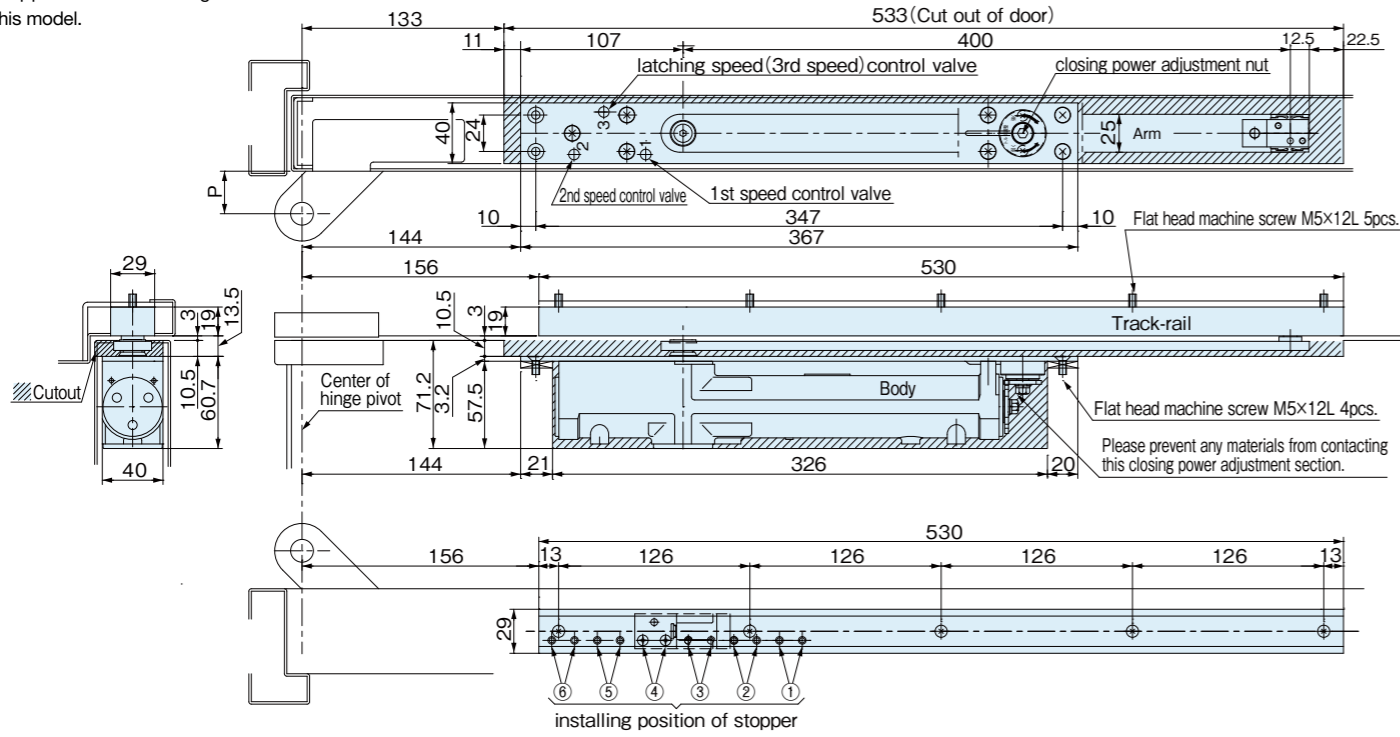


Offset hung(105° Opening)

Standard installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P*dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width(mm)	Weight(Kg)	Steel door	Wooden door			①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand	950 to 1500	40 to 180	50 or more	50 or more	Maximum opening angle	28	77°	82°	87°	93°	99°	105°
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L						40	78°	82°	87°	92°	97°	103°
									20	77°	82°	87°	93°	99°	106°

● Make sure to install a door stopper in case of using this model.

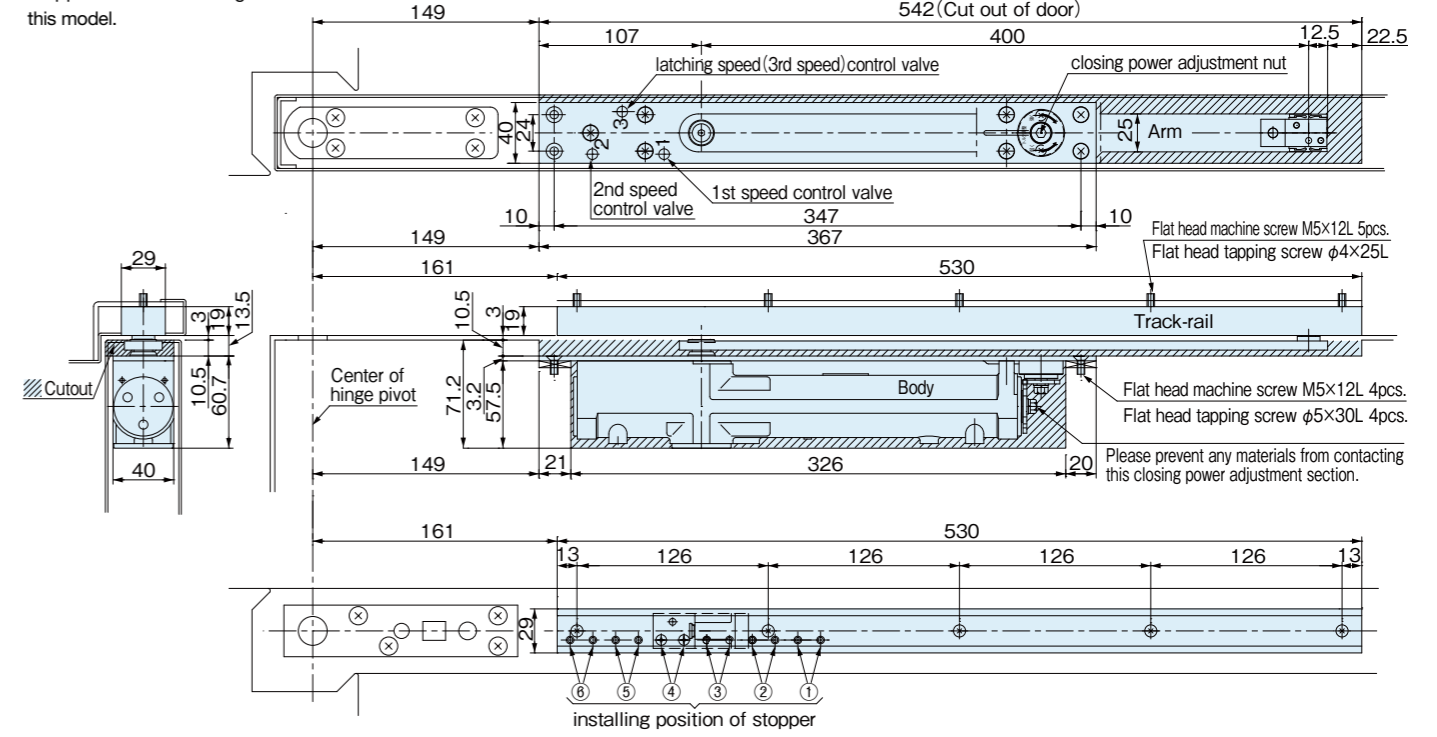


Centert hung(110° Opening)

Standard installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P*dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width(mm)	Weight(Kg)	Steel door	Wooden door			①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand	950 to 1500	40 to 180	50 or more	50 or more	Maximum opening angle	28	77°	82°	87°	93°	99°	105°
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L						40	78°	82°	87°	92°	97°	103°
									20	77°	82°	87°	93°	99°	106°

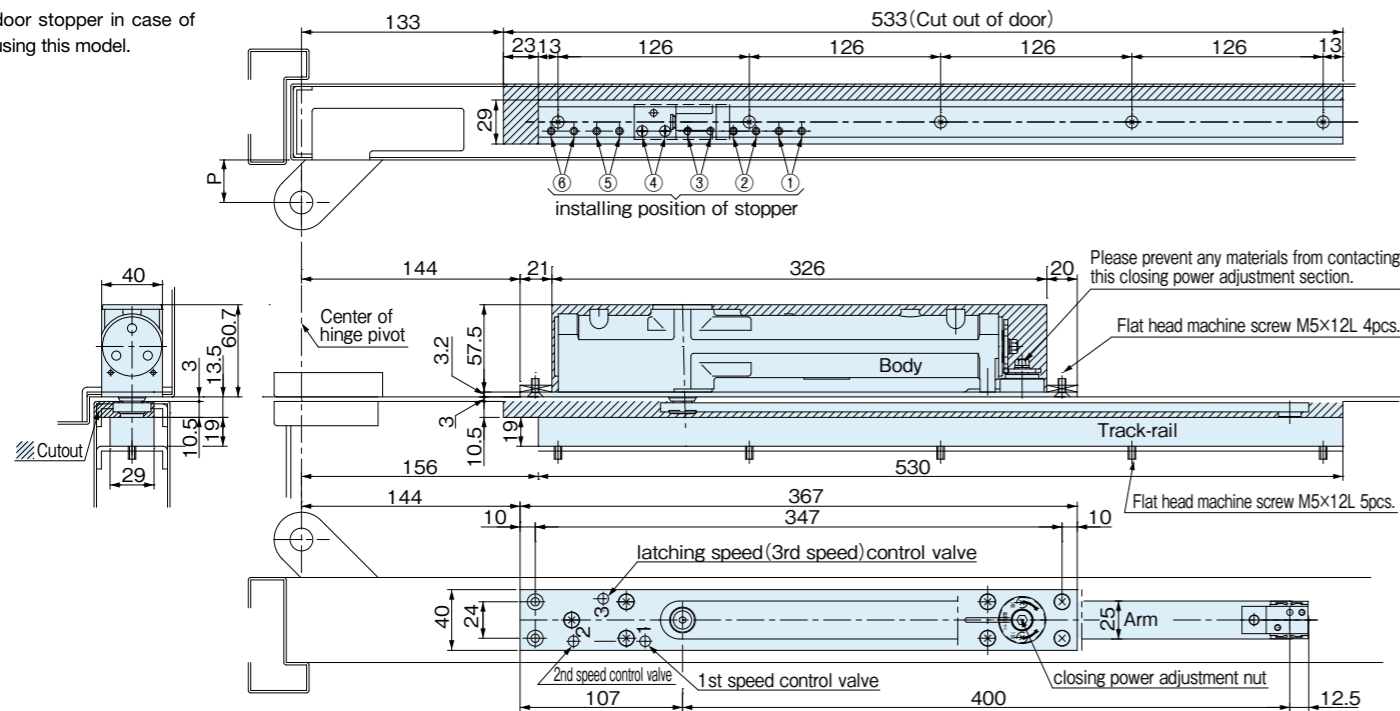
● Make sure to install a door stopper in case of using this model.



Top Jamb installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P*dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width (mm)	Weight (kg)	Steel door	Wooden door			①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand	950 to 1500	40 to 180	45 or more	45 or more	Maximum opening angle	28	68°	75°	82°	89°	97°	107°
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L						40	67°	73°	80°	87°	96°	105°
									20	69°	76°	82°	90°	98°	107°

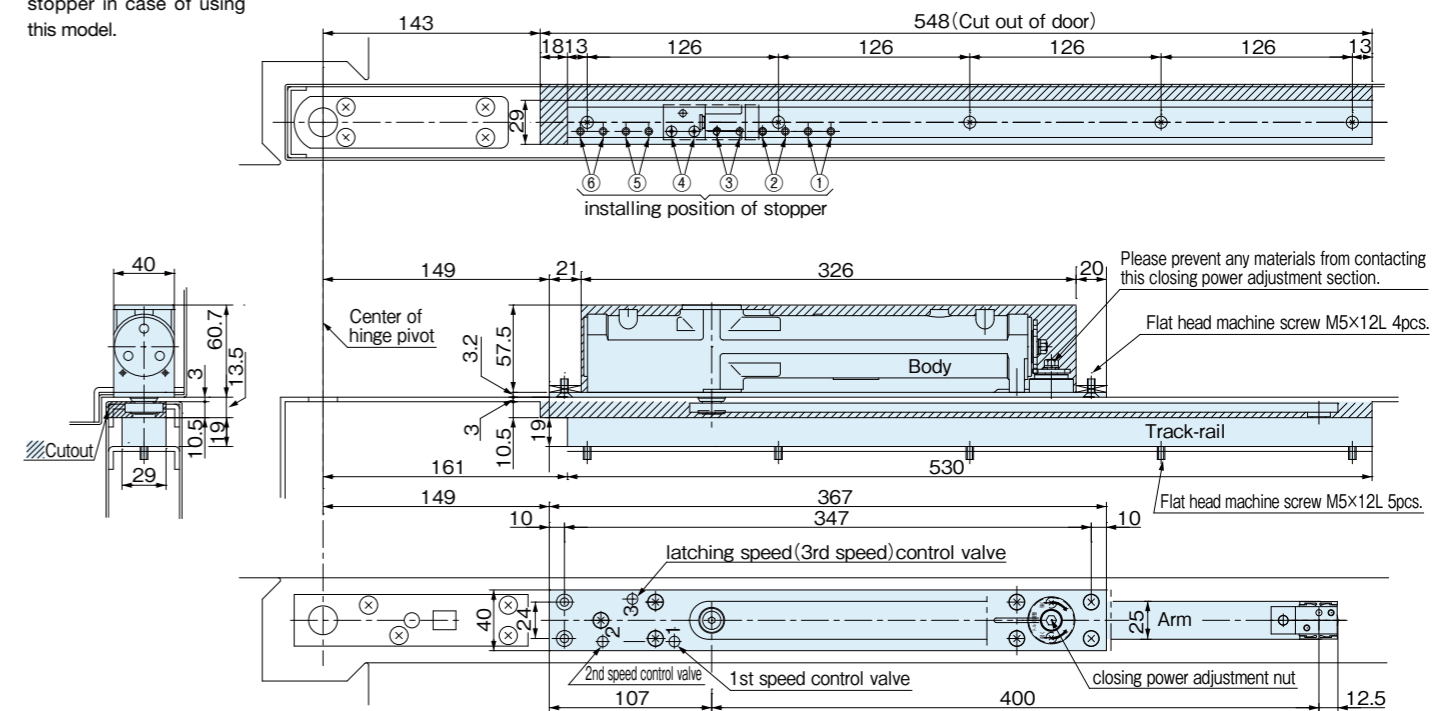
● Make sure to install a door stopper in case of using this model.



Top Jamb installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P*dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width(mm)	Weight(Kg)	Steel door	Wooden door			①	②	③	④	⑤	⑥
Right hand	Left hand	Right hand	Left hand	950 to 1500	40 to 180	45 or more	45 or more	Maximum opening angle	28	68°	75°	82°	89°	97°	107°
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L						40	67°	73°	80°	87°	96°	105°
									20	69°	76°	82°	90°	98°	107°

● Make sure to install a door stopper in case of using this model.



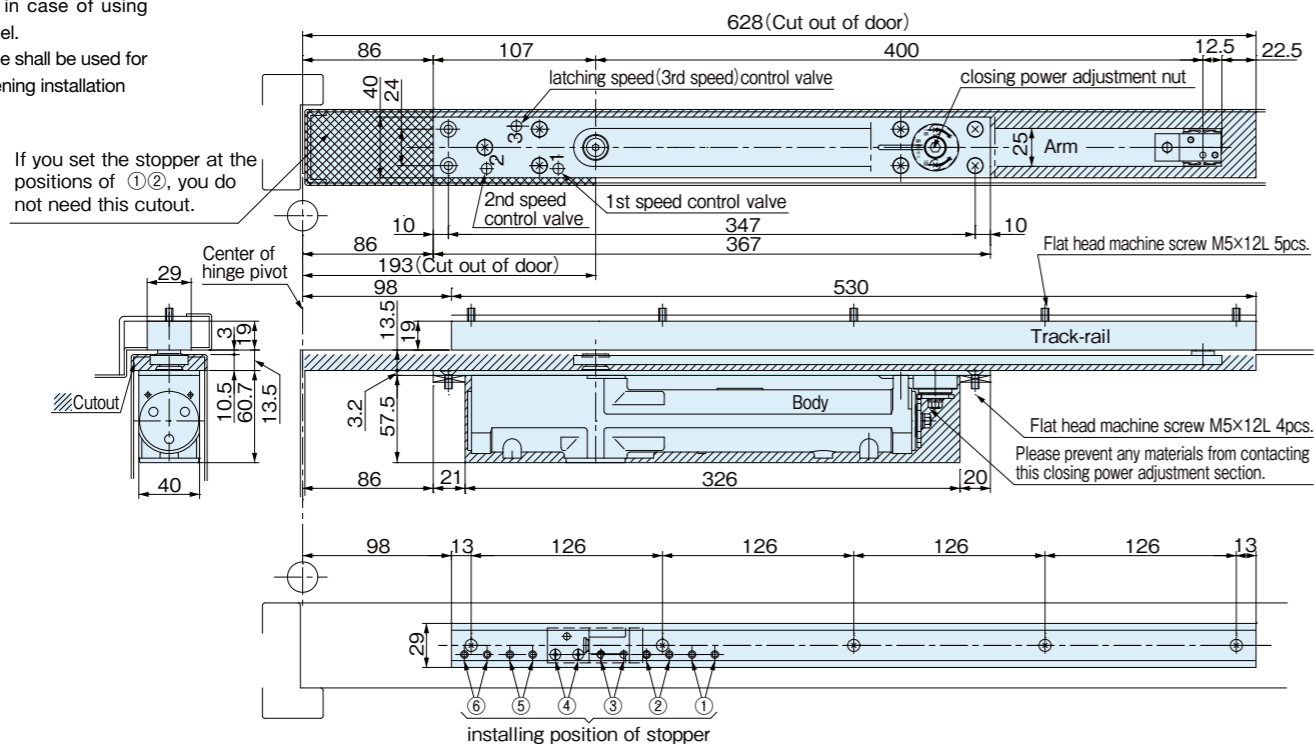
Offset hung(180° Opening)

Standard installation

Model No.				Applicable door size		Applicable door thickness (mm)		Type	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width(mm)	Weight(Kg)	Steel door	Wooden door							
Right hand	Left hand	Right hand	Left hand	950 to 1500	40 to 180	50 or more	50 or more	Maximum opening angle	①	②	③	④	⑤	⑥
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L	950 to 1500	40 to 180	50 or more	50 or more	100°	109°	119°	131°	151°	More than 180°	

There will be no closing force in more than 120° opening range

- Make sure to install a door stopper in case of using this model. Butt hinge shall be used for 180° opening installation

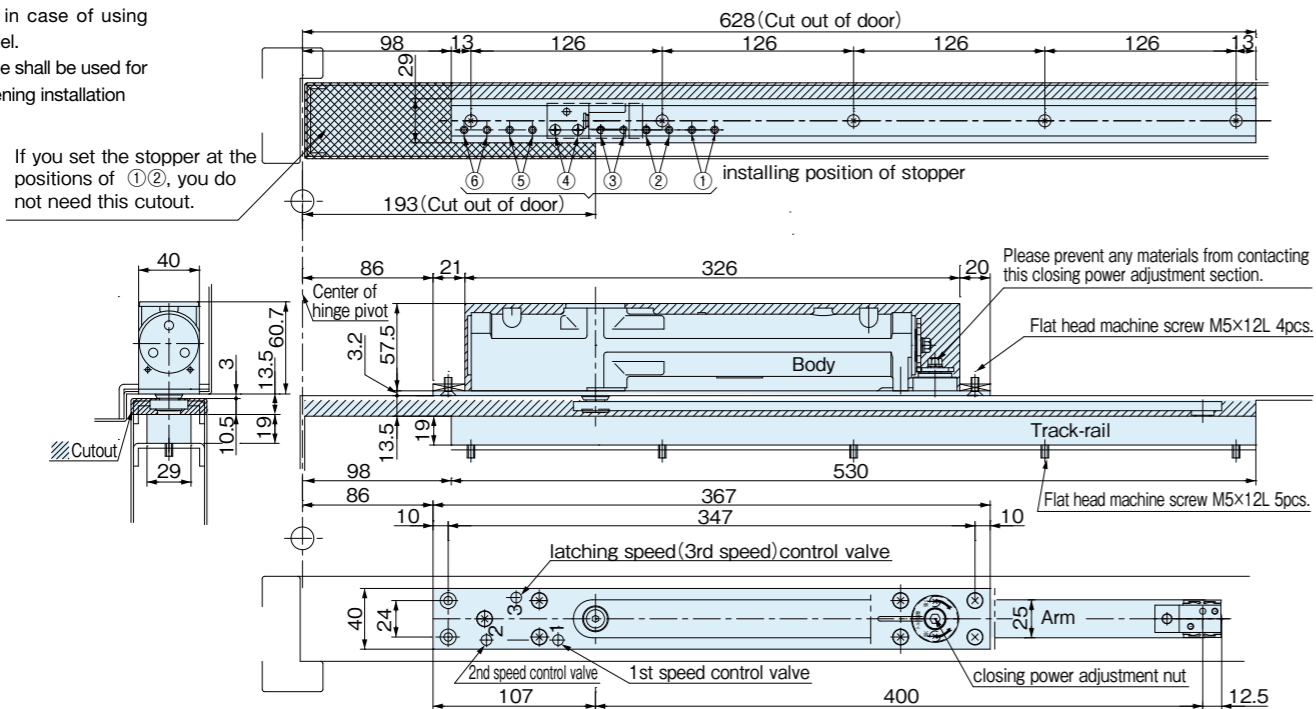


Top Jamb installation

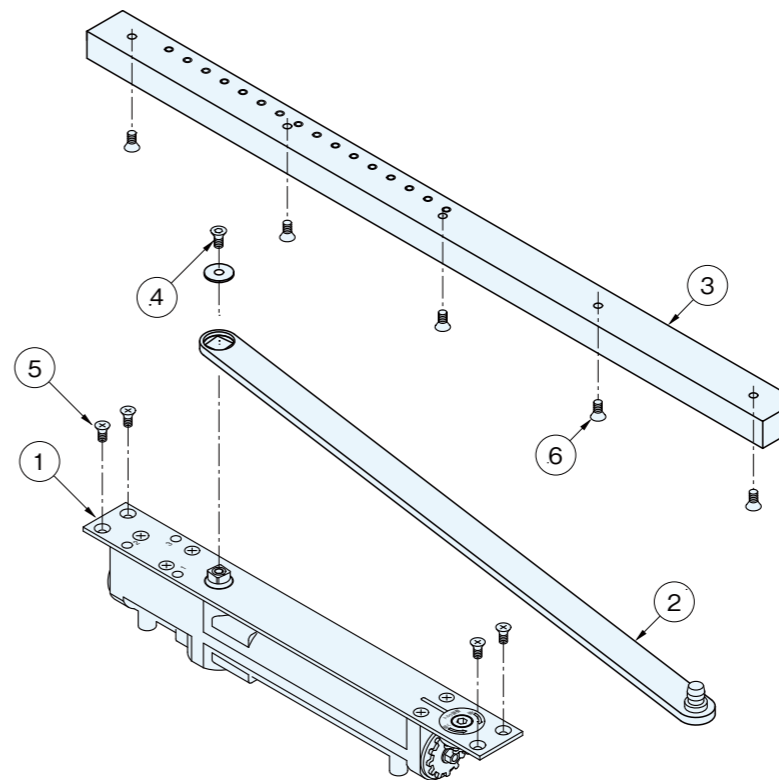
Model No.				Applicable door size		Applicable door thickness (mm)		Type	*P*dimension (offset dimension)	Hold-open device, stopper device installation position					
Without hold-open		With hold-open		Width(mm)	Weight(Kg)	Steel door	Wooden door								
Right hand	Left hand	Right hand	Left hand	950 to 1500	40 to 180	45 or more	45 or more	Maximum opening angle	①	②	③	④	⑤	⑥	
GC-6V-R	GC-6V-L	GCS-6V-R	GCS-6V-L	950 to 1500	40 to 180	45 or more	45 or more	88°	99°	111°	126°	149°	More than 180°		

There will be no closing force in more than 120° opening range

- Make sure to install a door stopper in case of using this model. Butt hinge shall be used for 180° opening installation



Components



①	Closer body
②	Arm
③	Track-rail
④	Hexagon socket head screw M6 × 16L
⑤	Flat head machine screw M5 × 12L 4pcs.
⑥	Flat head machine screw M5 × 12L 5pcs.

TRACK-RAIL TYPE

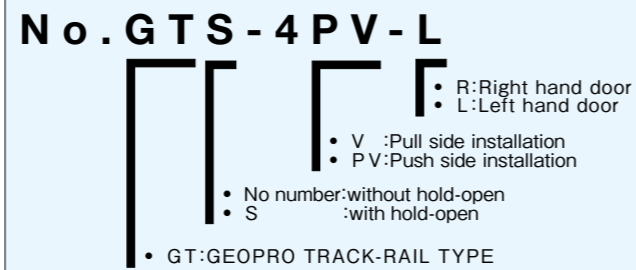
Model Chart

Standard Application

Model No.								Applicable door size	
Pull side installation				Push side installation				Width (mm)	Weight (kg)
Without hold-open		With hold-open		Without hold-open		With hold-open			
Right hand	Left hand	Right hand	Left hand	Right hand	Left hand	Right hand	Left hand		
GT-4V-R	GT-4V-L	GTS-4V-R	GTS-4V-L	GT-4PV-R	GT-4PV-L	GTS-4PV-R	GTS-4PV-L	800 to 1050	15 to 100

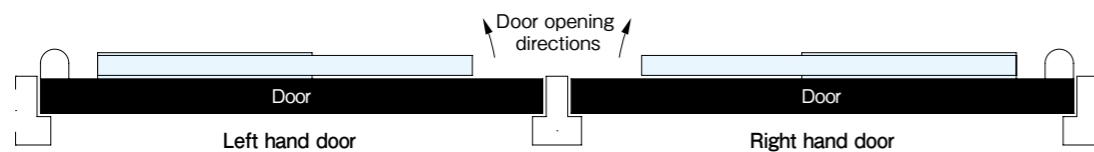
Function

Specification	Installation		Pull side	Push side
	Handing		Select handing, Right hand or Left hand.	
	Material		Aluminum Alloy	
Adjustable range of Max. opening angle	Offset hung	case: 18 to 25mm offset	78° to 160°	81° to 141°
Performance	Durability		500,000 cycles	
Standard function		1st speed Adjustment 2nd speed Adjustment Latching action Closing Force adjustment		

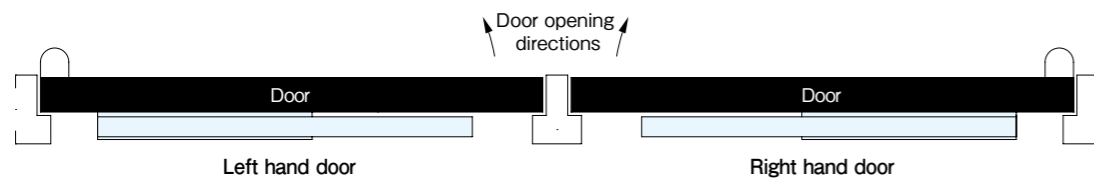


Door opening hand and installation method

• Pull side installation



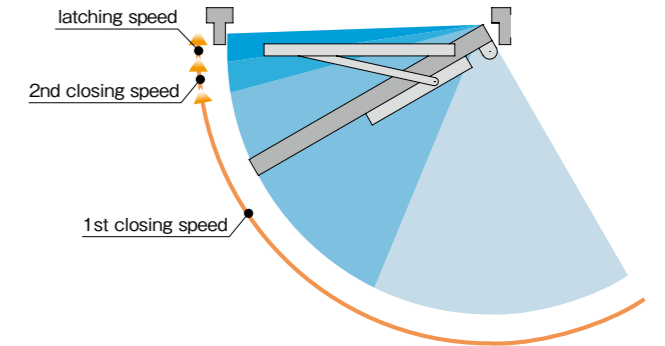
• Push side installation



Specification and Adjustment

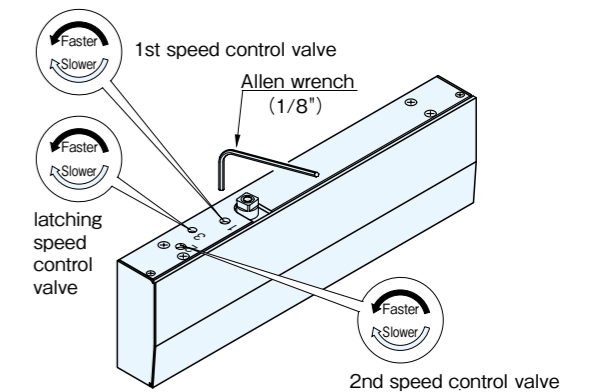
1st and 2nd speed control valves

- These independent valves enable you to adjust the closing speed according to the usage circumstances.



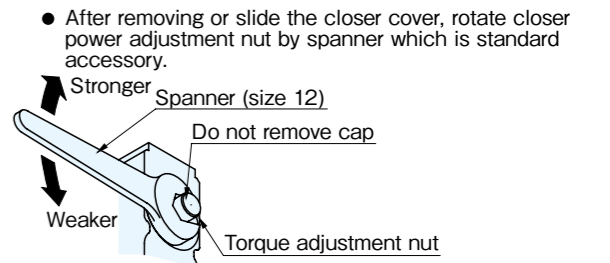
Latching action

- This ensure to close the door firmly by increasing the closing speed at 2 degree before closed position.



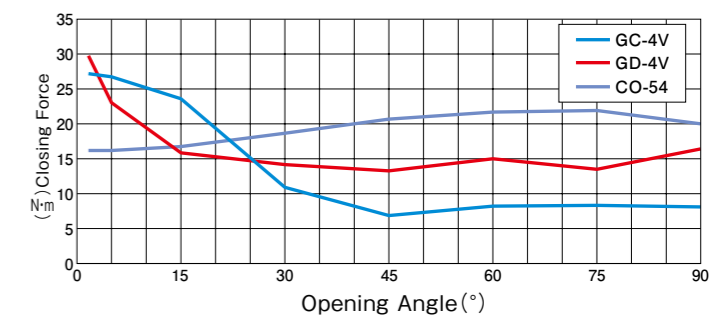
Torque adjustment function

- Closing force appropriate to size, weight and environment of the door is obtained by this function.
- This function is operated only by turning the torque adjustment nut.
- Factory preset torque has been adjusted for door size of 950 x 2100 (mm).
- When increasing the closing force, turn the torque adjustment nut clockwise, and when decreasing the force, turn the nut counterclockwise.



- Adjusting closing power according to table.

Max. Door Width and Height (mm)	Max. Door Weight (kg)	Turns of closing power adjustment nut	
		from Preset	from Min.
800 × 1800	30	-6	0
900 × 2100	45	-4	+2
950 × 2100	65	0	+6
1050 × 2400	100	+6	+12



TRACK-RAIL TYPE

Pull side installation

Model No.				Applicable door size		Type	*P* dimension (offset dimension)	Hold-open device, stopper device installation position							
Without hold-open		With hold-open		Width (mm)	Weight (kg)			①	②	③	④	⑤	⑥	⑦	
Right hand	Left hand	Right hand	Left hand	800 to 1050	15 to 100	Maximum Opening angle	18	78°	86°	95°	105°	117°	132°	159°	
GT-4V-R	GT-4V-L	GTS-4V-R	GTS-4V-L					25	79°	87°	96°	106°	117°	132°	159°
								20	78°	86°	95°	105°	117°	132°	160°

latching speed control valve
194
400
1st speed control valve
Center of hinge pivot
2nd speed control valve
86
10
525
10
9.6
20
3
19
19
20
90
11
97
290
86
312
86
545
30
Installing position of stopper
Flat head machine screw M5x35L 2 pcs.

● Make sure to install a door stopper in case of using this model.

30
20
90
19
37.3

Push side installation

Model No.				Applicable door size		Type	*P* dimension (offset dimension)	Hold-open device, stopper device installation position								
Without hold-open		With hold-open		Width (mm)	Weight (kg)			①	②	③	④	⑤	⑥	⑦	⑧	
Right hand	Left hand	Right hand	Left hand	800 to 1050	15 to 100	Maximum Opening angle	18	81°	88°	94°	101°	108°	117°	127°	141°	
GT-4PV-R	GT-4PV-L	GTS-4PV-R	GTS-4PV-L					25	82°	88°	94°	101°	108°	116°	125°	138°
								20	81°	88°	94°	101°	108°	116°	126°	140°

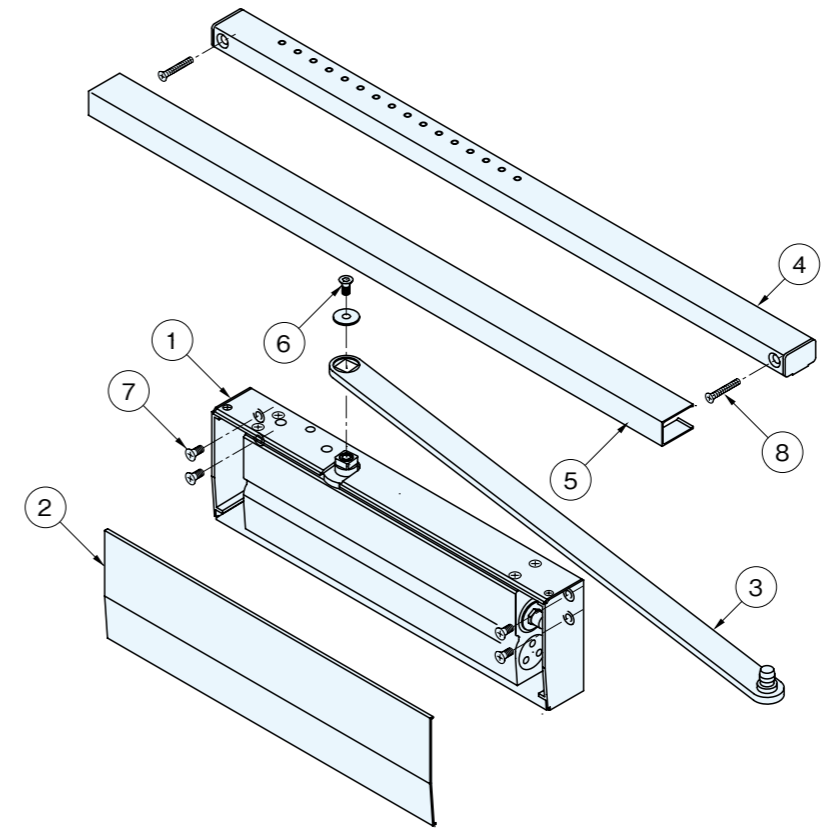
latching speed control valve
194
400
1st speed control valve
Center of hinge pivot
2nd speed control valve
86
548
Small flat head screw M5x12L 5 pcs.
31.2
19
31
19
90
11
97
290
86
312
86
126
126
126
126
22
Installing position of stopper
Oval head machine screw M5x12L 4 pcs.
Closing power adjustment nut

● Make sure to install a door stopper in case of using this model.

29
MAX. 25
19
90
19
31
37.3

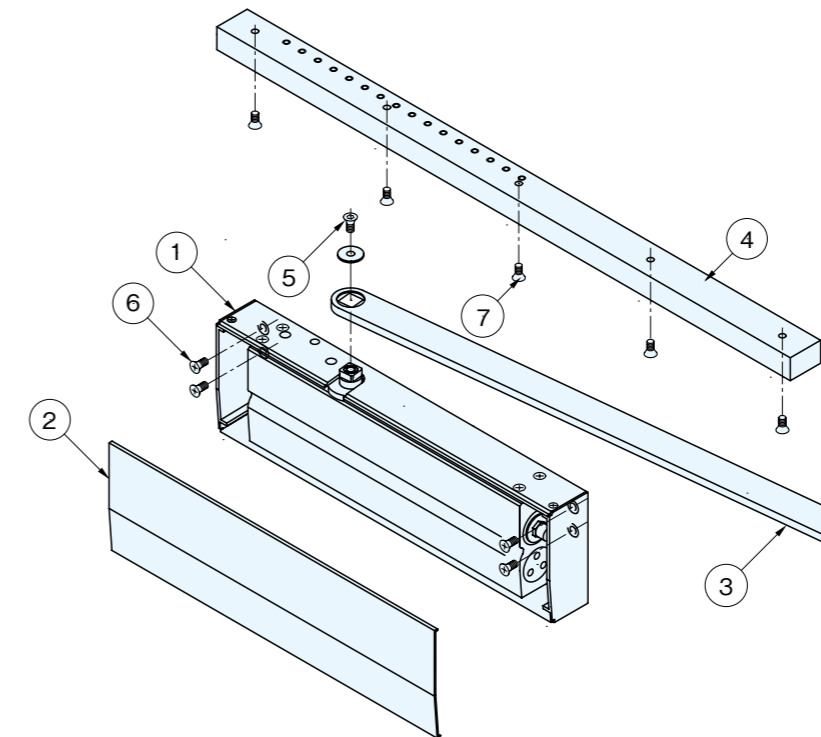
Components

Pull side



①	Closer body
②	Cover
③	Arm
④	Track-rail
⑤	Track rail cover
⑥	Hexagon socket head screw M6 x 16L
⑦	Oval head machine screw M5x12L 4 pcs.
⑧	Flat head machine screw M5x35L 2 pcs.

Push side



①	Closer body
②	Cover
③	Arm
④	Track-rail
⑤	Hexagon socket head screw M6 x 16L
⑥	Oval head machine screw M5x12L 4 pcs.
⑦	Small flat head screw M5x12L 5 pcs.