

FLOORHINGE 500SERIES / 400SERIES / 200SERIES Patch Fitting

FLOOR HINGE

Model chart

200 SERIES CLASSICAL TYPE

Model	With 90° Hold-open	S-201N	S-202N	S-201Y	S-202Y	S-201K	S-202K	S-203K	S-204K
	Without Hold-open	201N	202N	201Y	202Y	201K	202K	203K	204K
Maximu	m Door Width	900mm	950mm	900mm	950mm	900mm	950mm	950mm	1050mm
Maximu	Maximum Door Weight		130kg	80kg	130kg	80kg	130kg	180kg	185kg
Maximu	m Opening Angle (degrees)	ening Angle (degrees) 113°			·				
Applicat	ole Door	Aluminum Steel Stainless Steel Wood							
Cement	Case Dimension (mm)	280 X 13	280 X 132 X 47.5 284 X 130 X 54.5 280 X 132 X 47.5			'.5	298 X 146 X 47		
	General Speed Adjustment	•	•	•	•	•	•	•	•
	2nd Speed Adjustment	•	•	•	•	•	•	•	•
Feature	Closing Position Adjustment	•	•	•	•	•	•	•	•
	Height Position Adjustment			•	•				
	Double Action	•	•	•	•	•	•	•	•

^{★:} Please consult with Ryobi authorized distributor to select tapping screw when installing floor hinge with wooden door.

400 SERIES THIN TYPE

Model	With 90° Hold-open	S-401N	S-402N	S-401K	S-402K	S-403K		
	Without Hold-open	401N	402N	401K	402K	403K		
Maximu	m Door Width	900mm	950mm	900mm	950mm	950mm		
Maximum Door Weight		80kg	120kg	80kg	120kg	150kg		
Maximu	m Opening Angle (degrees)	108°						
Applicable Door		Aluminum Steel Stainless Steel Wood						
Cement	Case Dimension (mm)		306 X 112 X 40					
	General Speed Adjustment	•	•	•	•	•		
Factors	2nd Speed Adjustment	•	•	•	•	•		
Feature	Closing Position Adjustment	•	•	•	•	•		
	Double Action	•	•	•	•	•		

^{★:} Please consult with Ryobi authorized distributor to select tapping screw when installing floor hinge with wooden door.

Model chart

500 SERIES NARROW TYPE

N 4l - l	With 90° Hold-open	S-500V	S-500VDA			
Model	Without Hold-open	500 V	500VDA			
Maximu	m door width	110	0mm			
Maximu	m door weight	12	0kg			
Maximu	m opening angle (degrees)	17	75°			
Applicable door		Aluminum Steel Stainless Steel Wood				
Cement	case dimension (mm)	275 X 82 X 50				
	1st speed adjustment	•	•			
	2nd speed adjustment	•	•			
	Closing position adjustment	•	•			
	Height position adjustment	•	•			
Feature	Mechanical backcheck	•				
	Delayed action		•			
	Double action	•	•			
	Tested To CE EN1154	•				
	Tested To CE EN1634-1	•	•			

^{★ :} Please consult with Ryobi authorized distributor to select tapping screw when installing floor hinge with wooden door.

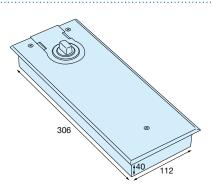
Important notice

- Firmly tighten the top pivot shaft.
- Firmly tighten the mounting screws.
- \bullet Do not use chemicals when cleaning in order to prevent corrosion.
- Do not hit the main body or grind it.
- Completely fill the outer circumference of the cement case with mortar in order to reliably secure the main body.
- Use a door stopper together in order to prevent failure and breakage of the main body.

Important notice

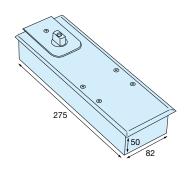
• The Profile **400 Series**

40mm depth is suitable for earlier and easier installation on 2nd, 3rd ...floor..



• The Profile 500 Series

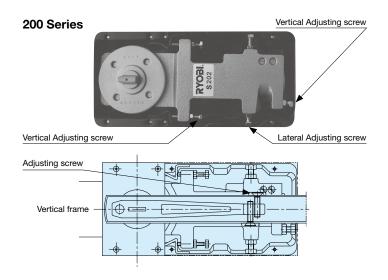
Narrow style perfectly matches with modern design profile.



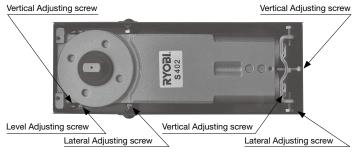
Model list

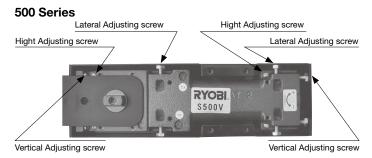
Adjustment of floor hinge body position (all series)

- Gap between door lower section and frame can be adjusted by the adjustment screw of the main body.
- Tighten all of the screws and their locknuts after adjustment.



400 Series

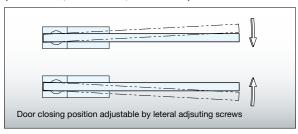


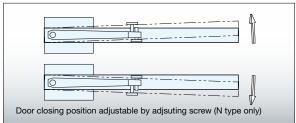


Adjustable range for closing position and clearance

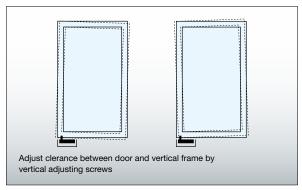
	Vertical	Lateral	Level	Height
200 Series	7mm	10mm		
400 Series	9mm	4.5mm	6mm	
500 Series	10mm	10mm		4mm

Adjustable Door Closing Position (200 Series, 400 Series, 500 Series)

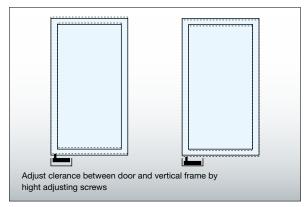




Adjustable Door Clearance (200 Series, 400 Series, 500 Series)

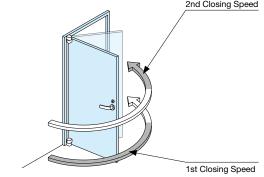


(500 Series)



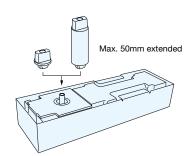
Adjust Closing Speed (All Series)

- There are two speed ranges for door closing speed.
- Those ranges are classified into two stages of the 1st speed range which controls overall door closing speed and the 2nd speed range which controls latching speed.
- The latching speed cannot be set to be faster than the closing speed.
 - Adjust the closing speed by the closing speed adjustment valve.
 - Adjust the latching speed by the latching speed adjustment valve.
 - The latching speed is the speed to store the door into the frame.
 - · Adjust to a speed which does not cause fingers to be caught. (It is appropriate for a door to take 5 to 8 seconds to completely close from a door opening angle of approximately 90 degrees.)
- Adjustment is easily made if the latching speed is adjusted in advance.



Additional feature (500 series)

- Inter changeable spindle.
- Height adjustment function is added.
- Spindle can be extended up to 50mm for extended floor clearance for threshold, carpeted or marble floor. Customs made spindle shape may be available.



• Mechanical backcheck

When introduced the backcheck stalls the opening door between 65 and 90 degrees. When doors are violently opened by pedestrians or wind, the backcheck feature reduces the likelihood of damage should contact be made with an adjacent wall, obstacles, or pedestrian.

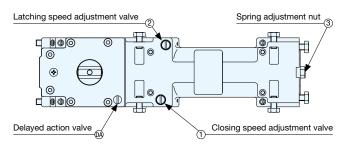
Delayed action

An optional delayed action feature adjusted by means of an independent valve. Once set, the door - when opened beyond 65 degrees enters into a delayed mode allowing additional time before the closing. Delayed time can be adjusted. The delayed action is an advantage to Nursing staff assisting patients, Domestic staff pushing meals or maintenance trolleys, handicapped person, elderly or infirm walking with sticks or frames under medical supervision.

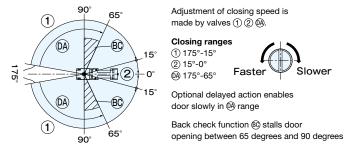
Adjustable closing power

Spring Power adjustable according to door weight and width EN 1 through EN 4. Factory preset size is 3.

Position of valves



Range of delayed action and back check



How to adjust closing power



Turn of adjustment nut	Torque	0°- 4°
0 turn	Minimum	-
4 turn	Size 1	11±2 [Nm]
10.5 turn	Size 3 (Preset)	27±5 [Nm]
13.5 turn	Size 4 (Max)	32±5 [Nm]

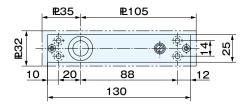
Factory preset is 11.5 turns.

Slower

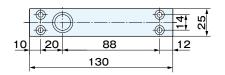
S-201N / 201N · S-202N / 202N

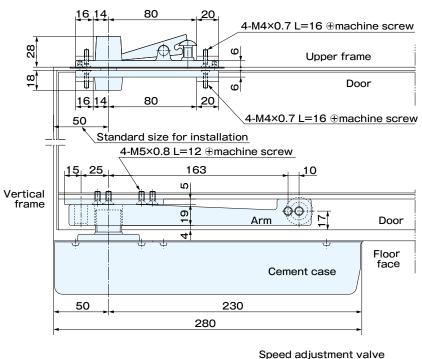
OPENING SYSTEM OF DOOR	MODEL NUMBER		FITTING SIZE AND WEIGHT		
OPENING STSTEM OF BOOK			WIDTH X HEIGHT(mm)	DOOR WEIGHT(Kg)	
CENTER HUNG DOUBLE ACTION	S-201N 90° HOLD		000)/0100	00	
	201N	NON-HOLD	900X2100	80	
	S-202N	90° HOLD	950X2100	130	
MAXIMUM OPENING ANGLE 113° HOLD-OPEN ANGLE 90°	202N	NON-HOLD	330//2100	130	

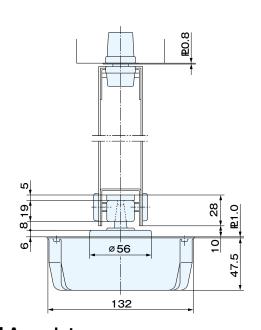
■ Top pivot(upper frame side)



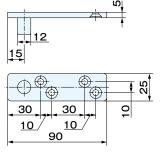
■ Top pivot(door side)

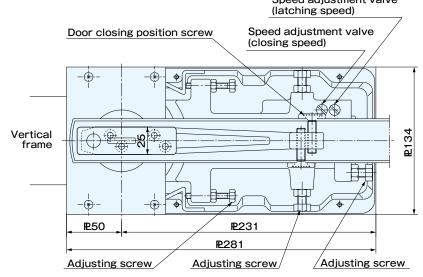






■ Arm plate





S-201Y / 201Y · S-202Y / 202Y

ODENING SYSTEM OF DOOR	MODEL NUMBER		FITTING SIZE AND WEIGHT		
OPENING SYSTEM OF DOOR			WIDTH X HEIGHT(mm)	DOOR WEIGHT(Kg)	
CENTER HUNG DOUBLE ACTION	S-201Y 90° HOLD		00000100	20	
	201Y	NON-HOLD	900X2100	80	
	S-202Y	90° HOLD	950X2100	130	
MAXIMUM OPENING ANGLE 113° HOLD-OPEN ANGLE 90°	202Y	NON-HOLD	93072100	130	

■ Top pivot(upper frame side) ■ Top pivot(door side) **P**141 (⊕) --!@ 8 4 9 25 122 13 169 20 14 116 4-M6×1.0 L=14 ⊕machine screw Top pivot 38 Upper frame P1.0 Door Ø 64 83 63 4-M6×1.0 L=25 ⊕machine screw Standard size for installation 170 Plate for adjusting chink 1.0 32.5 25 40 Vertical frame 40 9 Arm 24 9 2 Door N 9 $\overline{\oplus}$ Floor ø 42.5 金 2 _face(54. 56 228 130 284 Speed adjustment valve (closing speed) Speed adjustment valve (latching speed) Height Adjustment screw 4 ₹ 2 딘 \\ 140-0 ф φ. ₽63 **P**235 **P**298

Adjusting screw

Adjusting screw A

Dimension is indicated by m/m unit

Adjusting screw

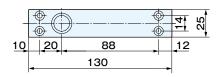
S-201K / 201K · S-202K / 202K

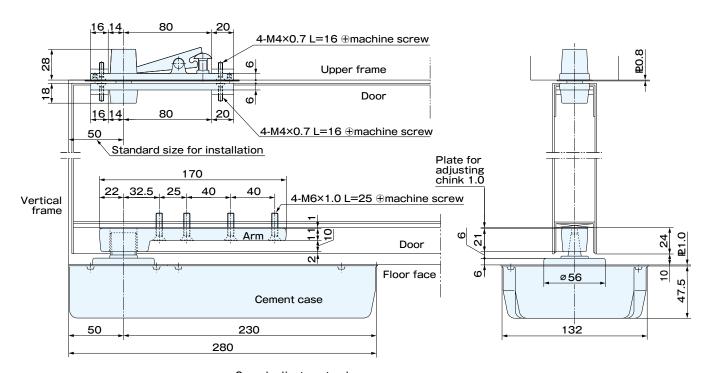
OPENING SYSTEM OF DOOR	MODEL NUMBER		FITTING SIZE AND WEIGHT		
OPENING STSTEM OF BOOK			WIDTH X HEIGHT(mm)	DOOR WEIGHT(Kg)	
CENTER HUNG DOUBLE ACTION	S-201K 90° HOLD		00000100	00	
	201K	NON-HOLD	900X2100	80	
	S-202K	90° HOLD	950X2100	130	
MAXIMUM OPENING ANGLE 113° HOLD-OPEN ANGLE 90°	202K	NON-HOLD	330//2100	130	

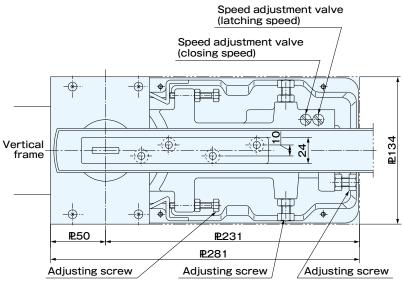
■ Top pivot(upper frame side)

R35 R105 N 10 20 88 12 130

■ Top pivot(door side)







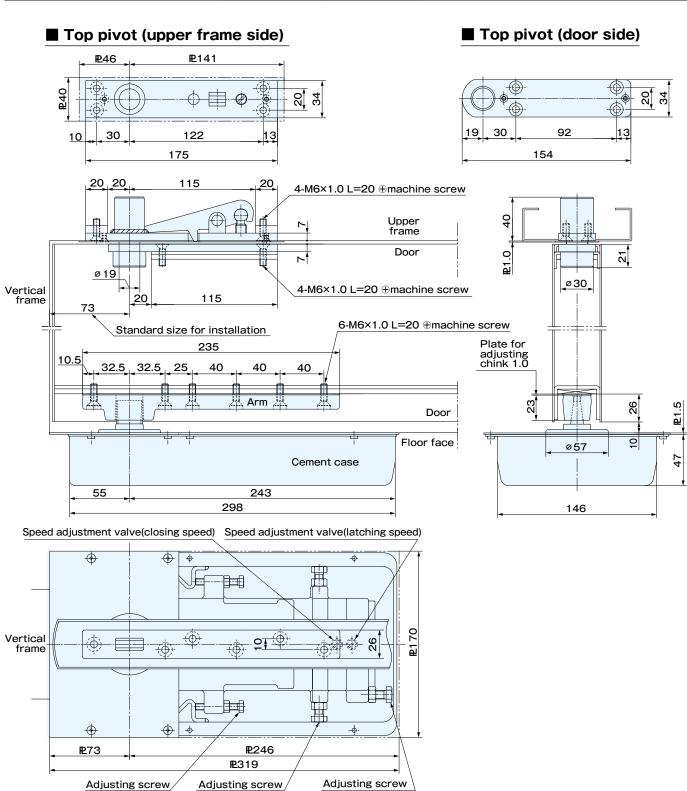
S-203K / 203K

OPENING SYSTEM OF DOOR	MODEL NUMBER		FITTING SIZE AND WEIGHT		
OPENING STSTEM OF BOOK			WIDTH X HEIGHT(mm)	DOOR WEIGHT(Kg)	
CENTER HUNG DOUBLE ACTION					
	S-203K	90° HOLD	950X2100	180	
	203K	NON-HOLD	000X2100	100	
MAXIMUM OPENING ANGLE 113° HOLD-OPEN ANGLE 90°	203K	NON-HOLD			

■ Top pivot (upper frame side) **■** Top pivot (door side) **P**141 32 32 19 46 46 13 9 25 122 150 169 20 14 4-M6×1.0 L=14 ⊕machine screw 116 19 38 ဖျ Upper frame R1.0 Door ဖ ø 12.5 3-M6×1.0 L=14 ⊕machine screw 115 Standard size for installation Plate for adjusting chink 1.0 170 32.5 25 40 40 Vertical frame 4-M6×1.0 L=25 ⊕machine screw 9 2 Door ဖ Floor face 47, Cement case 50 230 132 280 Speed adjustment valve (latching speed) Speed adjustment valve (closing speed) **-**∳ **P**134 Vertical frame ----**P**231 **P**.50 **P**281 Adjusting screw Adjusting screw / Adjusting screw Dimension is indicated by m/m unit

S-204K / 204K

OPENING SYSTEM OF DOOR	MODEL NUMBER -		FITTING SIZE AND WEIGHT		
OPENING STSTEM OF BOOK			WIDTH X HEIGHT(mm)	WEIGHT(kg)	
CENTER HUNG DOUBLE ACTION				185	
	S-204K	90° HOLD	1050X2400		
				100	
MAXIMUM OPENING ANGLE 113° HOLD-OPEN ANGLE 90°	204K	NON-HOLD			

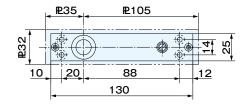


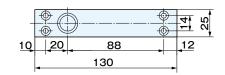
S-401N / 401N ·S-402N / 402N

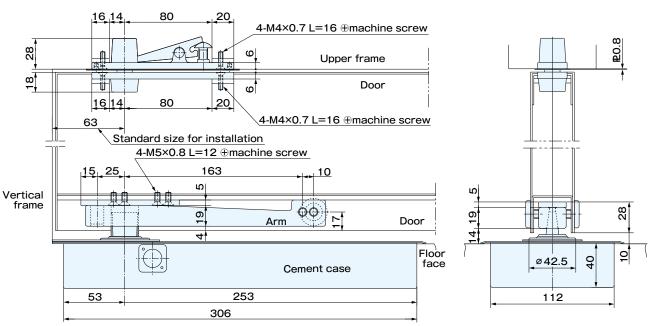
OPENING SYSTEM OF DOOR	MODEL NUMBER		FITTING SIZE AND WEIGHT		
OPENING STSTEM OF BOOK			WIDTH X HEIGHT(mm)	WEIGHT(Kg)	
CENTER HUNG DOUBLE ACTION	S-401N 90° HOLD		00000100	80	
	401N	NON-HOLD	900X2100	80	
	S-402N	90° HOLD	950X2100	120	
MAXIMUM OPENING ANGLE 108° HOLD-OPEN ANGLE 90°	402N	NON-HOLD	93072100	120	

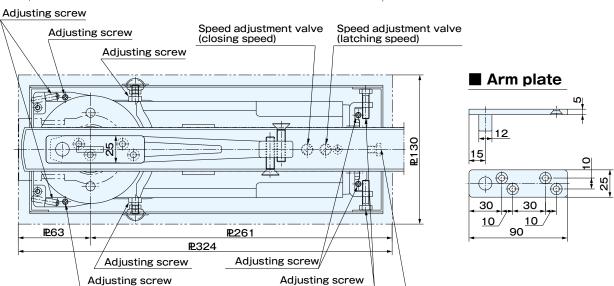
■ Top pivot (upper frame side)

■ Top pivot(door side)









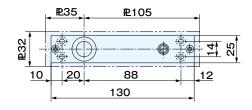
Adjusting screw

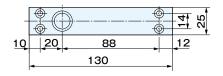
S-401K / 401K · S-402K / 402K

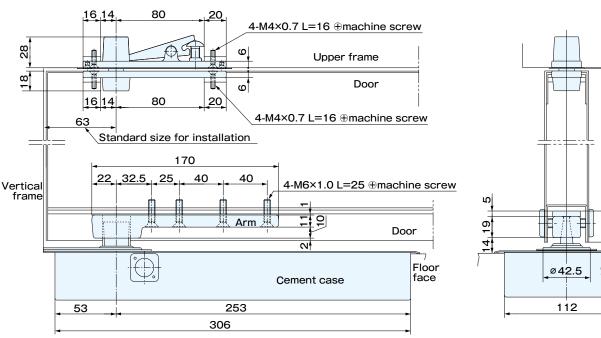
OPENING SYSTEM OF DOOR	MODEL NUMBER -		FITTING SIZE AND WEIGHT		
OPENING STSTEM OF BOOK			WIDTH X HEIGHT(mm)	WEIGHT(Kg)	
CENTER HUNG DOUBLE ACTION	S-401K 90°HOLD		900X2100	80	
	401K	NON-HOLD	900X2100	80	
	S-402K	90°HOLD	950X2100	120	
MAXIMUM OPENING ANGLE 108° HOLD-OPEN ANGLE 90°	402K	NON-HOLD	330//2100	120	

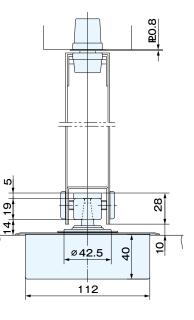
■ Top pivot (upper frame side)

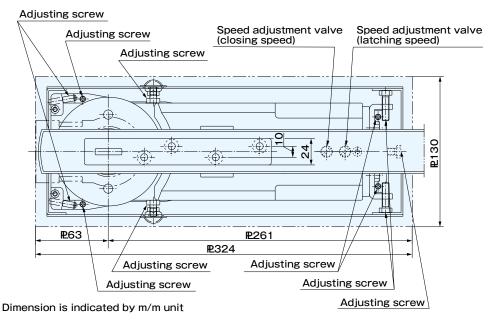
■ Top pivot (door side)









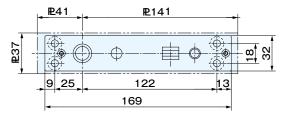


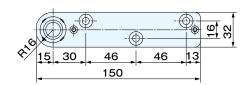
S-403K / 403K

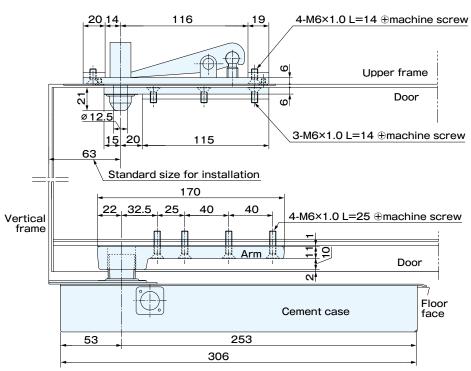
OPENING SYSTEM OF DOOR	MODEL NUMBER		FITTING SIZE AND WEIGHT	
OPENING STSTEM OF DOOR			WIDTH X HEIGHT(mm)	WEIGHT(Kg)
CENTER HUNG DOUBLE ACTION		90°HOLD	950X2100	150
	S-403K			
		NON-HOLD		
MAXIMUM OPENING ANGLE 108° HOLD-OPEN ANGLE 90°	403K			

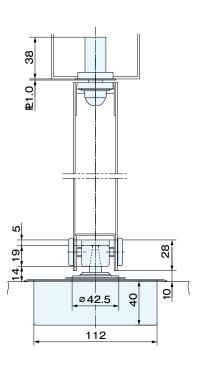
■ Top pivot (upper frame side)

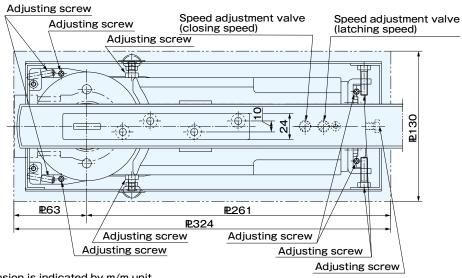
■ Top pivot (door side)











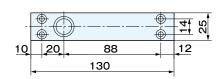
S-500V / 500V · S-500VDA / 500VDA

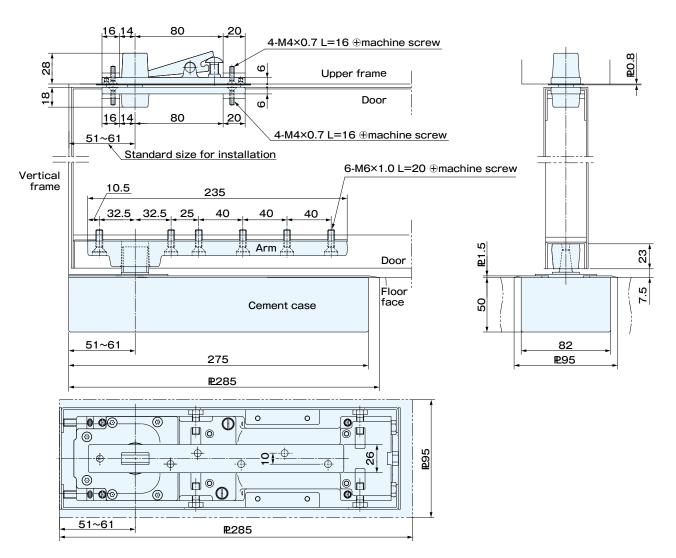
	DENING EVETEM OF DOOD	MODEL NUMBER		DELAYED ACTION	FITTING SIZE AND WEIGHT	
	OPENING SYSTEM OF DOOR				MAXIMUM WIDTH(mm)	MAXIMUM WEIGHT(Kg)
CENTER	CENTER HUNG IN DOUBLE ACTION	S-500V	90°HOLD	NO	1100	120
		500V	NON-HOLD	NO		
		S-500V DA	90°HOLD	YES		
	MAXIMUM OPENING ANGLE 175° HOLD-OPEN ANGLE 90°	500V DA	NON-HOLD	YES		

■ Top pivot(upper frame side)

P35 P105 20 88 12 130

■ Top pivot(door side)





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