

### Dear Customer :

The SLS-ELAN stay was designed and manufactured with Sugatsune utmost care in order to give you a high performance and smooth operation on a long-term basis. We ask you to follow these instructions for best possible results and carefree use throughout its lifetime.

### Safety recommendations:

- Sugatsune recommends for the installation to be made by a professional carpenter or installer.
- The SLS-ELAN stay contains some very strong springs: for your own safety, do not fold the arm before it is securely attached to the door. Failure to observe this advice may lead to bodily injury.
- Do not disassemble the arm or body of the stay.
- Please use this stay only within the specifications indicated below.
- Standard temperature of use is 0 to 40°C.

### Warranty

- Do not pull the arm down without door attached as it will spring back up violently and may cause serious injuries.
- The SLS-ELAN stay was produced with a particular attention to its quality. Should you however experience any difficulty, please refer to your local supplier or the Sugatsune export department (export@sugatsune.co.jp).
- The liability of Sugatsune is limited to the replacement or repair of the stay itself. Sugatsune cannot accept any liability for damaged incurred while using this stay.
- Standard guaranty is for a one-year period from the date of shipment.

### Specifications

- SLS-ELAN specifications are applicable in the list below.  
For dimensions other than mentioned below, select the type based on the calculation below.

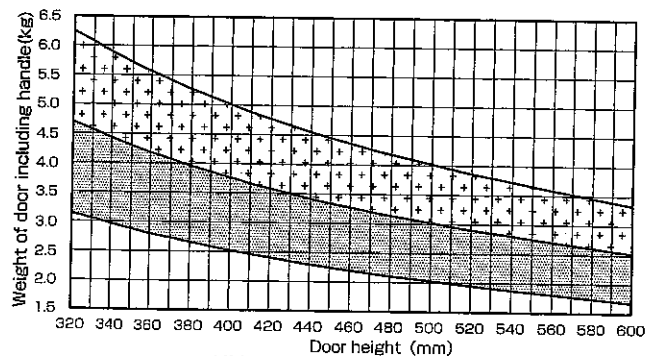
□ SLS-ELAN-HL(R)

■ SLS-ELAN-ML(R)

※ The following table provides an overview of the possible door sizes for which SLS-ELAN can be used.

※ It is given on an indicative basis only and does not constitute a guaranty in itself. Please always test assembly.

※ Torque shown for 1 stay.  
Double if used in pairs.



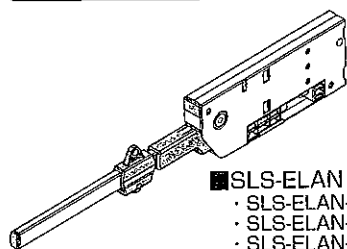
#### Calculation method

$$\frac{\text{Door height (m)}}{2} \times \text{Weight of door including handle (kg)} \times 9.8 = \text{Lifting Power (N} \cdot \text{m)}$$

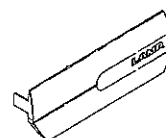
#### Lifting Power

4.9~7.35N·m(50~75kgf·cm) : SLS-ELAN-ML(R)  
7.35~9.8N·m(75~100kgf·cm) : SLS-ELAN-HL(R)

## Set content



- SLS-ELAN body (1 piece)  
 • SLS-ELAN-ML (4.9~7.35N·m)  
 • SLS-ELAN-MR (4.9~7.35N·m)  
 • SLS-ELAN-HL (7.35~9.8N·m)  
 • SLS-ELAN-HR (7.35~9.8N·m)



- Body cover (1 piece)  
 Left cover shown  
 (right cover is symmetrical)



- Mounting plate  
 (1 piece)



- Fixing bolt for  
 mounting plate  
 (1 piece)

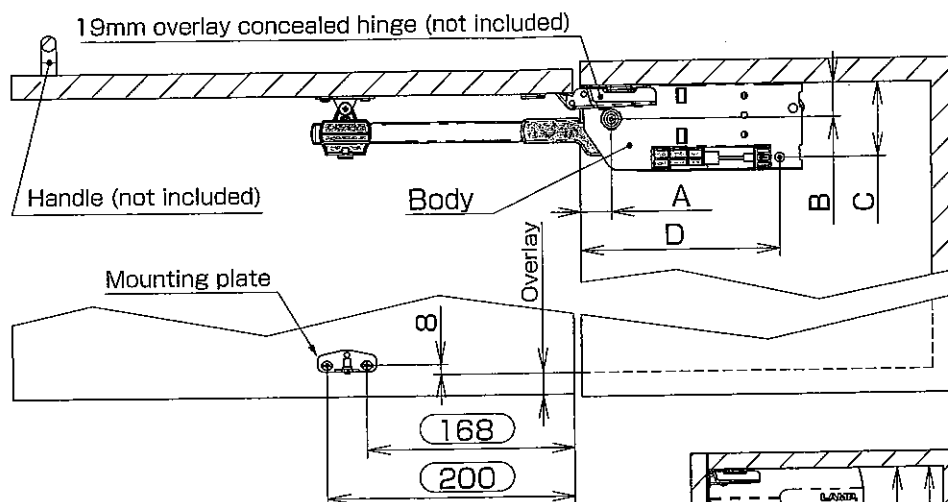


- Mounting plate fixing  
 screws 3.5x15  
 (2 pieces)



- Main body fixing  
 screws 3.5x35  
 (2 pieces)

## Installation drawing



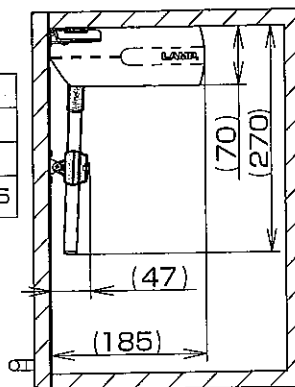
Door hanging hinge (Sold Separately)	A	B	C	D
Concealed Hinge 230-C26/19T(19mmOverlay)	25	27	59	160
Concealed Hinge 230-C26/9T(9mmOverlay)	25	37	69	160
Concealed Hinge 230-C26/0T(Inset)	Door thickness +27	47	79	A+135

\*Dimensions shown above are in case the mounting plate 230-P4W-30T or 230-P4W-32T are used with.

Dimensions indicated in ( ) above are for packing seal of a thickness up to 4mm.  
 When using thicker packing seal, deduct its thickness from the dimensions above.

Example:

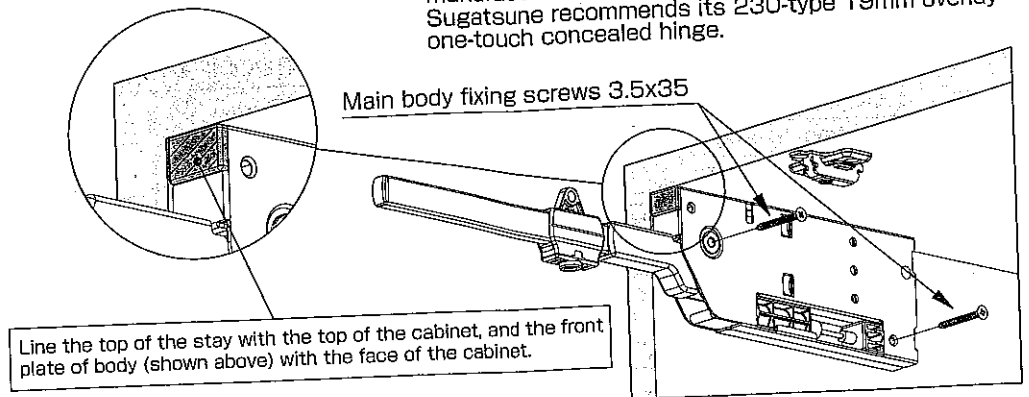
When packing seal thickness is 5mm, dimensions are:  
 $168-5=163\text{mm}$ ,  $200-5=195\text{mm}$



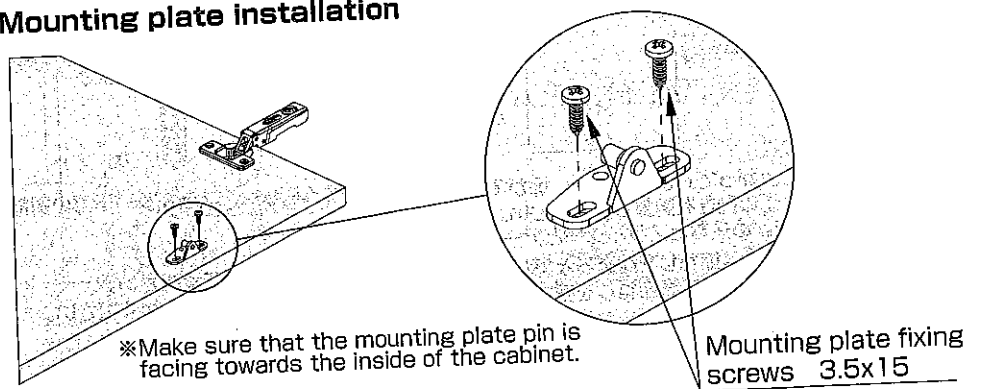
## Installation

### ① Body installation

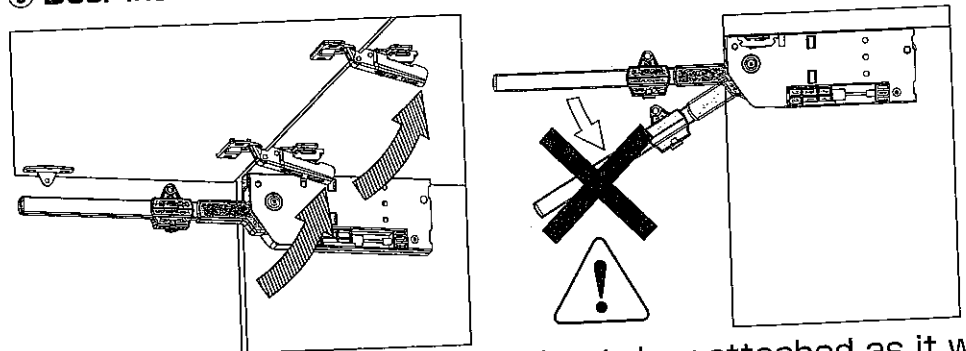
※ For concealed hinge installation, please follow the manufacturers instructions. Sugatsune recommends its 230-type 19mm overlay one-touch concealed hinge.



### ② Mounting plate installation

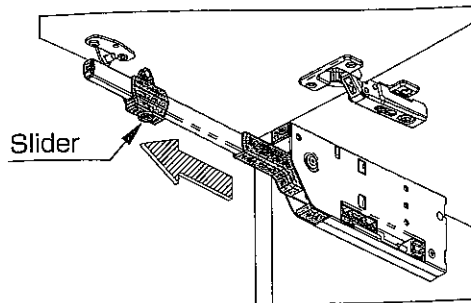


### ③ Door installation

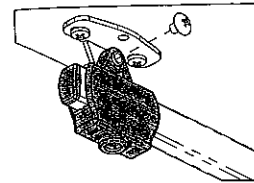


⚠ Do not pull the arm down without door attached as it will spring back up violently and may cause serious injuries.

#### ④ Mounting plate and arm attachment



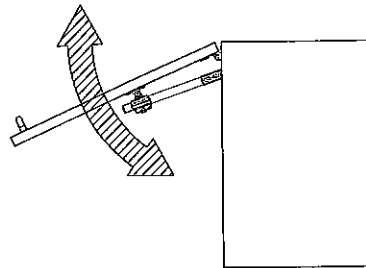
·Insert the pin of the mounting plate in the Slider



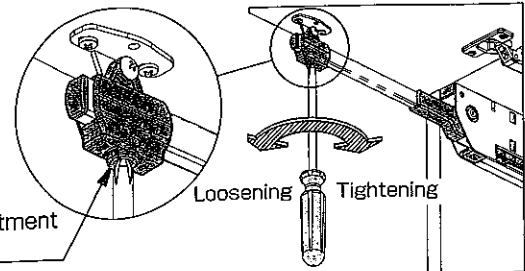
·Line up the Slider with the pin of the mounting plate

·Attach the Slider with the fixing bolt M4x5

#### ⑤ Final adjustment



Adjustment screw

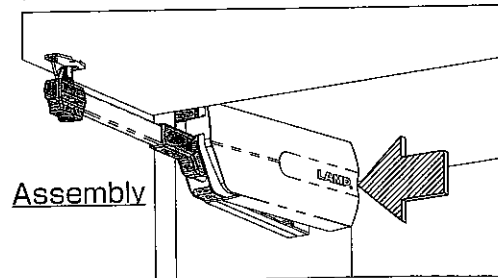


·If you feel that the door is too light (self lift-up) or too heavy (self-closing), it is possible to limit the action of the spring by tightening the adjustment screw.

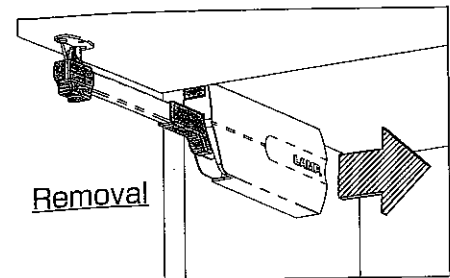
△ When using a light door, an under-tightened adjustment screw may result in a fast opening of the door.

△ Do not over-tighten the adjustment screw as this may damage the Slider.

#### ⑥ Cover assembly and removal



Fix the front of the cover and then clip the back in place.



To remove cover, pull the back side first.

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