# **PRECAUTIONS**



# **CAUTION**

- 1. Do not put your hand between the door and frame. Your hand may be caught in the door at time of opening/closing, resulting in injury.
- 2. Do not apply a strong force in a door closing direction. The door will slam close and this may cause an unexpected accident. Door closing operation is performed by the Closer body.
- 3. Make sure to install latches for rollers when constructing. The door may run off and fall over.
- 4. Do not modify or disassemble the Sliding Door Closer. Damage to a component or an accident may

# **MAINTENANCE · INSPECTION**

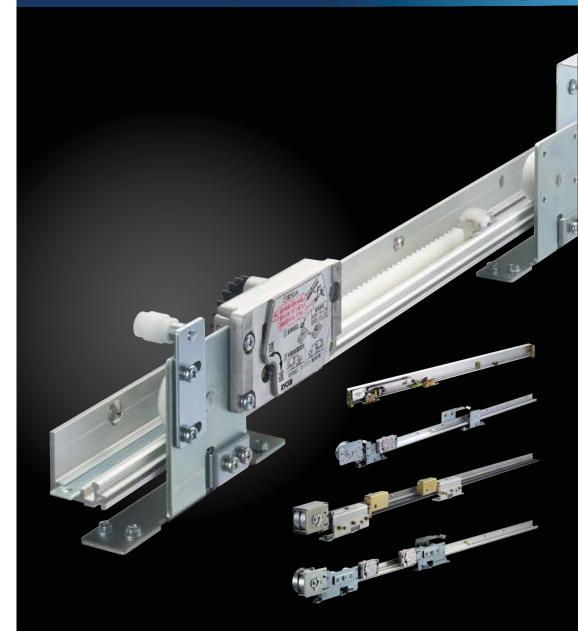
Trouble		Cause	Approach		
	1	Rollers are running off.	Set up the door correctly and install latches securely.		
	2	Rollers do not line up on the center line.	Install rollers in such a way that they are positioned in line with each other.		
The door does not move.	3	The door contacts the frame, wall, or floor. The guide roller contacts the door.	Wall Door Check the contact portion and actual dimensions, and install the door again.		
The door	4	The rail slope angle differs.	(Slope type)Install the rail at the correct slope angle (slope of 3.5/300mm). (With drive device) Install the rail horizontally.		
completely (it gets stuck while closing).	5	There is dirt, contamination, or a scratch on the surface of the rail or pulley.	Clean the rail or pulley. Replace the part depending on the severity of the scratch.		
Willie Closing).	6	The brake force is too strong.	Adjust it to the optimal brake force (see page 5).		
Speed adjustment is not effective	7	Improper speed adjustment	See page 6.		
while closing.	8	The direction of the braking gear is reverse.	Remove the braking device and install the gear again in the appropriate direction (see page 5).		
The door rattles.	9	There is dirt, contamination, or a scratch on the surface of the rail or pulley.	Clean the rail or pulley. Replace the part depending on the severity of the scratch.		
	10	Fixing screws are loose.	Tighten the screws.		

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# RYOBI<sub>®</sub>

# **SLIDING DOOR CLOSER** SL SERIES



# **MODEL CHART**

#### **SLIDERMAN**

DOOR TYPE	SPECIFICATION	OPENING	OPENING MODEL			APPLICABLE DOOR		PAGE
DOORTTPE	SPECIFICATION	OFEINING	W/O HOLD-OPEN	W/H HOLD-OPEN	W/H MULTI HOLD-OPEN	WIDTH × HEIGHT (mm)	WEIGHT (Kg)	FAGE
			_	SLS-1KN30	_		10 - 30	22-25
	SLOPE			020				44-45
	SLOPE		_	SLS-1K50	_		10 - 50	26-29
		SINGLE	_	3L3-1130		600 - 1450 × 2400	10 00	46-47
		SINGLE		SLS-2KN30		600 - 1450 \ 2400	Less	30-33
FOR WOOD DOOR				SLS-ZKNSU	_		than 30	48-49
FOR WOOD DOOR				SLS-2K50			Less	34-37
	W/H DRIVE			3L3-2K30	_		than 50	50-51
	DEVICE	BI-PARTING		SLS-2KD60			Less than 60	38-39
		BI-PARTING	_	3L3-2KD00	_	600 - 1300 × 2400	(Total door weight)	52-53
		TELESCOPIA	_	SLS-2KW60		550 005 V 0400	Less than 60	40-43
		TELESCOPIA		3L3-2KW60	_	550 - 905 × 2400	(Total door weight)	54-57

#### STANDARD SPECIFICATION

DOOR TYPE	SPECIFICATION	OPENING		MODEL		APPLICABLE DOOR		PAGE						
DOORTIFE	OF LOW TOATTON	OFLINING	W/O HOLD-OPEN	W/H HOLD-OPEN	W/H MULTI HOLD-OPEN	$WIDTH \times HEIGHT  (mm)$	WEIGHT (Kg)	FAGE						
	SLOPE	SINGLE	SL-1	SLS-1	SLM-1	600 - 1450 × 2400	10 - 80	58-59						
		OINGEL	SL-2	SL2-2	SLM-2	000 - 1430 / 2400	Less than 80	60-61						
		BI-PARTING	SL-2D	SLS-2D	SLM-2D	600 - 1300 × 2400	Less than 60 (Total door weight)	72-73						
		TELESCOPIA	SL-2W	SLS-2W	SLM-2W	550 - 905 × 2400	Less than 60 (Total door weight)	74-77						
		SINGLE	SL-2H150	SLS-2H150	ı	900 - 2150 × 2400	Less than 150	62-63						
FOR STEEL DOOR		OINGEL	SL-2H200	SLS-2H200		1300 - 2150 × 2400	Less than 200	64-65						
	W/H DRIVE DEVICE	TELESCOPIA	SL-2HW150	SLS-2HW150		800 - 1255 × 2400	Less than 150 (Total door weight)	78-81						
			SL-2HG120	SLS-2HG120	_	900 - 1450 × 2400	Less than 120	66-67						
								SINGLE	SL-2HG160	SLS-2HG160	_	900 - 1700 × 2400	Less than 160	68-69
			OINGEL	SL-2HG200	SLS-2HG200	_	1200 - 2000 × 2400	Less than 200	00-03					
			SL-2HG250	SLS-2HG250	_	1200 - 2550 × 2400	Less than 250	70-71						
		SINGLE	SL-2A	SLS-2A	SLM-2A	700 - 1450 × 2400	Less than 50	82-83						
		BI-PARTING	SL-2AD	SLS-2AD	SLM-2AD	600 - 1300 × 2400	Less than 80 (Total door weight)	86-87						
FOR ALUMINUM DOOR	W/H DRIVE DEVICE	SINGLE	SL-2B	SLS-2B	SLM-2B	700 - 1450 × 2400	Less than 50	84-85						
		BI-PARTING	SL-2BD	SLS-2BD	SLM-2BD	600 - 1300 × 2400	Less than 80 (Total door weight)	88-89						
		DI-PARTING	SL-2BDX	SLS-2BDX	SLM-2BDX	700 - 1300 × 2400 (per a door leaf)	Less than 50 (per a door leaf)	90-91						
		SINGLE	SL-2AQ	SLS-2AQ	_	600 - 1450 × 2400	Less than 80	92-93						
FOR MOISTY	FOR MOISTY W/H DRIVE	BI-PARTING	SL-2DAQ	SLS-2DAQ	_	600 - 1300 × 2400	Less than 80 (Total door weight)	94-95						
PLACE	DEVICE	SINGLE	SL-2BAQ	SLS-2BAQ	_	700 - 1450 × 2400	Less than 80	96-97						
		BI-PARTING	SL-2BDAQ	SLS-2BDAQ	_	600 - 1300 × 2400	Less than 80 (Total door weight)	98-99						

#### **FUNCTION**

	SL-1 SERIES	SL-2 SERIES	ST	OP FUNCTION	ON	OF	ENING FOR	MS
DOOR TYPE	SLOPE TYPE	WITH DRIVE DEVICE	W/O HOLD- OPEN	W/H HOLD- OPEN	W/H MULTI HOLD-OPEN	SINGLE	BI-PARTING	TELESCOPIA
	SLS-1KN30			0	△ OPTION	0		
FOR WOOD DOOR	SLS-1K50			0	△ OPTION	0		
TON WOOD DOON		SLS-2KN30		0	△ OPTION	0		
		SLS-2K50		0	△ OPTION	0	0	0
	SL-1		0	0	0			
		SL-2	0	0	0			
		SL-2H150	0	0		0		0
FOR STEEL DOOR		SL-2H200	0	0		0		
TONSTELL BOOK		SL-2HG120	0	0		0		
		SL-2HG160	0	0		0		
		SL-2HG200	0	0		0		
		SL-2HG250	0	0		0		
FOR ALUMINUM		SL-2A	0	0	0	0	0	
DOOR		SL-2B	0	0	0	0	0	
FOR MOISTY		SL-2AQ	0	0		0	0	
PLACE		SL-2BAQ	0	0		0	0	

# **SPECIFICATION**

	SL-1 SERIES	SL-2 SERIES	CONTRO	SYSTEM	SPEED	AVAIL ADLE		OLOGINO DOWED /
DOOR TYPE	SLOPE TYPE	WITH DRIVE DEVICE	HYDRAULICS	VISCOSITY DAMPER	ADJUSTABLE RANGE	AVAILABLE STROKE	DURABILITY	CLOSING POWER / OPENING POWER (N)
	SLS-1KN30		0				1,000,000	2.5 / 6.0
FOR WOOD DOOR	SLS-1K50		0				CYCLES	3.0 / 8.0
TON WOOD DOON		SLS-2KN30	0		250mm TO CLOSING	1300mm	500,00	2.5 / 6.0
		SLS-2K50	0		POSITION	130011111	CYCLES	2.5 / 10.5
	SL-1		0				1,000,000	2.5 / 6.0
		SL-2	0				CYCLES	4.0 / 9.0
		SL-2H150	0			2000mm 1300mm	200,00 CYCLES	5.0 / 20.0
FOR STEEL DOOR		SL-2H200	0					5.0 / 22.0
TONSTELL DOON		SL-2HG120	0		ALL TRACK			6.0 / 23.0
		SL-2HG160	0		RANGE	1550mm		6.0 / 28.0
		SL-2HG200	0			1850mm		6.0 / 32.0
		SL-2HG250	0			2400mm	1,000,000	6.0 / 37.0
FOR ALUMINUM		SL-2A	0				CYCLES	4.0 / 9.0
DOOR		SL-2B	0		250mm TO CLOSING	1300mm		4.0 / 9.0
FOR MOISTY		SL-2AQ		0	POSITION	130011111		5.0 / 12.0
PLACE		SL-2BAQ		0				3.0 / 12.0

Environment and use conditions

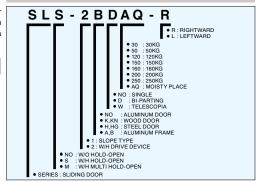
Ambient temperature: 0 $^{\circ}$  C to 40 $^{\circ}$  C

Use place: Indoors (Other than bath and shower room door compatible specifications: places not subject to water, etc. Bath and shower room door compatible specifications: excluding sauna room, hot spring, etc.)

# Numerous variations that respond to a wide range of scenes

RYOBI Sliding Door Closer products are compatible with wood sash, steel sash, heavy steel sash and aluminum front members suitable for hospitals, rehabilitation centers, offices and public facilities for optimum access by all including children, seniors, and physically disabled persons. In addition, hold-open functions can be selected according to use application and settings of bi-parting and telescopia are also available as opening and closing forms to ensure wide opening.

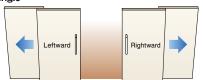
# MODEL NUMBER



#### **FEATURES**

#### Various opening and closing forms

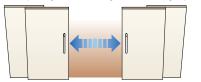
#### Single



#### Bi-parting

When large opening is required.

Both doors open together left and right to ensure large opening.



#### Used both for leftward and rightward (PAT)

Used both for leftward and rightward except for steel rail specifications for heavy steel door and for aluminum frame.

\*If rail length is specified, there are left and right rails.

#### Convenience of maintenance (storing-in-wall type)

Because the rack can be removed from above (PAT) even after the rail is installed on the frame, this is convenient for additional braking distance and maintenance.

In addition, the hold-open device can be replaced from the inspection hole (PAT), and this is excellent for maintainability.





#### Durability

Passed durability test of one million times (500,000 times for SL-2K series and 200,000 times for SL-2H series), excellent durability has been confirmed.

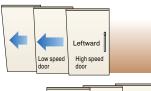
#### Opening direction viewed from inspection hole side is standard.

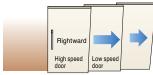
#### Telescopia

When large door pocket is not ensured.

High speed door and low speed door open together to ensure effective opening.

The high speed door moves two times the distance as the low speed door does.





#### Easy installation

Hold-open device and gear are assembled by a one-touch method. Installation is easily and securely performed and setting of a stable braking zone is realized by employing an L-shaped slide plate with positioning for rack units.





Insert until the convex portion hits against the rail, and fix the rack position.



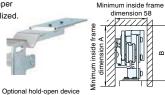
#### Quietness

Braking is quiet and smooth by a gear idle mechanism (PAT) for hydraulic damper unit and mohair employed for the rack portion. There is almost no uncomfortable abnormal sound at time of opening and closing.



#### Sliderman for wood sash

- Hydraulic control is employed Hydraulic oil damper is employed for all types and stable closing is realized.
- Standard rail supports door width up to 1450mm for single sliding.
- Optional hold-open device ST-110K is compatible with a top frame of small aspect dimensions.



ST-110K

IISIOTI 36 Model No. DW (mm) A (mm) Su	rom door upper surface 3 (mm)
SLS-1KN30 600~1200 120	110
ΔL3-1KN30 1201~1450 125	115
SLS-1K50 600~1200 130	120
1201~1450 135	125
SLS-2KN30 600~1450 110	100
SLS-2K50 600~1450 120	110

#### **FEATURES**

#### SL-2H type compatible with heavy steel sash

# Double roller employing a seesaw structure supporting heavy door

Large bore double roller also withstands heavy door. Durability is increased by employing a seesaw structure in which load is evenly applied on each roller.



#### Powerful double drum type drive device

drive device with torque adjustment function is of a powerful double drum type.

This securely closes even heavy doors, and eliminates incomplete closing.



#### Double control suppressing sudden closing (PAT.P)

Closing speed is stably controlled at two stages by double use of damper unit with speed adjustment mechanism and use of some rack units.

#### Steel rail specifications for heavy steel sash SL-2HG type

#### High durability is realized by rugged steel parts and smooth moving direct acting bearing.





Withstands the load of a heavy door and smoothly opens and closes a heavy door by employment of direct acting bearing used for industrial machines and steel rails. In addition, the direct acting bearing in which packing is arranged in four directions is also resistant to dust, and the sliding closer also offers excellent dust-proof performance. The rugged steel parts realize high durability performance.

#### Powerful driving device

The drive device with a torque adjustment function securely closes heavy doors and eliminates incomplete closing. SL-2H250 compatible with 250kg is equipped with a more powerful double drum type.



#### All zone control suppressing sudden closing

Damper unit with speed adjustment mechanism uses high strength steel gears. Speeds over all zones are controlled to a stable closing speed.



#### Bath and shower room door compatible specifications optimum for bath and shower room door AQ type

#### Damper unit excellent in temperature resistance performance

AQ type realizes stable closing speed relative to temperature change by employment of viscosity damper filled with silicon oil.

#### Corrosion resistance

Corrosion resistance is enhanced by stainless steel, resin or special surface treatment.

(There was no problem with operation after a salt spray test of 500 hours.)

Excellent as a bath and shower room door.

(Do not use in places such as a sauna room, hot spring, etc.)

# Change of closing speed with temperature change

# **ADJUSTMENT METHOD**

#### Speed adjustment

Damper unit and gear are assembled by a one-touch method. Construction is easily and securely performed by employing an L-shaped slide plate with positioning for rack units.





#### Installation of Gear

The damper unit and gear are not assembled before shipment. Press the gear into the shaft of the damper unit until it snaps on, so that the stamp symbol in the opening direction will be right





#### Sliderman, for steel sash, aluminum sash compatible specifications

Closing speed can be adjusted in the standard braking zone while closing of approximately 250mm.

(The braking zone can be extended by adding a rack even if the rail is not removed (PAT).)

Open and close the door a few times to check braking.

#### ●SL-1, 1K, 2, 2K, 2A, 2B types

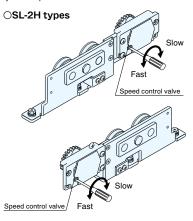


# For heavy steel door SL-2H type

The damper unit on the door head side controls almost all zones, and the damper unit on the door tail side controls while closing, therefore, closing speed can be adjusted at two stages.

Adjust the speed control valve for the damper unit with a flat-blade screwdriver

Open and close the door a few times to check braking. Adjust the speed for both units.



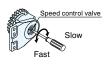
#### Bath and shower room door compatible specifications AQ type

Closing speed can be adjusted in the standard braking zone while closing of approximately 250mm.

(The braking zone can be extended by adding a rack even if the rail is not removed (PAT).)

Open and close the door a few times to check braking.

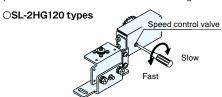
#### SL-2AQ types



#### Steel rail specifications for heavy steel door SL-2HG type

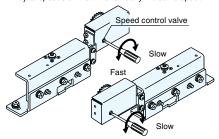
Controls speed of almost all zones to a stable speed. Adjust the speed control valve for the damper unit with a flat-blade screwdriver.

Open and close the door a few times to check braking.



#### OSL-2HG160, 200, 250 types

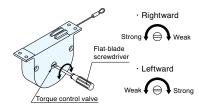
Speed adjustment zone for two units is the entire zone. Adjust speeds of two units to nearly the same speed.



# **ADJUSTMENT METHOD**

#### **Torque Adjustment**

#### Sliderman (SLS-2K type)

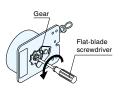


#### SL-2, 2A, 2B, AQ type

#### · Torque up

Turn the gear counterclockwise. The torque can be further controlled up the gear returns one tooth at a time to seven turns (9.5 turns engagement) compared with pre-shipment.

\*Excessive engagement may cause a failure.



Shake the catch little by little, then and the torque goes down. If the minimum value is unknown, return to zero turns once and engage the gear by 2.5 turns.



#### For heavy steel door SL-2H type

#### · Torque up

Turn the gear counterclockwise. The torque can be further controlled up to eight turns (9.5 turns engagement) and the torque goes down compared with pre-shipment.

\*Excessive engagement may cause a failure.

#### · Torque Down

Shake the catch little by little, then the gear returns one tooth at a time If the minimum value is unknown. return to zero turns once and engage the gear by 1.5 turns.

Catch

#### Torque up

Turn the gear counterclockwise. The torque can be further controlled up to eight turns (9.5 turns engagement) and the torque goes down compared with pre-shipment.

\*Excessive engagement may cause a failure.

# Torque Down

Steel rail specifications for heavy steel door SL-2HG type

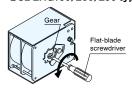
Shake the catch little by little, then the gear returns one tooth at a time If the minimum value is unknown, return to zero turns once and engage the gear by 1.5 turns.

#### OSL-2HG120 type





#### OSL-2HG160, 200, 250 type





#### Rack removal method (PAT)

Even after inserting the rail into the frame, you can remove the rack from above. Do so when changing the braking distance or performing maintenance

(Neither the slide plate nor the L-shaped slide plate can be removed from above.)

- (1) You can remove the rack by pressing the both ends of the rack against the rail and bending the arc-shaped projection by pressing it.
- (2) If the rail is too tight when inserting the rack, press the rack into the rail with a flat-blade screwdriver.

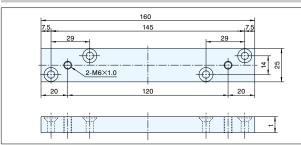




6 7 SL-2HG250 Fast

# **OPTION PARTS**

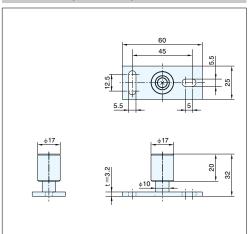
#### Gear fixing bracket for wood door 1 set = 1 door (2 pcs.)

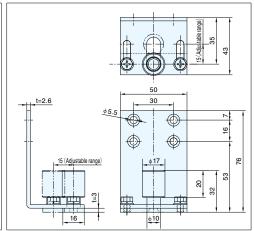


		Thickness "t"		
Specification	ification Model		Door tail side	
Slope	SLS-1K50	6	12	
	SLS-2K50	6	5	
W/H Drive deivice	SLS-2KD60	6		
	SLS-2KW60	6		

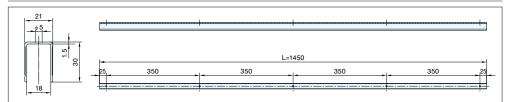
#### Guide roller (wood door) GT-17

#### Telescopia guide roller (wood door) LGT-17

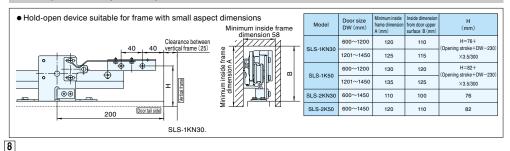




#### Guide rail for wood door GRA-17

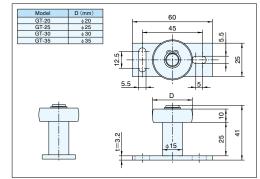


# Hold-open device (ST-110K)

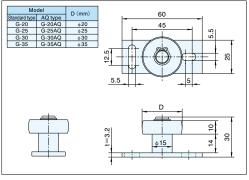


# **OPTION PARTS**

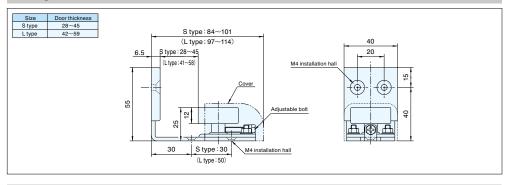
#### Guide roller (slope type)



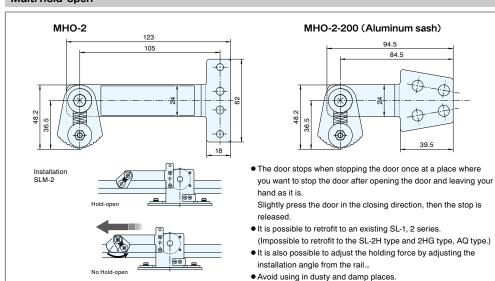
#### Guide roller (drive device)



#### Floor guide



#### Multi hold-open



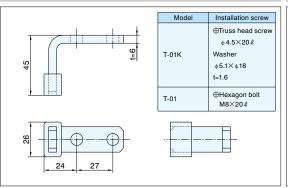
9

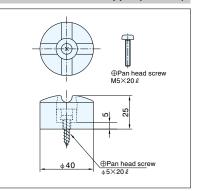
39.5

# **PARTS COMPONENTS**

# Door stopper (T-01K)

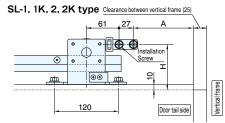
# Shock absorbed door stopper (TOA-40)



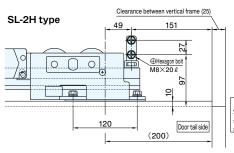


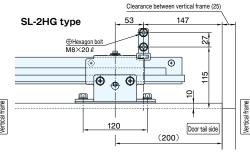
#### Installation door stopper (T-01K/T-01)

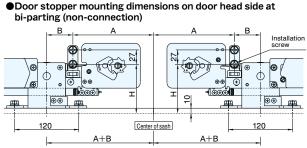




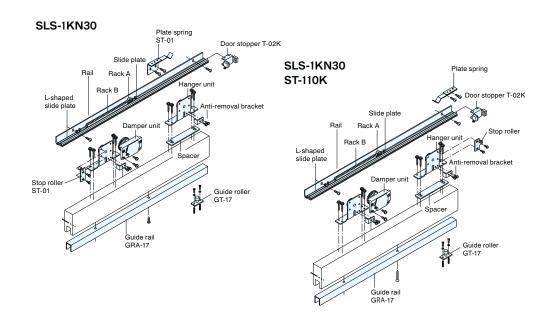
		Door size	In:	stallation	dimension
Sliding door closer	Model	DW(mm)	Α	Н	Installation screw
SL-1KN30		~ 1000	112	100	⊕Truss head screw
		1001 ~ 1350	112	100	φ4.5×20ℓ
SL-1K50	T-01K	1351 ~ 1450	212	108	Washer
SL-2KN30		~ 1350	112	85	φ5.1×φ18
SL-2K50		1351 ~ 1450	212	85	t=1.6
SL-1		~ 1000		100	Ollawaran halk
SL-1	T-01	1001 ~ 1450	112	108	⊕Hexagon bolt M8×20 ℓ
SL-2		~ 1450		85	WIO∧20€

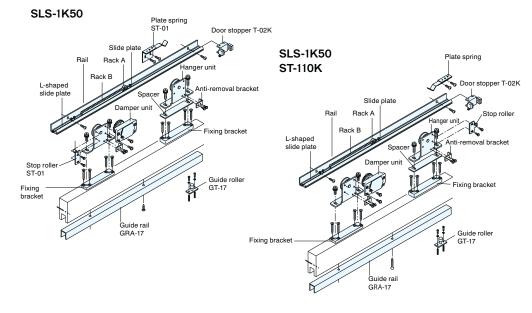


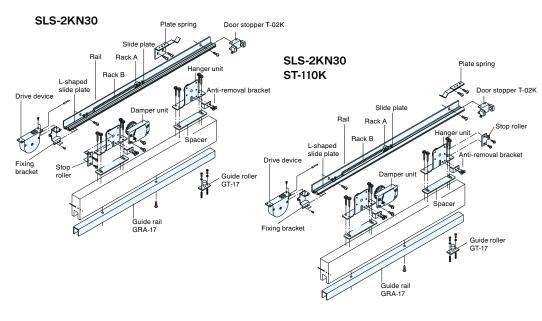


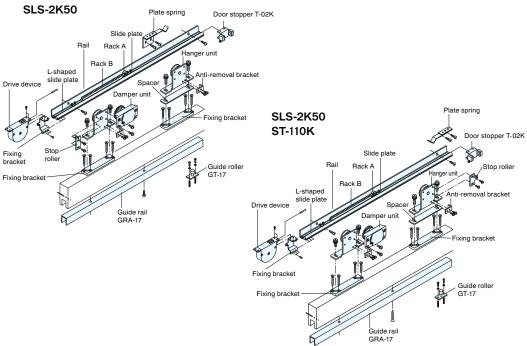


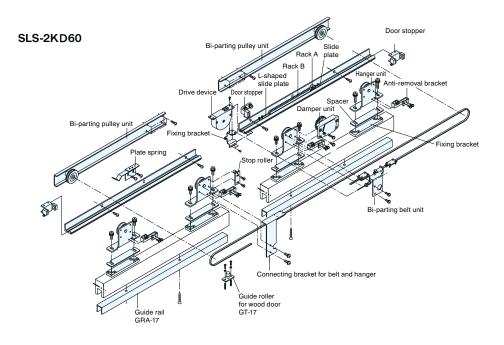
	Cliding door placer	Model	Installa	tion dim	ension
	Sliding door closer	wodei	Α	В	Н
1	SL-1KN30	T-01K			92
-	SL-1K50 SL-2K50	Installation screw ⊕Truss head screw ↓4.5×20ℓ (with washer)	151	49	98
	SL-1 SL-2				92
	SL-2H type	T-01			97
	SL-2HG type	Installation screw	167	53	115
	SL-2KW60	⊕Hexagon bolt			
	SL-2W SL-2HW type	M8×20ℓ	161	49	205

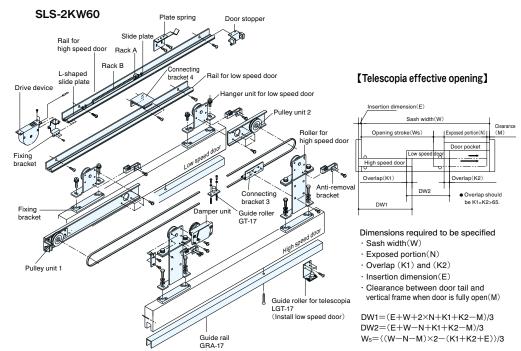


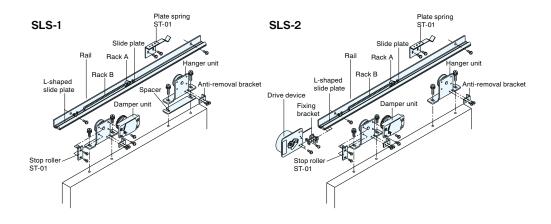


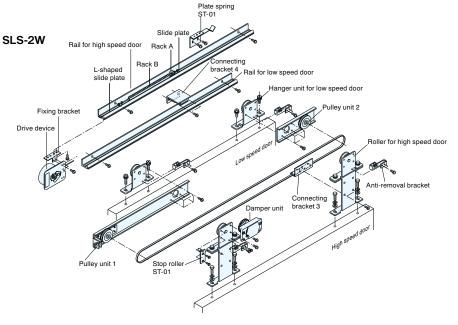




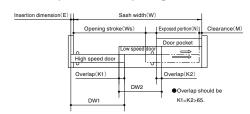








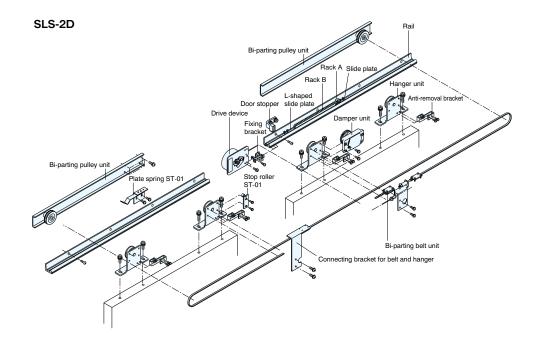
# [Telescopia effective opening]

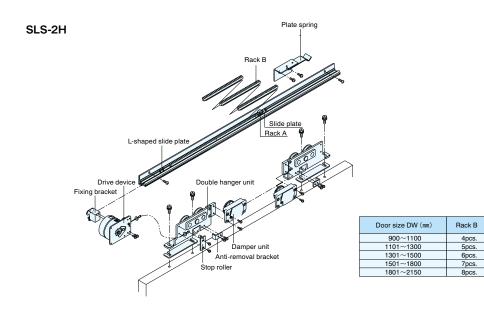


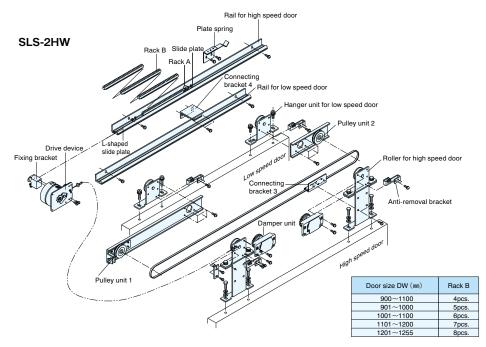
Dimensions required to be specified

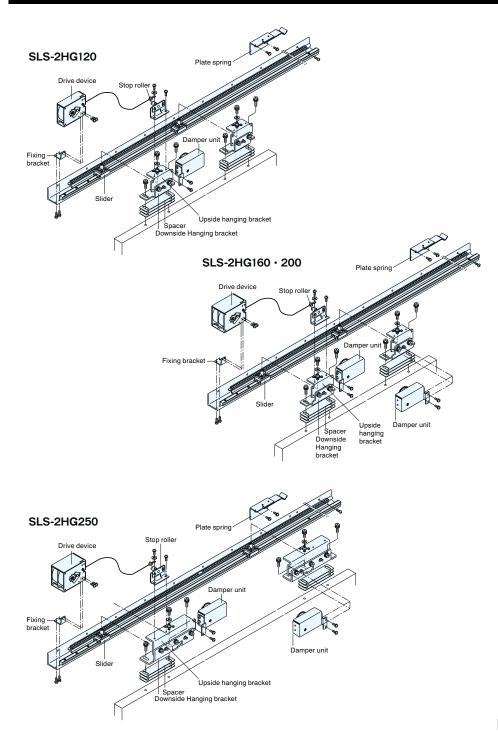
- · Sash width(W)
- · Exposed portion(N)
- · Overlap (K1) and (K2)
- · Insertion dimension(E)
- · Clearance between door tail and vertical frame when door is fully open(M)

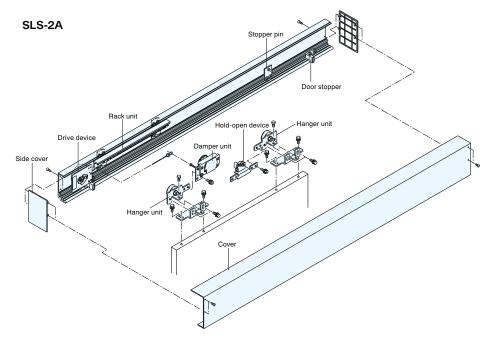
 $\begin{array}{l} DW1 = (E + W + 2 \times N + K1 + K2 - M)/3 \\ DW2 = (E + W - N + K1 + K2 - M)/3 \\ WS = \langle (W - N - M) \times 2 - (K1 + K2 + E) \rangle/3 \end{array}$ 

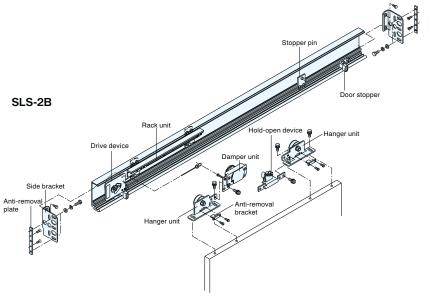


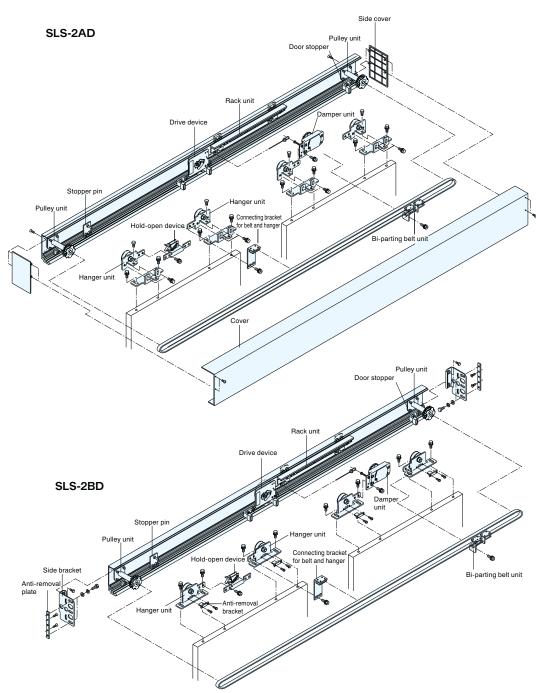


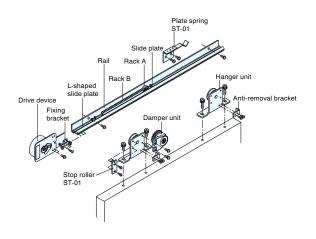




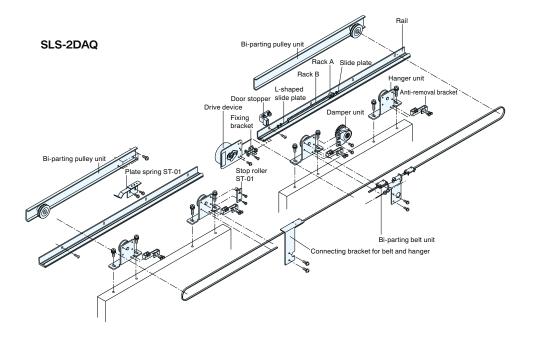


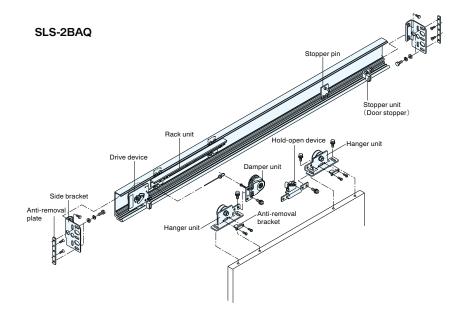


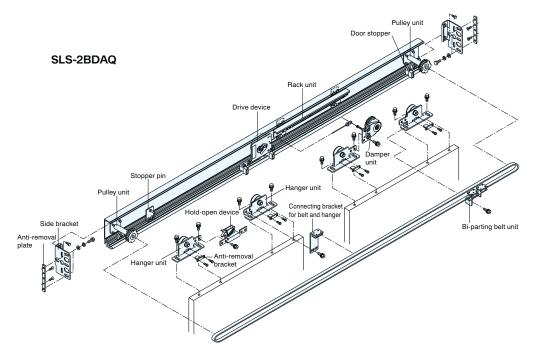




This is rightward with hold-open device







#### SLS-1KN30 SLOPE TYPE SINGLE OPENING FOR WOOD DOOR sash width W rightward 100 100%1 (200) rail length (L) = sash width (W)-200 1 (300) minimum inside frame \_50\_ remaining rail dimension fixed by screw every 300mm and 3.5mm height difference per 300mm dimension more than 58 (Remark No.5) ⊕pan head screw Plate spring stop roller 52.5 (ST-01) (ST-01) 28 24.5 opening stroke+40 truss head screw door stopper(T-02K) φ4.5×20ℓ Remark No.8) ⊕pan head screw M5×12 ℓ 1 D 10 ⊕truss head screw minimum inside frame dimension A Φ4.5×20ℓ anti-removal bracket $(24+(opening\ stroke imes3.5/300)$ 힏 200%1 (300) opening direction control stroke: 250mm from closing position\_ insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel(20) exposed portion from door pocket(130) clearance between vertical frame(25) 2008 φ4.5×20 ℓ Hanger unit 13.5 door tail door pocket panel side MHO-2 MHO-2(option) 40~45 sash width W leftward 100%1(200) 100 rail length (L) = sash width (W)-200 1 (300) hexagon flange 28 remaining rail dimension fixed by screw every 300mm and 3.5mm height difference per 300mm \_50\_ head screw φ4.5×35ℓ (Remark No.5) ⊕pan head screw stop rolle (ST-01) (ST-01) Dt truss head screw truss head screw door stopper(T-02K) opening stroke+40 ⊕truss head screw φ4.5×20ℓ φ4.5×20ℓ Remark No.8) ⊕pan head screw M5×12 ℓ ±4.5 x 20 ℓ guide rail(GRA-17) guide roller(GT-17) (c 9) (<del>00</del> (10) inti-removal bracket opening direction 200%1 (300) \_\_control stroke : 250mm from closing position 200 DW overlap with door pocket panel(20) opening stroke (max.1300) insertion dimension(5) \exposed portion from door pocket(130) clearance between vertical frame(25) screw anchor door pocket panel door tail side Hole pattern on inside view 13.5 Hanger unit fixed by screw every 300mm and 3.5mm height difference per 300mm (Remark No.5) rightward 40~45 opening stroke+40 MHO-2 Table 1 Door size Necessary spacer quantity Minimum inside frame dimension A В DW(mm) for hanger unit 위 600~ 700 door tail side 4pcs. Remark 701~ 800 door tail side 5pcs. door head side door tail opening direction door pocket panel side 801~ 900 door tail side 6pcs. 1. This is used both for rightward and leftward. 140 130 901~1000 door tail side 7pcs. 2. Hold-open device can not be combinedwith MHO-2. fixed by screw every 300mm and 3.5mm height difference per 300mm (Remark No.5) door tail side 8pcs. 3. Make sure to mount the anti-removal bracket to prevent the door from falling 1001 ~1100 leftward 1101~1200 door tail side 9pcs. down "after hanging the door up". 4. Refer to Table 1 necessary spacer quantity for hanger unit. 1201~1300 door tail side 10pcs. opening stroke+40 150 140 1301~1450 door tail side 12pcs. 5. Fixed by a screw every 300mm and 3.5mm height difference per 300mm. If the remaining rail more than 155mm, fixed by a screw at a position 150mm Fixed door size away from the final position and with an elevation difference of 1.8mm. Hold-open Model No Width and Height (mm) Weight (kg) 6. In case of Door width 1350mm, use the dimensions specified in \*\*1 \( \). 7. ( ) dimensions are reference dimensions. door pocket panel opening direction With Hold-open SLS-1KN30 600 ~ 1450×2400 8. In case of storing-in-wall, install a door stopper on the door or frame 23 instead of T-02K.

#### SLS-1KN30 ST110K (OPTION) SLOPE TYPE SINGLE OPENING FOR WOOD DOOR sash width W rightward 100 100%1 (200) rail length (L) = sash width (W)-200 1 (300) 50\_ fixed by screw every 300mm and 3.5mm height difference per 300mm remaining rail dimension (Remark No 4) ⊕pan head screw \M5×12ℓ minimum inside frame Plate spring (ST-110K) 40%1 clearance between dimension more than 58 40 (140) vertical frame(25) ⊕nan head screw M5×12 ℓ door stopper(T-02K) 52.5 28 24.5 Atruss head screw ±4.5×204 -230) X3.5/300 hexagon flange head screw \$\phi 4.5\times 35 \ell\$ anti-removal bracket minimum inside frame dimension A 9 φ4.5×20ℓ 200%1 (300) opening direction door stopper(T-02K) control stroke: 250mm from closing position DW 124+(opening stroke×3.5/300) insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel (20) ⊕truss head \exposed portion from door pocket(130) φ4.5×20 ℓ 76+ openir door tail door pocket panel side 24 Hanger unit 13.5 sash width W leftward 100%1 (200) 100 rail length (L) = sash width (W)-200%1 (300) hexagon flange head screw 28 remaining rail dimension fixed by screw every 300mm and 3.5mm height difference per 300mm \_50\_ (Remark No.4) ±4.5×35ℓ Plate spring (ST-110K) ⊕truss head screw clearance between 40%1 ±4.5×20ℓ vertical frame(25) (140), 40 door stopper(T-02K) stop roller ⊕pan head screw ⊕pan head screw M5×124 M5×12ℓ guide rail(GRA-17) guide roller(GT-17) φ4.5×20ℓ hexagon flange head screw \$\ \phi 4.5\times 35 \ell \ell\$ 125 opening direction 200%1 (300) \_control stroke : 250mm from closing position 200 overlap with door DW opening stroke (max.1300) pocket panel (20) insertion dimension(5) exposed portion from door pocket(130) screw anchor door tail door pocket panel side Hole pattern on inside view Hanger unit 13.5 fixed by screw every 300mm and 3.5mm height difference per 300mm (Remark No.4) rightward clearance between 40~45 vertical frame Table 1 Door size Necessary spacer quantity Minimum inside Dimension for hanger unit frame dimension A В DW(mm) 은 600∼ 700 door tail side 4pcs. Remark 701~ 800 door tail side 5pcs. door head side door tail side opening direction door pocket panel door tail side 6pcs. 801~ 900 1. This is used both for rightward and leftward. 120 110 901~1000 door tail side 7pcs. 2. Make sure to mount the anti-removal bracket to prevent the door from falling 1001 door tail side 8pcs. fixed by screw every 300mm and 3.5mm height difference per 300mm (Remark No.4) ~1100 down "after hanging the door up". leftward 1101~1200 door tail side 9pcs. 3. Refer to Table 1 necessary spacer quantity for hanger unit. clearance between 4. Fixed by a screw every 300mm and 3.5mm height difference per 300mm. 1201~1300 | door tail side 10pcs. vertical frame 125 115 1301~1450 door tail side 12pcs If the remaining rail more than 155mm, fixed by a screw at a position 150mm away from the final position and with an elevation difference of 1.8mm. Fixed door size 5. In case of Door width 1350mm, use the dimensions specified in \*14 >. Hold-open Model No. Width and Height (mm) Weight (kg) 6. ( ) dimensions are reference dimensions. 힏

With Hold-open | SLS-1KN30 | 600 ~ 1450×2400 | 10 ~ 30

door tail side

door pocket panel opening direction

76+ Spining S

#### SLS-1K50 SLOPETYPE SINGLE OPENING FOR WOOD DOOR sash width rightward 100 rail length (L) = sash width (W)-200 1300 100%1(200) minimum inside frame dimension more than 58 50 fixed by screw every 150mm and 3.5/2mm height difference per 150mm 40+(opening stroke×3.5/300) stop roller ⊕pan head screw M5×12ℓ 28 24.5 opening stroke+40 door stopper (T-02K) ⊕truss head screw (注記 9) ⊕pan head screw M5×12 ℓ ⊕truss head screv minimum inside frame dimension A **4.5**×20ℓ 120 anti-removal bracket 120 ⊕hexagon bolt ⊕hexagon bolt (10) M6×14 & M6×20 £ 30+(opening stroke×3.5/300) 160 160 opening direction 200%1(300) 200 control stroke: 250mm from closing position. DW truss head screw insertion dimension(5)\_ clearance between vertical frame (25) opening stroke (max.1300) overlap with door pocket panel(20) 원 64.5×20ℓ exposed portion from door pocket(130) door tail door pocket panel side MHO-2 (option) 65 40+ (opening stroke $\times 3$ , 5/300) MHO-2 sash width leftward 100%1(200) rail length (L) = sash width (W)-200%1(300) 100 fixed by screw every 150mm and 3.5/2mm height difference per 150mm 50 28±4 ⊕flat head screw Plate spring (ST-01) stop roller (ST-01) ⊕pan head screw ±4.5×35ℓ M5×120 Dt door stopper (T-02K **truss** head screw truss head screw opening stroke+40 ⊕truss head screw (注記 9) φ4.5×20 ℓ ±4.5×20ℓ ⊕pan head screw M5×124 guide rail(GRA-17) guide roller(GT-17) /o **a** (10) **|** 65 anti-removal bracket $\underline{\oplus}$ hexagon bolt M6 $\times$ 14 $\ell$ 120 ⊕hexagon bolt ⊕pan head screw M5×12 ℓ ⊕flat head screw \$4.5×35ℓ 160 opening direction 200%1(300) \_control stroke : 250mm from closing position DW clearance between vertical frame(25) overlap with door opening stroke (max.1300) insertion dimension (5 screw anchor pocket panel (20) exposed portion from door pocket(130) door tail door pocket panel side Hole pattern on inside view MHO-2 (option) fixed by screw every 150mm and 3.5/2mm height difference per 150mm 413 rightward MHO-2 opening stroke+40 40~45 Table 1 Door size Necessary spacer quantity Minimum inside for hanger unit frame dimension A DW(mm) В Remark 600~ 700 door head side 2pcs. 145 135 우 1. This is used both for rightward and leftward. 40+ (opening stroke) 701~ 800 door head side 1pcs. door head side opening direction door pocket panel 2. Hold-open device can not be combinedwith MHO-2 Not necessary 801~ 900 140 150 3. Make sure to mount the anti-removal bracket to prevent the door from falling 901~1000 door tail side 1 pcs. down "after hanging the door up" 1001 door tail side 2pcs. 150 ~1100 fixed by screw every 150mm and 3.5/2mm height difference per 150mm 4. Fixed by screw every 150mm and 3.5/2mm height difference per 150mm leftward 1101~1200 door tail side 3pcs. from standard position at door head side 1201~1300 door tail side 4pcs. opening stroke+40 standard hole 160 150 5. Refer to Table 1 necessary spacer quantity for hanger unit. door tail side 6pcs. 1301~1450 6. In case of steel frame, separately prepare screws. 55 Fixed door size (M5×L14)for installing the rail Hold-open Model No. Width and Height (mm) | Weight (kg) 8. ( ) dimensions are reference dimensions. door tail side door pocket panel opening direction 9. In case of storing-in-wall, install a door stopper on the door or frame With Hold-open | SLS-1K50 | 600 ~ 1450×2400 | 10 ~ 50 instead of T-02K.

#### SLS-1K50 ST110K (OPTION) SLOPE TYPE SINGLE OPENING FOR WOOD DOOR sash width rightward 100 100%1 (200) rail length (L) = sash width (W)-200 1 (300) 50 fixed by screw every 150mm and 3.5/2mm height difference per 150mm minimum inside frame ⊕pan head screw M5×12ℓ stop roller (ST-110K) dimension more than 58 40 (140) ⊕pan head screw M5×12 ℓ door stopper (T-02K) vertical frame (25) 28 24.5 64.5×20ℓ 65 9 ⊕hexagon bolt 120 truss head screv anti-removal bracket ⊕hexagon bolt minimum inside frame dimension A M6×14 & φ4.5×20ℓ M6×20 ℓ 160 opening direction $82+(\text{opening stroke}+\text{DW}-230)\times3.5/300$ 200%1(300) 200 control stroke : 250mm from closing position DW ⊕truss head screw opening stroke (max.1300) overlap with door pocket panel (20) insertion dimension(5) φ4.5×20ℓ exposed portion from door pocket(130) door tail 8 door pocket panel side 65 sash width leftward 100%1 (200) rail length (L) = sash width (W)-200%1 (300) 100 fixed by screw every 150mm and 3.5/2mm height difference per 150mm 50 28±4 ⊕flat head screw ±4.5×35ℓ Dt Plate spring (ST-110K) ⊕truss head screw 40%1 ⊕truss head screw ±4.5×20ℓ (140), 40 ±4.5×20ℓ clearance between door stopper (T-02K) stop roller (ST-110K) ⊕pan head screw ⊕pan head screw M5×12 ℓ M5×12ℓ vertical frame(25) I guide rail(GRA-17) guide roller(GT-17) ⊕truss head scre φ4.5×20ℓ |<del>₩</del> 9 95 120 ⊕hexagon bolt ⊕hexagon bolt M6×14 ℓ M6×20ℓ 150 ⊕pan head screw M5×12ℓ opening direction 200%1(300) control stroke: 250mm from closing position 200 DW overlap with door pocket panel(20) insertion dimension(5 opening stroke (max.1300) screw anchor exposed portion from door pocket(130) 82± door tail door pocket panel side Hole pattern on inside view fixed by screw every 150mm and 3.5/2mm height difference per 150mm 40. rightward **40~45** clearance between Table 1 vertical frame (25) Door size Necessary spacer quantity Minimum inside for hanger unit frame dimension A В DW(mm) 600~ 700 door head side 2pcs. 701~ 800 door head side 1pcs. door head side door tail side Remark opening direction door pocket panel 801~ 900 Not necessary 130 120 1. This is used both for rightward and leftward. 901~1000 door tail side 1pcs. 2. Make sure to mount the anti-removal bracket to prevent the door from falling door tail side 2pcs. 1001 fixed by screw every 150mm and 3.5/2mm height difference per 150mm ~1100 150 leftward down "after hanging the door up". 1101~1200 door tail side 3pcs. 3. Refer to Table 1 necessary spacer quantity for hanger unit. 1201 ∼1300 door tail side 4pcs. clearance between 135 125 4. Fixed by screw every 150mm and 3.5/2mm height difference per 150mm 1301~1450 door tail side 6pcs. vertical frame(25) from standard position at door head side 55 Fixed door size 5. In case of steel frame, separately prepare screws. Hold-open Model No (M5×L14) for installing the rail. Width and Height (mm) | Weight (kg) 힏 6. In case of Door width 1350mm, use the dimensions specified in $^{**1}\langle$ $\rangle$ . door tail side door pocket panel opening direction 7. ( ) dimensions are reference dimensions. With Hold-open | SLS-1K50 | 600 ~ 1450×2400 | 10 ~ 50 29

#### SLS-2KN30 WITH DRIVE DEVICE SINGLE OPENING FOR WOOD DOOR sash width rightward 100 rail length (L) = sash width (W)-200%1 (300) 100%1(200) 50 fixed by screw every 300mm remaining rail dimension minimum inside frame (Remark No.4) stop roller ⊕pan head screw dimension more than 58 M5×25ℓ 52.5 opening stroke+40 door stopper(T-02K) (Remark No.7) truss head screw 28 24.5 ⊕pan head screw M5×12 ℓ minimum inside frame dimension more than 140 Otruss head screv 5 125 hexagon flange head screw \$4.5\times35\ell\$ φ4.5×20ℓ anti-removal bracks door control stroke : 250mm from closing position\_ 200 200%1 (300) opening direction Hanger unit 13.5 DW insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel(20) hanger unit at door tail side ⊕truss head screw exposed portion from door pocket(130) φ4.5×20ℓ MHO-2 door head side door tail MHO-2 side (option) clearance between vertical frame (25) door pocket panel 40~45 sash width leftward 100%1(200) rail length (L) = sash width (W)-200%1 (300) 100 hexagon flange remaining rail dimension fixed by screw every 300mm 50 head screw Remark No.4) 64.5×35ℓ Plate spring (ST-01) door stopper(T-02K) ⊕truss head screw Otruss head screw 40 opening stroke+40 ⊕truss head screw 44.5×20ℓ ф4.5×20.8 ±4.5×20ℓ (Remark No.7) ⊕pan head screw M5×124 quide rail(GRA-17) guide roller(GT-17) 125 28 53 hexagon flange head screw \$4.5\times35 \ell\_{1}\$ 150 door opening direction 200%1 (300 control stroke: 250mm from closing position 200 Hanger unit 13.5 overlap with door DW 125 pocket panel(20) opening stroke (max.1300) insertion dimension(5) hanger unit at door tail side exposed portion from door pocket(130) screw anchor MHO-2 door tail side door head side MHO-2 ₩ clearance between vertical frame (25) Hole pattern on inside view door pocket panel fixed by screw every 300mm (Remark No.4) rightward 40~45 opening stroke+40 . 8 Remark 유 1. This is used both for rightward and leftward. door head side opening direction door pocket panel 2. Hold-open device can not be combinedwith MHO-2. 3. Make sure to mount the anti-removal bracket to prevent the door from falling fixed by screw every 300mm (Remark No.4) 150 down "after hanging the door up". leftward 4. Fixed by a screw every 300mm. If the remaining rail more than 155mm, opening stroke+40 fixed by a screw position 150mm away from the final position. Fixed door size 9 Model No. Hold-open Width and Height (mm) Weight (kg) 6. ( ) dimensions are reference dimensions. 49 7. In case of storing-in-wall, install a door stopper on the door or frame With Hold-open SLS-2KN30 $|600\sim1450\times2400|$ less than 30 2 instead of T-02K. door tail side 31 door head side door pocket panel opening direction

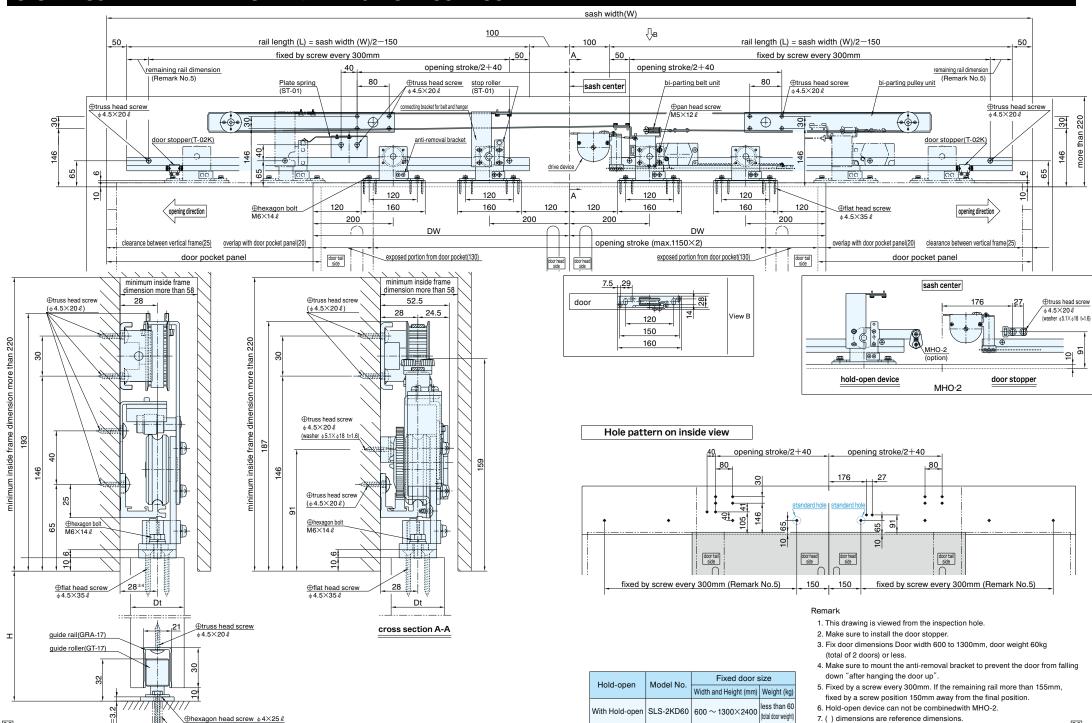
#### SLS-2KN30 ST110K (OPTION) WITH DRIVE DEVICE SINGLE OPENING FOR WOOD DOOR sash width(W) rightward 100%1(200) 100 rail length (L) = sash width (W)-200 1 (300) 50 fixed by screw every 300mm remaining rail dimension (Remark No.3) ⊕pan head screw M5×12 ℓ stop roller (ST-110K) Plate spring 40%1 minimum inside frame ⊕pan head screw M5×12 ℓ 40 (140) dimension more than 58 door stopper(T-02K) Zσ 28 24.5 anti-remova bracket minimum inside frame dimension more than 110 door 200 200%1 (300) opening direction control stroke : 250mm from closing position DW Hanger unit 13.5 ⊕truss head scre insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel(20) φ4.5×20ℓ truss head screv exposed portion from door pocket(130) door head side door tail 8 side clearance between vertical frame(25) door pocket panel 40~45 sash width(W) leftward 100%1(200) rail length (L) = sash width (W) - 200 1 (300) 100 hexagon flange 28 remaining rail dimension fixed by screw every 300mm 50 (Remark No.3) φ4.5×35ℓ Plate spring (ST-110K) ⊕truss head screw stop roller (ST-110K) ⊕pan head screw M5×12ℓ ⊕truss head screw 40%1 44.5×20ℓ ⊕pan head screw M5×12 & (25) (140), 40 door stopper(T-02K) quide rail(GRA-17) guide roller(GT-17) 44.5×20 A =3.2 anti-removal bracket hexagon flange head screw \$4.5\times35\ell\$ opening direction door 200%1 (300 control stroke: 250mm from closing position 13.5 DW overlap with door pocket panel(20) opening stroke (max.1300) insertion dimension(5) exposed portion from door pocket(130) screw anchor door tail side door head side clearance between vertical frame(25) Hole pattern on inside view door pocket panel fixed by screw every 300mm (Remark No.3) rightward clearance between vertical frame(25) 9 door head side opening direction door pocket panel Remark 1. This is used both for rightward and leftward. fixed by screw every 300mm (Remark No.3) 150 2. Make sure to mount the anti-removal bracket to prevent the door from falling leftward down "after hanging the door up". Fixed door size clearance between Model No. 3. Fixed by a screw every 300mm. If the remaining rail more than 155mm, Hold-open vertical frame(25) Width and Height (mm) Weight (kg) standard hole fixed by a screw position 150mm away from the final position. 4. In case of Door width 1350mm, use the dimensions specified in $^{\divideontimes 1}\langle \quad \rangle.$ 49 With Hold-open SLS-2KN30 600 ~ 1450×2400 less than 30 5. ( ) dimensions are reference dimensions. 흔 door pocket panel opening direction

#### SLS-2K50 WITH DRIVE DEVICE SINGLE OPENING FOR WOOD DOOR sash width(W) rightward 100 rail length (L) = sash width (W)-200\*1(300) 100 \*1 (200) 50 fixed by screw every 150mm minimum inside frame dimension more than 58 stop roller ⊕pan head screw M5×25ℓ opening stroke+40 40 door stopper(T-02K) truss head screw 28 24.5 (Remark No.7) ⊕pan head screw M5×12 ℓ minimum inside frame dimension more than 150 9 CC E truss head so anti-removal bracket 120 120 **44.5**×20ℓ ⊕hexagon bolt M6×14 ℓ 우 160 opening direction 200%1(300) 200 control stroke: 250mm from closing position MHO-2 DW clearance between insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel(20) vertical frame(25) MHO-2 φ4.5×20ℓ exposed portion from door pocket(130) 8 door tail side door head side door pocket panel T) 95 sash width(W) leftward 100\*1(200) rail length (L) = sash width (W)-200\*1(300) 100 fixed by screw every 150mm 50 28<sup>±4</sup> ⊕flat head screw Plate spring ⊕pan head screw M5×25 ℓ stop roller (ST-01) +4.5×35.6 Dt (ST-01) ⊕truss head screw ⊕truss head screw opening stroke+40 truss head screw door stopper(T-02K) ±4.5×20 ℓ 44.5×20 l ⊕pan head screw M5×124 (Remark No.7) guide rail(GRA-17) guide roller(GT-17) <u> ا</u> ♦ ♦ ا CC \_\_\_ anti-removal bracket 120 120 ⊕hexagon bolt M6×14 ℓ 160 ⊕pan head screw M5×12 ℓ opening direction 200\*1(300) control stroke: 250mm from closing position 200 MHO-2 clearance between vertical frame(25) overlap with door opening stroke (max.1300) insertion dimension(5 MHO-2 screw anchor pocket panel(20) exposed portion from door pocket(130) door pocket panel door tail side door head side Hole pattern on inside view fixed by screw every 150mm rightward opening stroke+40 **₽** 은 door head side opening direction door pocket panel Remark 1. This is used both for rightward and leftward. fixed by screw every 150mm 150 leftward 2. Hold-open device can not be combinedwith MHO-2. 3. Make sure to mount the anti-removal bracket to prevent the door from falling opening stroke+40 down "after hanging the door up" 4 4. In case of steel frame, separately prepare screws. Fixed door size 22 Model No. (M5×L14) for installing the rail. Hold-open Width and Height (mm) | Weight (kg) 5. In case of Door width 1350mm, use the dimensions specified in $^{**1}\langle$ $\rangle$ . 위 6. ( ) dimensions are reference dimensions. With Hold-open SLS-2K50 $|600\sim$ 1450imes2400 | less than 50 door tail side door pocket panel opening direction 7. In case of storing-in-wall, install a door stopper on the door or frame instead of T-02K.

#### SLS-2K50 ST110K (OPTION) WITH DRIVE DEVICE SINGLE OPENING FOR WOOD DOOR sash width(W) rightward rail length (L) = sash width (W)-200\*1(300) 100%1(200) 100 50 fixed by screw every 150mm ⊕pan head screw M5×25 ℓ Plate spring minimum inside frame 40%1 clearance between ⊕pan head screw M5×12 ℓ dimension more than 58 40 (140) vertical frame(25) door stopper(T-02K) Zσ 24.5 CC m φ4.5×204 5 120 minimum inside frame dimension more than 120 anti-removal bracket ⊕hexagon bolt, 160 opening direction control stroke: 250mm from closing position 200\*1(300) 200 ⊕truss head scre ±4.5×20ℓ insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel(20) exposed portion from door pocket(130) door tail door head side door pocket panel T) sash width(W) leftward 100%1(200) rail length (L) = sash width (W)-200 1 (300) 100 fixed by screw every 150mm 50 28±4 ⊕flat head screw 44.5×35.6 Dt Plate spring (ST-110K) ⊕truss head screw stop roller (ST-110K) ⊕pan head screw M5×12ℓ ⊕truss head screw φ4.5×20ℓ ±4.5×20ℓ 40%1 ⊕pan head screw M5×12 & clearance between vertical frame (25) (140) 40 door stopper(T-02K) quide rail(GRA-17) guide roller(GT-17) **₩** φ4.5×20ℓ 120 ⊕hexagon bolt M6×14 ℓ 160 ⊕pan head screw M5×12 ℓ opening direction 200\*1(300) control stroke: 250mm from closing position 200 DW overlap with door pocket panel(20) opening stroke (max.1300) insertion dimension(5) screw anchor exposed portion from door pocket(130) door tail side door head side door pocket panel Hole pattern on inside view fixed by screw every 150mm rightward 40~45 vertical frame(25) 유 door head side opening direction door pocket panel fixed by screw every 150mm 150 Remark leftward 1. This is used both for rightward and leftward. clearance between 2. Make sure to mount the anti-removal bracket to prevent the door from falling vertical frame(25 down "after hanging the door up". Fixed door size Model No. 3. In case of steel frame, separately prepare screws. Hold-open Width and Height (mm) Weight (kg) (M5×L14) for installing the rail. 4. In case of Door width 1350mm, use the dimensions specified in $^{lepha1}\langle$ $\rangle$ . With Hold-open SLS-2K50 $|600\sim$ 1450imes2400 | less than 50 door tail side door pocket panel opening direction 5. ( ) dimensions are reference dimensions. 37

# SLS-2KD60 WITH DRIVE DEVICE BI-PARTING FOR WOOD DOOR

screw anchor



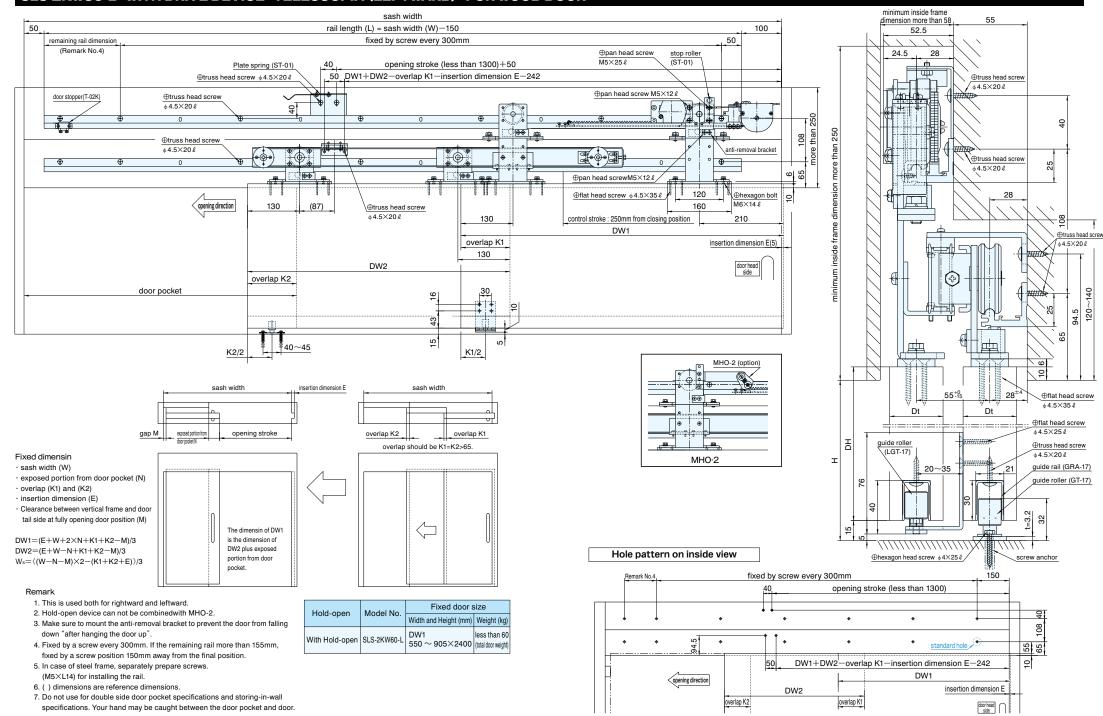
#### SLS-2KW60-R WITH DRIVE DEVICE TELESCOPIA (RIGHTWARD) FOR WOOD DOOR minimum inside frame sash width dimension more than 58 100 50 rail length (L) = sash width (W)-150 52.5 50 fixed by screw every 300mm remaining rail dimension (Remark No.4) 28 24.5 stop roller ⊕pan head screw (ST-01) M5×25ℓ opening stroke (less than 1300)+50 ф 40 Plate spring (ST-01) DW1+DW2-overlap K1-insertion dimension E-242 50 ⊕truss head screw **4.5×20ℓ** ⊕pan head screw M5×12 ℓ connecting Atruss head screw connecting bracket 3 connecting bracket 4 connecting door stopper (T-02K) pulley unit 1 pulley unit 2 φ4.5×20ℓ more than inside frame dimension more than 250 ⊕truss head screw 64.5×20ℓ ⊕truss head screw <del>•</del> φ4.5×20ℓ 65 ⊕pan head screw M5×12ℓ 28 10 $\oplus$ hexagon bolt 120 ⊕flat head screw ±4.5×35.0 M6×14 ℓ ⊕truss head screw (87)130 opening direction φ4.5×20ℓ 210 control stroke : 250mm from closing position 130 truss head scre overlap K1 insertion dimension E(5) φ4.5×20ℓ 130 door head DW2 overlap K2 door pocket 120~140 94.5 40~45 K1/2 K2/2 MHO-2(option) insertion dimension E sash width sash width 28<sup>±4</sup> 55+0 ⊕flat head screw φ4.5×35ℓ Dt Dt ⊕flat head screw φ4.5×25ℓ overlap K1 overlap K2 opening stroke from door pocket N auide roller 핌 **truss** head screw overlap should be K1=K2>65. \_= φ4.5×20ℓ (LGT-17) I MHO-2 guide rail(GRA-17) Fixed dimensin 20~35 · sash width (W) guide roller(GT-17) DW1 DW2 · exposed portion from door pocket (N) DW1 DW2 · overlap (K1) and (K2) · insertion dimension (E) · Clearance between vertical frame and door tail side at fully opening door position (M) The dimensin of DW1 is the dimension of DW2 plus exposed $DW1 = (E+W+2 \times N+K1+K2-M)/3$ screw anchor ⊕hexagon head screw \$4×25ℓ portion from door DW2 = (E+W-N+K1+K2-M)/3pocket. $W_s = \langle (W-N-M) \times 2 - (K1+K2+E) \rangle /3$ Hole pattern on inside view 150 fixed by screw every 300mm Remark No.4 Remark opening stroke (less than 1300) 40 Fixed door size 1. This is used both for rightward and leftward. Hold-open Model No. Width and Height (mm) Weight (kg) 2. Hold-open device can not be combinedwith MHO-2. 3. Make sure to mount the anti-removal bracket to prevent the door from falling less than 60 With Hold-open SLS-2KW60-R $550\sim905 imes2400$ (total door weight) 108 down "after hanging the door up". 4. Fixed by a screw every 300mm. If the remaining rail more than 155mm, standard hole fixed by a screw position 150mm away from the final position. 5. In case of steel frame, separately prepare screws. DW1+DW2-overlap K1-insertion dimension E-242 (M5×L14) for installing the rail. opening direction 6. ( ) dimensions are reference dimensions. insertion dimension E DW2 7. Do not use for double side door pocket specifications and storing-in-wall

overlap K1

overlap K2

specifications. Your hand may be caught between the door pocket and door.

# SLS-2KW60-L WITH DRIVE DEVICE TELESCOPIA (LEFTWARD) FOR WOOD DOOR



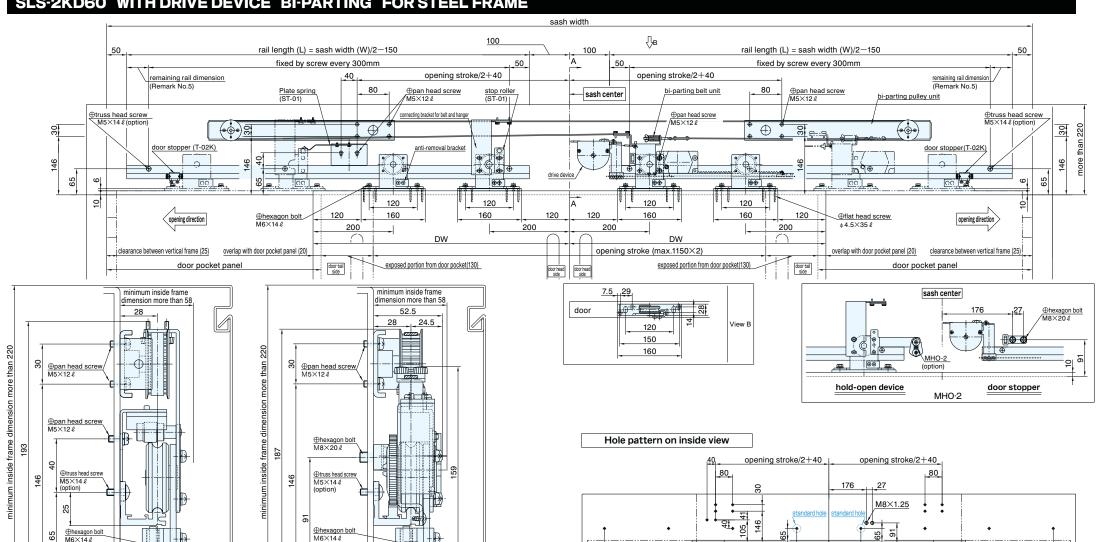
#### SLS-1KN30 SLOPE TYPE SINGLE OPENING FOR STEEL FRAME sash width W rightward 100 rail length (L) = sash width (W)-200\*1 (300) 100%1 (200) minimum inside frame \_50\_ fixed by screw every 300mm and 3.5mm height difference per 300mm remaining rail dimension dimension more than 58 ⊕pan head screw (Remark No.5) stop roller (ST-01) M5×12ℓ 28 24.5 opening stroke + 40 ⊕pan head screw M5×12ℓ door stopper(T-02K) (Remark No.9) ⊕truss head screw M5×14 ℓ (option) ⊕pan head screw M5×12 ℓ 1 D 10 ⊕pan head screw φM5×12ℓ minimum inside frame dimension 125 hexagon flange head screw ±4.5×35 ℓ 124+(opening stroke×3.5/300) anti-removal 200%1 (300) opening direction control stroke : 250mm from closing position\_ insertion dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) exposed portion from door pocket(130) clearance between vertical frame (25) Hanger unit 13.5 door tail door pocket panel side MHO-2 MHO-2 (option) sash width W leftward 100%1 (200) rail length (L) = sash width (W)-200%1 (300) 100 remaining rail dimension 28 fixed by screw every 300mm and 3.5mm height difference per 300mm \_50\_ hexagon flange head screw (Remark No.5) φ4.5×35ℓ door stopper(T-02K) truss head screw ⊕pan head screw ⊕truss head screw opening stroke + 40 ⊕pan head screwM5×12 (Remark No.9) M5×14 ℓ (option) ±4.5×20ℓ quide rail (GRA-17) guide roller (GT-17) /ci 🕀 i (<del>00</del> anti-removal bracket hexagon flange head screw \$4.5×35 l opening direction 200%1 (300) control stroke : 250mm from closing position 200 overlap with door DW pocket panel(20) opening stroke (max.1300) insertion dimension(5) exposed portion from door pocket(130) clearance between vertical frame (25) screw anchor door pocket panel door tail side Hole pattern on inside view 13.5 Hanger unit fixed by screw every 300mm and 3.5mm height difference per 300mm (M5×0.8)(Remark Nq.5) rightward 40~45 opening stroke+40 MHO-2 Table 1 Door size Minimum inside Necessary spacer quantity for hanger unit Remark DW(mm) frame dimension A 600~ 700 door tail side 4pcs. 1. This is used both for rightward and leftward. 701~ 800 door tail side 5pcs. 2. Hold-open device can not be combinedwith MHO-2. door head side opening direction door pocket panel side door tail side 6pcs. 3. Make sure to mount the anti-removal bracket to prevent the door from falling 130 140 door tail side 7pcs. down "after hanging the door up". fixed by screw every 300mm and 3.5mm height difference per 300mm (M5×0.8)(Remark Nq.5) 150 door tail side 8pcs. 1001 1100 4. Refer to Table 1 necessary spacer quantity for hanger unit. leftward door tail side 9pcs. 5. Fixed by a screw every 300mm and 3.5mm height difference per 300mm. ~1200 1201~1300 door tail side 10pcs If the remaining rail more than 155mm, fixed by a screw at a position 150mm opening stroke+40 150 140 away from the final position and with an elevation difference of 1.8mm. 1301~1450 door tail side 12pcs 6. In case of steel frame, separately prepare screws. Fixed door size (M5×L14) for installing the rail. Hold-open Model No. Width and Height (mm) Weight (kg) 7. In case of Door width 1350mm, use the dimensions specified in \*1\(\infty\). 8. ( ) dimensions are reference dimensions. door pocket panel opening direction With Hold-open | SLS-1KN30 | 600 ~ 1450×2400 | 10 ~ 30 9. In case of storing-in-wall, install a door stopper on the door or frame instead of T-02K.

#### SLS-1K50 SLOPE TYPE SINGLE OPENING FOR STEEL FRAME sash width W rightward 100 rail length (L) = sash width (W) $-200^{11}(300)$ 100%1(200) 50 fixed by screw every 150mm and 3.5/2mm height difference per 150mm minimum inside frame dimension more than 58 stop roller 52.5 ⊕pan head screw M5×12 ℓ opening stroke+40 truss head screw door stopper (T-02K) 24.5 M5×14 ℓ (option) (Remark No.9) ⊕pan head screw M5×12 ℓ ⊕pan head screw <del>\$\Phi</del> M5×12ℓ minimum inside frame dimension A 120 120 ⊕hexagon bolt anti-removal bracket ⊕hexagon bolt 6 30+(opening stroke×3.5/300) M6×14 ℓ 160 M6×20ℓ 160 opening direction 200 control stroke: 250mm from closing position 200%1(300) ⊕truss head screw insertion dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) clearance between vertical frame (25) M5×14ℓ (option) exposed portion from door pocket(130) door tail door pocket panel side MHO-2 (option) 65 sash width W leftward 100%1(200) rail length (L) = sash width (W)-200 1300 100 fixed by screw every 150mm and 3.5/2mm height difference per 150mm 50 28<sup>±4</sup> ⊕flat head screw ⊕pan head screw stop roller ±4.5×35ℓ Dt (ST-01) M5×12ℓ (ST-01) ⊕pan head screw M5×12ℓ truss head screw opening stroke+40 door stopper (T-02K truss head screw M5×14 ℓ (option) (Remark No 9) ⊕pan head screw M5×12 ℓ ф4.5x25. guide rail (GRA-17) /o **e** guide roller (GT-17) (10) 120 ⊕hexagon bolt M6×14 ℓ ⊕hexagon bolt M6×20ℓ 150 ⊕pan head screw M5×12 ℓ opening direction 200%1(300) control stroke : 250mm from closing position 200 DW overlap with door clearance between vertical frame(25) pocket panel (20) opening stroke (max.1300) insertion dimension (5 screw anchor exposed portion from door pocket(130) door tail door pocket panel side Hole pattern on inside view MHO-2 (option) fixed by screw every 150mm and 3.5/2mm height difference per 150mm (M5×0.8) 40. rightward MHO-2 standard hole opening stroke+40 40~45 Table 1 Door size Necessary spacer quantity Minimum inside for hanger unit frame dimension A В DW(mm) 600 ∼ 700 door head side 2pcs. 145 135 1. This is used both for rightward and leftward. 701~ 800 door head side 1pcs. door head side opening direction door pocket panel 2. In case of steel frame, separately prepare screws. Not necessary 801~ 900 (M5×L14) for installing the rail. 140 150 901~1000 door tail side 1 pcs. 3. Hold-open device can not be combinedwith MHO-2. 1001~1100 door tail side 2pcs. fixed by screw every 150mm and 3.5/2mm height difference per 150mm (M5×0.8) 150 leftward 4. Make sure to mount the anti-removal bracket to prevent the door from 1101~1200 door tail side 3pcs. falling down "after hanging the door up". opening stroke+40 standard hol 1201~1300 door tail side 4pcs. 160 150 5. Fixed by screw every 150mm and 3.5/2mm height difference per 150mm 1301~1450 door tail side 6pcs. from standard position at door head side 6. Refer to Table 1 necessary spacer quantity for hanger unit. Fixed door size Hold-open Model No. 7. In case of Door width 1350mm, use the dimensions specified in $\times 1$ $\langle \ \rangle$ . Width and Height (mm) | Weight (kg) 위 8. ( ) dimensions are reference dimensions. door tail side door pocket panel opening direction 9. In case of storing-in-wall, install a door stopper on the door or frame With Hold-open SLS-1K50 600 ~ 1450×2400 10 ~ 50 46 instead of T-02K. 47

#### SLS-2KN30 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL FRAME sash width W rightward 100 rail length (L) = sash width (W)-200%1 (300) 100%1(200) minimum inside frame 50 fixed by screw every 300mm remaining rail dimension dimension more than 58 (Remark No.4) stop roller ⊕pan head screw M5×25ℓ 28 24.5 opening stroke+40 ⊕pan head screw M5×12 ℓ door stopper(T-02K) ⊕truss head screw ⊕pan head screw M5×12 ℓ minimum inside frame dimension more than 140 [일 인 ⊕pan head screw φM5×12 ℓ hexagon flange head screw \$4.5×35 \$\ell\$ anti-remova door control stroke : 250mm from closing position \_ 200 200%1 (300) opening direction Hanger unit 13.5 13.5 DW insertion dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) ⊕pan head screw exposed portion from door pocket(130) M5×14ℓ MHO-2 door head side door tail /MHO-2 side (option) clearance between vertical frame (25) door pocket panel 40~45 sash width W leftward 100%1(200). rail length (L) = sash width (W)-200\*1 (300) 100 remaining rail dimension fixed by screw every 300mm 50 Remark No.4) ⊕pan head screw stop roller (ST-01) M5×25ℓ door stopper(T02K) truss head screw ⊕pan head screw opening stroke+40 truss head screw M5×14ℓ (option) (Remark No.8) ±4.5×20 € ⊕pan head screw M5×124 guide rail (GRA-17) guide roller (GT-17) 125 25 28 hexagon flange head screw \$4.5\times35 \ell\_{1}\$ opening direction 200%1 (300 control stroke : 250mm from closing position 200 Hanger unit 13.5 overlap with door DW pocket panel(20) opening stroke (max.1300) insertion dimension(5) exposed portion from door pocket(130) screw anchor MHO-2 door tail side door head side MHO-2 ₩ clearance between vertical frame (25) Hole pattern on inside view door pocket panel fixed by screw every 300mm (M5×0.8)(Remark No.4) rightward 40~45 opening stroke+40 . 8 Remark 1. This is used both for rightward and leftward. 9 2. Hold-open device can not be combinedwith MHO-2. 3. Make sure to mount the anti-removal bracket to prevent the door from falling door head side opening direction door pocket panel down "after hanging the door up". 4. Fixed by a screw every 300mm. If the remaining rail more than 155mm, fixed by screw every 300mm (M5×0.8)(Remark No.4) fixed by a screw position 150mm away from the final position. leftward 5. In case of steel frame, separately prepare screws. opening stroke+40 (M5×L14) for installing the rail. Fixed door size 6. In case of Door width 1350mm, use the dimensions specified in \*1( ). Model No. Hold-open Width and Height (mm) Weight (kg) 7. ( ) dimensions are reference dimensions. 49 8. In case of storing-in-wall, install a door stopper on the door or frame With Hold-open SLS-2KN30 $|600 \sim 1450 \times 2400$ less than 30 위 instead of T-02K. 49 door tail side 48 door head side door pocket panel opening direction

#### SLS-2K50 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL FRAME sash width W 100\*1(200) 100 rail length (L) = sash width (W)-200\*1(300) rightward 50 fixed by screw every 150mm minimum inside frame dimension more than 58 stop roller ⊕pan head screw (ST-01) (ST-01) 52.5 opening stroke+40 28 ⊕pan head screw M5×12 ℓ truss head screw 24.5 door stopper (T-02K) ⊕pan head screw M5×12 ℓ M5×14 ℓ (option) (Remark No.7) minimum inside frame dimension more than 150 7d ₩, CC m ⊕nan head screw ПП M5×12ℓ 120 ⊕hexagon bolt anti-removal bracket 힏 160 160 opening direction control stroke: 250mm from closing position 200 \*1 (300) (option) clearance between ⊕truss head screw insertion dimension(5) opening stroke (max.1300) overlap with door pocket panel (20) vertical frame (25) MHO-2 M5×14 ℓ (option) exposed portion from door pocket(130) door tail door head side door pocket panel 25 rh: 65 40~45 sash width W leftward 100%1(200) rail length (L) = sash width (W)-200\*1(300) 100 50 fixed by screw every 150mm 28<sup>±4</sup> ⊕flat head screw ⊕pan head screw stop roller φ4.5×35ℓ Dt M5×25 ℓ (ST-01) door stopper (T-02K) ⊕truss head screw ⊕pan head screw M5×12 ℓ opening stroke+40 ⊕truss head screw M5×14 ℓ (option) ⊕pan head screw M5×12ℓ φ4.5×20ℓ guide rail(GRA-17) guide roller(GT-17) 120 120 ⊕hexagon bolt M6×14 ℓ opening direction 160 ⊕pan head screw M5×12 ℓ 200\*1(300) control stroke : 250mm from closing position 200 MHO-2 ⊕⊛ clearance between overlap with door insertion pocket panel (20) opening stroke (max.1300) vertical frame (25) MHO-2 screw anchor exposed portion from door pocket(130) door tail door head side door pocket panel side Hole pattern on inside view fixed by screw every 150mm (M5×0.8) rightward opening stroke+40 40~45 6 door head side door tail side opening direction door pocket panel Remark 1. This is used both for rightward and leftward. fixed by screw every 150mm (M5×0.8) 150 leftward 2. In case of steel frame, separately prepare screws. (M5×L14) for installing the rail. opening stroke+40 3. Hold-open device can not be combined with MHO-2. **원** 4. Make sure to mount the anti-removal bracket to prevent the door from Fixed door size 55 Hold-open Model No. falling down "after hanging the door up". Width and Height (mm) Weight (kg) 5. In case of Door width 1350mm, use the dimensions specified in \*1\(\times\). 10 6. ( ) dimensions are reference dimensions. With Hold-open | SLS-2K50 | 600 ~ 1450×2400 less than 50 door pocket panel opening direction 7. In case of storing-in-wall, install a door stopper on the door or frame 50 51 instead of T-02K.

# SLS-2KD60 WITH DRIVE DEVICE BI-PARTING FOR STEEL FRAME



Dt

cross section A-A

28

힏

⊕flat head scre

φ4.5×35L

28±4

Dt

\_truss head screw

±4.5×20ℓ

screw anchor

⊕flat head screw

guide rail (GRA-17)

guide roller (GT-17)

# Remark

door head side

150

door head side

150

- 1. This drawing is viewed from the inspection hole.
- 2. Make sure to install the door stopper.
- 3. Fix door dimensions Door width 600 to 1300mm, door weight 60kg (total of 2 doors) or less.
- 4. Make sure to mount the anti-removal bracket to prevent the door from falling down "after hanging the door up".

door tail side

fixed by screw every 300mm (M5×0.8)(Remark No.5)

- 5. Fixed by a screw every 300mm. If the remaining rail more than 155mm, fixed by a screw position 150mm away from the final position.
- 6. In case of steel frame, separately prepare screws. (M5×L14) for installing the rail.
- 7. Hold-open device can not be combinedwith MHO-2.
- 8. ( ) dimensions are reference dimensions.



door tail side

fixed by screw every 300mm (M5×0.8)(Remark No.5)

#### SLS-2KW60-R WITH DRIVE DEVICE TELESCOPIA (RIGHTWARD) FOR STEEL FRAME sash width W dimension more than 58 55 100 rail length (L) = sash width (W)-150 50 52.5 50 fixed by screw every 300mm remaining rail dimension (Remark No.4) 24.5 stop roller ⊕pan head screw (ST-01) M5×25ℓ opening stroke (less than 1300)+50 40 Plate spring (ST-01) ⊕pan head screw DW1+DW2-overlap K1-insertion dimension E-242 50 ⊕pan head screw M5×12 ℓ M5×12ℓ ⊕pan head screw M5×12 ℓ connecting connecting bracket 3 connecting bracket 4 truss head screw connecting door stopper (T-02K pulley unit 1 pulley unit 2 M5×14 ℓ (option) more than 250 ninimum inside frame dimension more than 250 8 truss head screw M5×14 ℓ (option) ⊕truss head screw <del>•</del> M5×14ℓ 9 (option) ⊕pan head screw M5×12ℓ 120 28 힏 ⊕hexagon bolt Щ 90 M6×14ℓ 160 ⊕pan head screw M5×12ℓ (87) 130 opening direction control stroke : 250mm from closing position 130 210 ⊕truss head screv DW1 M5×14ℓ overlap K1 insertion dimension E(5) 130 door head side DW2 overlap K2 door pocket 120~140 94.5 K2/2 K1/2 sash width W sash width W insertion dimension E 28<sup>±4</sup> ⊕flat head screw .55<sup>+0</sup> φ4.5×35ℓ Dt Dt ⊕flat head screw φ4.5×25ℓ overlap K1 overlap K2 opening stroke from door pocket N 핌 guide roller **truss** head screw overlap should be K1=K2>65. MHO-2 ₺ (LGT-17) φ4.5×20ℓ guide rail(GRA-17) 20~35 Fixed dimensin guide roller(GT-17) · sash width (W) DW1 DW2 exposed portion from door pocket (N) DW1 DW2 · overlap (K1) and (K2) · insertion dimension (E) · Clearance between vertical frame and door The dimensin of DW1 tail side at fully opening door position (M) is the dimension of DW2 plus exposed $DW1 = (E+W+2\times N+K1+K2-M)/3$ screw anchor portion from door DW2 = (E+W-N+K1+K2-M)/3pocket. $W_s = \langle (W-N-M) \times 2 - (K1+K2+E) \rangle /3$ Hole pattern on inside view 150 fixed by screw every 300mm (M5×0.8) Remark No.4 opening stroke (less than 1300)+50 Fixed door size Remark Model No. Hold-open 1. This is used both for rightward and leftward. Width and Height (mm) | Weight (kg 2. Incase of steel frame, separately prepare screws. DW1 less than 60 With Hold-open SLS-2KW60-R 3. Hold-open device can not be combinedwith MHO-2. 108 $550 \sim 905 \times 2400$ (total door weight) 4. Fixed by a screw every 300mm. If the remaining rail more than 155mm, standard hole fixed by a screw position 150mm away from the final position. 55 55 5. Make sure to mount the anti-removal bracket to prevent the door from falling down DW1+DW2-overlap K1-insertion dimension E-242 6. ( ) dimensions are reference dimensions. 7. Do not use for double side door pocket specifications and storing-in-wall opening direction specifications. Your hand may be caught between the door pocket and door. insertion dimension E DW2

overlap K1

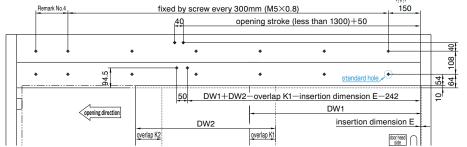
54

overlap K2

#### SLS-2KW60-L WITH DRIVE DEVICE TELESCOPIA (LEFTWARD) FOR STEEL FRAME minimum inside frame dimension more than 58 55 50 100 rail length (L) = sash width (W)-150 52.5 remaining rail dimension fixed by screw every 300mm 50 (Remark No.4) ⊕pan head screw stop roller 24.5 M5×25ℓ (ST-01) opening stroke (less than 1300)+50 Plate spring (ST-01) ⊕pan head screw ⊕pan head screw M5×12 50 DW1+DW2-overlap K1-insertion dimension E-242 M5×12ℓ ⊕pan head screw M5×12ℓ truss head screw door stopper (T-02K) M5×14 ℓ (option) 80 truss head screw M5×14 ℓ (option) anti-removal bracket ⊕truss head screw M5×14 ℓ ⊕pan head screw M5×12 ℓ (option) 120 28 ⊕hexagon bolt opening direction M6×14ℓ 130 (87) ⊕pan head screw M5×12ℓ 130 control stroke : 250mm from closing position 210 ⊕truss head screw DW1 M5×14 ℓ overlap K1 insertion dimension E(5) 130 DW2 door head side overlap K2 戸袋 34.5 5 曲 K2/2 K1/2 sash width insertion dimension E sash width 55+0 ⊕flat head screw φ4.5×35ℓ Dt Dt ⊕flat head screw exposed portion φ4.5×25ℓ gap M\_ opening stroke Η guide roller overlap should be K1=K2>65 truss head screw MHO-2 (LGT-17) φ4.5×20ℓ Fixed dimensin 피 · sash width (W) guide rail (GRA-17) 20~35 · exposed portion from door pocket (N) guide roller (GT-17) · overlap (K1) and (K2) · insertion dimension (E) · Clearance between vertical frame and door tail side at fully opening door position (M) The dimensin of DW1 is the dimension of $DW1 = (E+W+2 \times N+K1+K2-M)/3$ DW2 plus exposed DW2 = (E+W-N+K1+K2-M)/3Hole pattern on inside view ⊕hexagon head screw \$4×25ℓ/ portion from door screw anchor $W_s = \langle (W-N-M) \times 2 - (K1+K2+E) \rangle /3$ pocket. Remark No.4 fixed by screw every 300mm (M5×0.8) 150 opening stroke (less than 1300)+50 Remark Fixed door size 1. This is used both for rightward and leftward. Hold-open Model No. Width and Height (mm) Weight (kg) 2. In case of steel frame, separately prepare screws. (M5×L14) for installing the rail. DW1 less than 60 With Hold-open SLS-2KW60-I

 $550\sim905 imes2400$  (total door weight)

- 3. Hold-open device can not be combinedwith MHO-2.
- 4. Fixed by a screw every 300mm. If the remaining rail more than 155mm, fixed by a screw position 150mm away from the final position.
- 5. Make sure to mount the anti-removal bracket to prevent the door from falling down "after hanging the door up".
- 6. ( ) dimensions are reference dimensions
- 7. Do not use for double side door pocket specifications and storing-in-wall specifications. Your hand may be caught between the door pocket and door.



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#### SL-1 SLOPE TYPE SINGLE OPENING FOR STEEL DOOR sash width rightward 100 rail length (L) = sash width (W)-260 160 50 fixed by screw every 300mm and 3.5mm height difference per 300mm emaining rail dimension minimum inside frame (Remark No.6) stop roller ⊕pan head screw Plate spring dimension more than 58 M5×12ℓ opening stroke+40 ⊕pan head screw M5×12ℓ Atruss head screw 28 24.5 ⊕pan head screw M5×12 ℓ ninimum inside frame dimension more than 160 7a 00 📠 ⊕pan head screw **⊕**• M5×12 ℓ 120 120 anti-removal bracket ⊕hexagon bolt ⊕hexagon bolt M8×25 ℓ M8×25ℓ(30ℓ) stroke×3.5/300 150 150 opening direction 200 200 control stroke: 250mm from closing position DW ⊕truss head screw insertion dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) clearance between vertical frame (25) M5×14ℓ exposed portion from door pocket(130) door tail +(opening door pocket panel side 25 MHO-2 (option) SI M-1-R sash width leftward 160 rail length (L) = sash width (W)-260 100 fixed by screw every 300mm and 3.5mm height difference per 300mm 50 remaining rail dimension 28<sup>±4</sup> ⊕hexagon bolt (Remark No.6) ⊕pan head screw stop roller M8×25ℓ Dt M5×12ℓ ⊕truss head screw ⊕pan head screw opening stroke+40 H M5×14 Ø ⊕pan head screw M5×12 ℓ **ა20** ~35 guide roller /of **&** 0 100 anti-removal bracket 120 120 ⊕hexagon bolt ⊕hexagon bolt M8×25ℓ(30ℓ) M8×25ℓ 150 ⊕pan head screw M5×12 ℓ opening direction control stroke: 250mm from closing position 200 200 . hexagon bolt DW overlap with door (M5×16ℓ) clearance between vertical frame (25) pocket panel (20) opening stroke (max.1300) insertion dimension(5) door tail exposed portion from door pocket(130) door pocket panel side Hole pattern on inside view **€**MH<u>O-2</u> Table 1 (option) fixed by screw every 300mm and 3.5mm height difference per 300mm (M5×0.8) (Remark No.6) rightward Necessary spacer guantity for hanger unit Door size DW( mm ) SI M-1-I opening stroke+40 600~ 700 4pcs. 701~ 800 5pcs. 59 801~ 900 6pcs. Romark 901~1000 7pcs. 우 1. This is used both for rightward and leftward. 1001~1100 8pcs. 2. This drawing is SLS-1 (w/h Hold-open devise) door head side opening direction door pocket panel 1101~1200 9pcs. 3. Hold-open device is not included with SL-1 (w/o Hold-open device) 1201~1300 10pcs. 4. SLM-1 includes MHO-2 instead of Hold-open devise. 1301~1450 12pcs. 5. Make sure to mount the anti-removal bracket to prevent the door from fixed by screw every 300mm and 3.5mm height difference per 300mm (M5 $\times$ 0.8) (Remark No.6) 150 leftward falling down "after hanging the door up". Fixed door size Hold-open Model No 6. Fixed by a screw every 300mm and 3.5mm height difference per 300mm. opening stroke+40 Width and Height (mm) Weight (kg) If the remaining rail more than 155mm, fixed by a screw at a position Without Hold-open SL-1 150mm away from the final position and with an elevation difference of 1.8mm. 600~1450 :1 (opening stroke×3.5/300) 49 59 With Hold-open SLS-1 10~80 7. Refer to Table 1 necessary spacer quantity for hanger unit. ×2400 8. ( ) dimensions are reference dimensions. With Multi Hold-open SLM-1 door tail side door head side door pocket panel opening direction

#### SL-2 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL DOOR sash width W rightward 100 rail length (L) = sash width (W)-260 160 50 fixed by screw every 300mm remaining rail dimension stop roller ⊕pan head screw (Remark No.6) minimum inside frame dimension more than 58 opening stroke+40 ⊕pan head screw M5×12 ℓ truss head screw M5×14ℓ 52.5 ⊕pan head screw M5×12ℓ 20~35 28 24.5 dimension more than 140 59 ⊕pan head screw anti-removal bracket 120 의 ⊕hexagon bolt M5×12ℓ M8×25ℓ 150 150 opening direction control stroke: 250mm from closing position 200 200 DW clearance between 4 vertical frame (25) SLM-2-R insertion dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) ⊕truss head screw M5×14ℓ exposed portion from door pocket(130) 124 door head side door tail minimum inside frame door pocket panel 93 side 59 sash width W leftward 160 rail length (L) = sash width (W)-260 100 fixed by screw every 300mm 50 remaining rail dimension ⊕hexagon bolt (Remark No.6) Plate spring ⊕pan head screw stop roller M8×25 ℓ Dt M5×25ℓ $\oplus$ pan head screw truss head screw opening stroke+40 M5×14 ℓ M5×12ℓ ⊕pan head screw M5×12ℓ 품 20~35 guide roller **d** 20~35 59 الهوا @@ <u>\_\_\_\_</u> , <del>m</del>., \_\_\_\_\_ 30以 120 anti-removal bracket ⊕hexagon bolt 120 M8×25ℓ 150 유 ⊕pan head screw M5×12 ℓ opening direction 200 control stroke: 250mm from closing position 200 clearance between ⊕hexagon bolt overlap with door vertical frame (25) SLM-2-L opening stroke (max.1300) (M5×16ℓ) pocket panel (20) insertion dimension(5) exposed portion from door pocket(130) door tail door head side door pocket panel Hole pattern on inside view side fixed by screw every 300mm (M5×0.8)(Remark No.6) rightward opening stroke+40 · 4 5 Remark door head side door tail side door pocket panel opening direction 1. This is used both for rightward and leftward. 2. This drawing is SLS-2 (w/h Hold-open devise) 3. Hold-open device is not included with SL-2 (w/o Hold-open device) fixed by screw every 300mm (M5×0.8)(Remark No.6) 150 leftward 4. SLM-2 includes MHO-2 instead of Hold-open devise. 5. Make sure to mount the anti-removal bracket to prevent the door from opening stroke+40 Fixed door size Hold-open Model No falling down "after hanging the door up". Width and Height (mm) Weight (kg) 6. Fixed by a screw every 300mm. If the remaining rail more than 155mm, Without Hold-open SL-2 fixed by a screw position 150mm away from the final position. 600~1450 less tha 유 With Hold-open SLS-2 7. ( ) dimensions are reference dimensions. ×2400 80

door pocket panel opening direction

door tail side With Multi Hold-open

SLM-2

#### SL-2H150 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL DOOR sash width W rightward 100 rail length (L) = sash width (W)-260 160 50 fixed by screw every 150mm stop roller ⊕pan head screw minimum inside frame for drive device (fixed unit) more than 76 M5×12ℓ opening stroke+40 ⊕pan head screw M5×12 ℓ ⊕truss head screw M5×14 ℓ minimum inside frame for damper ⊕pan head screwM5×12ℓ unit (moval unit) more than 58 28 24.5 - Q+ ⊕pan head screw anti-removal bracket 120 의 ⊕hexagon bolt 120 M5×12ℓ ⊕pan head screw M8×25ℓ 150 150 200 opening direction 200 DW 4 insertion ⊕truss head screw opening stroke (max.2000) dimension (5) overlap with door pocket panel (20) clearance between vertical frame (25) M5×14ℓ exposed portion from door pocket(130) door head side door tail door pocket panel side 64 sash width W leftward 160 rail length (L) = sash width (W)-260 100 fixed by screw every 150mm 50 ⊕hexagon bolt Plate spring ⊕pan head screw stop roller M8×25ℓ M5×12ℓ ⊕truss head screw ⊕pan head screw opening stroke+40 M5×14 ℓ M5×12ℓ H ⊕pan head screw M5×12ℓ guide roller **d20~35** (option) anti-removal bracket 120 120 ⊕hexagon bolt ⊕pan head scre M8×25 ℓ opening direction 150 150 0 M5×12ℓ 200 200 DW .⊕hexagon bolt overlap with door insertion clearance between vertical frame (25) pocket panel (20) opening stroke (max.2000) (M5×16ℓ) dimension (5) exposed portion from door pocket(130) door tail door head side door pocket panel Hole pattern on inside view side fixed by screw every 150mm (M5×0.8) rightward 1. This is used both for rightward and leftward. opening stroke+40 2. This drawing is SLS-2H150 (w/h Hold-open devise) 3. Hold-open device is not included with SL-2H150 **4**1 (w/o Hold-open device) 4. Make sure to mount the anti-removal bracket to prevent the door from falling down "after hanging the door up". 10 5. Fix the rail by screw every 150mm.

door head side

leftward

door tail side

opening direction

fixed by screw every 150mm (M5×0.8)

91

door tail side

door pocket panel opening direction

door pocket panel

opening stroke+40

150

유

- 6. Quantity of rack B is according to door size (door width).

Hold-open	Model No.	Fixed door size		
noiu-open	Model No.	Width and Height (mm)	Weight (kg)	
Without Hold-open	SL-2H150	900~2150	less than	
With Hold-open	SLS-2H150	×2400	150	

Door size DW (mm)	Rack B
900~1100	4pcs.
1101~1300	5pcs.
1301~1500	6pcs.
1501~1800	7pcs.
1801~2150	8pcs.

7. ( ) dimensions are reference dimensions.

#### SL-2H200 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL DOOR sash width W rightward 100 rail length (L) = sash width (W)-260 160 50 fixed by screw every 150mm ⊕pan head screw minimum inside frame for drive stop roller device (fixed unit) more than 76 M5×12ℓ opening stroke+40 40 ⊕pan head screw M5×12ℓ truss head screw minimum inside frame for damper M5×14 & ⊕pan head screw M5×12 ℓ unit (moval unit) more than 58 28 24.5 **□** • - L ..... ⊕pan head screw anti-removal bracket M5×12ℓ 위 ⊕hexagon bolt 120 120 ⊕pan head screw M8×25ℓ 150 150 M5×12ℓ opening direction 200 200 DW clearance between vertical frame (25) insertion ⊕truss head screw opening stroke (max.2000) dimension(5) overlap with door pocket panel (20) M5×14ℓ nimum inside frame exposed portion from door pocket(130) door head side door tail door pocket panel side 64 sash width W leftward 160 rail length (L) = sash width (W)-260 100 fixed by screw every 150mm 50 ⊕hexagon bolt M8×25ℓ Plate spring ⊕pan head screw stop roller Dt M5×12ℓ opening stroke+40 truss head screw ⊕pan head screw M5×14 ℓ M5×12ℓ ⊕pan head screw M5×12ℓ guide roller ¢20~35 (option) F23 . 죠. anti-removal bracket 120 120 ⊕hexagon bolt ⊕pan head scre M8×25 ℓ opening direction 150 150 유 M5×12ℓ 200 200 DW ⊕hexagon bolt clearance between overlap with door insertion vertical frame (25) (M5×16ℓ) pocket panel (20) opening stroke (max.2000) dimension(5) exposed portion from door pocket(130) door tail door pocket panel Hole pattern on inside view side fixed by screw every 150mm (M5×0.8) rightward opening stroke+40 Remark 4 1. This is used both for rightward and leftward. 2. This drawing is SLS-2H200 (w/h Hold-open devise)

10

door head side

leftward

door tail side

fixed by screw every 150mm (M5 $\times$ 0.8)

door tail side

door pocket panel opening direction

<u>8</u>

opening direction door pocket panel

opening stroke+40

150

우

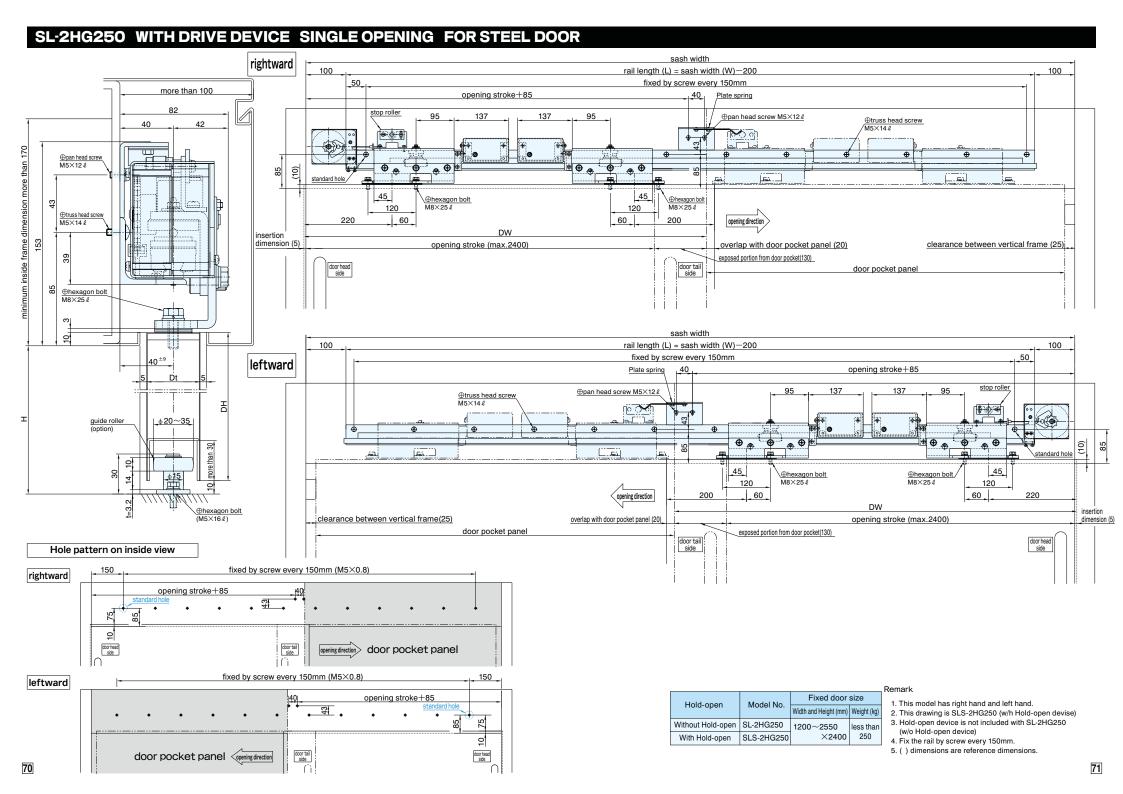
- 3. Hold-open device is not included with SL-2H200 (w/o Hold-open device)
- 4. Make sure to mount the anti-removal bracket to prevent the door from falling down "after hanging the door up".
- 5. Fix the rail by screw every 150mm.
- 6. Quantity of rack B is according to door size (door width).

Hold-open	Model No.	Fixed door size		
поіц-ореп	Model No.	Width and Height (mm)	Weight (kg)	
Without Hold-open	SL-2H250	1300~2150	less than	
With Hold-open	SLS-2H250	×2400	200	

Door size DW (mm)	Rack B
1300~1500	6pcs.
1501~1800	7pcs.
1801~2150	8pcs.

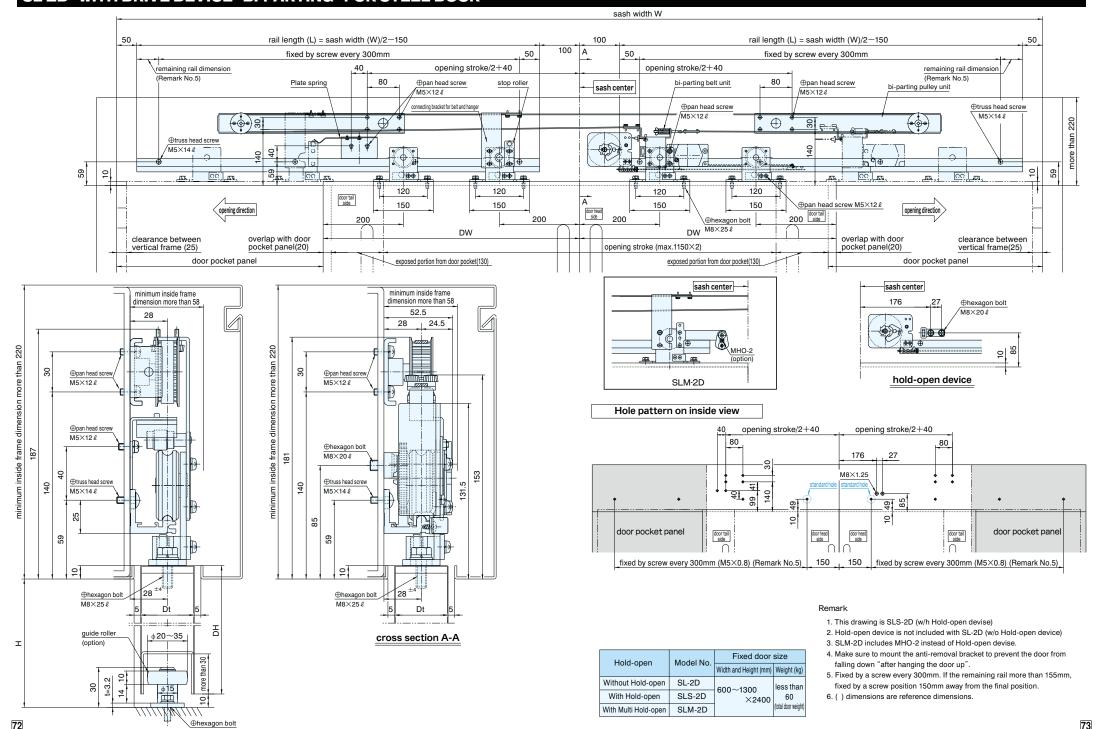
#### SL-2HG120 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL DOOR sash width rightward 100 rail length (L) = sash width (W)-200 100 50 fixed by screw every 150mm more than 100 opening stroke+85 ⊕pan head screw M5×12ℓ ⊕truss head screw 40 42 ninimum inside frame dimension more than 150 ⊕pan head screw M5×12ℓ 9 \⊕hexagon bolt M8×25ℓ ⊕hexagon bolt M8×25 ℓ 120 ⊕truss head screw M5×14 ℓ 220 60 200 60 opening direction clearance between insertion dimension (5) vertical frame (25) opening stroke (max.1300) overlap with door pocket panel(20) exposed portion from door pocket(130) door head side door tail door pocket panel ⊕hexagon bolt M8×25 ℓ sash width 100 rail length (L) = sash width (W)-200 100 fixed by screw every 150mm 50 leftward opening stroke+85 Dt ⊕pan head screw M5×12 ⊕truss head screw M5×14 ℓ L ¢20~35 guide roller \<u>⊕hexagon bolt</u> M8×25 ℓ ⊕hexagon bolt M8×25 ℓ 120 120 opening direction 60 \_60\_ 220 200 t=3.2 DW ⊕hexagon bolt clearance between insertion (M5×16ℓ) vertical frame(25) dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) door pocket panel exposed portion from door pocket(130) door head side door tail Hole pattern on inside view side fixed by screw every 150mm (M5×0.8) rightward opening stroke+85 door head side opening direction door pocket panel fixed by screw every 150mm (M5×0.8) 150 leftward opening stroke+85 Fixed door size Hold-open 1. This model has right hand and left hand. Model No. 43 Width and Height (mm) Weight (kg) 2. This drawing is SLS-2HG120 (w/h Hold-open devise) 75 3. Hold-open device is not included with SL-2HG120 Without Hold-open SL-2HG120 900~1450 (w/o Hold-open device) 120 With Hold-open SLS-2HG120 ×2400 위 4. Fix the rail by screw every 150mm. 5. ( ) dimensions are reference dimensions door tail side door head side door pocket panel opening direction 66

#### SL-2HG160/200 WITH DRIVE DEVICE SINGLE OPENING FOR STEEL DOOR sash width W rightward 100 rail length (L) = sash width (W)-200 100 50 fixed by screw every 150mm more then 100 opening stroke+85 137 ⊕pan head screw M5×12 ℓ ⊕truss head screw 40 42 ninimum inside frame dimension more than 170 ⊕pan head screw M5×12ℓ 9 ⊕hexagon bolt ⊕hexagon bolt M8×25 ℓ M8×25ℓ 120 ⊕truss head screw \_60 60 200 opening direction dimension(5) opening stroke (SL-2HG160: max.1550 / SL-2HG200: max.1850) clearance between vertical frame verlap with door pocket panel exposed portion from door pocket door tail door head side door pocket panel side ⊕hexagon bolt M8×25 ℓ sash width W 100 rail length (L) = sash width (W)-200 100 fixed by screw every 150mm 50 leftward Plate spring opening stroke+85 Dt ⊕pan head screw M5×12 & 137 **truss** head screw \_¢20~35 guide roller ⊕hexagon bolt ⊕hexagon bolt M8×25ℓ M8×25ℓ 120 유 \_60 60 220 opening direction 200 ⊕hexagon bolt overlap with door clearance between vertical frame opening stroke (SL-2HG160: max.1550 / SL-2HG200: max.1850) pocket panel door pocket panel exposed portion from door pocket door head side door tail side Hole pattern on inside view fixed by screw every 150mm (M5×0.8) rightward opening stroke+85 유 door head side Remark opening direction door pocket panel 1. This is used both for rightward and leftward. 2. This drawing is SLS-2HG160 (w/h Hold-open devise) and Fixed door size fixed by screw every 150mm (M5×0.8) 150 Hold-open Model No. SLS-2HG200 (w/h Hold-open devise) leftward Width and Height (mm) Weight (kg) 3. Hold-open device is not included with SL-2HG160 (w/o opening stroke+85 Without Hold-open SL-2HG160 Hold-open device) and SL-2HG200 (w/o Hold-open device) 900~1700 less than 4. Fix the rail by screw every 150mm. 8 160 With Hold-open SLS-2HG160 ×2400 5. ( ) dimensions are reference dimensions. 75 Without Hold-open SL-2HG200 1200~2000 less than With Hold-open SLS-2HG200 ×2400 200 위 door head side door tail side door pocket panel opening direction 69



# SL-2D WITH DRIVE DEVICE BI-PARTING FOR STEEL DOOR

(M5×16ℓ)



#### SL-2W-R WITH DRIVE DEVICE TELESCOPIA (RIGHTWARD) FOR STEEL DOOR more than 58 sash width W 52.5 100 rail length (L) = sash width (W)-150 50 50 fixed by screw every 300mm remaining rail dimension 28 24.5 (Remark No.6) stop roller ⊕pan head screw M5×12ℓ opening stroke (less than 1300mm)+50 40 Plate spring ⊕pan head screw DW1+DW2-overlap K1-insertion dimension E-242 50 ⊕pan head screw M5×12ℓ M5×12ℓ ⊕pan head screw M5×12 ℓ connecting connecting bracket 3 connecting bracket 4 truss head screw connecting pulley unit 1 pulley unit 2 M5×14ℓ 250 more than ⊕truss head screw M5×140 truss head screw M5×14ℓ <del>•</del> 5 2 ⊕pan head screw M5×12 ℓ more than 250 2 120 28 ⊕pan head screw, ⊕hexagon bolt 80 M5×25ℓ M8×25 ℓ 150 ⊕pan head screw M5×12ℓ (87)130 opening direction control stroke : 250mm from closing position 210 130 ⊕pan head screw M5×12 ℓ DW1 overlap K1 insertion dimensionE(5) 130 door head side DW2 overlap K2 door pocket 93.5 sash width W sash width W dimension E ⊕hexagon bolt M8×25ℓ exposed portion overlap K1 overlap K2 opening stroke gap M H SLM-2W-R I φ20<sup>1</sup>~35 guide roller (option) DW1 DW2 DW1 DW2 The dimensin of DW1 is the dimension of DW2 plus exposed ⊕hexagon bolt option portion from door (M5×16ℓ) pocket. Hole pattern on inside view 150 fixed by screw every 300mm (M5×0.8)(Remark No.6) Remark No.6 opening stroke (less than 1300mm)+50 40 Remark Fixed door size Hold-open 1. This is used both for rightward and leftward. ight (kg) 2. This drawing is SLS-2W-R (w/h Hold-open devise) 3. Hold-open device is not included with SL-2W-R (w/ ss thar 108

120~140

standard hole

DW1+DW2-overlap K1-insertion dimension E-242

overlap K1

DW2

opening direction

DW1

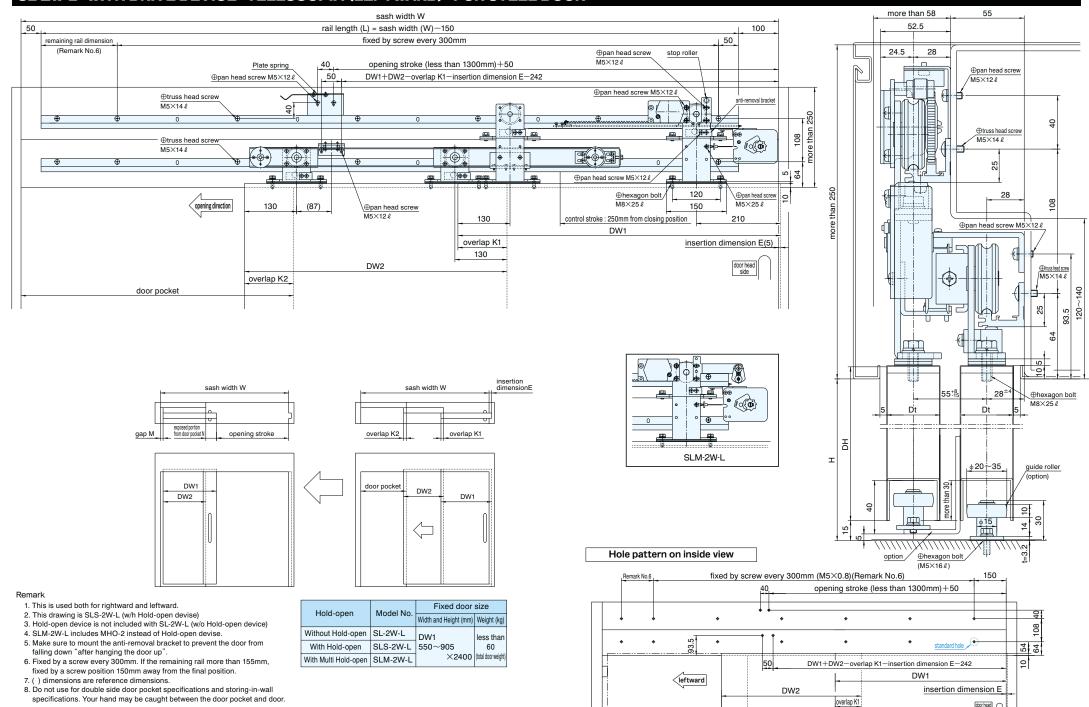
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insertion dimension E

a)			Width and Height (mm)	Weight (kg)	
w/o Hold-open device)	Without Hold-open	SL-2W-R	DW1	less than	
n devise. revent the door from	With Hold-open	SLS-2W-R		60 (total door weight)	
revent the door from	With Multi Hold-open	SLM-2W-R	×2400		

- 4. SLM-2W-R includes MHO-2 instead of Hold-open
- 5. Make sure to mount the anti-removal bracket to pre falling down "after hanging the door up".
- 6. Fixed by a screw every 300mm. If the remaining rail more than 155mm, fixed by a screw position 150mm away from the final position.
- 7. ( ) dimensions are reference dimensions.
- 8. Do not use for double side door pocket specifications and storing-in-wall specifications. Your hand may be caught between the door pocket and door.

# SL-2W-L WITH DRIVE DEVICE TELESCOPIA (LEFTWARD) FOR STEEL DOOR



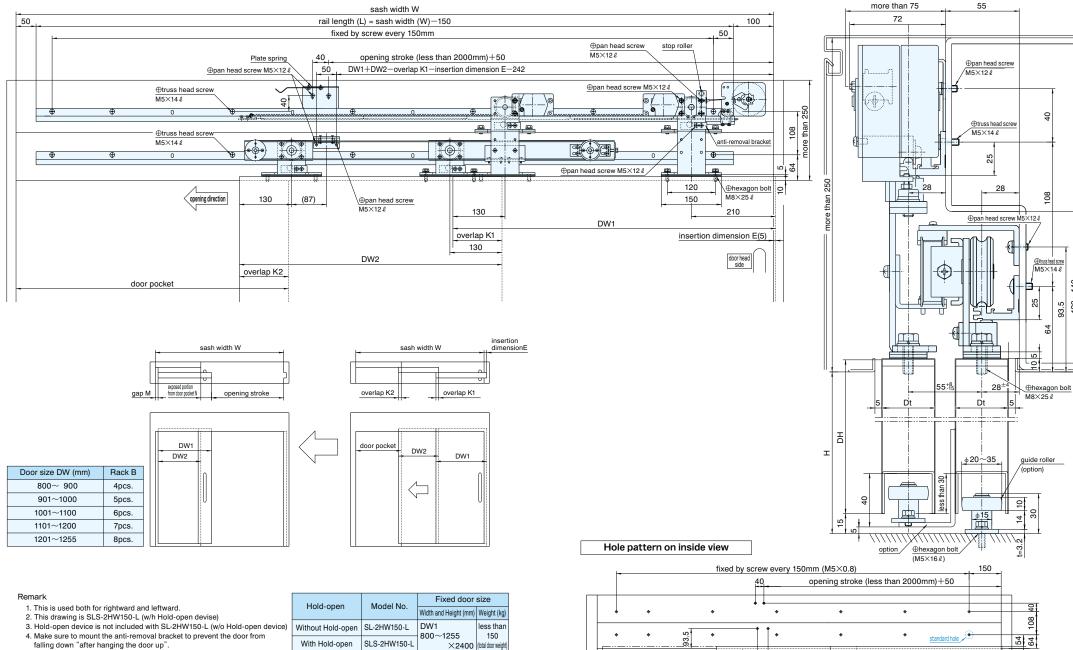
#### SL-2HW150-R WITH DRIVE DEVICE TELESCOPIA (RIGHTWARD) FOR STEEL DOOR more than 75 sash width W 72 100 rail length (L) = sash width (W)-150 50 50 fixed by screw every 150mm stop roller ⊕pan head screw M5×12ℓ opening stroke (less than 2000mm)+50 40 Plate spring ⊕pan head screw M5×12 ℓ DW1+DW2-overlap K1-insertion dimension E-242 50 pan head screw M5×12ℓ ⊕pan head screw M5×12ℓ connecting connecting bracket 3 connecting bracket 4 ⊕truss head screw connecting pulley unit 1 bulley unit 2 M5×14ℓ ⊕truss head screw than 08 M5×140 ⊕truss head screw more M5×14ℓ <del>•</del> ⊕pan head screw M5×12ℓ more than 250 28 2 120 ⊕hexagon bolt 80 M8×25ℓ 150 ⊕pan head screw M5×12ℓ (87)130 opening direction 210 130 ⊕pan head screw M5×12 ℓ DW1 overlap K1 insertion dimension E(5) 130 door head side DW2 Thruss head screu overlap K2 door pocket 93.5 insertion dimension E sash width W sash width W ⊕hexagon bolt M8×25ℓ exposed portion overlap K1 overlap K2 opening stroke rom door pocket N H I φ20 ~35 guide roller DW1 DW2 DW1 DW2 Rack B Door size DW(mm) 800~ 900 4pcs. The dimensin of DW1 901~1000 5pcs. is the dimension of DW2 plus exposed 1001~1100 6pcs. ⊕hexagon bolt option portion from door 1101~1200 7pcs. pocket. Hole pattern on inside view 1201~1255 8pcs. 150 fixed by screw every 150mm (M5×0.8) opening stroke (less than 2000mm)+50 40 Remark Fixed door size Model No. Hold-open 1. This is used both for rightward and leftward. Nidth and Height (mm) | Weight (kg) 2. This drawing is SLS-2HW150-R (w/h Hold-open devise) DW1 less than SL-2HW150-R 3. Hold-open device is not included with SL-2HW150-R (w/o Hold-open device) Without Hold-open 150 108 4. Make sure to mount the anti-removal bracket to prevent the door from 800~1255 With Hold-open SLS-2HW150-R ×2400 (total door weight) falling down "after hanging the door up". 5. Quantity of rack B is according to door size (door width). standard hole 6. ( ) dimensions are reference dimensions. 5 DW1+DW2-overlap K1-insertion dimension E-242 7. Do not use for double side door pocket specifications and storing-in-wall DW1 specifications. Your hand may be caught between the door pocket and door. insertion dimension E

opening direction

DW2

overlap K1

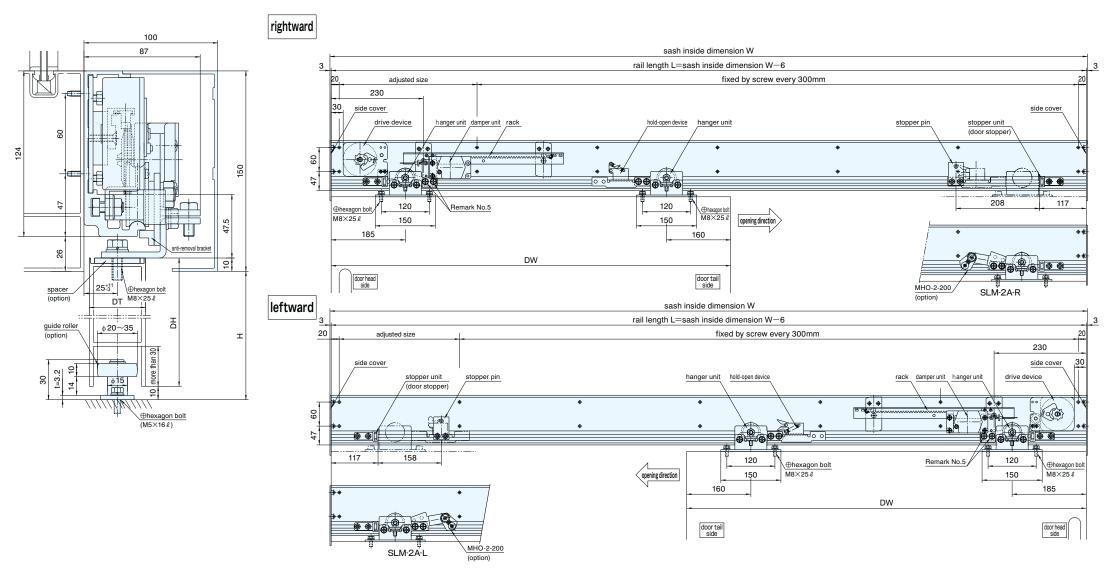
# SL-2HW150-L WITH DRIVE DEVICE TELESCOPIA (LEFTWARD) FOR STEEL DOOR



- falling down "after hanging the door up".
- 5. Quantity of rack B is according to door size (door width).
- 6. ( ) dimensions are reference dimensions.
- 7. Do not use for double side door pocket specifications and storing-in-wall specifications. Your hand may be caught between the door pocket and door.

		l-e-	fixed by screw every 150mm (M5×0.8)					150				
					40	0	oening stroke (le	ss than 2000r	mm)+50			
	П	$\rightarrow$									1	
		ţ	<b>*</b>	•	•	•	•	<b>*</b>		•		8 40
		<b>*</b>	<b>*</b>	93.5	• † †	•	•	<b>*</b>	standard hole	•	54	108
					50	DW1+D	W2-overlap K1	-insertion dir	mension E-	242	9	
	-	ļ		leftward			_	DW1			'	
			DW2		in	sertion dime	ension E	-				
							overlap K1			door head side		

# SL-2A WITH DRIVE DEVICE SINGLE OPENING FOR ALUMINUM DOOR

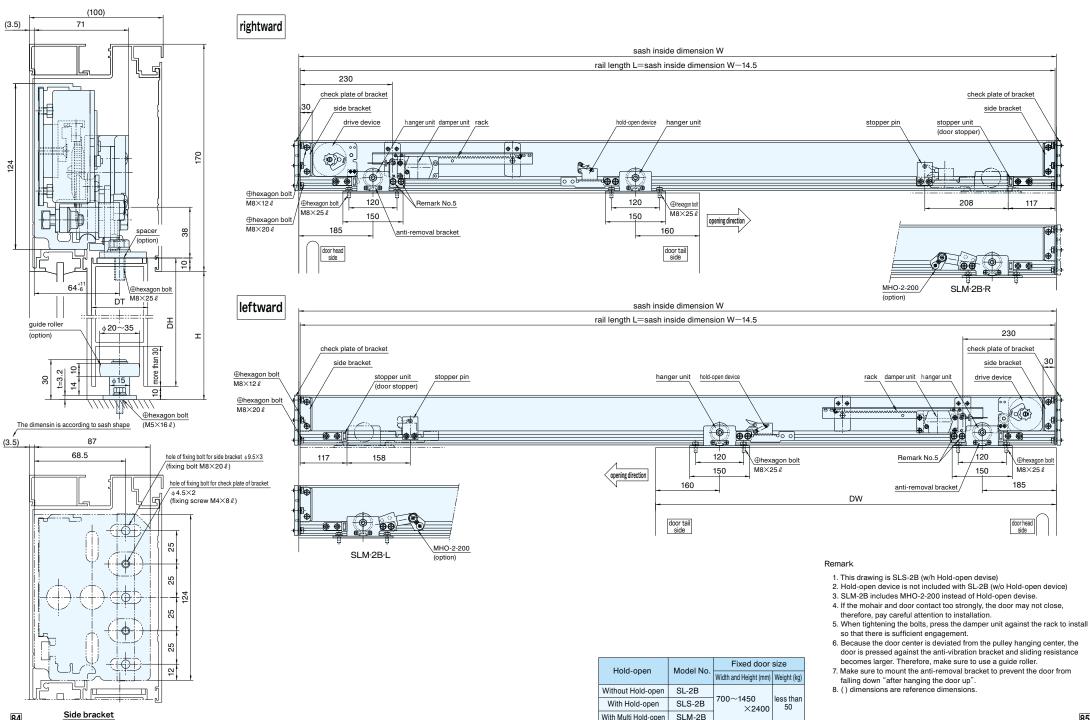


Hold-open	Model No.	Fixed door size			
Holu-open	wouel No.	Width and Height (mm)	Weight (kg)		
Without Hold-open	SL-2A	700~1450	less than		
With Hold-open	SLS-2A	×2400	50		
With Multi Hold-open	SLM-2A				

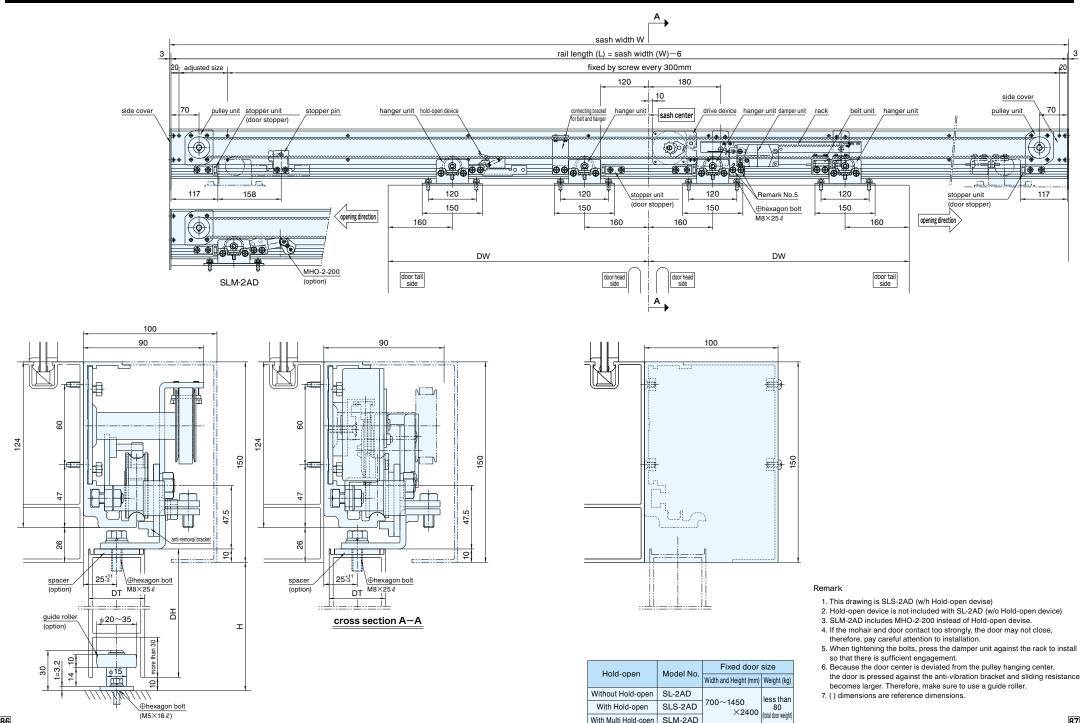
### Remark

- 1. This drawing is SLS-2A (w/h Hold-open devise)
- 2. Hold-open device is not included with SL-2A (w/o Hold-open device)
- 3. SLM-2A includes MHO-2-200 instead of Hold-open devise.
- 4. If the mohair and door contact too strongly, the door may not close, therefore, pay careful attention to installation.
- When tightening the bolts, press the damper unit against the rack to install so that there is sufficient engagement.
- Because the door center is deviated from the pulley hanging center, the door is pressed against the anti-vibration bracket and sliding resistance becomes larger. Therefore, make sure to use a guide roller.
- 7. () dimensions are reference dimensions.

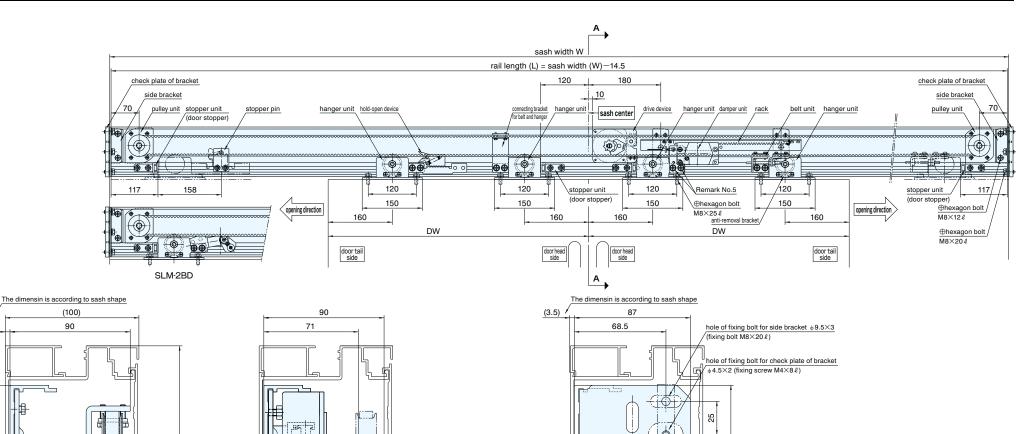
## SL-2B WITH DRIVE DEVICE SINGLE OPENING FOR ALUMINUM DOOR

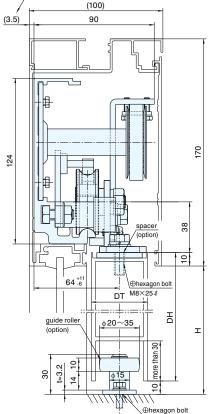


# SL-2AD WITH DRIVE DEVICE BI-PARTING FOR ALUMINUM DOOR

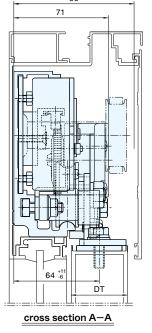


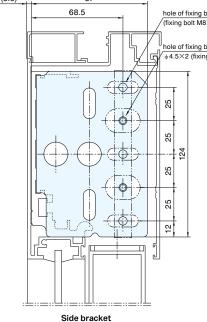
# SL-2BD WITH DRIVE DEVICE BI-PARTING FOR ALUMINUM DOOR





(M5×16ℓ)

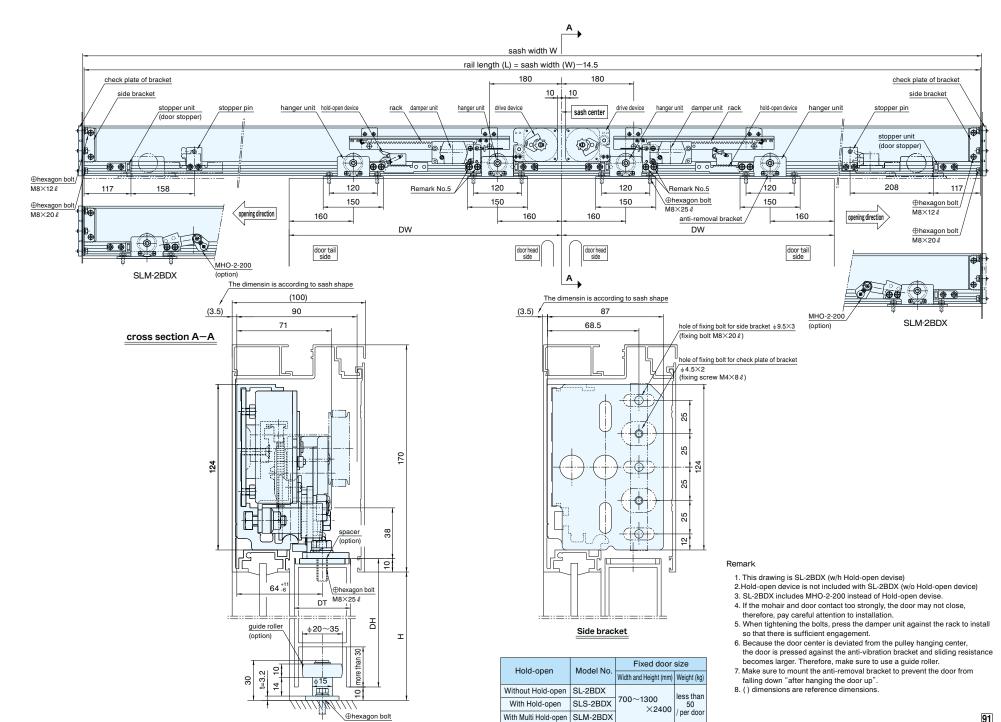




#### nark

- 1. This drawing is SLS-2BD (w/h Hold-open devise)
- 2. Hold-open device is not included with SL-2BD (w/o Hold-open device)
- 3. SLM-2BD includes MHO-2-200 instead of Hold-open devise.
- If the mohair and door contact too strongly, the door may not close, therefore, pay careful attention to installation.
- When tightening the bolts, press the damper unit against the rack to install so that there is sufficient engagement.
- Because the door center is deviated from the pulley hanging center, the door is pressed against the anti-vibration bracket and sliding resistance becomes larger. Therefore, make sure to use a guide roller.
- Make sure to mount the anti-removal bracket to prevent the door from falling down "after hanging the door up".
- 8. () dimensions are reference dimensions.

# SL-2BDX WITH DRIVE DEVICE BI-PARTING FOR ALUMINUM DOOR



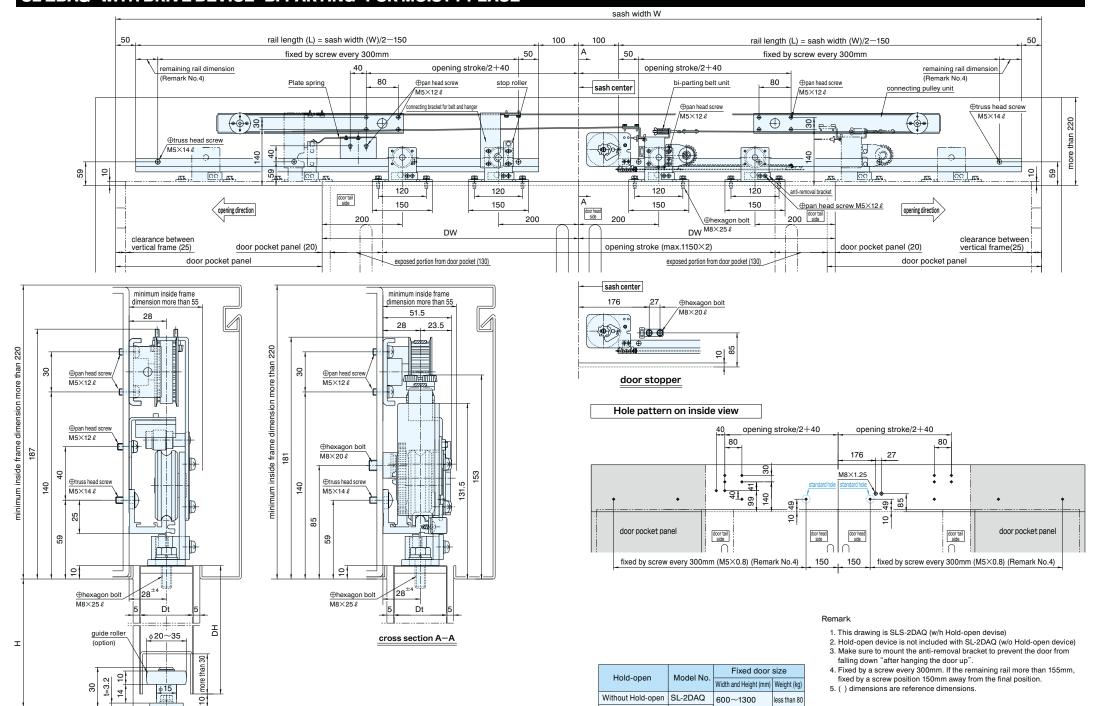
With Multi Hold-open | SLM-2BDX

#### SL-2AQ WITH DRIVE DEVICE SINGLE FOR MOISTY PLACE sash width W rightward 100 rail length (L) = sash width (W)-260 160 50 fixed by screw every 300mm remaining rail dimension stop roller ⊕pan head screw (Remark No.5) minimum inside frame dimension more than 55 opening stroke+40 ⊕pan head screw M5×12 ℓ truss head screw 51.5 M5×14ℓ ⊕pan head screw M5×12ℓ 23.5 20~35 more than 59 ⊕⊕ ററ 📠 أرراتكم ⊕pan head screw 120 M5×12ℓ 위 ⊕hexagon bolt anti-removal bracket M8×25ℓ 150 150 opening direction dimension 200 200 DW ⊕truss head screw dimension (5) opening stroke (max.1300) overlap with door pocket panel (20) clearance between vertical frame (25) M5×14ℓ 124 minimum inside frame exposed portion from door pocket (130) door head side door tail door pocket panel side 59 9 sash width W leftward 160 rail length (L) = sash width (W)-260 100 ⊕hexagon bolt remaining rail dimension fixed by screw every 300mm 50 M8×25 ℓ (Remark No.5) Plate spring ⊕pan head screw stop roller M5×25ℓ truss head screw opening stroke+40 ⊕pan head screw 품 M5×14 ℓ M5×12ℓ ⊕pan head screw M5×12ℓ guide roller ¢20~35 20~35 59 الهوا .07 120 anti-removal bracket ⊕hexagon bolt M8×254 150 150 ⊕pan head screw M5×12 ℓ opening direction 200 control stroke : 250mm from closing position 200 ⊕hexago<u>n bolt</u> (M5×16ℓ) overlap with door insertion opening stroke (max.1300) dimension (5) clearance between vertical frame (25) pocket panel (20) exposed portion from door pocket (130) door tail door head side door pocket panel Hole pattern on inside view side fixed by screw every 300mm (M5×0.8)(Remark No.5) rightward opening stroke+40 **₽** Remark 5 1. This is used both for rightward and leftward. 2. This drawing is SLS-2AQ (w/h Hold-open devise) door head side door tail side door pocket panel rightward 3. Hold-open device is not included with SL-2AQ (w/o Hold-open device) 4. Make sure to mount the anti-removal bracket to prevent fixed by screw every 300mm (M5×0.8)(Remark No.5) 150 the door from falling down "after hanging the door up". leftward 5. Fixed by a screw every 300mm. If the remaining rail opening stroke+40 more than 155mm, fixed by a screw position 150mm away from the final position. Fixed door size <u></u> Hold-open Model No 6. ( ) dimensions are reference dimensions. Width and Height (mm) Weight (kg) Without Hold-open SL-2AQ 위 600~1450 less than SLS-2AQ ×2400 80 With Hold-open door tail side door pocket panel (leftward

## SL-2DAQ WITH DRIVE DEVICE BI-PARTING FOR MOISTY PLACE

⊕hexagon bolt

(M5×16ℓ)

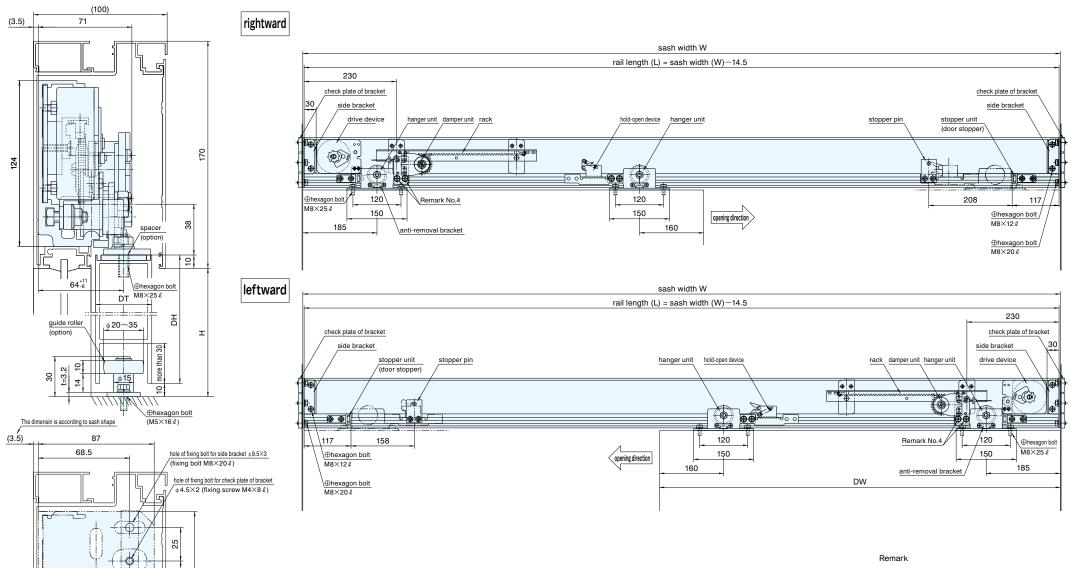


×2400 (total door weight)

With Hold-open

SLS-2DAQ

# SL-2BAQ WITH DRIVE DEVICE SINGLE FOR MOISTY PLACE



- 1. This drawing is SLS-2BAQ (w/h Hold-open devise)
- Hold-open device is not included with SLS-2BAQ (w/o Hold-open device)
- 3. If the mohair and door contact too strongly, the door may not close, therefore, pay careful attention to installation.4. When tightening the bolts, press the damper unit against
- the rack to install so that there is sufficient engagement.
- Because the door center is deviated from the pulley hanging center, the door is pressed against the anti-vibration bracket and sliding resistance becomes larger. Therefore, make sure to use a guide roller.
- 6. Make sure to mount the anti-removal bracket to prevent the door from falling down "after hanging the door up".
- 7. () dimensions are reference dimensions.

 Hold-open
 Model No.
 Fixed door size

 Without Hold-open
 SL-2BAQ
 700~1450
 less than 80

 With Hold-open
 SLS-2BAQ
 X2400
 80

Side bracket

25

12

# SL-2BDAQ WIYH DRIVE DEVICE BI-PARTING FOR MOISTY PLACE

