

Safety Door Lock Slide Unit

SFDL2-SD Series

INSTRUCTION MANUAL

TCD230020AB

Autonics

Thank you for choosing our Autonics product.

Read and understand the instruction manual and manual thoroughly before using the product.

For your safety, read and follow the below safety considerations before using.

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

Keep this instruction manual in a place where you can find easily.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Follow Autonics website for the latest information.

Safety Considerations

- Observe all 'Safety Considerations' for safe and proper operation to avoid hazards.
- ⚠ symbol indicates caution due to special circumstances in which hazards may occur.

⚠ Warning Failure to follow instructions may result in serious injury or death.

01. Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime/disaster prevention devices, etc.)

Failure to follow this instruction may result in personal injury, economic loss or fire

02. Do not use the unit in the place where flammable/explosive/corrosive/toxic gas, high humidity, direct sunlight, radiant heat, vibration, impact, or salinity may be present.

Failure to follow this instruction may result in explosion or fire.

03. Do not disassemble, modify or repair the unit.

Failure to follow this instruction may result in personal injury due to loss of safety function.

04. Check installed status of the switch and slide unit, operating status, and signs of damage, modification, tampering on a regular basis.

Failure to follow this instruction may result in personal injury due to malfunction of the product and safety function.

05. When operating the slide handle, be cautious to avoid catching hand.

Failure to follow this instruction may result in personal injury.

⚠ Caution Failure to follow instructions may result in injury or product damage.

01. Use the unit within the rated specifications.

Failure to follow this instruction may result in fire or product damage.

02. Use a dry cloth to clean the unit, and do not use water or organic solvent.

Failure to follow this instruction may result in fire.

03. Install this product on the light door under 20kg.

Failure to follow this instruction may result in product damage or malfunction.

04. Do not drop or impact the product.

Failure to follow this instruction may result in product damage or malfunction.

05. Do not close the door without the bolt slide.

Failure to follow this instruction may result in product damage or malfunction.

06. Do not use the switch or cable with excessive force.

Failure to follow this instruction may result in product damage or malfunction.

07. Do not slide the product with excessive force.

Failure to follow this instruction may result in product damage or malfunction.

08. To use the product properly, attach the enclosed warning label near the product.

Failure to follow this instruction may result in product damage or malfunction.

09. Do not move the slide handle or close the door with the door open and the group locking device(HASP) fastened.

Failure to follow this instruction may result in product damage or malfunction.

10. When the slide unit is installed, do not use the spare operation key besides the operation key on the slide unit to operate switch.

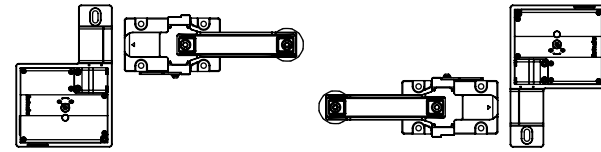
Failure to follow this instruction may result in personal injury due to loss of safety function.

11. Do not pull excessively with the group locking device(HASP) fastened on the operation key.

Failure to follow this instruction may result in product damage or malfunction.

Cautions during Use

- Follow instructions in 'Cautions during Use'. Otherwise, it may cause unexpected accidents.
- This product is dedicated for Autonics safety slim type door lock switch, SFDL2 Series(Front installation type). Do not use with the door lock switch from other manufacturer.
- Place the group locking device(HASP) on the operation key. And lock the padlock on the group locking device(HASP).
- Be sure to carry the padlock key when entering the hazardous area.
- Durability of the slide unit can be differed according to opening condition. Check the environment where the product is used in and machine which the product is used for, and use the product within the rated number of mechanical durability.
- Use the slide handle only in the right or left direction as following image.
- For closing again the handle opened, close the handle by pulling the index plunger.



- For the detailed information such as installation and use about the safety slim type door lock switch, SFDL2 Series, which is used with the slide unit, please refer to the instruction manual of the safety slim type door lock switch.

Product Components

- Instruction manual
 - Slide unit mounting part × 1
 - Slide unit handle part × 1
 - Door lock switch mounting M4 bolt⁰¹⁾ × 3 / M4 spring washer × 3
 - Operation key mounting M4 bolt⁰¹⁾ × 2 / M4 spring washer × 2 / M4 flat washer × 2
 - Inner lever × 1
 - Korean warning label × 1 / English warning label × 1
 - Operation key (SFD-KH) × 1
- 01) The head type of the switch and operation key mounting bolts is Torx Pole.

Sold Separately

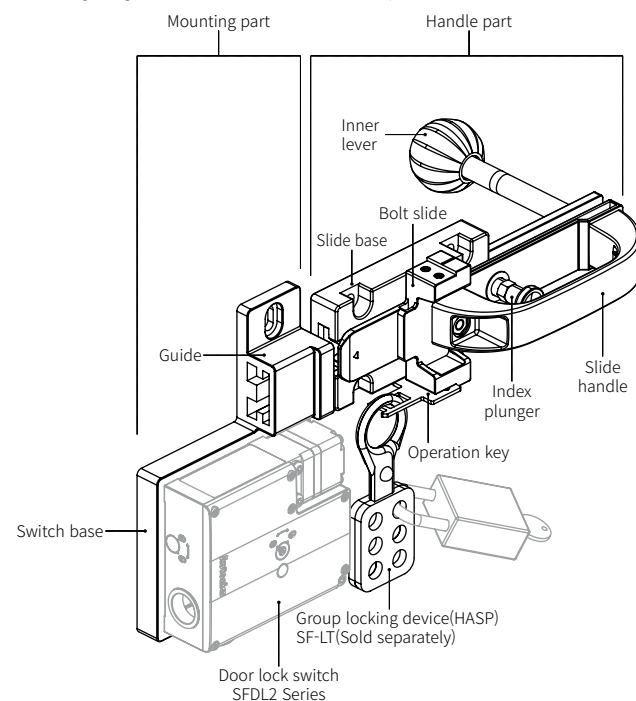
- Group locking device(HASP): SF-LT

Specifications

Model	SFDL2-SD
Ambient temperature	-10 to 55 °C, storage: -20 to 75 °C (no freezing or condensation)
Ambient humidity	≤ 95%RH, storage: 35 to 85%RH (no freezing or condensation)
Mechanical durability	≥ 20,000 times
Material	Polyamide
Unit weight (Packaged)	≈ 640 g (≈ 890 g)

Unit Description

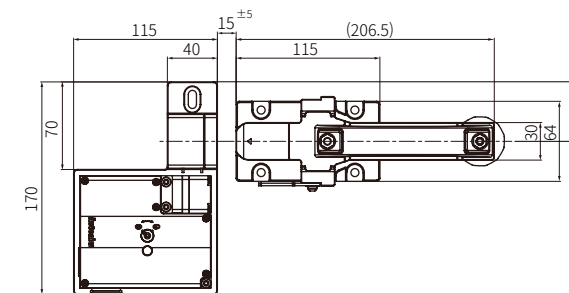
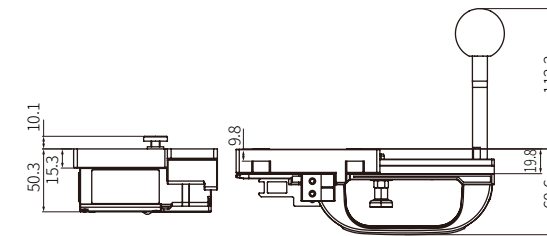
- Following image shows the status when door is opened.



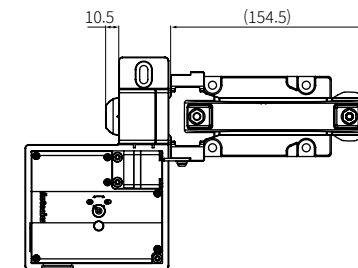
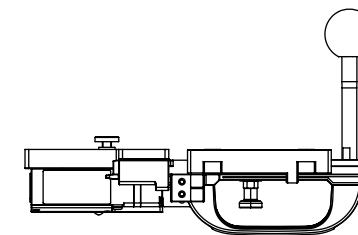
Dimensions

- Unit: mm, For the detailed dimensions of the product, follow the Autonics web site.
- Figures in () can be differed according to the installing environment and product operation.

■ When the door is opened

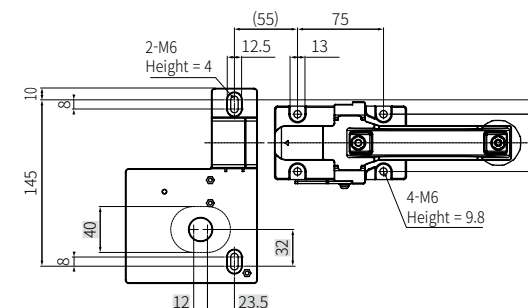


■ When the door is closed

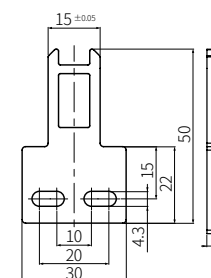


■ Panel processing dimensions

- Figures in shaded parts are the panel processing dimensions when using the rear release button type of the safety slim type door lock switch SFDL2 Series.

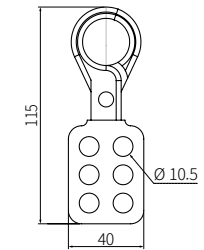


■ Operation key (SFD-KH)



■ Group locking device(HASP): SF-LT(Sold separately)

- It can prevent the bolt slide closed and the lock switch locked by fastening the group locking device(HASP) on the operation key.
- Please use a padlock(purchased separately) to lock the group locking device(HASP).



Cautions during Installation

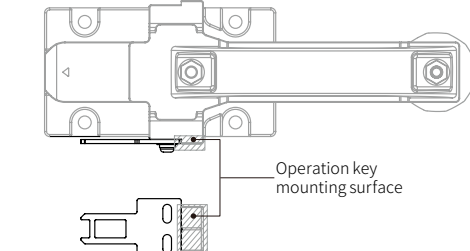
- Tighten the bolt with the designated tightening torque of each, using spring washer/flat washer. Failure to follow this instruction may result in product damage or malfunction.

Bolt	Tightening torque
Slide unit mounting bolt (M6 BOLT)	6.0 to 7.0 N·m
Operation key mounting bolt	0.7 to 0.9 N·m
Switch mounting bolt	0.75 to 1.15 N·m

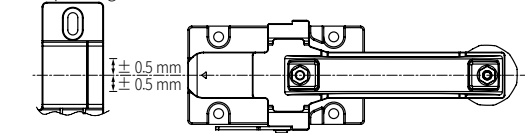
Above tightening torque is for the status of installing with spring washer/flat washer.

- Apply additional methods such as glue to prevent loosening of the bolt. Mount the slide base with all of 4 bolts.

- In order that the operation key is not to be tilted, mount the operation key tightly onto the operation key mounting surface.

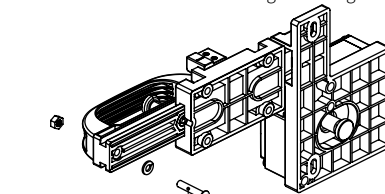


- Install the between bolt slide and guide aligning them within ±0.5 mm from the center line. Excessive wear and damage on the product may result in trouble in operating the slide unit.



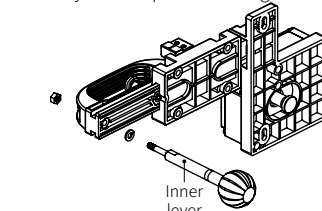
Inner Lever Installation

- Disassemble the handle fixing bolt using 4mm hexagon wrench.



Handle fixing bolt

- Tighten the hexagon nut+spring washer-inner lever with the designated tightening torque using a spanner with 10mm width. If the inner lever is screwed loosely, it may result in product damage.



Bolt	Tightening torque
Inner lever	9 to 10 N·m

- Keep cautious not to lose the hexagon nut and spring washer, when disassemble the handle fixing bolt.
- Do not use handle when the handle fixing bolt is disassembled. It may result in product damage.
- This inner lever is dedicated to Autonics SFDL2-SD. Do not use it for another product or purpose.