

# D4GL-mounting Slide Keys D4GL-SK10-LK

The lockout key ensures worker safety.

## The Slide Key opens the door to safety.



# D4GL-mounting Slide Keys D4GL-SK10-LK

### D4GL Door-mounting Accessory with Lockout Key to Prevent Workers from Becoming Trapped inside Hazardous Area

- The vertical D4GL Guard Lock Safety-door Switch can be easily mounted on 40-mm<sup>2</sup> aluminum frames.
- The plastic material makes the Slide Key suitable for lightweight doors.

Refer to Safety Precautions on page 6.



### Configuration

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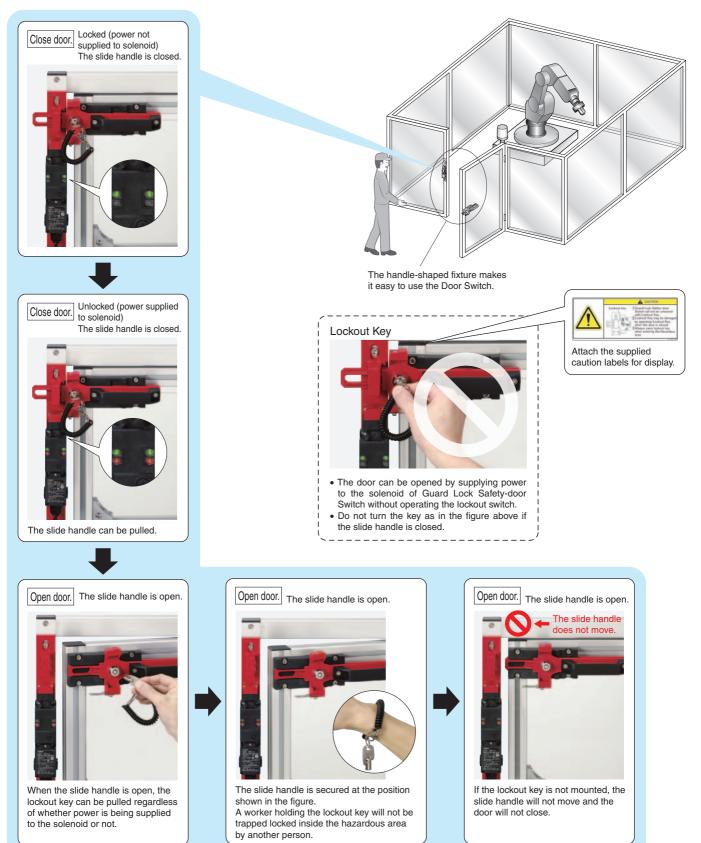
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### **Features**

• The lockout key prevents workers from becoming trapped without using a padlock.

Note: Using two-color LEDs enables confirming whether the door is open or closed and locked or unlocked.

Example: D4GL-2DFA-A with mechanical lock and solenoid release



### **Ordering Information**

Appearance	Specifications	fications Contents		Applicable Door Switch	
	Weight: Approx. 0.6 kg Mechanical durability: 20,000 operations min.	Slide Key: 1 (not yet mounted) D4GL mounting plate: 1 Door Switch special mounting screws: 4 D4DS-K1 (operation key): 1 D4DS-K1 special mounting screws: 2 Lockout keys: 2 Lockout key strap: 1 Caution labels (stickers): 2 sheets (English and Japanese)	D4GL-SK10-LK	D4GL	

Note 1. The Door Switch is not included. Select the Door Switch depending on the necessary number of contacts and the conduit size. The contents are provided as a total set, individual contents cannot be ordered separately.

2. Perform risk assessment for the equipment in question, configure relay units and other safety circuits, and use properly.

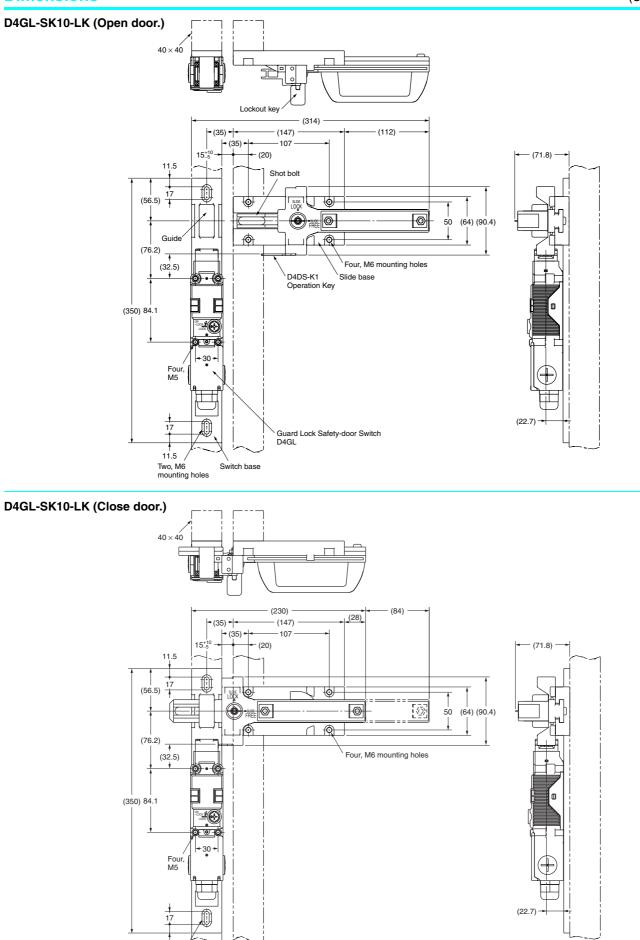
### **Applicable Door Switches**

uard Lock Ifety-door Switch	Release	Solenoid voltage	Lock and	Contact configuration	Conduit	
4GL	key type	and indicator type	release types	(door open/closed detection switch and lock monitor switch contacts)	opening	Model
				Pg13.5	D4GL-1AFA-	
			1NC/1NO+1NC/1NO	G1/2	D4GL-2AFA-	
				M20	D4GL-4AFA-	
					Pg13.5	D4GL-1BFA-
				1NC/1NO+2NC	G1/2	D4GL-2BFA
					M20	D4GL-4BFA
				2NC+1NC/1NO	Pg13.5	D4GL-1CFA
					G1/2	D4GL-2CFA
					M20	D4GL-4CFA
6			Mechanical lock,	2NC+2NC	Pg13.5	D4GL-1DFA
					G1/2	D4GL-2DFA
The state of the s					M20	D4GL-4DFA
and the second sec			Solenoid release		Pg13.5	D4GL-1EFA
The second second				2NC/1NO+1NC/1NO	G1/2	D4GL-2EFA
					M20	D4GL-4EFA
ne two-color (orange/green)				2NC/1NO+2NC	Pg13.5	D4GL-1FFA
					G1/2	D4GL-2FFA
ED indicators enable					M20	D4GL-4FFA
ecking whether the door is					Pg13.5	D4GL-1GFA
cked and the key is				3NC+1NC/1NO	G1/2	D4GL-2GFA
,					M20	D4GL-4GFA
serted.				3NC+2NC	Pg13.5	D4GL-1HFA
ith gold-plated contacts					G1/2	D4GL-2HFA
ed as standard, general	<u>.</u>	Solenoid: 24 VDC			M20	D4GL-4HFA
ads and microloads are	Standard	Orange/green LED: 24 VDC			Pg13.5	D4GL-1AFG
		LED. 24 VDC		1NC/1NO+1NC/1NO	G1/2	D4GL-2AFG
ipported.			Solenoid lock, Mechanical release		M20	D4GL-4AFG
				1NC/1NO+2NC	Pg13.5	D4GL-1BFG
					G1/2	D4GL-2BFG
					M20	D4GL-4BFG
				2NC+1NC/1NO	Pg13.5	D4GL-1CFG
					G1/2	D4GL-2CFG
					M20	D4GL-4CFG
				2NC+2NC	Pg13.5	D4GL-1DFG
					G1/2	D4GL-2DFG
					M20	D4GL-4DFG
					Pg13.5	D4GL-1EFG
				2NC/1NO+1NC/1NO	G1/2	D4GL-2EFG
					M20	D4GL-4EFG
				2NC/1NO+2NC	Pg13.5	D4GL-1FFG
					G1/2	D4GL-2FFG
					M20	D4GL-4FFG
				3NC+1NC/1NO 3NC+2NC	Pg13.5	D4GL-1GFG
					G1/2	D4GL-2GFG
					M20	D4GL-2GFG
					Pg13.5	D4GL-1HFG
					G1/2	D4GL-2HFG
					M20	D4GL-2HFG

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(Unit: mm)

### **Dimensions**



11.5 / Two, M6 mounting holes

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### **Safety Precautions**



Do not use this product mounted so that it slides vertically. This may cause malfunction, resulting in personal injury.



Do not insert the operation key with the door open. Devices may start to operate, resulting in injury.

### **Precautions for Safe Use**

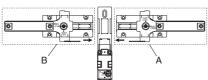
- Do not drop the Product. Doing so may prevent the Product from functioning to full capacity.
- Mount the Product securely to prevent it from falling.
- Otherwise, injury may occur.
- Do not attempt to disassemble or modify the Switch. Doing so may cause the Switch to malfunction.
- Make sure that the gap between the shot bolt and the guide is ±0.5 mm. Otherwise, excessive wear or damage may cause malfunction.
- To ensure safety, do not operate the Switch with anything other than the Slide Key Unit.
- Your hand may be injured by being pinched between the Operation Key and Switch when closing the door with your hand on the Product.
- Be careful to avoid pinching your hand when operating the Slide Handle.
- Do not impose a force of exceeding 1 N·m when operating the Lockout Key. Otherwise, the Product may be damaged and may not operate properly.

To prevent damage, attach the supplied labels for display near the Product.

- Do not force the slide handle to move when the lockout key is not inserted. Doing so may damage the product and make operation impossible.
- Do not force the slide handle to move when the door is locked.
- Do not close the door with the short bolt removed. Doing so
- may damage the product and make operation impossible. • Turn the Lockout Key to the "SLIDE LOCK" position and
- remove it when opening the door to prevent a third party from operating the Slide Handle.
- The durability of the Switch varies considerably depending on the switching conditions. Always confirm the usage conditions by using the Switch in an actual application, and use the Switch only for the number of switching operations given in the performance specifications.
- The user must not maintain or repair equipment incorporating the Switch. Contact the manufacturer of the equipment for any maintenance or repairs required.
- Refer to the *D4GL Guard Lock Safety-door Switch Datasheet* and *Instruction Sheet* about storage conditions, ambient conditions, Switch details, and handling methods.

### **Precautions for Correct Use**

- This product is for D4GL Guard Lock Safety-door Switch only. This product cannot be used with any other manufacturer's door switches.
- Use the Slide Handle in the direction A or B in the following figure.



 Loose screws may result in malfunction. Use washers and tighten the screws to the specified torques. Mount the Slide Base at four points with screws. Adding adhesive is recommended for preventing the screws from loosening. Also, when mounting the Product to a door for disableprevention purposes, purchase and use tamper-resistant screws.

### Tightening Torque

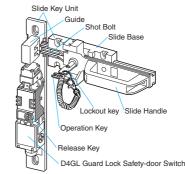
Slide Key mounting screw (M6)	6.0 to 7.0 N·m
Operation key special mounting screw (screws supplied)	2.4 to 2.8 N·m
Switch special mounting screw (screws supplied)	1.3 to 1.5 N·m

#### **Technical Specifications**

Ambient operating temperature	-10 to 55°C (with no icing)
Ambient operating humidity	95% max.
Mechanical durability	20,000 operations min.
Weight	Approx. 0.6 kg (not including D4JL Guard Lock Safety-door Switch)

- Do not store the Switch where corrosive gases (e.g., H<sub>2</sub>S, SO<sub>2</sub>, NH<sub>3</sub>, HNO<sub>3</sub> or Cl<sub>2</sub>) or dust is present, or in locations subject to high temperature or humidity.
- Perform maintenance inspections periodically.
- When the lockout key is attached to your wrist, be careful that the strap does not get stuck in equipment.

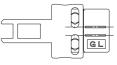
#### Nomenclature



### Differences between Lockout Key and Trapped Key (Reference)

	Lockout key	Trapped key (Refer to information on the D4JL-□□□A-□7-□□)
Closing the door	The door cannot be closed unless the lockout key is inserted in the slide and turned.	The door cannot be closed unless the trapped key is inserted in the Switch and turned.
Opening the door	The door can be opened by supplying power to the Switch solenoid without operating the lockout switch.	The door can never be opened without both supplying power to the Switch solenoid and operating the trapped key.

• When mounting the operation key, line up the inside edges of the long operation key holes with the outer edges of the slide handle as in the following figure to ensure easy position adjustment.



- Use the supplied special screws to mount the operation key and D4GL Guard Lock Safety-door Switch.
- To tighten the screws, use the tip of a flat-head screwdriver on the screw heads as shown in the following figure.
- The special screws cannot be removed once they are tightened.

Note: The special screws are designed so that they cannot

be turned counter-clockwise

tightened. using a flat-head screwdriver. AUDIN - 8, avenue de la malle - 51370 Saint Brice Courcelles - Tel : 03.26.04.20.21 - Fax : 03.26.04.28.20 - Web : http: www.audin.fr - Email : info@audin.fr

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#### OMRON Corporation Industrial Automation Company

Safety Devices Division Shiokoji Horikawa, Shimogyo-ku, Kyoto, 600-8530 Japan Tel: (81)75-344-7093/Fax: (81)75-344-8197

**Regional Headquarters** 

OMRON EUROPE B.V. Wegalaan 67-69, NL-2132 JD Hoofddorp The Netherlands Tel: (31)2356-81-300/Fax: (31)2356-81-388 OMRON SCIENTIFIC TECHNOLOGIES INC. 6550 Dumbarton Circle, Fremont CA 94555-3605 U.S.A

Tel: (1)510-608-3400/Fax: (1)510-744-1442 OMRON ASIA PACIFIC PTE. LTD.

83 Clemenceau Avenue, #11-01, UE Square, 239920 Singapore Tel: (65)6835-3011/Fax: (65)6835-2711

OMRON (CHINA) CO., LTD. Room 2211, Bank of China Tower, 200 Yin Cheng Road (M), Shanghai, 200120 China Authorized Distributor:

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