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Super Small Class 6-Contact Guard Lock Safety-Door Switch

D4SL-N Guard Lock Safety-door Switch

- Wiring time is reduced with two types of wiring methods capable of one-touch attachment and removal.
- · A wide variety of built-in switches can be used for various devices. (4-, 5-, and 6-contact models are available)
- Key holding force of 1,300 N.
- · It is possible to change the key insertion point without detaching the head.
- Drive solenoids directly from the Controller.
- A Rapid Delivery Product: Select models are available for shipment today or within 3 to 5 days.

D4SL-NSK10-LK□ Slide Key

- Lockout Key to prevent workers from becoming trapped inside the hazardous area.
- The vertical D4SL Guard Lock Safety-door Switch can be easily mounted on 40 x 40 mm aluminum frames.
- The plastic material makes the Key suitable for lightweight doors.





Specifications

Standards and EC Directives

Conforms to the following EC Directives:

- · Machinery Directive
- · Low Voltage Directive
- EMC Directive
- EN 1088
- EN 60204-1
- GS-ET-19

Certified Standards

Certification body Standard		File No.	
TÜV SÜD	EN 60947-5-1 (certified direct opening)	Consult your representative for details.	
UL *1 UL 508, CSA C22.2 No.14		E76675	
CQC (CCC)	GB14048.5	pending	
KOSHA *2	EN60947-5-1		

^{*1.} Certification has been obtained for UL CSA C22.2 No. 14.

Certified Standard Ratings

TÜV (EN 60947-5-1)

Utilization category	AC-15	DC-13
Rated operating current (le)	1.5 A *1 1 A *2	0.22 A
Rated operating voltage (Ue)	120 V	125 V

Note: Use a 4 A fuse that conforms to IEC 60127 as a short-circuit protection device. This fuse is not included with the switch.

Select models are available for Rapid Delivery.

Visit this product on www.sti.com for details.

Rated	Carry current	Current (A)		Volt-amperes (VA)	
voltage		Make	Break	Make	Break
120 VAC	2.5 A	15	1.5	1,800	180

R150

C150

Rated	Carry	Current (A)		Volt-amperes (VA)	
voltage	current	Make	Break	Make	Break
125 VDC	1.0 A	0.22	0.22	28	28

Solenoid Coil Characteristics

UL/CSA (UL 508, CSA C22.2 No. 14)

Item	24 VDC
Rated operating voltage (100% ED)	24 VDC -15%
Current consumption*	Power ON: 6-contact type Approx. 6.4 W at 0.26 A 4-contact/5-contact type Approx. 4.8 W at 0.2 A Constant: Approx. 2.6 W (average) at 0.2 A (max.)
Insulation Class	Class E (120°C max.)

^{*}A starting current is applied to the solenoid for approx. 10 seconds. After this, the internal circuit switches to constant current.

Indicator

Item	LED Type
Rated voltage	24 VDC
Current consumption	Approx. 10 mA
Color (LED)	Orange



^{*1.11-42, 21-42, 21-22}

^{*2.} Other terminals

Specifications (continued)

Characteristics

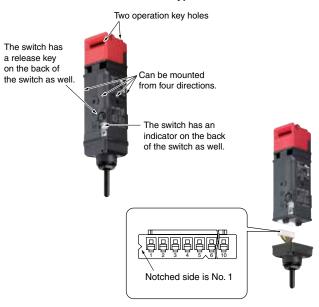
Degree of prote	ction *1	IP67 (EN60947-5-1)	
	Mechanical	1,000,000 operations min.	
Durability *2	Electrical	150,000 operations min. (1 A resistive load at 125 VAC) *3	
Operating spee	d	0.05 to 1 m/s	
Operating frequ	ency	5 operations/minute max.	
Direct opening	force *4	60 N min. (EN60947-5-1)	
Direct opening	travel *4	15 mm min. (EN60947-5-1)	
Holding force *	5	1,300 N min.	
Contact resistar	nce	200 mΩ max.	
Minimum applic	able load *6	1 mA resistive load at 5 VDC (N-level reference value)	
Rated insulation	voltage (Ui)	150 V (EN60947-5-1)	
Rated frequenc	у	50/60 Hz	
Protection again	st electric shock	Class II (double insulation)	
Pollution degree (operating envir		3 (EN60947-5-1)	
Impulse withstand voltage (EN60947-5-1)	Between terminals of same polarity	1.5 kV	
	Between terminals of different polarity	1.5 kV	
	Between other terminals and non-current carrying metallic parts.	2.5 kV	
Insulation resist	ance	100 MΩ min. (at 500 VDC)	
Vibration resistance	Malfunction	10 to 55 Hz, 0.35 mm single amplitude	
Shock	Malfunction	80 m/s² min.	
resistance	Destruction	1,000 m/s² min.	
Conditional sho	rt-circuit current	100 A (EN60947-5-1)	
Conventional free air thermal current (Ith)		2.5 A (11-42, 21-52, 21-22) 1A (Others)	
Ambient operating temperature		-10 to +55°C (with no icing)	
Ambient operating humidity		95% max.	
Weight		Head: Resin Approx. 290 g (Connector model) Approx. 330 g (Terminal block model) Head: Metal Approx. 370 g (Connector model) Approx. 410 g (Terminal block model)	

- Notes: 1. The above values are initial values.
 - 2. The Switch contacts can be used with either standard loads or microloads. Once the contacts have been used to switch a load, however, they cannot be used to switch smaller loads. The contact surfaces will become rough once they have been used and contact reliability for smaller loads may be reduced.
- *1 The degree of protection is tested using the method specified by the standard (EN60947-5-1). Confirm that sealing properties are sufficient for the operating conditions and environment beforehand. Although the switch box is protected from dust, oil or water penetration, do not use the D4SL in places where cutting chips, oil, water or chemicals may enter through the key hole on the head, otherwise Switch damage or malfunctioning may occur.
- $^{\star}2$ The durability is for an ambient temperature of 5 to 35°C and an ambient humidity of 40% to 70%. For more details, consult your OMRON representative.
- *3 Do not pass the 1 A, 125 VAC load through more than 3 circuits.
- *4 These figures are minimum requirements for safe operation.
- *5 This figure is based on the GS-ET-19 evaluation method.
- *6 This value will vary with the switching frequency, environment, and reliability level. Confirm that correct operation is possible with the actual load beforehand.

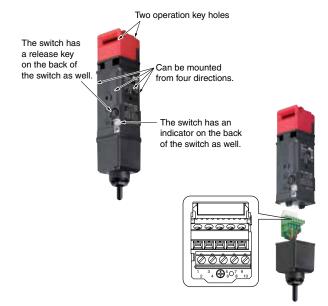
Structure

Structure

D4SL-N□□□□D-□N Connector Type

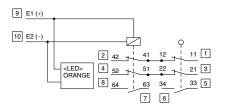


D4SL-N□□□□D-□ Terminal Block Type



Terminal Arrangement

D4SL-N N D-D



Note: Numbers inside the boxes are terminal numbers printed on the product.

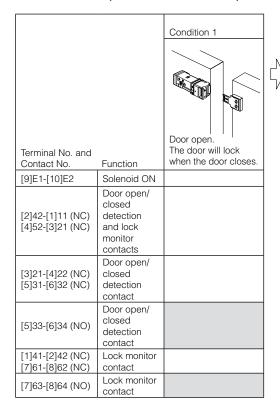




Structure (continued)

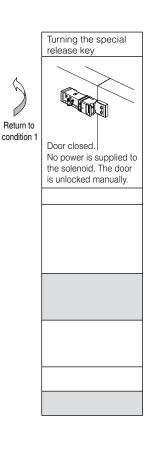
Operating Cycle Examples for Standard Models

D4SL-N□□□A-□ (Mechanical Lock Models)



	Condition 2
\rangle	
	Door closed.
	The door is locked.





D4SL-N□□G-□ (Solenoid Lock Models)

Terminal No. and Contact No.	Function	Even when the door is closed, it does not lock until power is supplied to the solenoid.
[9]E1-[10]E2	Solenoid ON	
[2]42-[1]11 (NC) [4]52-{3]21 (NC)	Door open/ closed detection and lock monitor contacts	
[3]21-[4]22 (NC) [5]31-[6]32 (NC)	Door open/ closed detection contact	
[5]33-[6]34 (NO)	Door open/ closed detection contact	
[1]41-[2]42 (NC) [7]61-[8]62 (NC)	Lock monitor contact	
[7]63-[8]64 (NO)	Lock monitor contact	

Door closed. The door is locked.

Door closed. The door can be opened.

The shaded areas indicate the contact is closed and power is supplied to the solenoid.

Door open/closed detection and lock monitor contacts:

Can be used in safety circuits because of the direct opening mechanisms.

Door open/closed detection contact:

Can be used to confirm whether the key is inserted and to monitor the open/ closed status of a door.

Lock monitor contact: Can be used to confirm whether power is supplied to the solenoid and to monitor whether or not a door can be opened or closed.

Note: The door open/closed detection and lock monitor contact configuration depends on the model.

Caution!: For solenoid-to-lock 6-contact models (contact configuration: N,P,Q,R), if a current is detected in the solenoid before the door is closed, the door might remain unlocked. Apply power to the solenoid AFTER the door is closed to ensure proper locking function.



Select models are available for Rapid Delivery.





Applicable Door Switches

D4SL-NSK10-LK



D4SL-NSK10-LKH

G





 $\label{thm:composition} \mbox{Visit this product on www.sti.com for details.}$





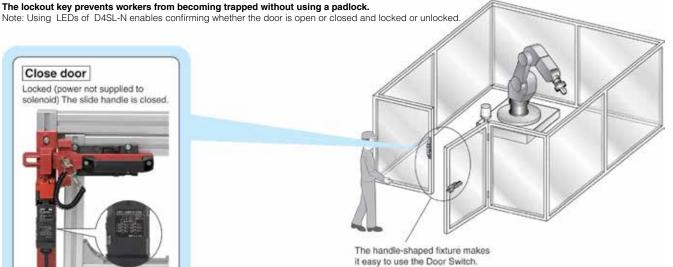
Door Switch Features



















The slide handle is open.



When the slide handle is open, the lockout key can be pulled regardless of whether power is being supplied to the solenoid or not.

Open door

The slide handle is open.



The slide handle is secured at the position shown in the figure.

A worker holding the lockout key will not be trapped locked inside the hazardous area by another person.





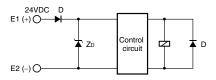
If the lockout key is not mounted, the slide handle will not move and the door will not close.



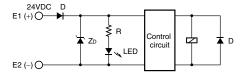


Internal Circuit Diagram

Without Indicator



With Indicator

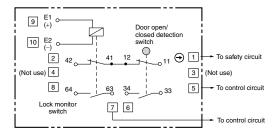


Circuit Connection Example

- Direct opening contacts used as safety-circuit input are indicated with the mark.
- Do not switch circuits for three or more standard loads at the same time. Doing so may adversely affect insulation performance.
- DC solenoids have polarity. (E1: Positive, E2: Negative) Confirm terminal polarity before wiring.
- If a lock is required for safety, design the system so that the closing of the NC contacts on both the door open/closed detection switch and the lock monitor switch is detected.

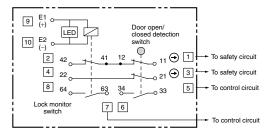
Connection Example for D4SL-N□AF□-□

Contacts 12 and 41 are internally connected.



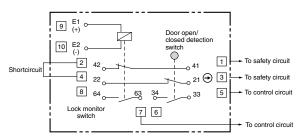
Connection Example for D4SL-N□EF□-D□

Contacts 12 and 41 are internally connected.



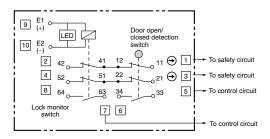
Connection Example for D4SL-N□SF□-□

There is no internal connection, so connect contacts 22 and 42 externally.



Connection Example for D4SL-N□NF□-D□

Contacts 12 and 41 and contacts 22 and 51 are internally connected.



Select models are available for Rapid Delivery.







Connections (continued)

Contact Form

Indicates conditions where the Key is inserted and the lock is applied.

	_			
Model	Contact (door open/ closed detection and lock monitor)	Lock Closed Monitor Closed detection	Operating pattern	Remarks
D4SL-N□A□□-□	1NC/1NO+ 1NC/1NO	Door open/closed detection 1 42 41 12	Lock position 42-11 34-33 64-63 Stroke Operation Key Insertion completion position Extraction completion position	Only NC contact 11-12 has a certified direct opening mechanism. The terminals 42-11, 34-33, and 64-63 can be used as unlike poles.
D4SL-N□B□□-□	1NC/1NO+2NC	Door open/closed detection 1 42 41 12	Lock position 42-11 34-33 62-61 Stroke Operation Key Insertion completion position Extraction completion position	Only NC contact 11-12 has a certified direct opening mechanism. The terminals 42-11, 34-33, and 62-61 can be used as unlike poles.
D4SL-N□C□□-□	2NC+1NC/1NO	Door open/closed detection 1	Lock position 42-11 32-31 64-63 Stroke Operation Key Insertion completion position Extraction completion position	Only NC contact 11-12 and 31-32 have a certified direct opening mechanism. The terminals 42-11, 32-31, and 64-63 can be used as unlike poles.
D4SL-N□D□□-□	2NC+2NC	Door open/closed detection 1 42	Lock position 42-11 32-31 62-61 Stroke Operation Key Insertion completion position Extraction completion position	Only NC contact 11-12 and 31-32 have a certified direct opening mechanism. The terminals 42-11, 32-31, and 62-61 can be used as unlike poles.
D4SL-N□S□□-□	1NC/1NO+ 1NC/1NO	Door open/closed detection 2	Lock position 42-41 22-21 34-33 64-63 Stroke Operation Key Insertion completion position Completion position	Only NC contact 21-22 has a certified direct opening mechanism. The terminals 42-41, 22-21, 34-33, and 64-63 can be used as unlike poles.
D4SL-N□T□□-□	1NC/1NO+2NC	Door open/closed detection 1	Lock position 42-41 22-21 34-33 62-61 Stroke Operation Key Insertion completion position Extraction completion position	Only NC contact 21-22 has a certified direct opening mechanism. The terminals 42-41, 22-21, 34-33, and 62-61 can be used as unlike poles.
D4SL-N□U□□-□	2NC+1NC/1NO	Lock monitor Door open/closed detection $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Lock position 42-41 22-21 32-31 64-63 Stroke Operation Key Insertion completion position Extraction completion position	Only NC contact 21-22, and 31-32 have a certified direct opening mechanism. The terminals 42-41, 22-21, 32-31, and 64-63 can be used as unlike poles.
D4SL-N□V□□-□	2NC+2NC	Lock monitor Door open/closed detection $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Lock position 42-41 22-21 32-31 62-61 Stroke Operation Key Insertion completion position Completion position Extraction completion position	Only NC contact 21-22, and 31-32 have a certified direct opening mechanism. The terminals 42-41, 22-21, 32-31, and 62-61 can be used as unlike poles.



Connections (continued)

Contact Form (continued)

Indicates conditions where the Key is inserted and the lock is applied.

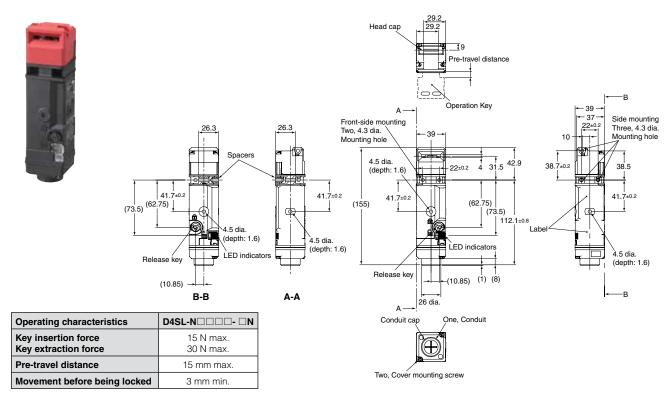
Model	Contact (door open/ closed detection and lock monitor)	Contact form Lock Door open/ closed detection	Operating pattern	Remarks
D4SL-N□E□□-□	2NC/1NO+ 1NC/1NO	Door open/closed detection 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	34-33 64-63 Stroke	Only NC contact 11-12 and 21-22 has a certified direct opening mechanism. The terminals 42-11, 22-21, 34-33, and 64-63 can be used as unlike poles.
D4SL-N□F□□-□	2NC/1NO+2NC	Door open/closed detection 1 1 42 41 12 9 11 1	34-33 62-61 Stroke On	Only NC contact 11-12 and 21-22 has a certified direct opening mechanism. The terminals 42-11, 22-21, 34-33, and 62-61 can be used as unlike poles.
D4SL-N□G□□-□	3NC+1NC/1NO		32-31 64-63 Stroke	Only NC contact 11-12, 21-22, and 31-32 has a certified direct opening mechanism. The terminals 42-11, 22-21, 32-31, and 64-63 can be used as unlike poles.
D4SL-N□H□□-□	3NC+2NC		32-31 62-61 Stroke	Only NC contact 11-12, 21-22, and 31-32 has a certified direct opening mechanism. The terminals 42-11, 22-21, 32-31, and 62-61 can be used as unlike poles.
D4SL-N□N□□-□	2NC/1NO+ 2NC/1NO	Door open/closed detection 11	34-33 64-63 Stroke	Only NC contact 11-12 and 21-22 has a certified direct opening mechanism. The terminals 42-11, 52-21, 34-33, and 62-61 can be used as unlike poles.
D4SL-N□P□□-□	2NC/1NO+3NC	Door open/closed detection 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	34-33 62-61 Stroke	Only NC contact 11-12 and 21-22 has a certified direct opening mechanism. The terminals 42-11, 52-21, 34-33, and 62-61 can be used as unlike poles.
D4SL- N□Q□□-□	3NC+2NC/1NO	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	32-31 32-31 64-63 Stroke	Only NC contact 11-21, 21-22, and 31-32 have a certified direct opening mechanism. The terminals 42-11, 52-21, 32-31, and 64-63 can be used as unlike poles.
D4SL-N□R□□-□	3NC+3NC	Door open/closed detection 1	32-31 32-31 62-61 Stroke	Only NC contact 11-12, 21-22, and 31-32 have a certified direct opening mechanism. The terminals 42-11, 52-21, 32-31, and 62-61 can be used as unlike poles.



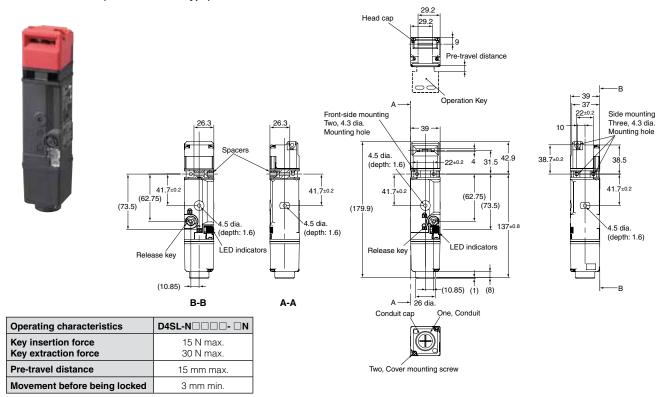


Switches

D4SL-N□□□-□N (Connector Type)



D4SL-N□□□-□ (Terminal Block Type)



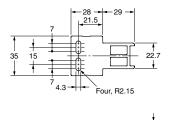
Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.



Operation Keys

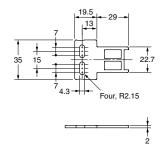
D4SL-NK1





D4SL-NK1S

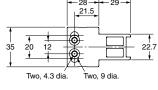


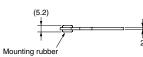


D4SL-NK1G

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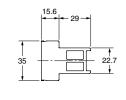


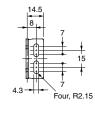




D4SL-NK2

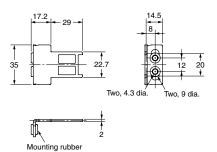






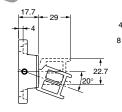
D4SL-NK2G

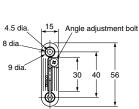




D4SL-NK3

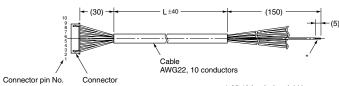






Connector Cable

D4SL-CN□



* All	10 lead wires laid bare.	

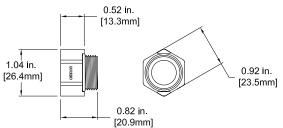
	wodei
(5)	D4SL-CN1
	D4SL-CN3
	D4SL-CN5

Connector No.	Lead wire color	
1	Black	
2	Black/White	
3	Red	
4	Red/White	
6	Green	

Connector No.	Lead wire color	
6	Green/White	
7	Yellow	
8	Yellow/White	
9	Brown	
10	Brown White	

Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

M20-NPT Adapter



1 m 3 m 5 m

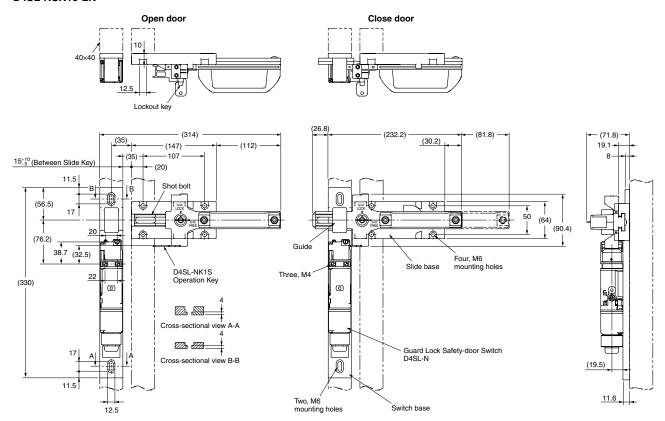




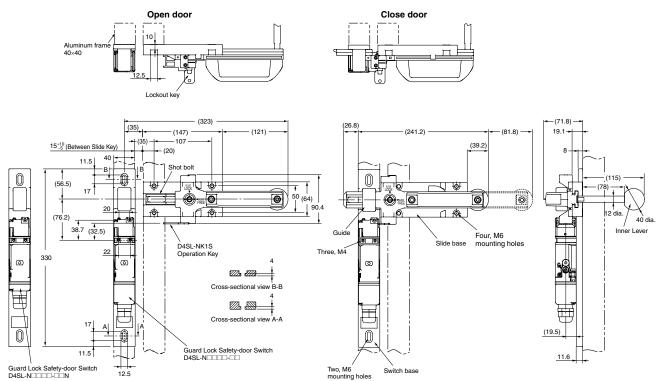
Slide Key

D4SL-NSK10-LK

Dimensions and Operating Characteristics



D4SL-NSK10-LKH



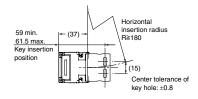


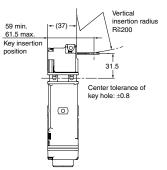
Operating Key Mounting

D4SL-N+D4SL-NK1

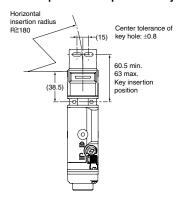
With Front-inserted Operation Key

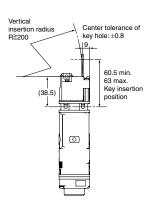






With Top-Inserted Operation Key



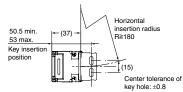


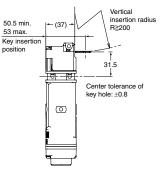
D4SL-N+D4SL-NK1S

K1S With Front-inserted Operation Key

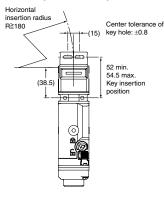


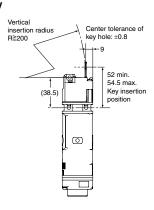
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With Top-Inserted Operation Key

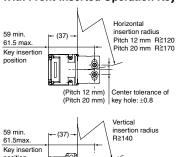


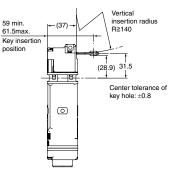


D4SL-N+D4SL-NK1G

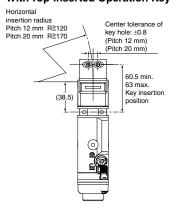
With Front-inserted Operation Key

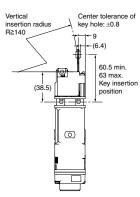






With Top-Inserted Operation Key



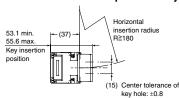


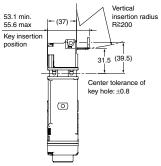
G

Operating Key Mounting (continued)

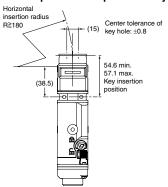
D4SL-N+D4SL-NK2

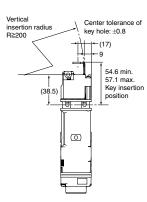
With Front-inserted Operation Key





With Top-Inserted Operation Key

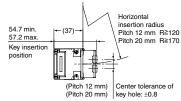


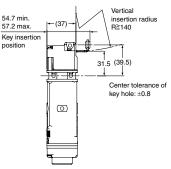


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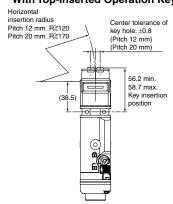


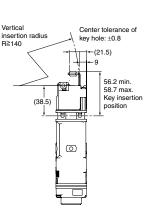
With Front-inserted Operation Key





With Top-Inserted Operation Key

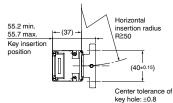


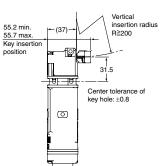


D4SL-N+D4SL-NK3

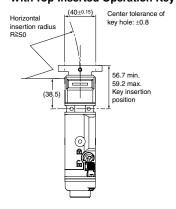


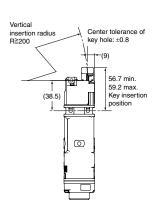
With Front-inserted Operation Key





With Top-Inserted Operation Key







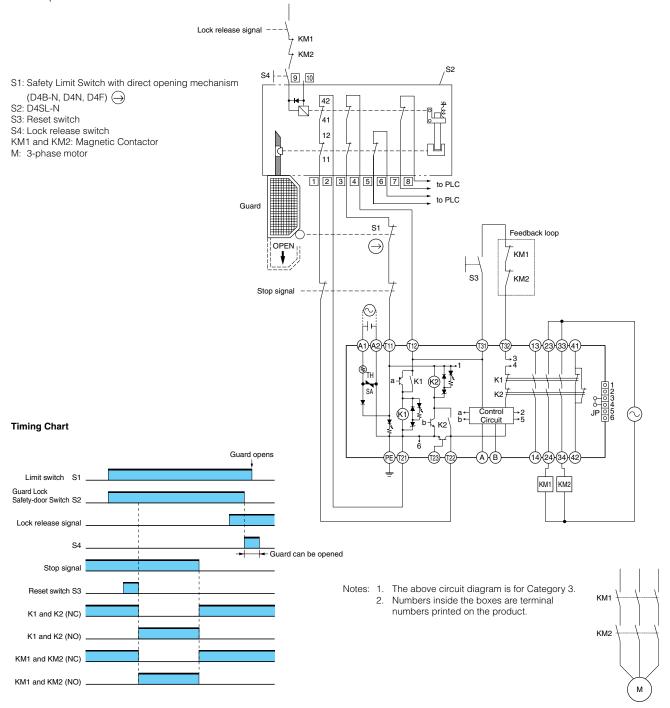
Application Examples

D4SL-N Application Example

PL/Safety Category	Applied models	Stop category	Reset method
Equivalent to PLe/4	D4SL-N□R□A-□ Compact Safety Door Switch with Magnetic Lock (mechanical lock) G9SA-301 (24 VAC/DC) Safety Relay Unit	0	Manual

Application Overview

- If the guard is opened, it is detected with S2 and the power supply to the motor (M) is shut OFF.
- When the guard is closed, the lock status can be detected and the power supply to the motor (M) remains shut OFF until limit switch S3 is pressed.





G-38



Ordering

Model Number Structure

Switch

D4SL - N 🗆 🗆 🗆 - 🗆 🗆 0 0 0 0 0 0 0

- Conduit Size
 - 2: G1/2 (conduit)
 - 3: 1/2-14 NPT (M20, includes M20-to-1/2-14NPT conversion adapter)
 - M20
- 2 Built-in Switch

4-contact Model: Door monitor and lock monitors are connected in series

- 1NC/1NO + 1NC/1NO 1NC/1NO + 2NC C: 2NC + 1NC/1NO
- D: 2NC + 2NC

4-contact Model: Door monitor and lock monitors are NOT connected in series internally

- 1NC/1NO + 1NC/1NO 1NC/1NO + 2NC 2NC + 1NC/1NO
- 2NC + 2NC

5-contact Model

2NC/1NO + 1NC/1NO 2NC/1NO + 2NC G: 3NC + 1NC/1NO H: 3NC + 2NC

6-contact Model

- 2NC/1NO + 2NC/1NO 2NC/1NO + 3NC Q: 3NC + 2NC/1NO 3NC + 3NC
- Head Material

4-contact Model

F: Resin

5- or 6-contact Model (common)

- Resin D: Metal
- O Door Lock and Release
 - A: Mechanical lock/24 VDC solenoid release
 - G: 24 VDC solenoid lock/mechanical release
- 6 Indicator

4-contact Model

Blank: None

5- or 6-contact Model (common)

D: 24 VDC (orange LED indicator)

6 Release Key Type

4-contact Model

Blank: Standard release key (metal)

5- or 6-contact Model (common)

Blank: Special release key (metal)

Special release key (resin) (Note: Release keys are provided)

Connection Method Blank: Terminal block Connector *1

Operation Key

D4SL-NK □ □



- Operation Key Type
 - 1: Horizontal mounting
 - 2: Vertical mounting
 - 3: Adjustable mounting (horizontal)
- Key Type

Blank: No cushion rubber

- G: Cushion rubber
- S: No cushion rubber, short type

Note:

*1. Connector cables are not included with the connector type and are to be purchased separately.

Caution!: For solenoid-to-lock 6-contact models (contact configuration: N,P,Q,R), if a current is detected in the solenoid before the door is closed, the door might remain unlocked. Apply power to the solenoid AFTER the door is closed to ensure proper locking function.



Select models are available for Rapid Delivery.





Ordering (continued)

List of Models

Release Key Type	Wiring method	Solenoid voltage/ Indicator	Lock and release type	Contact configuration (door open/closed detection switch and lock monitor switch contacts)	Conduit size (See Note.)	Model
					G1/2	D4SL-N2□FA-DN
				6-contact Model	1/2-14NPT	D4SL-N3□FA-DN
				Insert the built-in switch (N, P, Q or R) into the blank □.	1/2-14NPT	D4SL-N3NFA-DN
		24 VDC (Orange)			M20	D4SL-N4□FA-DN
	0	(Grange)		5-contact Model	G1/2	D4SL-N2□FA-DN
	Connector			Insert the built-in switch (E, F, G or H) into	1/2-14NPT	D4SL-N3□FA-DN
				the blank □.	M20	D4SL-N4□FA-DN
				4-contact Model	G1/2	D4SL-N2□FA-N
		24 VDC (without indicator)		Insert the built-in switch (A, B, C, D, S, T, U	1/2-14NPT	D4SL-N3□FA-N
		(William William)		or V) into the blank □.	M20	D4SL-N4□FA-N
			Mechanical lock Solenoid release		G1/2	D4SL-N2□FA-D
			00.01.0.0.10.0000	6-contact Model	1/2-14NPT	D4SL-N3□FA-D
				Insert the built-in switch (N, P, Q or R) into	1/2-14NPT	D4SL-N3NFA-D
		24 VDC		the blank □.	1/2-14NPT	D4SL-N3QFA-D
		(Orange)			M20	D4SL-N4□FA-D
	Terminal block			5-contact Model	G1/2	D4SL-N2□FA-D
	BIOCK	24 VDC (without indicator)	Insert the built-in switch (E, F, G or I the blank □. 4-contact Model	Insert the built-in switch (E, F, G or H) into	1/2-14NPT	D4SL-N3□FA-D
					M20	D4SL-N4□FA-D
				4-contact Model	G1/2	D4SL-N2□FA
Standard (metal)				Insert the built-in switch (A, B, C, D, S, T, U	1/2-14NPT	D4SL-N3□FA
					M20	D4SL-N4□FA
			Inst the	6-contact Model Insert the built-in switch (N, P, Q or R) into the blank □.	G1/2	D4SL-N2□FG-DN
					1/2-14NPT	D4SL-N3□FG-DN
3	Connector				1/2-14NPT	D4SL-N3NFG-DN
T. Fried		24 VDC			M20	D4SL-N4□FG-DN
		(Orange)		5-contact Model Insert the built-in switch (E, F, G or H) into the blank	G1/2	D4SL-N2□FG-DN
					1/2-14NPT	D4SL-N3□FG-DN
					1/2-14NPT	D4SL-N3HFG-DN
					M20	D4SL-N4□FG-DN
				4-contact Model	G1/2	D4SL-N2□FG-N
			Solenoid lock	Insert the built-in switch (A, B, C, D, S, T, U	1/2-14NPT	D4SL-N3□FG-N
		(William William)	Mechanical	or V) into the blank □.	M20	D4SL-N4□FG-N
			release		G1/2	D4SL-N2□FG-D
				6-contact Model	1/2-14NPT	D4SL-N3□FG-D
				Insert the built-in switch (N, P, Q or R) into the blank \square .	1/2-14NPT	D4SL-N3NFG-D
		24 VDC (Orange)			M20	D4SL-N4□FG-D
	Terminal	(3.495)		5-contact Model	G1/2	D4SL-N2□FG-D
	block			Insert the built-in switch (E, F, G or H) into	1/2-14NPT	D4SL-N3□FG-D
				the blank .	M20	D4SL-N4□FG-D
		24 VDC (without indicator)		4-contact Model	G1/2	D4SL-N2□FG
				Insert the built-in switch (A, B, C, D, S, T, U	1/2-14NPT	D4SL-N3□FG
		(Without indicator)		or V) into the blank \square .	M20	D4SL-N4□FG

Note: The recommended models for equipment and machinery being exported to Europe are those with an M20 conduit sizes, and for North America, the recommended models are those with a 1/2-14NPT conduit sizes.







Ordering (continued)

List of Models (continued)

Release Key Type	Wiring method	Solenoid voltage/ Indicator	Lock and release type	Contact configuration (door open/closed detection switch and lock monitor switch contacts)	Conduit size (See Note.)	Model
				6-contact Model	G1/2	D4SL-N2□FA-D4N
				Insert the built-in switch (N, P, Q or R) into	1/2-14NPT	D4SL-N3□FA-D4N
				the blank \square .	M20	D4SL-N4□FA-D4N
	Connector			5-contact Model	G1/2	D4SL-N2□FA-D4N
				Insert the built-in switch (E, F, G or H) into	1/2-14NPT	D4SL-N3□FA-D4N
				the blank \square .	M20	D4SL-N4□FA-D4N
			Mechanical lock Solenoid release		G1/2	D4SL-N2□FA-D4
			Joieriola release	6-contact Model	1/2-14NPT	D4SL-N3□FA-D4
				Insert the built-in switch (N, P, Q or R) into the blank □.	1/2-14NPT	D4SL-N3NFA-D4
Special	Terminal block		5-contact Model Insert the built-in switch (E, F, G or H) into the blank □.	M20	D4SL-N4□FA-D4	
	DIOOK			Insert the built-in switch (E, F, G or H) into	G1/2	D4SL-N2□FA-D4
					1/2-14NPT	D4SL-N3□FA-D4
				M20	D4SL-N4□FA-D4	
(resin)	Connector	24 VDC (Orange)		6-contact Model Insert the built-in switch (N, P, Q or R) into the blank □.	G1/2	D4SL-N2□FG-D4N
					G1/2	D4SL-N2NFG-D4N
					1/2-14NPT	D4SL-N3□FG-D4N
					M20	D4SL-N4□FG-D4N
N. Comments				5-contact Model	G1/2	D4SL-N2□FG-D4N
				Insert the built-in switch (E, F, G or H) into	1/2-14NPT	D4SL-N3□FG-D4N
			Solenoid lock	the blank □.	M20	D4SL-N4□FG-D4N
			Mechanical release		G1/2	D4SL-N2□FG-D4
				6-contact Model	1/2-14NPT	D4SL-N3□FG-D4
				Insert the built-in switch (N, P, Q or R) into the blank \square .	1/2-14NPT	D4SL-N3NFG-D4
	Terminal block				M20	D4SL-N4□FG-D4
	2.001			5-contact Model	G1/2	D4SL-N2□FG-D4
				Insert the built-in switch (E, F, G or H) into	1/2-14NPT	D4SL-N3□FG-D4
				the blank \square .	M20	D4SL-N4□FG-D4

Note: The recommended models for equipment and machinery being exported to Europe are those with an M20 conduit sizes, and for North America, the recommended models are those with a 1/2-14NPT conduit sizes.







Operation Keys

Туре		Model
Horizontal mounting	C T	D4SL-NK1
Horizontal mounting (Short)		D4SL-NK1S
Horizontal mounting (Cushion rubber)		D4SL-NK1G
Vertical mounting		D4SL-NK2

Vertical mounting (Cushion rubber)		D4SL-NK2G
Adjustable (Horizontal)	••••	D4SL-NK3

D4SL-NK $\square\square$ actuators are compatible with both D4SL & D4SL-N switches D4SL-K□□ actuators are also compatible with both D4SL & D4SL-N switches

Connector Cables

Туре	Model
1 m	D4SL-CN1
3 m	D4SL-CN3
5 m	D4SL-CN5

G

Slide Key

-				Applicable Door
Туре	Specifications	Contents	Model	Switch
	Weight: Approx. 0.6 kg Mechanical durability: 20,000 operations min.	Slide Key: 1 (not yet mounted) D4SL-IN mounting plate: 1 Door Switch special mounting screws: 3 D4SL-INK1 (operation key): 1 D4SL-INK1 special mounting screws: 2 Lockout keys: 2 Lockout key strap: 1 Caution labels (stickers): 2 sheets (English and Japanese)	D4SL-NSK10-LK	D4SL-N
	Weight: Approx. 0.1 kg	Inner Lever: 1	D4SL-SK10H *	_
	Weight: Approx. 0.7 kg Mechanical durability: 20,000 operations min.	Slide Key: 1 (not yet mounted) Inner Lever: 1 D4SL-N mounting plate: 1 Door Switch special mounting screws: 3 D4SL-NK1 (operation key): 1 D4SL-NK1 special mounting screws: 2 Lockout keys: 2 Lockout key strap: 1 Caution labels (stickers): 2 sheets (English and Japanese)	D4SL-NSK10-LKH	D4SL-N





