Safety Interlock Switches
D4SL-N

SpeedSPEC www.sti.com D4SLN

Rev. 11.12b

World's Smallest Class 6-Contact Guard Lock Safety-Door Switch

Guard Lock Safety-door Switch D4SL-N

- 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.

Slide Key D4SL-NSK10-LK□

- 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 Slide Key suitable for lightweight doors.

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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 (Ie)	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.

*1. 11-42, 21-42, 21-22

*2. Other terminals

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

C150

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

R150

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

Solenoid Coil Characteristics

Item	24 VDC
Rated operating voltage (100% ED)	24 VDC $^{+10\%}_{-15\%}$
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 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

Specifications (continued)

Characteristics

Degree of protection *1		IP67 (EN60947-5-1)
Durability *2	Mechanical	1,000,000 operations min.
	Electrical	150,000 operations min. (1 A resistive load at 125 VAC) *3
Operating speed		0.05 to 1 m/s
Operating frequency		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 resistance		200 mΩ max.
Minimum applicable load *6		1 mA resistive load at 5 VDC (N-level reference value)
Rated insulation voltage (Ui)		150 V (EN60947-5-1)
Rated frequency		50/60 Hz
Protection against electric shock		Class II (double insulation)
Pollution degree (operating environment)		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 resistance		100 MΩ min. (at 500 VDC)
Vibration resistance	Malfunction	10 to 55 Hz, 0.35 mm single amplitude
Shock resistance	Malfunction	80 m/s^2 min.
	Destruction	1,000 m/s^2 min.
Conditional short-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)

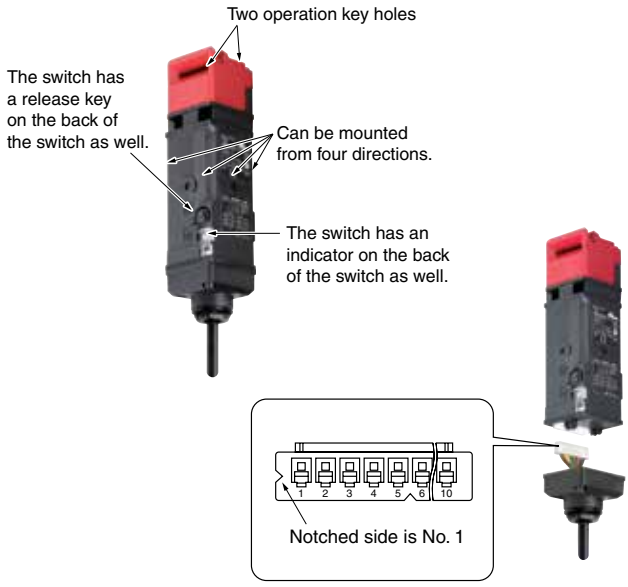
Notes: 1. The above values are initial values.
2. The Switch contacts can be used with either standard loads or microloads. Once the contacts have been used to switch a load, however, they cannot be used to switch smaller loads. The contact surfaces will become rough once they have been used and contact 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.
*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.

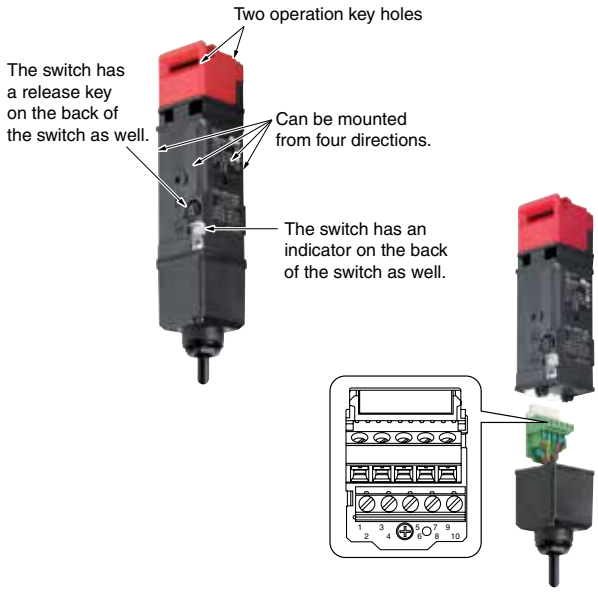
Structure

Structure

D4SL-N□□□□D-□N Connector Type

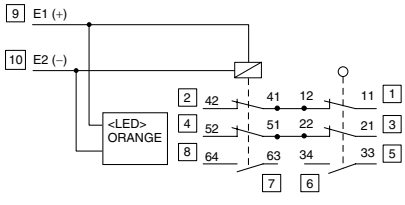


D4SL-N□□□□D-□ Terminal Block Type



Terminal Arrangement

D4SL-N□N□□-D□



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

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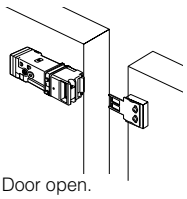
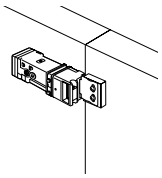
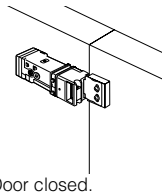
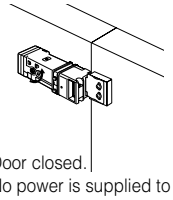
Structure (continued)

Operating Cycle Examples for Standard Models

D4SL-N□□□A-□ (Mechanical Lock Models)

Terminal No. and Contact No.	Function	Condition 1  Door open. The door will lock when the door closes.	Condition 2  Door closed. The door is locked.	Condition 3  Door closed. The door can be opened.	Return to condition 1	Turning the special release key  Door closed. No power is supplied to the solenoid.The door is unlocked manually.
[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					

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.	Door closed. The door is locked.	Door closed. The door can be opened.
[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			

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.

Notes: 1. The door open/closed detection and lock monitor contact configuration depends on the model.
2. If a current is detected in the solenoid lock model (built-in switches; N,P,Q,R), before the door is closed, the door will remain unlocked. Be sure to supply power to the solenoid after the door is closed.

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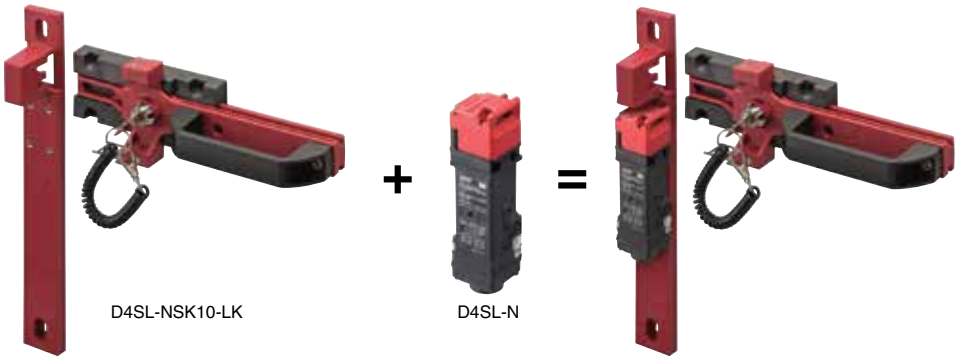
Applicable Door Switches

D4SL-NSK10-LK



D4SL-NSK10-LK D4SL-N

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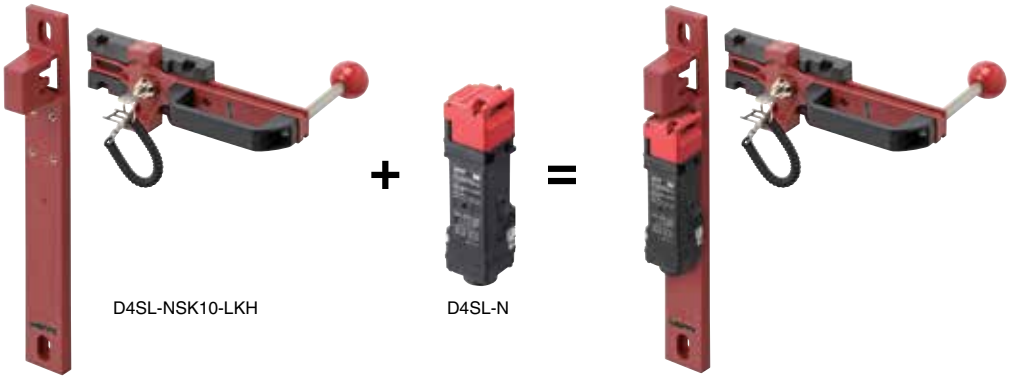
D4SL-NSK10-LKH



D4SL-NSK10-LKH D4SL-N

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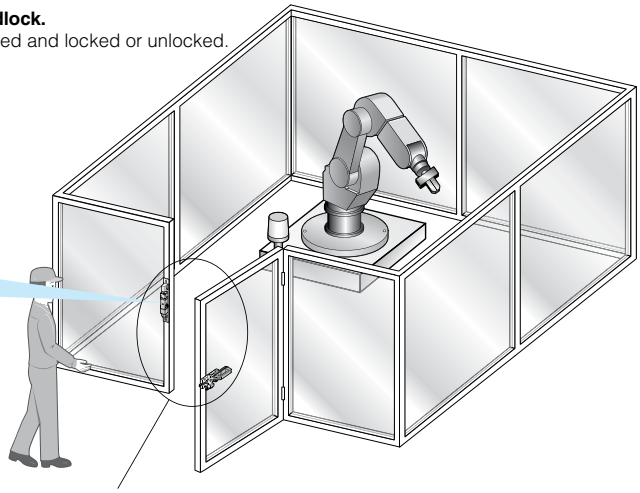
Door Switch Features

The lockout key prevents workers from becoming trapped without using a padlock.
Note: Using LEDs of D4SL-N enables confirming whether the door is open or closed and locked or unlocked.



The handle-shaped fixture makes it easy to use the Door Switch.

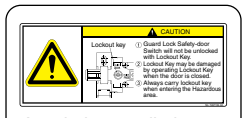
Close door

Locked (power not supplied to solenoid) The slide handle is closed.

Close door

Unlocked (power supplied to solenoid) The slide handle is closed.

The slide handle can be pulled.



Attach the supplied caution labels for display.

Lockout Key

Do not turn the key as in the figure above if the slide handle is closed.

Left door

Door Opening to the Left.

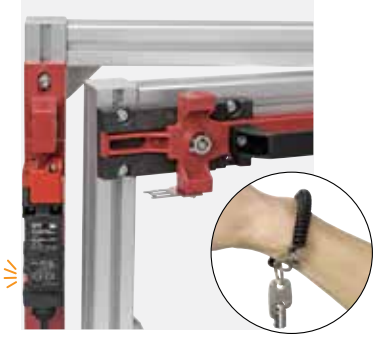
Open door

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

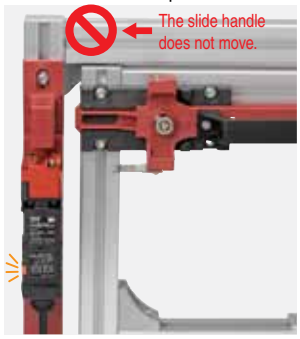
The slide handle is open.



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.

Open door

The slide handle is open.



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

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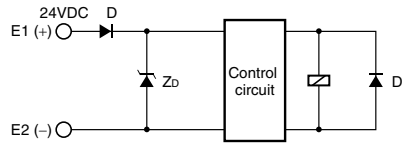
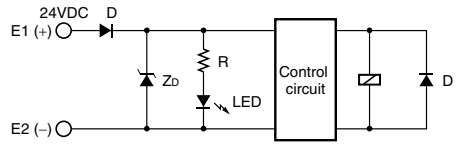
Connections

Internal Circuit Diagram

Without Indicator



With Indicator

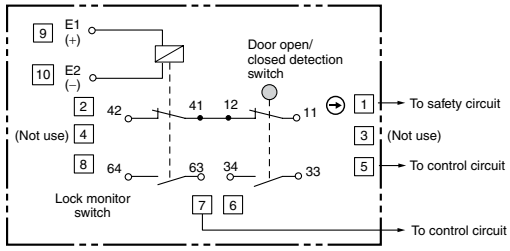


Circuit Connection Example

- 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.

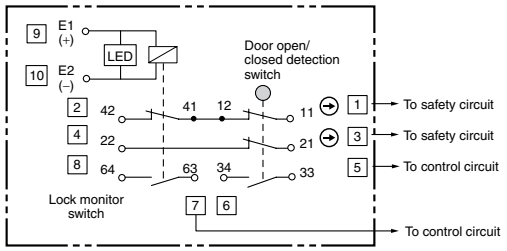
Connection Example for D4SL-N☐AF☐-☐

Contacts 12 and 41 are internally connected.



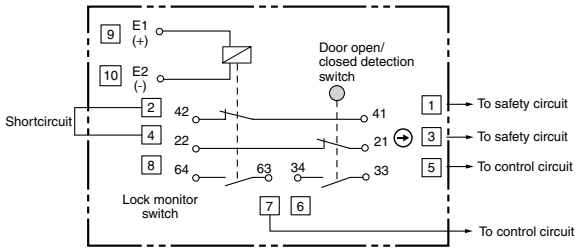
Connection Example for D4SL-N☐EF☐-D☐

Contacts 12 and 41 are internally connected.



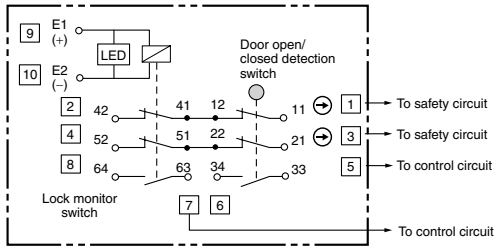
Connection Example for D4SL-N☐SF☐-☐

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.



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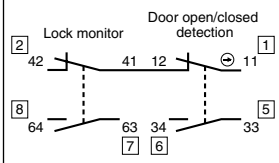
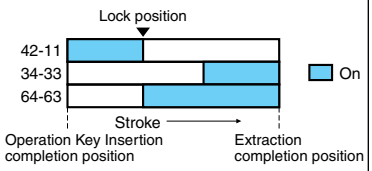
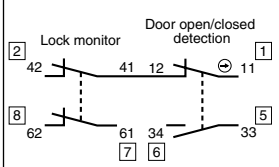
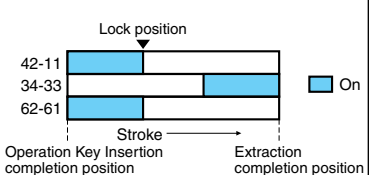
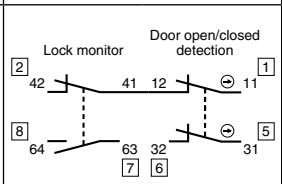
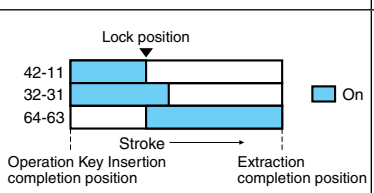
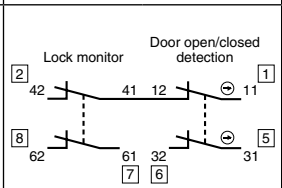
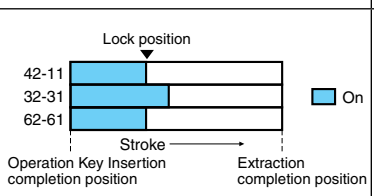
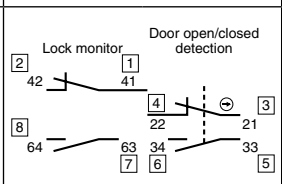
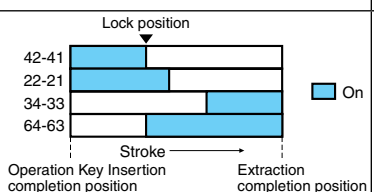
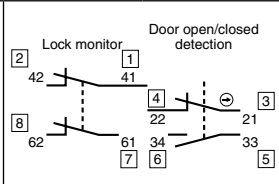
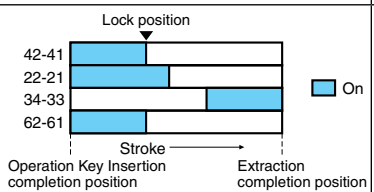
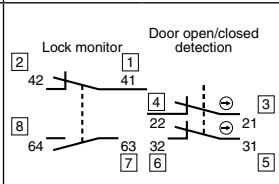
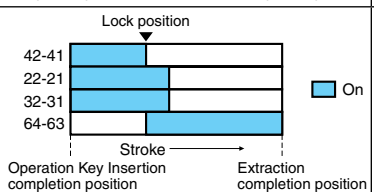
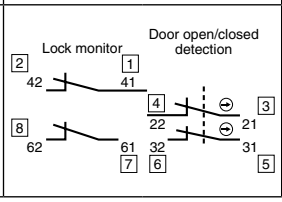
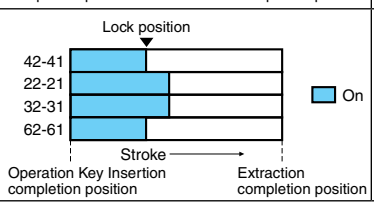
Connections (continued)

Contact Form

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

Model	Contact (door open/ closed detection and lock monitor)	Contact form		Operating pattern	Remarks
		Lock monitor	Door open/ closed detection		
D4SL-N□A□□-□	1NC/1NO+ 1NC/1NO				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				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				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				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				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				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				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				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.

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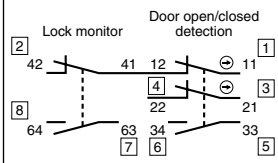
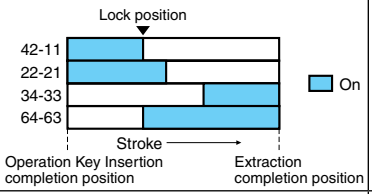
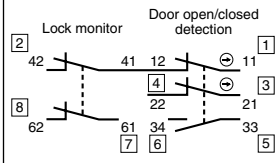
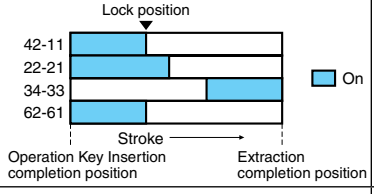
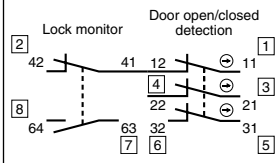
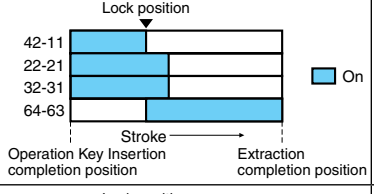
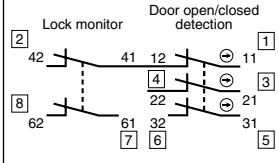
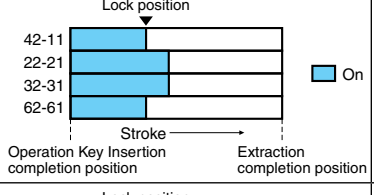
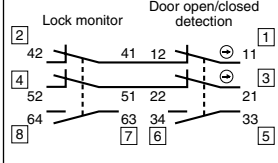
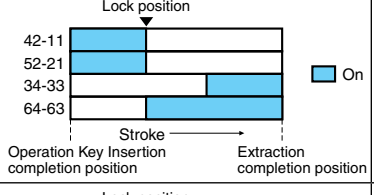
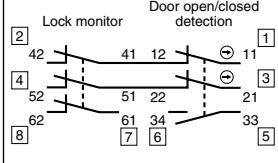
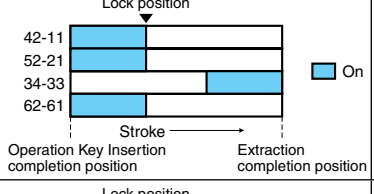
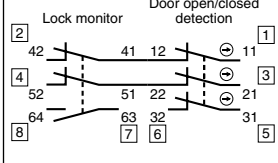
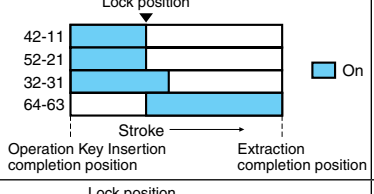
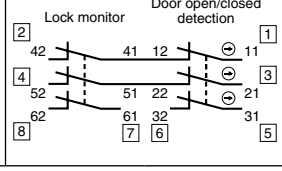
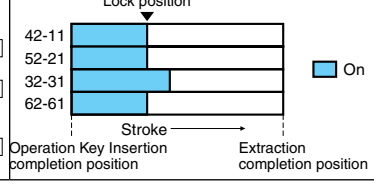
Connections (continued)

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		Operating pattern	Remarks
		Lock monitor	Door open/ closed detection		
D4SL-N□E□□-□	2NC/1NO+ 1NC/1NO				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				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				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				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				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				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				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				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.

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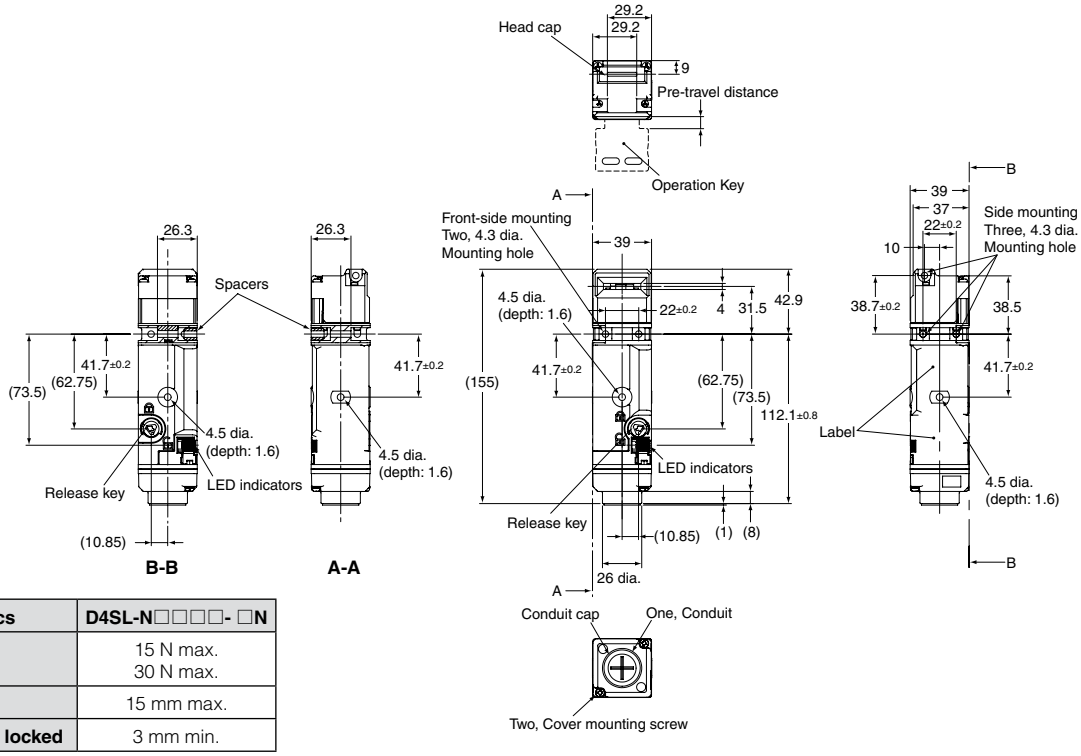
Dimensions and Operating Characteristics

(mm)

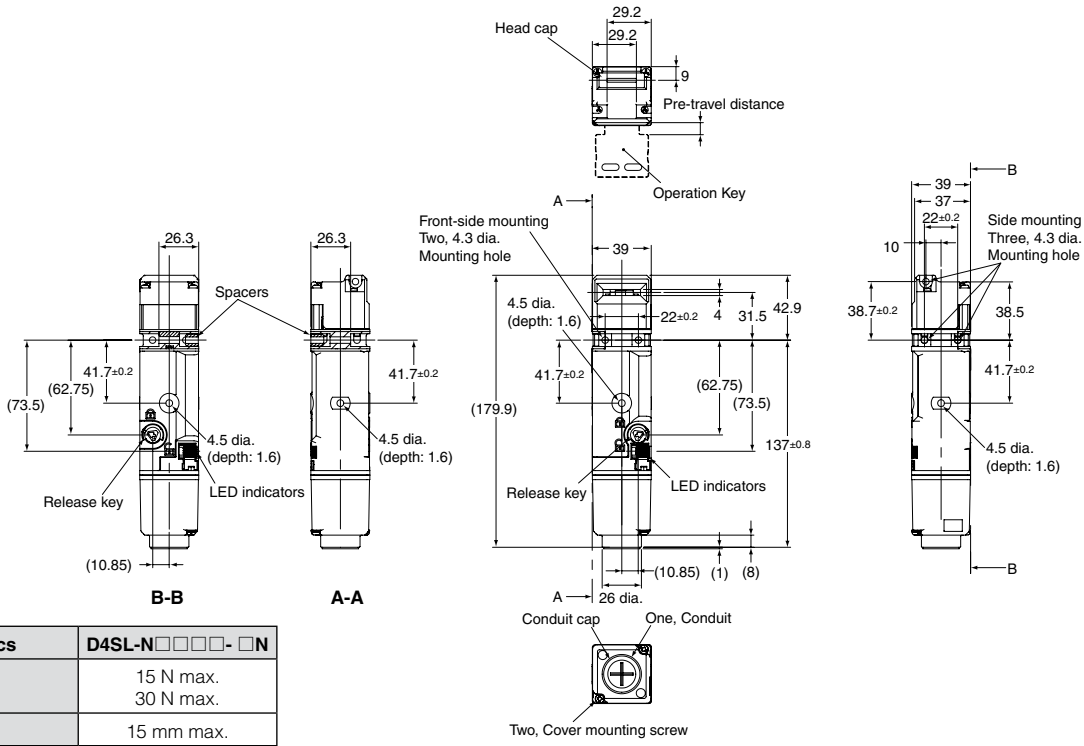
Switches

D4SL-N□□□□-□N (Connector Type)



Operating characteristics	D4SL-N□□□□- □N
Key insertion force Key extraction force	15 N max. 30 N max.
Pre-travel distance	15 mm max.
Movement before being locked	3 mm min.

D4SL-N□□□□-□ (Terminal Block Type)



Operating characteristics	D4SL-N□□□□- □N
Key insertion force Key extraction force	15 N max. 30 N max.
Pre-travel distance	15 mm max.
Movement before being locked	3 mm min.

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

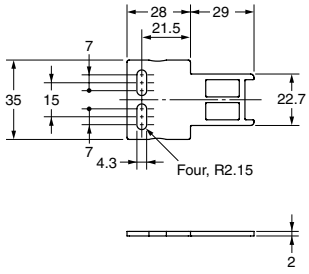
G

Dimensions and Operating Characteristics (continued)

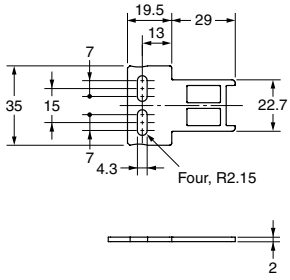
(mm)

Operation Keys

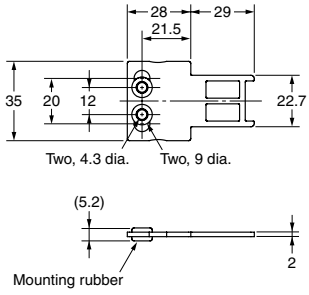
D4SL-NK1



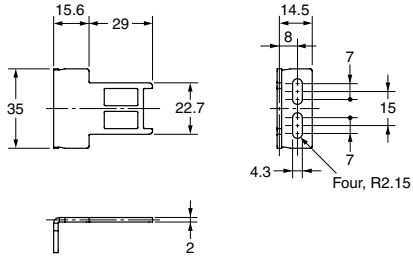
D4SL-NK1S



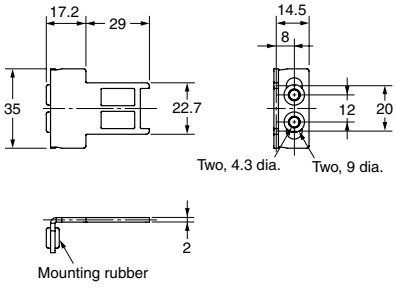
D4SL-NK1G



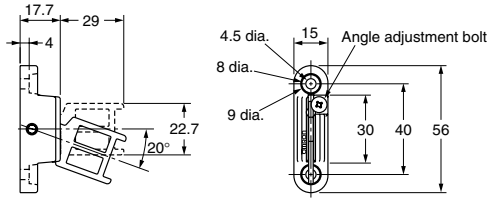
D4SL-NK2



D4SL-NK2G

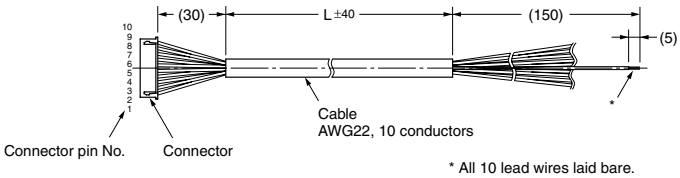


D4SL-NK3



Connector Cable

D4SL-CN□

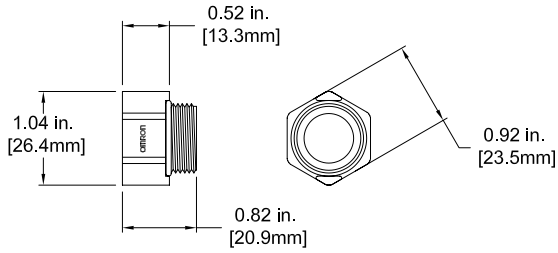


Model	L size
D4SL-CN1	1 m
D4SL-CN3	3 m
D4SL-CN5	5 m

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

M20-NPT Adapter



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

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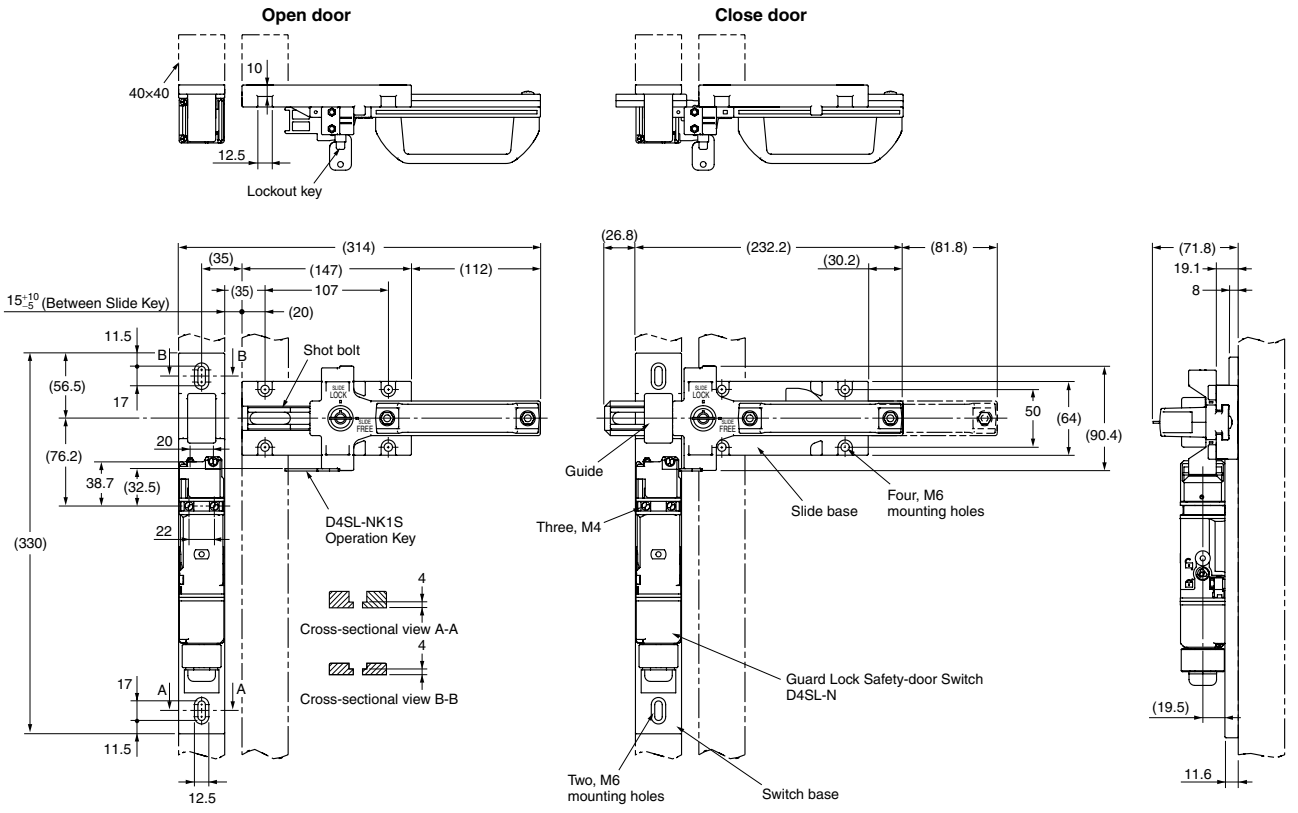
Dimensions and Operating Characteristics

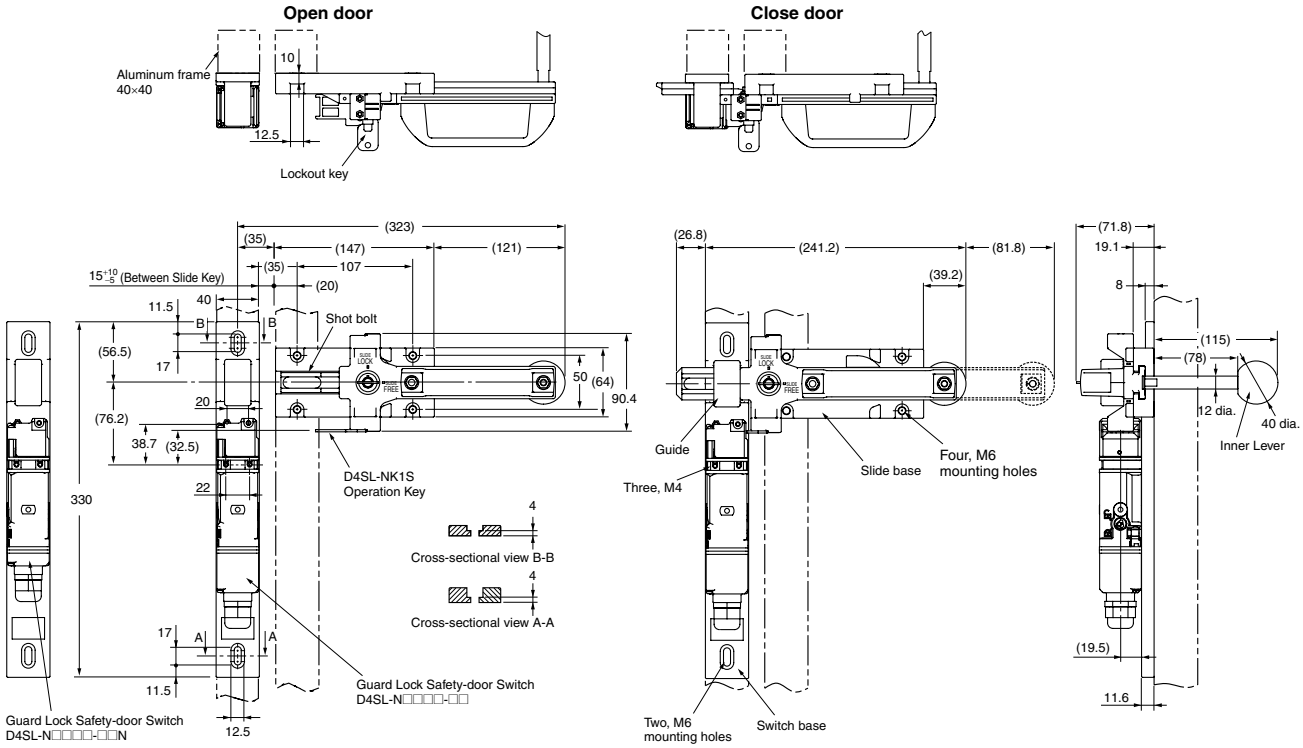
(mm)

Slide Key

D4SL-NSK10-LK



D4SL-NSK10-LKH



G

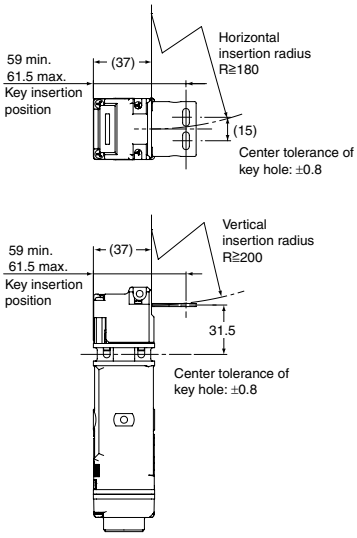
Dimensions and Operating Characteristics (continued)

(mm)

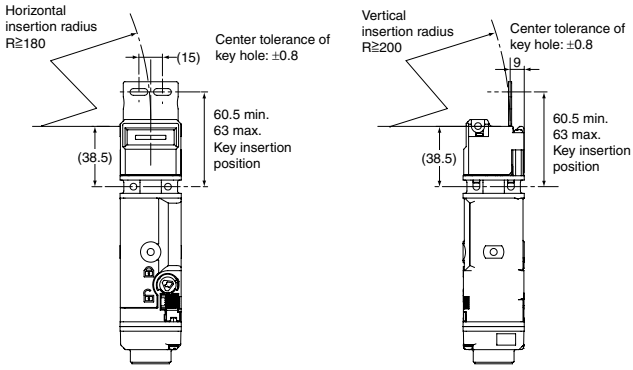
Operating Key Mounting

D4SL-N+D4SL-NK1

With Front-inserted Operation Key

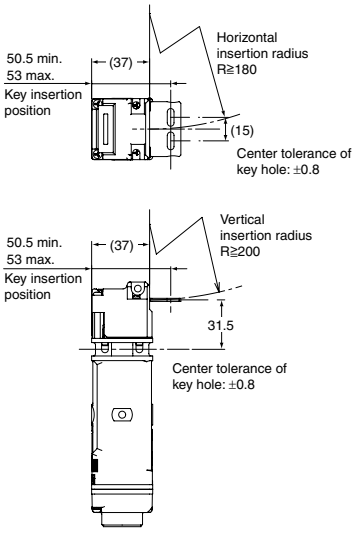


With Top-Inserted Operation Key

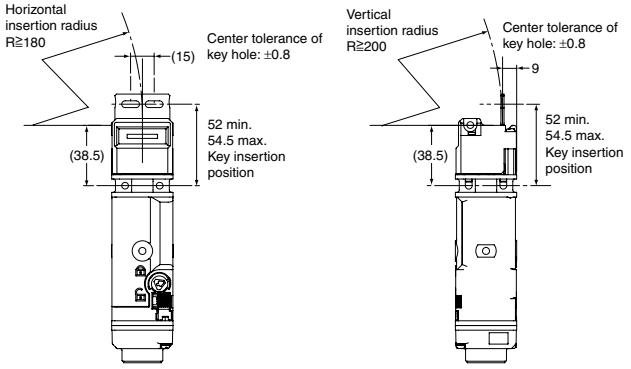


D4SL-N+D4SL-NK1S

With Front-inserted Operation Key

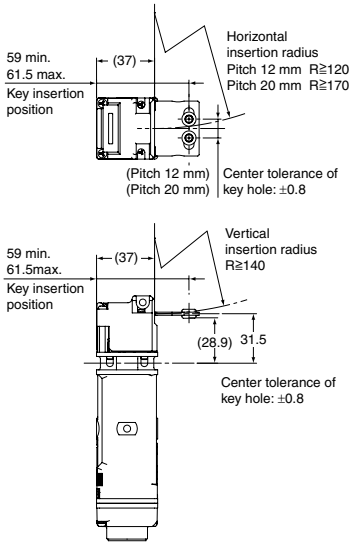


With Top-Inserted Operation Key

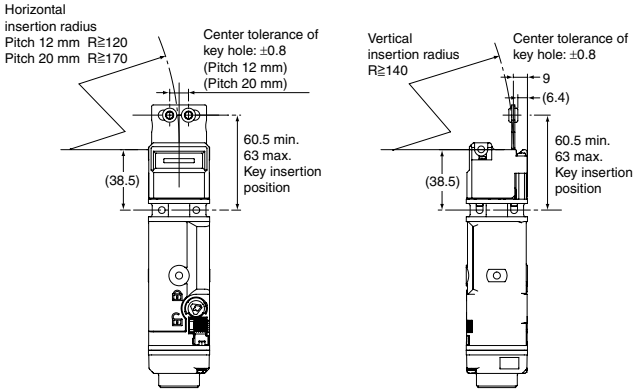


D4SL-N+D4SL-NK1G

With Front-inserted Operation Key



With Top-Inserted Operation Key



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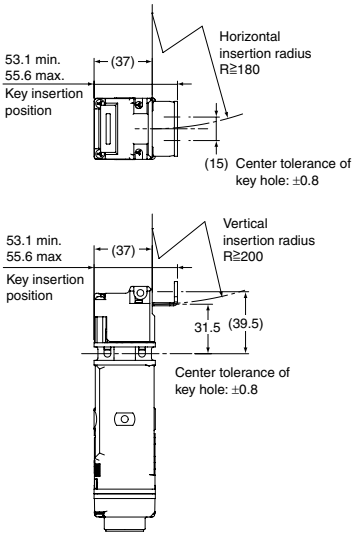
Dimensions and Operating Characteristics (continued)

(mm)

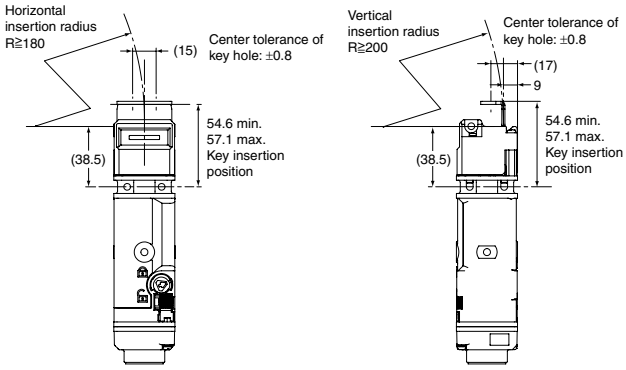
Operating Key Mounting (continued)

D4SL-N+D4SL-NK2

With Front-inserted Operation Key

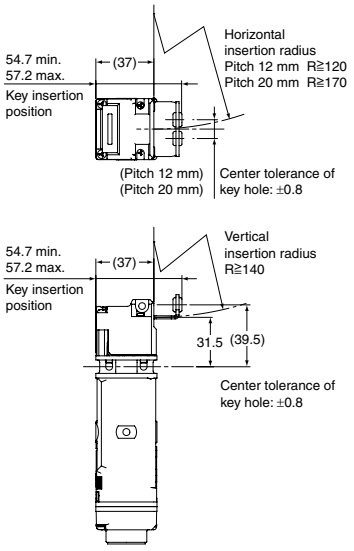


With Top-Inserted Operation Key

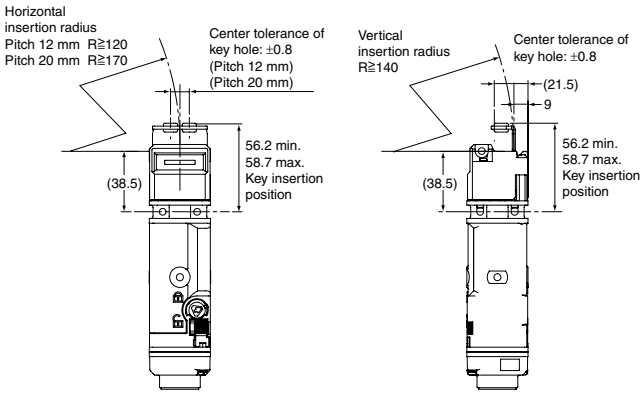


D4SL-N+D4SL-NK2G

With Front-inserted Operation Key

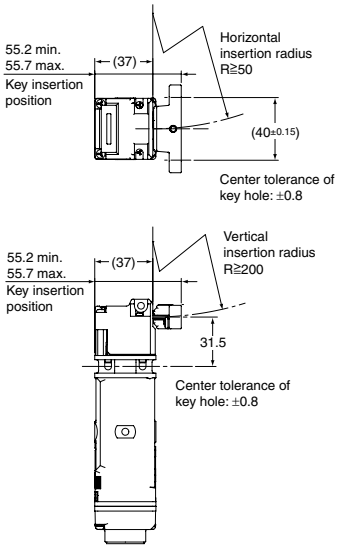


With Top-Inserted Operation Key

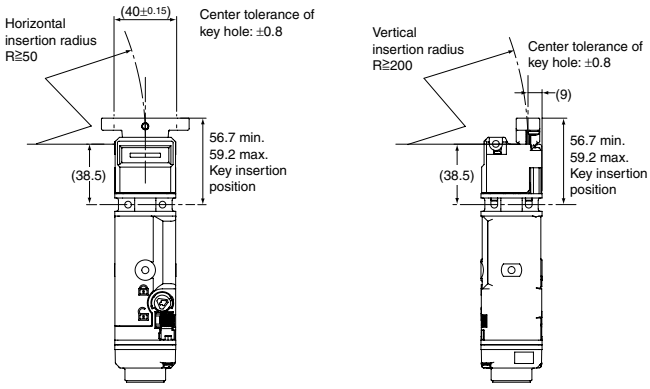


D4SL-N+D4SL-NK3

With Front-inserted Operation Key



With Top-Inserted Operation Key



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Application Examples

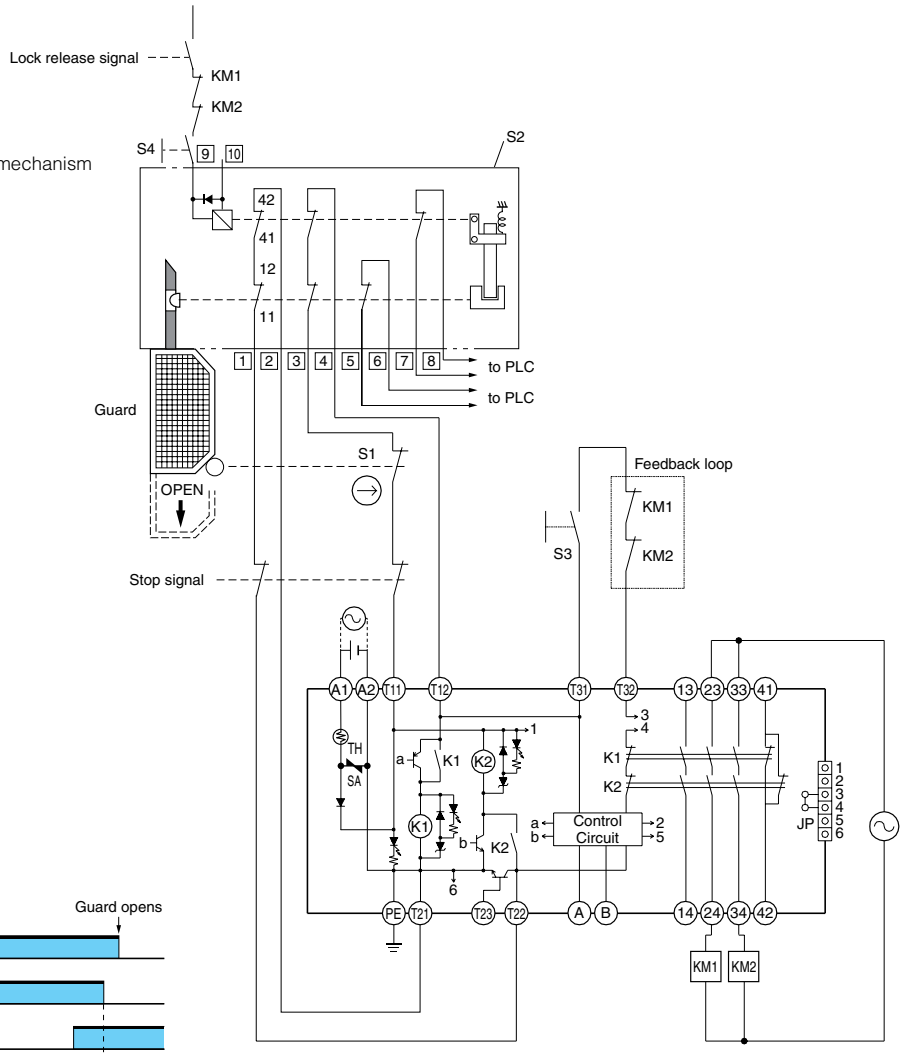
D4SL-N Application Example

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

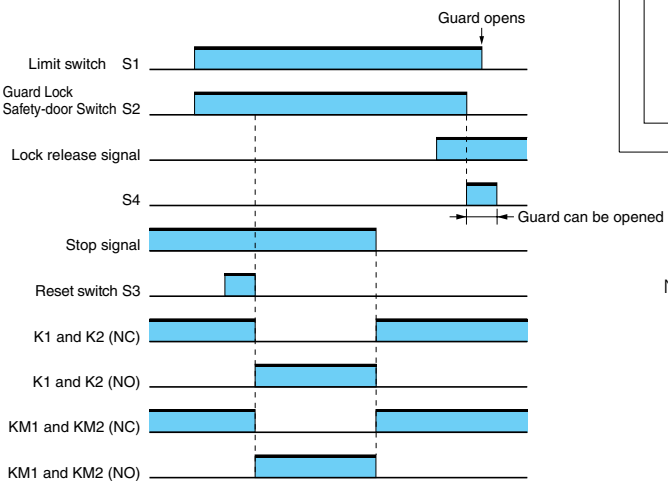
Application Overview

- 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.

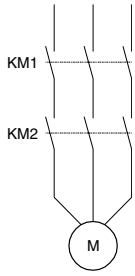
S1: Safety Limit Switch with direct opening mechanism (D4B-N, D4N, D4F)
S2: D4SL-N
S3: Reset switch
S4: Lock release switch
KM1 and KM2: Magnetic Contactor
M: 3-phase motor



Timing Chart



Notes: 1. The above circuit diagram is for Category 3.
2. Numbers inside the boxes are terminal numbers printed on the product.



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Ordering

Model Number Structure

Switch

D4SL – N ☐ ☐ ☐ ☐ – ☐ ☐ ☐
❶ ❷ ❸ ❹ ❺ ❻ ❼

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

❷ Built-in Switch
4-contact Model: Door monitor and lock monitors are connected in series internally
A: 1NC/1NO + 1NC/1NO
B: 1NC/1NO + 2NC
C: 2NC + 1NC/1NO
D: 2NC + 2NC

4-contact Model: Door monitor and lock monitors are NOT connected in series internally
S: 1NC/1NO + 1NC/1NO
T: 1NC/1NO + 2NC
U: 2NC + 1NC/1NO
V: 2NC + 2NC

5-contact Model
E: 2NC/1NO + 1NC/1NO
F: 2NC/1NO + 2NC
G: 3NC + 1NC/1NO
H: 3NC + 2NC

6-contact Model
N: 2NC/1NO + 2NC/1NO
P: 2NC/1NO + 3NC
Q: 3NC + 2NC/1NO
R: 3NC + 3NC

❸ Head Material
4-contact Model
F: Resin

5- or 6-contact Model (common)
F: Resin
D: Metal

❹ Door Lock and Release
A: Mechanical lock/24 VDC solenoid release
G: 24 VDC solenoid lock/mechanical release

❺ Indicator
4-contact Model
Blank: None

5- or 6-contact Model (common)
D: 24 VDC (orange LED indicator)

❻ Release Key Type
4-contact Model
Blank: Standard release key (metal)

5- or 6-contact Model (common)
Blank: Special release key (metal)
4: Special release key (resin) (Note: Release keys are provided)

❼ Connection Method
Blank: Terminal block
N: Connector *1

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

Operation Key

D4SL-NK ☐ ☐
❶ ❷

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

❶ Key Type
Blank: No cushion rubber
G: Cushion rubber
S: No cushion rubber, short type

G

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
Standard (metal)	Connector	24VDC (Orange)	Mechanical lock Solenoid release	6-contact Model Insert the built-in switch (N, P, Q or R) into the blank ☐.	G1/2	D4SL-N2☐FA-DN
					1/2-14NPT	D4SL-N3☐FA-DN
					1/2-14NPT	D4SL-N3NFA-DN
					M20	D4SL-N4☐FA-DN
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FA-DN
					1/2-14NPT	D4SL-N3☐FA-DN
					M20	D4SL-N4☐FA-DN
		24VDC (without indicator)		4-contact Model Insert the built-in switch (A, B, C, D, S, T, U or V) into the blank ☐.	G1/2	D4SL-N2☐FA-N
					1/2-14NPT	D4SL-N3☐FA-N
					M20	D4SL-N4☐FA-N
	Terminal block	24VDC (Orange)		6-contact Model Insert the built-in switch (N, P, Q or R) into the blank ☐.	G1/2	D4SL-N2☐FA-D
					1/2-14NPT	D4SL-N3☐FA-D
					1/2-14NPT	D4SL-N3NFA-D
					1/2-14NPT	D4SL-N3QFA-D
					M20	D4SL-N4☐FA-D
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FA-D
					1/2-14NPT	D4SL-N3☐FA-D
					M20	D4SL-N4☐FA-D
		24VDC (without indicator)		4-contact Model Insert the built-in switch (A, B, C, D, S, T, U or V) into the blank ☐.	G1/2	D4SL-N2☐FA
					1/2-14NPT	D4SL-N3☐FA
					M20	D4SL-N4☐FA
	Connector	24VDC (Orange)	Solenoid lock Mechanical release	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
					1/2-14NPT	D4SL-N3NFG-DN
					M20	D4SL-N4☐FG-DN
				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
		24VDC (without indicator)		4-contact Model Insert the built-in switch (A, B, C, D, S, T, U or V) into the blank ☐.	G1/2	D4SL-N2☐FG-N
					1/2-14NPT	D4SL-N3☐FG-N
					M20	D4SL-N4☐FG-N
	Terminal block	24VDC (Orange)		6-contact Model Insert the built-in switch (N, P, Q or R) into the blank ☐.	G1/2	D4SL-N2☐FG-D
					1/2-14NPT	D4SL-N3☐FG-D
					1/2-14NPT	D4SL-N3NFG-D
					M20	D4SL-N4☐FG-D
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FG-D
					1/2-14NPT	D4SL-N3☐FG-D
					M20	D4SL-N4☐FG-D
		24VDC (without indicator)		4-contact Model Insert the built-in switch (A, B, C, D, S, T, U or V) into the blank ☐.	G1/2	D4SL-N2☐FG
					1/2-14NPT	D4SL-N3☐FG
					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.

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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
Special (resin)	Connector	24VDC (Orange)	Mechanical lock Solenoid release	6-contact Model Insert the built-in switch (N, P, Q or R) into the blank ☐.	G1/2	D4SL-N2☐FA-D4N
					1/2-14NPT	D4SL-N3☐FA-D4N
					M20	D4SL-N4☐FA-D4N
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FA-D4N
					1/2-14NPT	D4SL-N3☐FA-D4N
					M20	D4SL-N4☐FA-D4N
	Terminal block			6-contact Model Insert the built-in switch (N, P, Q or R) into the blank ☐.	G1/2	D4SL-N2☐FA-D4
					1/2-14NPT	D4SL-N3☐FA-D4
					1/2-14NPT	D4SL-N3NFA-D4
					M20	D4SL-N4☐FA-D4
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FA-D4
					1/2-14NPT	D4SL-N3☐FA-D4
					M20	D4SL-N4☐FA-D4
	Connector		Solenoid lock Mechanical release	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
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FG-D4N
					1/2-14NPT	D4SL-N3☐FG-D4N
					M20	D4SL-N4☐FG-D4N
	Terminal block			6-contact Model Insert the built-in switch (N, P, Q or R) into the blank ☐.	G1/2	D4SL-N2☐FG-D4
					1/2-14NPT	D4SL-N3☐FG-D4
					1/2-14NPT	D4SL-N3NFG-D4
					M20	D4SL-N4☐FG-D4
				5-contact Model Insert the built-in switch (E, F, G or H) into the blank ☐.	G1/2	D4SL-N2☐FG-D4
					1/2-14NPT	D4SL-N3☐FG-D4
					M20	D4SL-N4☐FG-D4

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Ordering (continued)

Operation Keys

Type	Model
Horizontal mounting	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

Notes:
D4SL-NK□□ actuators are compatible with both D4SL & D4SL-N switches
D4SL-K□□ actuators are also compatible with both D4SL & D4SL-N switches

Connector Cables

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

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Slide Key

Type	Specifications	Contents	Model	Applicable Door Switch
	Weight: Approx. 0.6 kg Mechanical durability: 20,000 operations min.	Slide Key: 1 (not yet mounted) 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-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

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