

# Guard Lock Safety-door Switch D4NL

CSM\_D4NL\_DS\_E\_8\_1

## Best-selling Guard Lock Safety-door Switch Available in Several Compact, Multi-contact Models



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Be sure to read the "Safety Precautions" on page 16.

## Model Number Structure

### Model Number Legend Switch (Standard type)

D4NL-□□□□-□□□□  
1 2 3 4 5 6 7

- Conduit Size**
  - 1: Pg13.5
  - 2: G1/2
  - 4: M20
- Built-in Switch (with Door Open/Closed Detection Switch and Lock Monitor Switch Contacts)**
  - A: 1NC/1NO (slow-action contacts) + 1NC/1NO (slow-action contacts)
  - B: 1NC/1NO (slow-action contacts) + 2NC (slow-action contacts)
  - C: 2NC (slow-action contacts) + 1NC/1NO (slow-action contacts)
  - D: 2NC (slow-action contacts) + 2NC (slow-action contacts)
  - E: 2NC/1NO (slow-action contacts) + 1NC/1NO (slow-action contacts)
  - F: 2NC/1NO (slow-action contacts) + 2NC (slow-action contacts)
  - G: 3NC (slow-action contacts) + 1NC/1NO (slow-action contacts)
  - H: 3NC (slow-action contacts) + 2NC (slow-action contacts)
- Head Mounting Direction and Material**
  - F: Four mounting directions possible (Front-side mounting at shipping)/plastic
  - D: Four mounting directions possible (Front-side mounting at shipping)/metal
- Door Lock and Release**
  - A: Mechanical lock/24 VDC solenoid release
  - B: Mechanical lock/110 VAC solenoid release
  - G: 24 VDC solenoid lock/mechanical release
  - H: 110 VAC solenoid lock/mechanical release
- Indicator**
  - B: 10 to 115 VAC/VDC (orange LED indicator)
- Release Key Type**
  - Blank: Standard (resin)
  - 4: Special release key (resin)  
(Note: Release keys are provided.)
- Release Key Position**
  - Blank: Bottom
  - S: Front

### Switch (Metallic release key type)

D4NL-□□□□-□□□□-SJ  
1 2 3 4 5 6 7

- Conduit Size**
  - 2: G1/2 (1-conduit)
  - 4: M20 (1-conduit)
- Built-in Switch**
  - E: 2NC/1NO + 1NC/1NO
  - F: 2NC/1NO + 2NC
  - G: 3NC + 1NC/1NO
  - H: 3NC + 2NC
- Head Material**
  - F: resin
- Door Lock and Release**
  - A: Mechanical lock/ 24 VDC solenoid release
  - G: 24 VDC solenoid lock/ mechanical release
- Indicator**
  - B: 10 to 115 VAC/VDC (orange LED indicator)
- Release Key Type**
  - Blank: Standard (metal)
- Release Key Position**
  - Blank: Bottom

### Operation Key

D4DS-K□  
1

- Operation Key Type**
  - 1: Horizontal mounting
  - 2: Vertical mounting
  - 3: Adjustable mounting (horizontal)
  - 5: Adjustable mounting (horizontal/vertical)

## Ordering Information

### List of Models

#### Switches (Operation Keys are sold separately.)

■: Models with certified direct opening contacts.

Consult with your OMRON representative when ordering any models that are not listed in this table.

Head material	Release key position	Release key type	Solenoid voltage/indicator	Lock and release types	Contact configuration (door open/closed detection switch and lock monitor switch contacts) (slow-action) Certified direct opening NC contact	Conduit opening	Model
Plastic *1	Bottom	Standard (resin)	Solenoid: 24 VDC Orange LED: 10 to 115 VAC/VDC	Mechanical lock Solenoid release	1NC/1NO+1NC/1NO	Pg13.5	D4NL-1AFA-B
						G1/2	D4NL-2AFA-B
						M20	D4NL-4AFA-B
					1NC/1NO+2NC	Pg13.5	D4NL-1BFA-B
						G1/2	D4NL-2BFA-B
						M20	D4NL-4BFA-B
					2NC+1NC/1NO	Pg13.5	D4NL-1CFA-B
						G1/2	D4NL-2CFA-B
						M20	D4NL-4CFA-B
					2NC+2NC	Pg13.5	D4NL-1DFA-B
						G1/2	D4NL-2DFA-B
						M20	D4NL-4DFA-B
					2NC/1NO+1NC/1NO	Pg13.5	D4NL-1EFA-B
						G1/2	D4NL-2EFA-B *2
						M20	D4NL-4EFA-B *2
					2NC/1NO+2NC	Pg13.5	D4NL-1FFA-B
						G1/2	D4NL-2FFA-B *2
						M20	D4NL-4FFA-B *2
					3NC+1NC/1NO	Pg13.5	D4NL-1GFA-B
						G1/2	D4NL-2GFA-B *2
						M20	D4NL-4GFA-B *2
					3NC+2NC	Pg13.5	D4NL-1HFA-B
						G1/2	D4NL-2HFA-B *2
						M20	D4NL-4HFA-B *2
				Solenoid lock Mechanical release	1NC/1NO+1NC/1NO	Pg13.5	D4NL-1AFG-B
						G1/2	D4NL-2AFG-B
						M20	D4NL-4AFG-B
					1NC/1NO+2NC	Pg13.5	D4NL-1BFG-B
						G1/2	D4NL-2BFG-B
						M20	D4NL-4BFG-B
					2NC+1NC/1NO	Pg13.5	D4NL-1CFG-B
						G1/2	D4NL-2CFG-B
						M20	D4NL-4CFG-B
					2NC+2NC	Pg13.5	D4NL-1DFG-B
						G1/2	D4NL-2DFG-B
						M20	D4NL-4DFG-B
					2NC/1NO+1NC/1NO	Pg13.5	D4NL-1EFG-B
						G1/2	D4NL-2EFG-B *2
						M20	D4NL-4EFG-B *2
					2NC/1NO+2NC	Pg13.5	D4NL-1FFG-B
						G1/2	D4NL-2FFG-B *2
						M20	D4NL-4FFG-B *2
					3NC+1NC/1NO	Pg13.5	D4NL-1GFG-B
						G1/2	D4NL-2GFG-B *2
						M20	D4NL-4GFG-B *2
					3NC+2NC	Pg13.5	D4NL-1HFG-B
						G1/2	D4NL-2HFG-B *2
						M20	D4NL-4HFG-B *2

\*1. Switches with metal heads can also be manufactured upon request. Ask your OMRON representative for details.

\*2. Models with Korean S-mark certification.

Head material	Release key position	Release key type	Solenoid voltage/indicator	Lock and release types	Contact configuration (door open/closed detection switch and lock monitor switch contacts) (slow-action) Certified direct opening NC contact	Conduit opening	Model
Plastic *1	Bottom	Special release key (resin)	Solenoid: 24 VDC Orange LED: 10 to 115 VAC/VDC	Mechanical lock Solenoid release	1NC/1NO+1NC/1NO	Pg13.5	D4NL-1AFA-B4
						G1/2	D4NL-2AFA-B4
						M20	D4NL-4AFA-B4
					1NC/1NO+2NC	Pg13.5	D4NL-1BFA-B4
						G1/2	D4NL-2BFA-B4
						M20	D4NL-4BFA-B4
					2NC+1NC/1NO	Pg13.5	D4NL-1CFA-B4
						G1/2	D4NL-2CFA-B4
						M20	D4NL-4CFA-B4
					2NC+2NC	Pg13.5	D4NL-1DFA-B4
						G1/2	D4NL-2DFA-B4
						M20	D4NL-4DFA-B4
					2NC/1NO+1NC/1NO	Pg13.5	D4NL-1EFA-B4
						G1/2	D4NL-2EFA-B4 *2
						M20	D4NL-4EFA-B4 *2
					2NC/1NO+2NC	Pg13.5	D4NL-1FFA-B4
						G1/2	D4NL-2FFA-B4 *2
						M20	D4NL-4FFA-B4 *2
				3NC+1NC/1NO	Pg13.5	D4NL-1GFA-B4	
					G1/2	D4NL-2GFA-B4 *2	
					M20	D4NL-4GFA-B4 *2	
				3NC+2NC	Pg13.5	D4NL-1HFA-B4	
					G1/2	D4NL-2HFA-B4 *2	
					M20	D4NL-4HFA-B4 *2	
				Solenoid lock Mechanical release	1NC/1NO+1NC/1NO	Pg13.5	D4NL-1AFG-B4
						G1/2	D4NL-2AFG-B4
						M20	D4NL-4AFG-B4
					1NC/1NO+2NC	Pg13.5	D4NL-1BFG-B4
						G1/2	D4NL-2BFG-B4
						M20	D4NL-4BFG-B4
					2NC+1NC/1NO	Pg13.5	D4NL-1CFG-B4
						G1/2	D4NL-2CFG-B4
						M20	D4NL-4CFG-B4
					2NC+2NC	Pg13.5	D4NL-1DFG-B4
						G1/2	D4NL-2DFG-B4
						M20	D4NL-4DFG-B4
2NC/1NO+1NC/1NO	Pg13.5	D4NL-1EFG-B4					
	G1/2	D4NL-2EFG-B4 *2					
	M20	D4NL-4EFG-B4 *2					
2NC/1NO+2NC	Pg13.5	D4NL-1FFG-B4					
	G1/2	D4NL-2FFG-B4 *2					
	M20	D4NL-4FFG-B4 *2					
3NC+1NC/1NO	Pg13.5	D4NL-1GFG-B4					
	G1/2	D4NL-2GFG-B4 *2					
	M20	D4NL-4GFG-B4 *2					
3NC+2NC	Pg13.5	D4NL-1HFG-B4					
	G1/2	D4NL-2HFG-B4 *2					
	M20	D4NL-4HFG-B4 *2					

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