# <u>OMRON</u>

# **General-purpose Limit Switch**

D4B-□N

- Snap-action or slow-action contact for accurate switching with safe operation via direct drive positive contact opening even with metal deposition between mating contacts.
- Two sets of contact: one (NC) for safety circuit and the other (NO) for control circuit.
- Enclosure rating: IP67 (IEC529), UL/CSA type 3, 4, 4X, 6P and 13.
- Wide standard operating temperature range: -40°C to 80°C (standard type).
- Conforms to EN50041 (42.5 x 60 mm) with the Forms A, B, C and D.
- Actuators are interchangeable and can be mounted in any of four directions.
- 3-conduit switches are available.
- Safety Standards:
- Conformity: Machinery Directive Low Voltage Directive EN1088 EN50041
- Approval:

Agency	Standard	File No.		
		Snap-action	Slow-action	
TÜV Rheinland	EN60947-5-1	With	R9151643	
BIA	EN60947-5-1 GS-ET-15 →	Pending	9202158	
UL	UL508	E76675		
CSA	CSA C22.1 No.14	LR45746		
SUVA	SUVA 😏	Pending	4887	











# Ordering Information

## **Model Number Legend:**

D4B -2

- 1. Conduit
- 1: PG13.5 (standard)
- G1/2 (PF1/2) (standard)

- 1/2-14NPT (standard)
  PG13.5 (3-conduit)
  G1/2 (PF1/2) (3-conduit)
  1/2-14NPT (3-conduit)
- 2. Built-in Switch
- 1NC/1NO (Snap-action)
- A: 2NC (Slow-action)
- 5: 1NC/1NO (Slow-action)

- 3. Actuator
- 11: Roller lever (standard)
- 16: Adjustable roller lever
- 17: Adjustable rod lever70: Top plunger
- 71: Top roller lever
- 81: Coil spring
- 87: Plastic rod
- 00: Switch box (without head)
- 1R: Roller lever

(conventional D4B-compatible)

### 4. Indicator

LD: LED (10 to 115 VDC/VAC) LE: Neon lamp (125/250 VAC)

D4B-□N <del></del>	OMRON	——— D4B-□N
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### ■ Standard Switch (EN50041)

						Conduit size				
		PG13.5 (see note 2)			G1/2			1/2-14NPT		
	Actuator	1NC/1NO (Snap-action)	1NC/1NO (Slow-action)	2NC (Slow-action)	1NC/1NO (Snap-action)	1NC/1NO (Slow-action)	2NC (Slow-action)	1NC/1NO (Snap-action)	1NC/1NO (Slow-action)	2NC (Slow-action)
Side rotary	Roller lever (form A)	D4B-1111N	D4B-1511N	D4B-1A11N	D4B-2111N	D4B-2511N	D4B-2A11N	D4B-3111N	D4B-3511N	D4B-3A11N
	Adjustable roller lever (see note 1)	D4B-1116N	D4B-1516N	D4B-1A16N	D4B-2116N	D4B-2516N	D4B-2A16N	D4B-3116N	D4B-3516N	D4B-3A16N
	Adjustable rod lever (form D) (see note 1)	D4B-1117N	D4B-1517N	D4B-1A17N	D4B-2117N	D4B-2517N	D4B-2A17N	D4B-3117N	D4B-3517N	D4B-3A17N
Top plunger	Plain (form B)	D4B-1170N	D4B-1570N	D4B-1A70N	D4B-2170N	D4B-2570N	D4B-2A70N	D4B-3170N	D4B-3570N	D4B-3A70N
	Roller (form C)	D4B-1171N	D4B-1571N	D4B-1A71N	D4B-2171N	D4B-2571N	D4B-2A71N	D4B-3171N	D4B-3571N	D4B-3A71N
Wobble lever	Coil spring	D4B-1181N		D4B-1A81N	D4B-2181N		D4B-2A81N	D4B-3181N		D4B-3A81N
(see note 3)	Plastic rod	D4B-1187N		D4B-1A87N	D4B-2187N		D4B-2A87N	D4B-3187N		D4B-3A87N
Standard	s	EN60947-5-1	$\rightarrow$		EN60947-5-1	$\odot$		EN60947-5-1	$\odot$	

Note: 1. The adjustable roller lever and adjustable rod lever models are approved under the Forced Opening Certificate (TÜV) of the EN standard, but they do not conform to the GS-ET-15 Standard (BIA) and SUVA.

- 2. The D4B- $\square$ N is a Limit Switch conforming to European standards, and PG13.5 is commonly used in Europe.
- 3. The wobble lever models are ordinary limit switches and are not approved under EN, GS, and SUVA's Forced Opening Certificate.

### ■ 3-conduit Switch

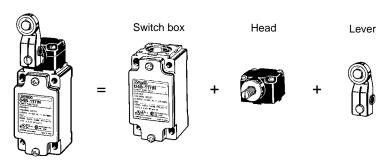
			Conduit size									
		PG13.5 (see note 2)			G1/2			1/2-14NPT				
	Actuator	1NC/1NO (Snap-action)	1NC/1NO (Slow-action)	2NC (Slow-action)	1NC/1NO (Snap-action)	1NC/1NO (Slow-action)	2NC (Slow-action)	1NC/1NO (Snap-action)	1NC/1NO (Slow-action)	2NC (Slow-action)		
Side rotary	Roller lever (form A)	D4B-5111N	D4B-5511N	D4B-5A11N	D4B-6111N	D4B-6511N	D4B-6A11N	D4B-7111N	D4B-7511N	D4B-7A11N		
	Adjustable roller lever (see note 1)	D4B-5116N	D4B-5516N	D4B-5A16N	D4B-6116N	D4B-6516N	D4B-6A16N	D4B-7116N	D4B-7516N	D4B-7A16N		
	Adjustable rod lever (form D) (see note 1)	D4B-5117N	D4B-5517N	D4B-5A17N	D4B-6117N	D4B-6517N	D4B-6A17N	D4B-7117N	D4B-7517N	D4B-7A17N		
Top plunger	Plain (form B)	D4B-5170N	D4B-5570N	D4B-5A70N	D4B-6170N	D4B-6570N	D4B-6A70N	D4B-7170N	D4B-7570N	D4B-7A70N		
	Roller (form C)	D4B-5171N	D4B-5571N	D4B-5A71N	D4B-6171N	D4B-6571N	D4B-6A71N	D4B-7171N	D4B-7571N	D4B-7A71N		
Wobble lever	Coil spring	D4B-5181N		D4B-5A81N	D4B-6181N		D4B-6A81N	D4B-7181N		D4B-7A81N		
(see note 3)	Plastic rod	D4B-5187N		D4B-5A87N	D4B-6187N		D4B-6A87N	D4B-7187N		D4B-7A87N		
Standard	ls	EN60947-5-1	$\overline{\bullet}$	•	EN60947-5-1	$\overline{\bullet}$	•	EN60947-5-1	$\overline{\bigcirc}$			

Note: 1. The adjustable roller lever and adjustable rod lever models are approved under the Forced Opening Certificate (TÜV) of the EN standard, but they do not conform to the GS-ET-15 Standard (BIA) and SUVA.

- 2. The D4B- $\square$ N is a Limit Switch conforming to European standards, and PG13.5 is commonly used in Europe.
- 3. The wobble lever models are ordinary limit switches and are not approved under EN, GS, and SUVA's Forced Opening Certificate.

### ■ Replacement Part

Because the D4B- $\square$ N employs a block mounting construction, the switch box, operating head, and lever (side rotary type only) may be ordered as a complete assembly or individually as replacement parts. (Replacement parts are not available as a switch box and head assembly or as a head and lever assembly.)



ex. D4B-2111N = D4B-2100N + D4B-0010N + D4B-0001N

### **Switch Box**

		EN50041			3-conduit type		
		PG13.5	G1/2	1/2-14NPT	PG13.5	G1/2	1/2-14NPT
1NC/1NO (Snap-action)	$\bigcirc$	D4B-1100N	D4B-2100N	D4B-3100N	D4B-5100N	D4B-6100N	D4B-7100N
1NC/1NO (Slow-action)	$\bigcirc$	D4B-1500N	D4B-2500N	D4B-3500N	D4B-5500N	D4B-6500N	D4B-7500N
2NC (Slow-action)	$\bigcirc$	D4B-1A00N	D4B-2A00N	D4B-3A00N	D4B-5A00N	D4B-6A00N	D4B-7A00N

### **Operating Heads**

Actuator	Туре	Model	
Side rotary	Standard	D4B-0010N	
Top plunger	Plain	D4B-0070N	
	Roller	D4B-0071N	
Wobble lever	Coil spring	D4B-0081N	
	Plastic rod	D4B-0087N	

### Levers (for Side Rotary Switches)

Actuator	Length	Diameter of roller	Model
Standard	31.5	17.5 dia.	D4B-0001N
Adjustable roller lever	25 to 89	19 dia.	D4B-0006N
Adjustable rod lever	145 max.		D4B-0007N
Interchangeable with D4B-0001	33.7	19 dia.	D4B-000RN

# **Specifications**

### ■ Ratings

1. TÜV Rheinland-approved: AC-15, 2 A/400 V

2. UL/CSA-approved: A600

Rated voltage	Current			Switching power	
	Continuous	Make	Break	Make	Break
120 VAC	10 A	60 A	6 A	7,200 VA	720 VA
240 VAC		30 A	3 A		
480 VAC		15 A	1.5 A		
600 VAC		12 A	1.2 A		

### **■** Characteristics

Item	Snap-action	Slow-action				
Operating speed	1 mm/s to 50 cm/s					
Operating frequency	Mechanical: 120 operations/min Electrical: 30 operations/min					
Rated frequency	50/60 Hz					
Insulation resistance	$100~\text{M}\Omega$ min. (at 500 VDC) between terminals of the non-current-carrying part	100 M $\Omega$ min. (at 500 VDC) between terminals of the same polarity and between each terminal and non-current-carrying part				
Contact resistance	25 m $Ω$ max. (initial value)	25 m $Ω$ max. (initial value)				
Dielectric strength						
Between terminals of same polarity	U <sub>imp</sub> 2.5 kV	U <sub>imp</sub> 4 kV				
Between terminals of different polarity		U <sub>imp</sub> 4 kV				
Between current-carrying metal parts and ground	U <sub>imp</sub> 4 kV	U <sub>imp</sub> 4 kV				
Between each terminal and non-current-carrying parts	U <sub>imp</sub> 4 kV U <sub>imp</sub> 4 kV					
Rated insulation voltage (Ui)	) 600 VAC (EN60947-5-1)					
Counter electromotive voltage at switching	1,500 VAC max. (EN60947-5-1)					
Operating environmental pollution level	3 (EN60947-5-1)					
Short-circuit protective device	10-A fuse (type gl or gG) (IEC269)					
Conditional short-circuit current	100 A (EN60947-5-1)					
Conventional enclosed thermal current (I <sub>the</sub> )	20 A (EN60947-5-1)					
Electric shock protection class	Class I (with grounding terminal)					
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude	е				
Shock resistance	Destruction: 1,000 m/s <sup>2</sup> min. {approx. 100G min.} Malfunction: 300 m/s <sup>2</sup> min. {approx. 30G min.}					
Life expectancy (see note 2)	Mechanical: 30,000,000 operations min. Electrical: 500,000 operations min.	Mechanical: 10,000,000 operations min. Electrical: 500,000 operations min.				
Contact gap	2 x 0.5 mm min.	2 x 2 mm min.				
Bounce time 3 ms min. Same as the operating speed		Same as the operating speed				
Ambient temperature	Operating: -40°C to 80°C (with no icing) (see note 4)					
Ambient humidity	Operating: 95% max.					
Degree of protection	IP67 (EN60947-5-1)					
Weight	Approx. 250 g					

**Note:** 1. The above values are for initial operation.

- 2. The life expectancy is for an ambient temperature of 5°C to 35°C and ambient humidity of 40% to 70%. For further conditions, consult your OMRON sales representative.
- 3. The values in this table are for an ambient temperature of 5°C to 35°C and ambient humidity of 40% to 70%. For further conditions, consult your OMRON sales representative.
- 4.  $-25^{\circ}$ C to  $80^{\circ}$ C for the flexible-rod type.

## ■ Operating Characteristics

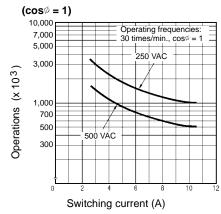
Model	D4B-□□11N	D4B-□□16N (see note 1)	D4B-□□17N (see note 2)	D4B-□□70N	D4B-□□71N	D4B-□□81N	D4B-□□87N
OF max.	9.41 N {960 gf}		2.12 N {216 gf}	18.63 N {1,900 g	gf}	1.47 N {150 gf}	
RF min.	1.47 N {150 gf}		0.29 N {30 gf}	1.96 N {200 gf}			
PT	21±3°			2.0 mm max.		15° max.	
PT (2nd) (see note 3)	(45°)		(3.0 mm)				
OT min.	50°		5.0 mm				
MD max. (see note 4)	12°		1.0 mm				
POT min.	35° (Slow-action	models)		3.2 mm			
	55° (Snap-action	n models)		7			
POF min.	19.61 N {2,000 gf}		49.03 N {5,000 gf}				
TT	(75°)		7.0 mm				
FP max.			38 mm 51 mm				
OP			35±1 mm	48±1 mm			

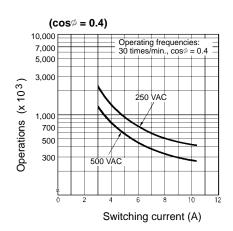
Note: 1. The operating characteristics of these Switches were measured with the roller lever set at 31.5 mm.

- 2. The operating characteristics of these Switches were measured with the rod lever set at 140 mm.
- 3. Only for slow-action models.
- 4. Only for snap-action models.

# **Engineering Data**

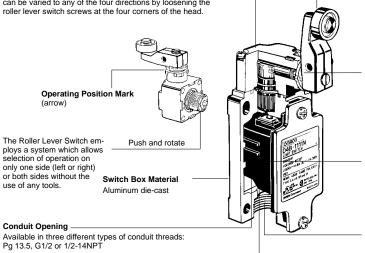
# Electrical Life Expectancy (Snap-action)





# Nomenclature

With Roller Lever Switches, the direction of the switch head can be varied to any of the four directions by loosening the roller lever switch screws at the four corners of the head.



Safety-oriented Lever Setting
Grooves which engage the lever every 90° are cut in the operation indicator disk to prevent the lever from slipping against the rotary shaft.

### **Equipped with Operation Display Plate**

An optimum overtravel (OT) value may be secured by setting a desired OT value with a projection

Shearing Force Contact Separating Mechanism (NC Contact Section Only)

Should any abnormality occur in the contact area, the contacts are positively pulled apart from each other by shearing force.

### **Ground Terminal Screw**

A ground terminal is provided to improve safety.

### **Contact Material**

Ag alloy

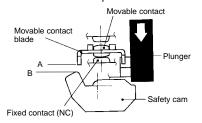
# Operation -

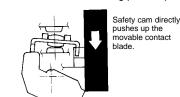
## ■ Positive Contact Opening Mechanism

### 1NO/1NC Contact (Snap-action)

If metal deposition between mating contacts occurs on the NC contact side, they can be pulled apart by the shearing force and tensile force generated when part B of the safety cam or plunger engages part A of the movable contact blade. When the safety cam or plunger is moved in the direction of the arrow, the Limit Switch releases.

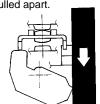
1. When metal deposition occurs.



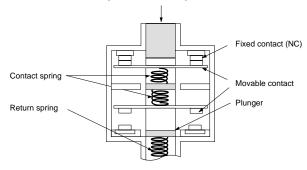


2. When contacts are being pulled apart.

3. When contacts are completely pulled apart.



### 1NC/1NO Contact (Slow-action)

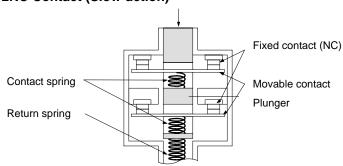


Conforms to IEC 947-5-1 Positive Opening



When metal deposition occurs, the contacts are separated from each other by the plunger being pushed in.

### 2NC Contact (Slow-action)



Conforms to EN60947-5-1



When metal deposition occurs, the contacts are separated from each other by the plunger being pushed in.

is marked on the product to indicate approval of positive opening.

### Contact Form (EN50013)

Model		Contact	Diagrams (see note)
1NC/1NO Contacts (Snap-action)	13 — Za 14	Only 11 to 12 contacts are positive opening.  EN60947-5-1 conformity	0 2 mm max. (7 mm) 11 to 12 13 to 14
1NC/1NO Contacts (Slow-action)	7b 11 12 23 24	Only 11 to 12 contacts are positive opening.  EN60947-5-1 conformity	0 2 mm max. (7 mm) 11 to 12 23 to 24 (3 mm)
2NC Contacts (Slow-action)	Zb 12 12 22	Both 11 to 12 and 21 to 22 contacts are positive opening.  EN60947-5-1 conformity	0 2 mm max. (7 mm) 11 to 12 21 to 22

Note: 1. Contact operation

Closed	Open
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2. The stroke value in parentheses refers to the D4B-□□70N.

### D4B-□N

# **Dimensions**

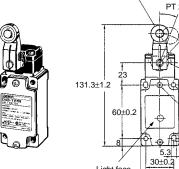
Note: 1. All units are in millimeters unless otherwise indicated.

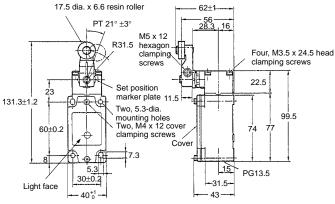
- 2. Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.
- 3. When placing your order, specify the conduit type by adding a code from the list below to the blank box of the following model numbers as shown below.

3-conduit Switches Standard Switches 1: PG 13.5 5: PG 13.5 2: G 1/2 6: G 1/2 3: 1/2-14NPT 7: 1/2-14NPT

### ■ Standard Switches

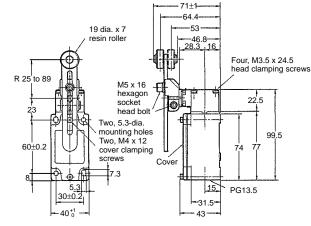
D4B-□111N D4B-□A11N D4B-□511N





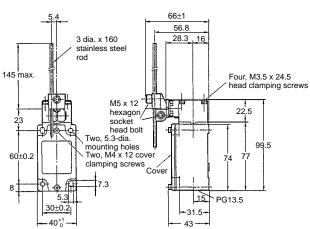
D4B-□116N D4B-□A16N D4B-□516N





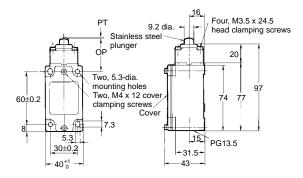
D4B-□117N D4B-□A17N D4B-□517N





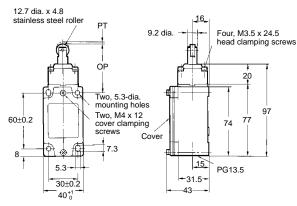
D4B-□170N D4B-□A70N D4B-□570N





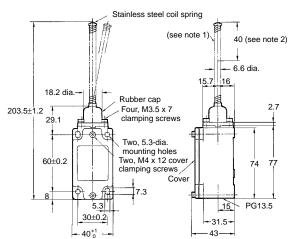
D4B-□171N D4B-□A71N D4B-□571N





D4B-□181N D4B-□A81N





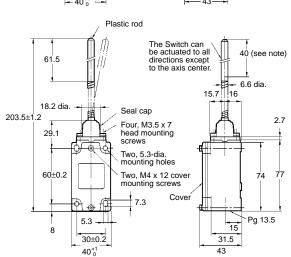
1. The coil spring may be operated from any directions except axial directions ( $\downarrow$ ).

Note:

Be sure to adjust the dog to within 40 mm from the top end of the coil spring.

D4B-□187N D4B-□A87N





**Note:** Be sure to adjust the dog to within 40 mm from the top end of the plastic rod.

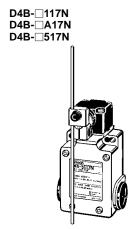
### 3-conduit Switches

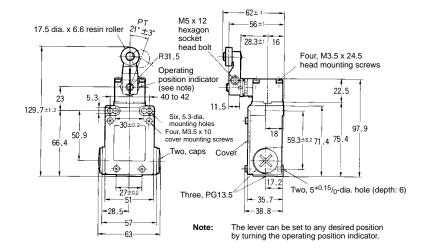
D4B-□111N D4B-□A11N D4B-□511N

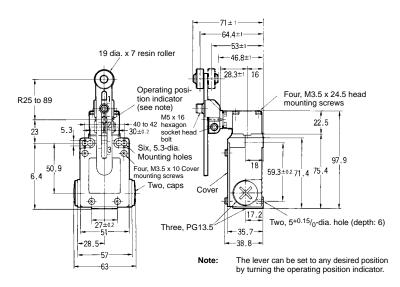


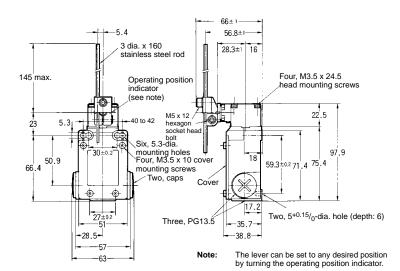
D4B-□116N D4B-□A16N D4B-□516N

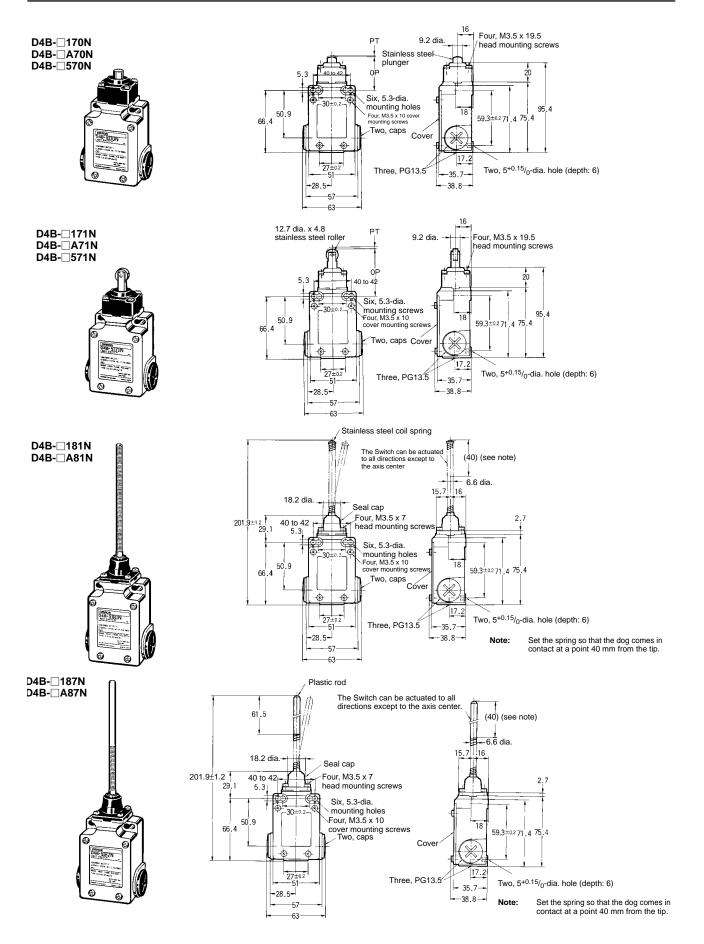






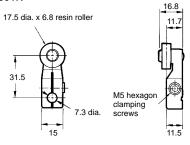




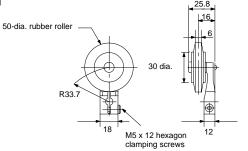


### ■ Roller Levers

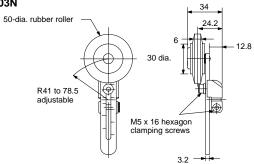
### D4B-0001N



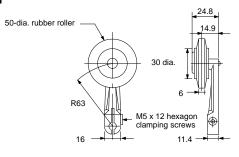
### D4B-0002N



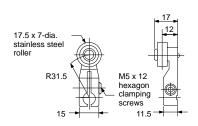
### D4B-0003N



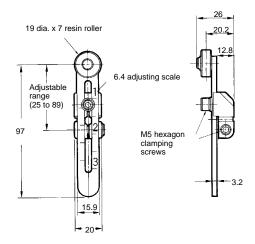
### D4B-0004N

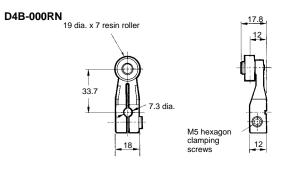


### D4B-0005N

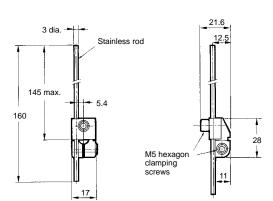


### D4B-0006N



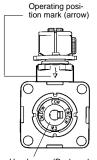


D4B-0007N



### CW, CCW or Two-way Operation

The head of Side Rotary Switches can be converted in seconds to CW, CCW, or two-way operation. The conversion procedure follows.



Head cover (Push and rotate

### **Procedure**

- Dismount the head by loosening the four screws that secure it.
- Turn over the head to set the desired operation (CW, CCW, or both). The desired operation can be selected by setting the mode selector knob shown in the figure. This knob is factory set to the "CW + CCW" (two-way operation) position.
- Set the CW hole on the head at the operation position mark (arrow) for clockwise operation or set the CCW hole right at the arrow for counterclockwise operation. In either case, be sure to set the hole position exactly at the arrow point.

# **Precautions**

If the D4B- $\square$ N is applied to an emergency stop circuit or safety circuit for prevention of injury, use the D4B- $\square$ N model that has an NC contact equipped with a force-separation mechanism, and make sure that the D4B- $\square$ N operates in the positive mode. Furthermore, secure the D4B- $\square$ N with screws or equivalent parts that are tightened in a single direction so that the D4B- $\square$ N cannot be easily removed. Then provide a protection cover for the D4B- $\square$ N and post a warning label near the D4B- $\square$ N.

In order to protect the D4B- $\square$ N from damage due to short-circuiting, connect a fuse breaking a current 1.5 to 2 times higher than the rated current in parallel with the D4B- $\square$ N.

If an application satisfying EN standards is to employ the D4BL, apply the 10-A gI or gG fuse approved by IEC269.

Do not apply the D4B- $\square$ N to the door without applying a stopper to the door.

If the D4B- $\square$ N is used with the actuator normally pressed, the D4B- $\square$ N may malfunction or may soon have reset failures. Be sure to check and replace the D4B- $\square$ N regularly.

### **■** Correct Use

### **Operating Environment**

- The D4B-□N is for indoor use. The D4B-□N may malfunction if the D4B-□N is used outdoors. Be sure to use a model with a lever-type actuator for outdoor use instead.
- Do not use the D4B-□N in the following places.

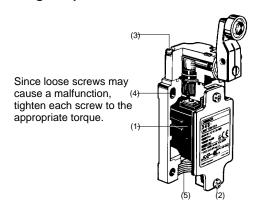
Places with radical temperature changes.

Places with excessive humidity that may cause condensation.

Places with excessive vibration.

Places where metal dust, oil, or chemical may be sprayed to the D4B- $\square$ N.

### **Tightening Torque**



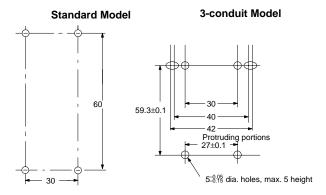
	Туре	Proper tightening torque
1	Terminal screw	0.59 to 0.78 N • m {6 to 8 kgf • cm}
2	Cover-mounting screw	1.18 to 1.37 N • m {12 to 14 kgf • cm}
3	Head-mounting screw	0.78 to 0.98 N • m {8 to 10 kgf • cm}
4	Switch-mounting screw (M5)	4.90 to 5.88 N • m {50 to 60 kgf • cm}
5	Connector	1.77 to 2.16 N • m {18 to 22 kgf • cm}
6	Cap screw (for three-conduit models)	1.27 to 1.67 N • m {13 to 17 kgf • cm}

Note: Apply a tightening torque of 0.78 to 0.88 N • m {8 to 9 kgf • cm} to conduit models.

### Mounting

Use four M5 screws with washers to mount the standard model. Be sure to apply the proper torque to tighten each screw. The D4B-□N can be mounted more securely by using the four screws plus two 5 -0.05/\_0.15-mm protruding parts, each of which has a maximum height of 4.8 mm as shown below.

### **Mounting Dimensions (M5)**



### **Changes in Actuator Mounting Position**

To change the angle of the lever, loosen the hexagon-head bolts on the side of the lever.

The operation indicator plate has protruding parts which engage with the lever, thus allowing changes to the lever position by 90°.

The back of the operation indicator plate has no protruding parts. The lever can be set at any angle by attaching the operation indicator plate to the Switch so that this side will face the lever. In this case, however, the D4B-□N will not be approved by SUVA or BIA. Make sure that the lever engages with the operation indicator plate securely so that the lever will not slip.

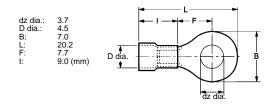
### **Changes in Head Mounting Position**

By removing the screws on the four corners of the head, the head can be reset in any of four directions. Make sure that no foreign materials will penetrate through the head.

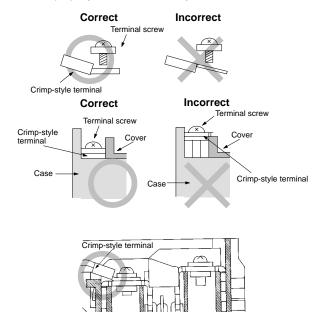
### Wiring

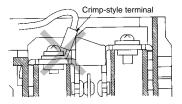
Do not connect the bare lead wires directly to the terminals but be sure to connect each of them by using an insulation tube and M3.5 round solderless terminals and tighten each terminal screw within the specified torque range.

The proper lead wire is 20 to 14 AWG (0.5 to 2.5 mm<sup>2</sup>) in size.



Make sure that all solderless terminals come into contact with the casing or cover as shown below, otherwise the cover may not be mounted properly or the D4B
N may malfunction.





### Connector

Make sure that each connector is tightened within the specified torque range. The casing may be damaged if the connector is tightened excessively.

If the 1/2-14NPT is used, cover the cable and conduit end with sealing tape in order to ensure IP67.

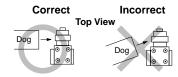
The Pg13.5 connector must be Nippon Flex's ABS-08Pg13.5 or ABS-12 Pg13.5.

Use OMRON's SC-series connector which is suited to the cable in diameter.

Properly attach the provided conduit cap to the unused conduit opening and securely tighten the cap screw within the specified torque when wiring the D4B- $\square$ N.

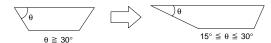
### **Others**

The load for the actuator (roller) of the Switch must be imposed on the actuator in the horizontal direction, otherwise the actuator or the rotating axis may be deformed or damaged.



When using a long lever model like the D4B- $\square$ 16N or D4B- $\square$ 17N, the Switch may telegraph. To avoid telegraphing, take the following precautions.

- 1. Set the lever to operate in one direction. For details, see page 13, *CW*, *CCW* or *Two-way Operation*.
- 2. Modify the rear end of the dog to an angle of  $15^{\circ}$  to  $30^{\circ}$  as shown below or to a secondary-degree curve.



Modify the circuit so as not to detect the wrong operating signals.

### **Correct Selection and Usage of Switches**

### **Snap-action switch**

A snap-action switch takes only a short time to switch electric current, which reduces contact arcing and prevents contacts from wear and tear. Therefore, a snap-action switch is more ideal than a slow-action switch for applications that require high repeat accuracy, high operation frequency, and slow operating speed.

### Slow-action Switch

The electric current switching time of a slow-action switch differs in proportion to the operating speed of the switch. A slow-action switch operates safely via direct drive positive contact opening even after metal deposition between mating contacts and provides insulation capability after contact separation. Opposite polarity ensures high contact reliability, even when voltages and currents are small and allows switching of voltages of different potential by contacts blocks with several contacts. For example, it is possible to perform a control function with 220 VAC and signalling function with 60 VDC using only one device.

### Safety Switch

The NC contact section of the D4B-□N's built-in switch incorporates a shearing force contact separating mechanism. Therefore, based on the above mentioned switching features, the snap-action switch can be mainly applied to positioning control purposes and the slow-action switch can be mainly applied to safety and protection purposes. Both slow- and snap-action switches conform to BS5304, IEC 204-1, and VDE 0113 safety standard.

D4B-□N ———	OMRON	D4B-□N
U4B-∐N ————	— Ollikoli —	D4D

### ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. C005-E1-8 In the interest of product improvement, specifications are subject to change without notice.

## **OMRON Corporation**

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