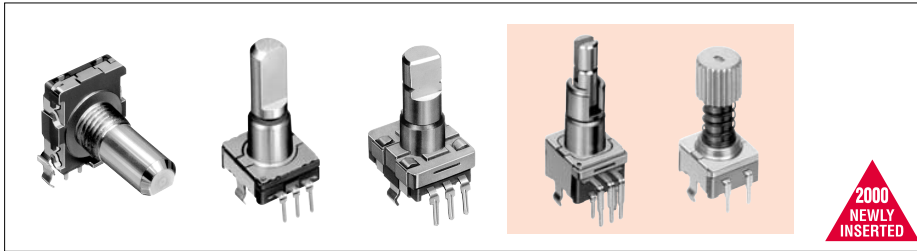


## 11mm Size Metal Shaft Encoders

Compact and highly reliable type available in variety.



Those parts which are shown on the  patterned background among the above appearance photographs are new products.

### Features

- High-precision sliding type encoder.
- Compact design, long life and high reliability.
- Capable of adapting to a 4.5 mm body with 1.5 mm stroke push switch.
- Available in a wide variety of lineup to meet all user needs.
- Incremental type.

### Applications

- All kinds of level control, tuning and timer setting in audio-visual equipment, ordinary household electric appliances, radio equipment, communications equipment, etc.

### Products Line

Size	Model	Pulses/rotational	Number of detent	Detent torque	Mounting method
Standard type	EC11B15	15/360°	30	5 to 19 mN·m	Available for fastened with bushing unit/ snap-in
			15		
	EC11B20	20/360°	20		
Thin type	EC11E09	9/360°	18	3 to 17 mN·m	Available for Snap-in only
	EC11E15	15/360°	30		
	EC11E18	18/360°	36		


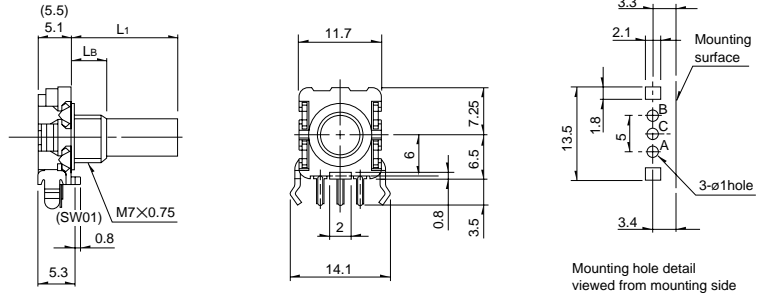

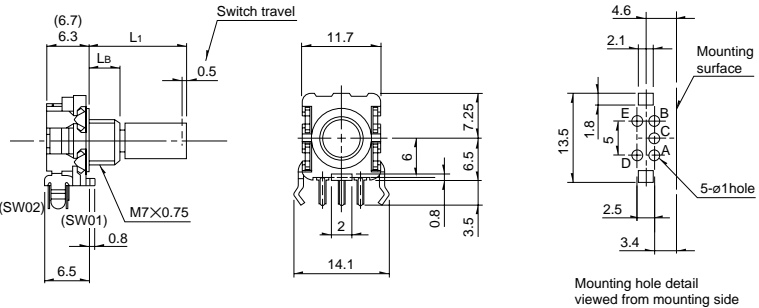
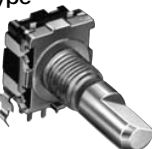
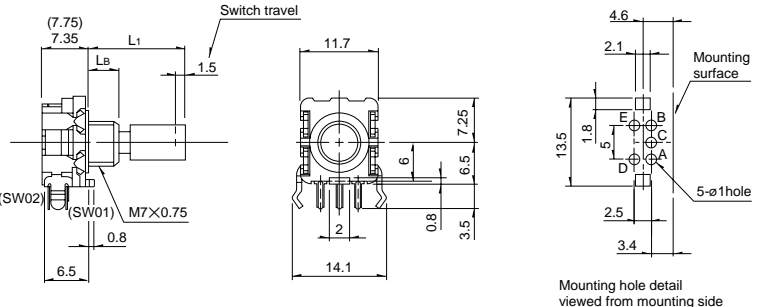

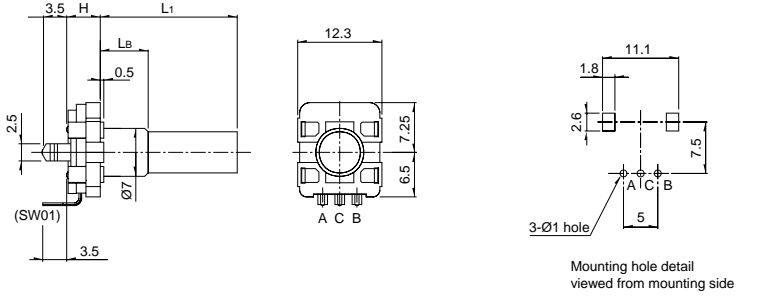
### 注記 Notes

1. Adaptable to a push-on switch.
2. Also adaptable to units without a click.
3. For standard type, click torque up type is also available.
4. The thin type is also available with 2-shaft (outer shaft encoder or self-return switch) or 1-shaft push lock mechanism.
5. The thin type is also available with self-return switch.
6. The EC11B (30 detents) and EC11E type type have output of 1 pulse per 2 click.

11mm Size Metal Shaft Encoders

■ Dimensions

Unit : mm

Model	Dimension
<p>EC11B□□202 Horizontal type</p>  <p>Minimum packing unit 100 pcs.</p>	
<p>travel 0.5mm EC11B□□242-5R4411 With push-on switch horizontal type</p>  <p>Minimum packing unit 100 pcs.</p>	
<p>travel 1.5mm EC11B□□242-5R4511 With push-on switch horizontal type</p>  <p>Minimum packing unit 100 pcs.</p>	
<p>EC11B□□203 Vertical type</p>  <p>Minimum packing unit 100 pcs.</p>	



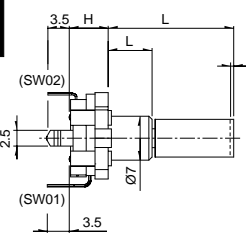
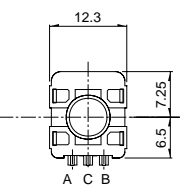
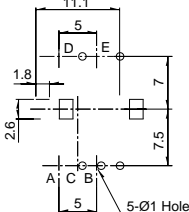
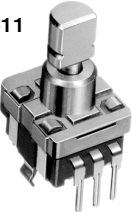

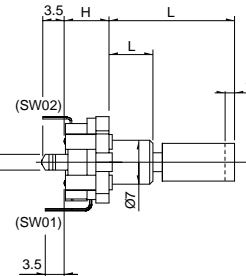
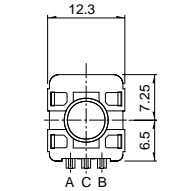
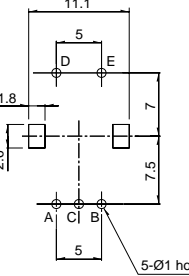


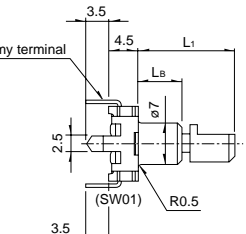
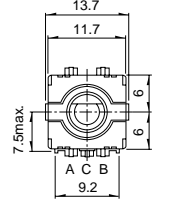
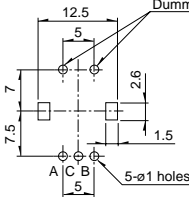


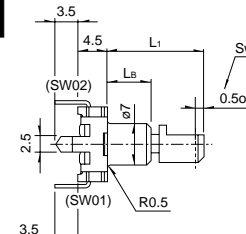
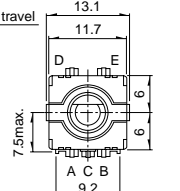
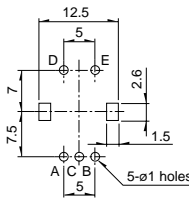
注記  
Notes

1. Dimensions in parentheses ( ) are available for the trick torque up type.
2. Dimension H is a EC11B Vertical type installation height (H) in P.163.

# 11mm Size Metal Shaft Encoders

## ■ Dimensions

Unit : mm

Model	Dimension		
<p>travel 0.5mm EC11B□□243-5R4411 With push-on switch vertical type</p>  <p>Minimum packing unit 100 pcs.</p>	 		 <p>Mounting hole detail viewed from mounting side</p>
<p>travel 1.5mm EC11B□□243-5R4511 With push-on switch vertical type</p>  <p>Minimum packing unit 100 pcs.</p>	 		 <p>Mounting hole detail viewed from mounting side</p>
<p>Low-Profile and vertical type EC11E□□204</p>  <p>Minimum packing unit 100 pcs.</p>	 		 <p>Mounting hole detail viewed from mounting side</p>
<p>Low-Profile type, 0.5 mm travel/1.5 mm travel push on switch, vertical type EC11E□□244</p>  <p>Minimum packing unit 100 pcs.</p>	 		 <p>Mounting hole detail viewed from mounting side</p>


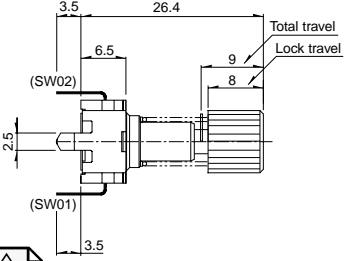
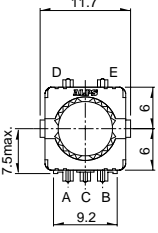
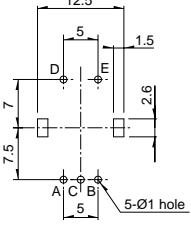


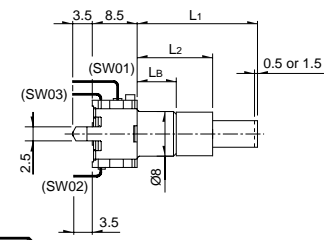
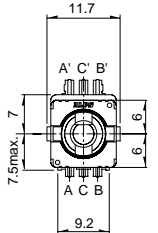
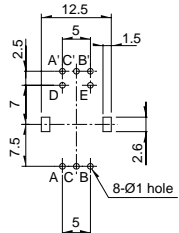

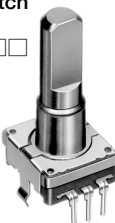
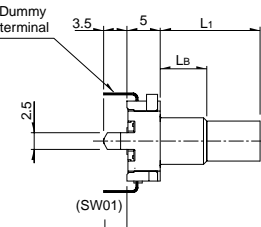
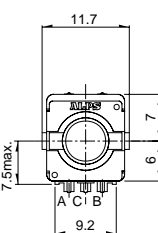
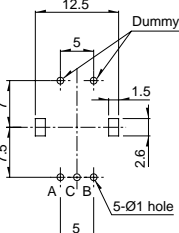


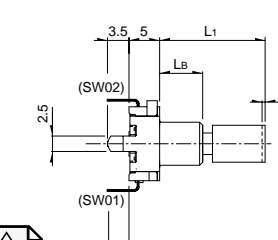
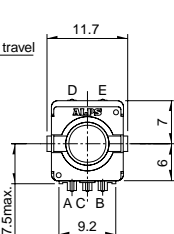
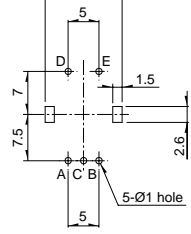

**注記**  
**Note**

Dimension H is a EC11B Vertical type installation height (H) in P.163.

11mm Size Metal Shaft Encoders

■ Dimensions

Unit : mm

Model	Dimension		
<p>Low-profile type with push-lock switch vertical type EC11E1524U</p>  <p>2000 NEWLY INSERTED</p>	 <p>3.5 26.4 6.5 9 8 2.5 (SW02) (SW01) 3.5</p> <p>Total travel Lock travel</p>	 <p>11.7 7.5max. 7 6 6 9.2 A C B D E</p>	 <p>12.5 5 1.5 7 7.5 5 5-Ø1 hole</p> <p>Mounting hole detail viewed from mounting side</p>  <p>D E</p>
<p>Low-profile type dual-shaft type EC11E</p>  <p>2000 NEWLY INSERTED</p>	 <p>3.5 8.5 L1 L2 0.5 or 1.5 (SW01) (SW03) (SW02) 2.5 3.5 Ø8</p>	 <p>11.7 7 7.5max. 7 6 6 9.2 A' C' B' A C B D E</p>	 <p>12.5 5 1.5 7 7.5 5 8-Ø1 hole</p> <p>Mounting hole detail viewed from mounting side</p>  <p>D E</p>
<p>Low-profile type self-return switch vertical type EC111□□□□□</p>  <p>2000 NEWLY INSERTED</p>	 <p>Dummy terminal 3.5 5 L1 L2 2.5 (SW01) 3.5</p>	 <p>11.7 7 7.5max. 7 6 6 9.2 A' C' B' A C B D E</p>	 <p>12.5 5 1.5 7 7.5 5 Dummy 5-Ø1 hole</p> <p>Mounting hole detail viewed from mounting side</p>  <p>D E</p>
<p>Low-profile type self-return switch 0.5mm travel / 1.5mm travel push-on switch vertical type EC111□□□□2</p>  <p>2000 NEWLY INSERTED</p>	 <p>3.5 5 L1 L2 2.5 (SW02) (SW01) 3.5</p> <p>Switch travel 0.5 or 1.5</p>	 <p>11.7 7 7.5max. 7 6 6 9.2 D E A C B</p>	 <p>12.5 5 1.5 7 7.5 5 5-Ø1 hole</p> <p>Mounting hole detail viewed from mounting side</p>  <p>D E</p>

Rotary Potentiometers

Slide Potentiometers

Timmer Potentiometers

Stick Controller

Rotary Encoders

Position Sensors

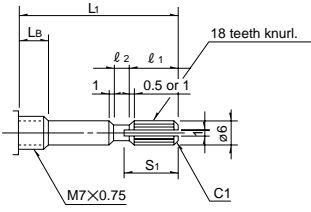
## Standard Dimensions of Shaft

### 1 Single-shaft Type

#### 1.) Knurled Type

Unit : mm

● Style  $\phi 6$  (Shaft diameter)

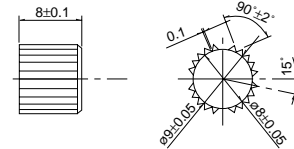


● Detail dimensions

L <sub>1</sub>	L <sub>B</sub>	l <sub>1</sub>	l <sub>2</sub>	S
15	5	6	1	7
20	7	6	1	7
25	7	10	2	11
30	7	12	4	14

● Style  $\phi 9$  (Shaft diameter)

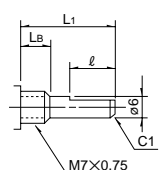
Applicable to models with push lock mechanism only.



#### 2. Flat Type

Unit : mm

● Style :  $\phi 6$  (Shaft diameter)



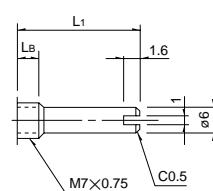
● Detail dimensions

L <sub>1</sub>	L <sub>B</sub>	l
15	5	7
20	7	10 (12)
25	7	12
30	7	12

#### 3. Slotted Type

Unit : mm

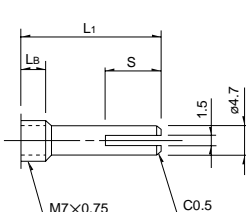
● Style :  $\phi 6$  (Shaft diameter)



● Detail dimensions

L <sub>1</sub>	L <sub>B</sub>
15	5
20	7
25	7
30	7

● Style :  $\phi 4.7$  (Shaft diameter)



● Detail dimensions

L <sub>1</sub>	L <sub>B</sub>	S
15	5	8
20	7	8 (11)
25	7	11
30	7	11

※Dimensions in parentheses ( ) are available for the type without push-on switch.

注記  
Note

shows the specification recommended by us.

11mm Size Metal Shaft Encoders

Standard Dimensions of Dual-shaft Type

1.) Slotted Type

Unit : mm

● Style

● Detail dimensions (mm)

L <sub>1</sub>	L <sub>2</sub>	L <sub>B</sub>	S	ℓ
20	10	5	7	4
25	15	7	7	5
30	20	7	7	5

2.) Flat Type

Unit : mm

● Style (Inner-shaft : φ 3.5 Outer-shaft : φ 6)

● Detail dimensions (mm)

L <sub>1</sub>	L <sub>2</sub>	L <sub>B</sub>	ℓ <sub>1</sub>	ℓ <sub>2</sub>
20	10	5	7	4
25	15	7	7	5
30	20	7	7	5

EC11B

EC11B Vertical Type Installation Height (H)

Bushing	H Dimensions			L <sub>B</sub>
	Switch Without switch	Switch (Travel/0.5mm)	Switch (Travel/1.5mm)	
φ 7	5.4 (5.4)	6.6 (6.6)	7.55 (7.55)	5 or 7
M7×0.75	5.4 (5.8)	6.6 (7.0)	7.55 (7.95)	

※ Dimensions in parentheses ( ) are available for the trick torque up type.

**注記**  
**Note**  shows the specification recommended by us.