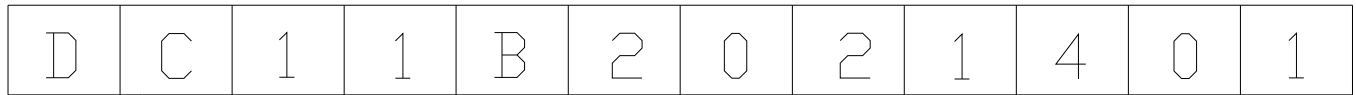


## Products Numbering System



ENCODER

Dimension

09	09mm
10	10mm
11	11mm
12	12mm
15	15mm

Pulse

03	03 Pulses
08	08 Pulses
10	10 Pulses
12	12 Pulses
15	15 Pulses
16	16 Pulses
20	20 Pulses
24	24 Pulses

Switch

0	Without
1	0.5 SW
2	1.5 SW

Detent

1	Without
2	With

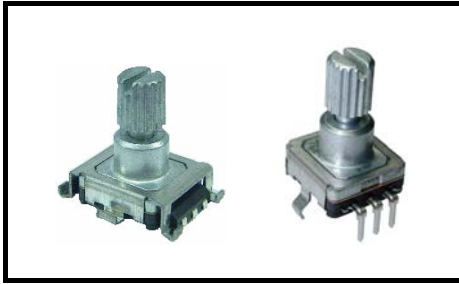
District

B	Metal Shaft
F	Mouse Encoder
G	Insulated Shaft With Bushing
H	Hollow Shaft
J	Knob Type
K	Insulated Shaft
L	Slim Type

Model

1	Hollow Horizontal type
2	Horizontal type
3	Hollow Vertical type
4	Vertical type
5	SMD type

## 11mm Size Slim Type Encoder



### ◆ Feature

- Encoder of Surface Mount Device type.
- With push-on switch

### ◆ Applications

- Most suitable for all controls of compact and low profile electronic equipment.
- Hi-Fi, CD, Mini Disc and MP3 players, volume, tone and title search controls.
- TV/monitor OSD setting.

### ◆ Common Specifications

Pulse	Number of detent	Phase difference (msec)	Chattering (msec)	Sliding noise (msec)	Insulation resistance	Dielectric strength	Detent torque (gf · cm)	Rotational life (cycle)
15	30	4	2	2	250V DC 100MΩ MIN	300V AC 1 min	100±70	15,000

### ◆ Switch Specifications

Rating	Contact resistance	Insulation resistance	Dielectric strength	Contact arrangement	Travel of switch (mm)	Operating force (gf)	Operating life (cycle)
DC 5V 10 mA	100 mΩ	250V DC 100MΩ MIN	300V AC 1 min	PUSH ON	0.5	350±100	20,000
					1.5	400±200	

### ◆ Standard Dimension of Shaft and Bushing

#### Knurled Type (Zinc Diecast)

Without Switch			0.5mm Switch Stroke			1.5mm Switch Stroke		
<b>L1</b>	<b>LB</b>	<b>L2</b>	<b>L1</b>	<b>LB</b>	<b>L2</b>	<b>L1</b>	<b>LB</b>	<b>L2</b>
<b>9.5</b>	<b>5</b>	<b>4.5</b>	<b>9.5</b>	<b>5</b>	<b>2.9</b>	<b>9.5</b>	<b>5</b>	<b>2.9</b>
			<b>13.5</b>	<b>5</b>	<b>6.9</b>	<b>13.5</b>	<b>5</b>	<b>6.9</b>

#### Knurled Type (Aluminum)

Without Switch			0.5mm Switch Stroke			1.5mm Switch Stroke		
<b>L1</b>	<b>LB</b>	<b>L2</b>	<b>L1</b>	<b>LB</b>	<b>L2</b>	<b>L1</b>	<b>LB</b>	<b>L2</b>
<b>15</b>	<b>5</b>	<b>8</b>	<b>15</b>	<b>5</b>	<b>7</b>	<b>15</b>	<b>5</b>	<b>6</b>
<b>20</b>	<b>7</b>	<b>10</b>	<b>20</b>	<b>7</b>	<b>9</b>	<b>20</b>	<b>7</b>	<b>8</b>

## 11mm Size Slim Type Encoder

### Flat Type

Without Switch			0.5mm Switch Stroke			1.5mm Switch Stroke		
L1	LB	L2	L1	LB	L2	L1	LB	L2
15	5	7	15	5	7	15	5	7
20	7	12	20	7	10	20	7	10

### ◆Dimension




Unit : mm

Model	Dimensions
<p><b>DC11L15205</b> Vertical type <b>SMD</b></p>	<p style="text-align: right; font-size: small;">MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p><b>DC11L15215-0.5SW</b> with push on switch vertical type</p>	<p style="text-align: center; font-size: small;">CIRCUIT DIAGRAM</p> <p style="text-align: right; font-size: small;">MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p><b>DC11L15225-1.5SW</b> with push on switch vertical type</p>	<p style="text-align: center; font-size: small;">CIRCUIT DIAGRAM</p> <p style="text-align: right; font-size: small;">MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>

## 11mm Size Slim Type Encoder

◆Dimension

Unit : mm

Model	Dimensions
<p><b>DC11L15204</b> vertical type</p> 	
<p><b>DC11L15214- 0.5SW</b> with push on switch vertical type</p> 	<p style="text-align: center;">CIRCUIT DIAGRAM</p>
<p><b>DC11L15224- 1.5SW</b> with push on switch vertical type</p> 	<p style="text-align: center;">CIRCUIT DIAGRAM</p>