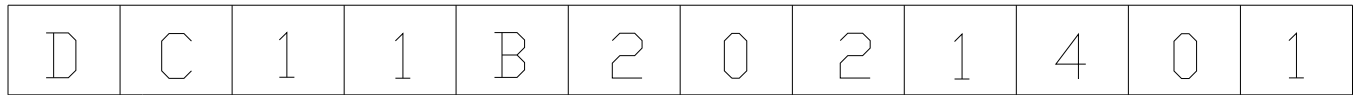


**Products Numbering System**



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

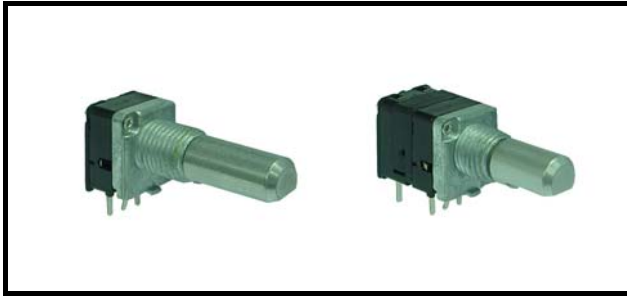
District

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

## 9mm Size Encoder



### ◆Features

- Very small, only 9.5mm wide.
- Contour is similar to 9mm size metal shaft rotary potentiometers.

### ◆Applications

- Various controls for car audio equipment , AV equipment , communication equipment etc.

### ◆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)
12	12	3	5	5	250V DC 100MΩ MIN	300V AC 1 min	30~200	30,000
	24							
15	30	3	5	5				

### ◆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	300±200	20,000
					1.5	400±200	

### ◆Bushing & Shaft Type

Bushing	Flat	Knurled


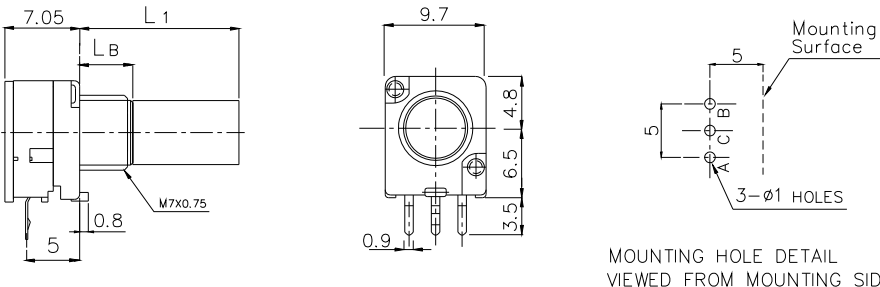

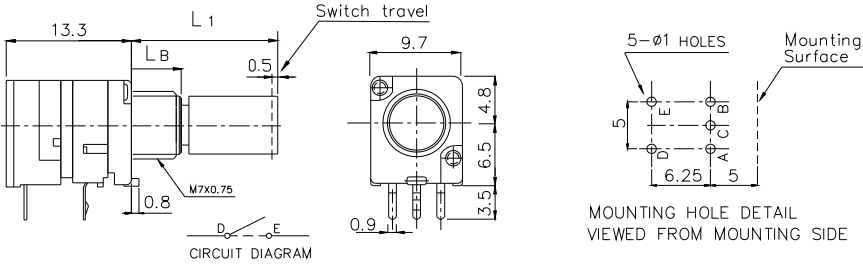

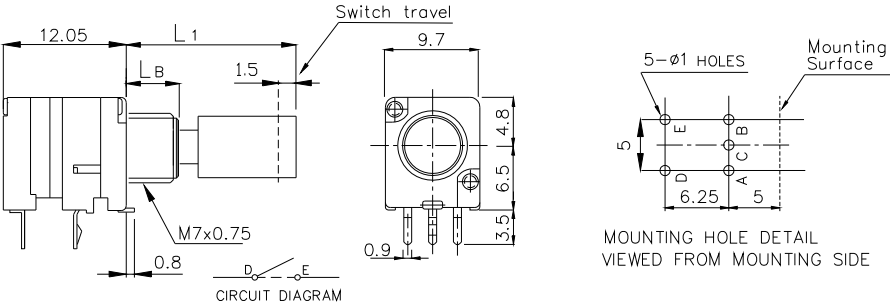
### ◆Standard Dimension of Shaft and Bushing

Dimension	LB	L1
	5	15
	7	20
	10	25
	10	30

## 9mm Size Encoder

### ◆Dimension

Unit : mm

Model	Dimensions
<p><b>DC09B12202</b> horizontal type</p> 	 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p><b>DC09B12212</b> horizontal type with push on switch 0.5</p> 	 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p> <p>CIRCUIT DIAGRAM</p>
<p><b>DC09B12222</b> horizontal type with push on switch 1.5</p> 	 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p> <p>CIRCUIT DIAGRAM</p>