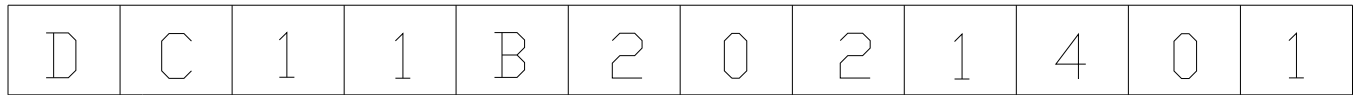


Products Numbering System



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 Encoder



◆ Feature

- High-precision rotary type encoder.
- Compact design, long life and high reliability.
- Low cost as compared with optical type.
- Available in a wide variety of line up to meet all user needs.

◆ Applications

- All kinds of level control, tuning and timer setting in audio-visual equipment, ordinary household electric appliances, radio equipment, communications 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)
8	16	4	3	3	250V DC 100MΩ MIN	300V AC 1 min	30~200	15,000
15	30	6	2	2				
16	16	4	3	3				
20	20	4	2	2				

◆ 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	600±300	20,000
					1.5	400±200	

◆ Bushing & Shaft Type

Bushing	Flat	Knurled


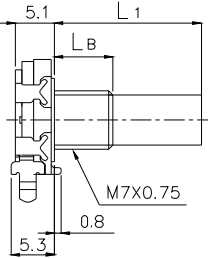
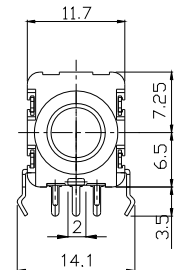
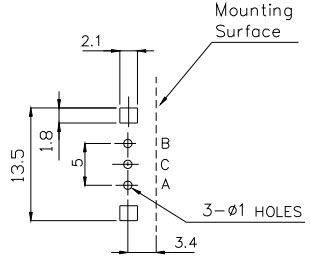

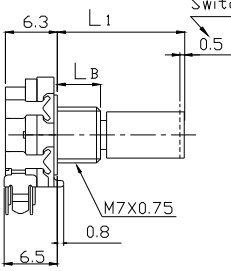
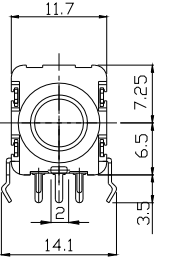
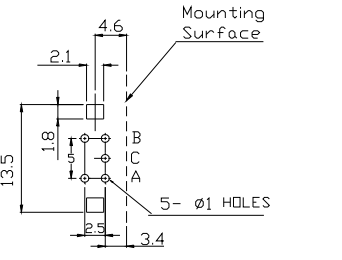

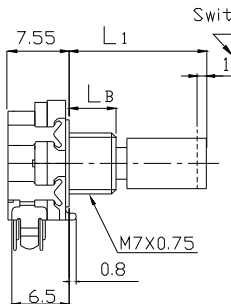
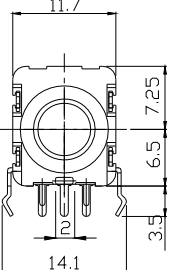
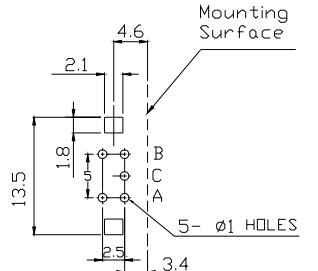

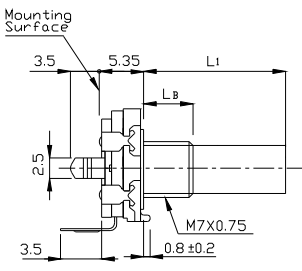
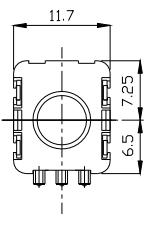
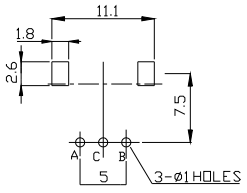
◆ Standard Dimension of Shaft and Bushing

Dimension	LB	L1
	5	15 · 20
	7	20 · 25
	5	15 · 20
	7	20 · 25

11mm Size Encoder

◆Dimension


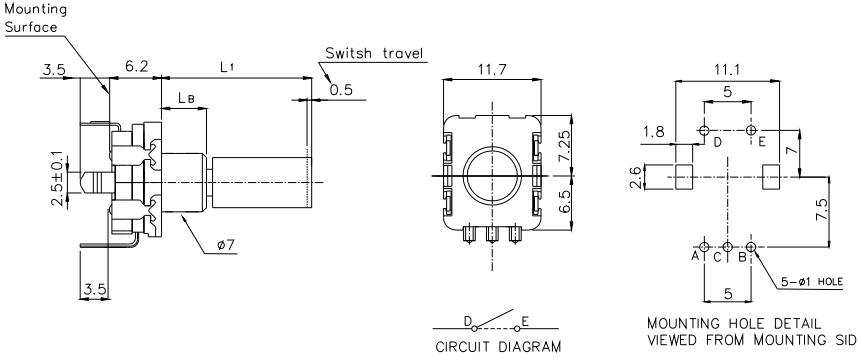

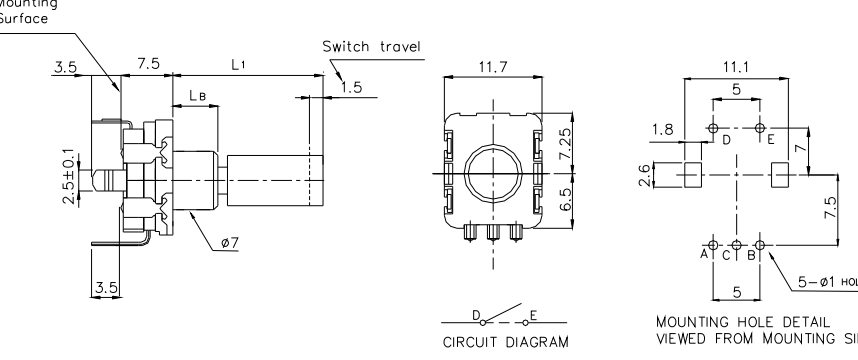
Unit : mm

Model	Dimensions		
<p>DC11B20202 horizontal type</p> 			 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p>DC11B20212-5R4411 with push on switch –0.5mm horizontal type</p> 			 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p>DC11B20222-5R4511 with push on switch –1.5mm horizontal type</p> 			 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p>DC11B20204 vertical type</p> 			 <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>

11mm Size Encoder

◆Dimension

Unit : mm

Model	Dimensions
<p>DC11B20214-5R4411 with push on switch –0.5mm vertical type</p> 	 <p>CIRCUIT DIAGRAM</p> <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>
<p>DC11B20224-5R4511 with push on switch –1.5mm vertical type</p> 	 <p>CIRCUIT DIAGRAM</p> <p>MOUNTING HOLE DETAIL VIEWED FROM MOUNTING SIDE</p>