

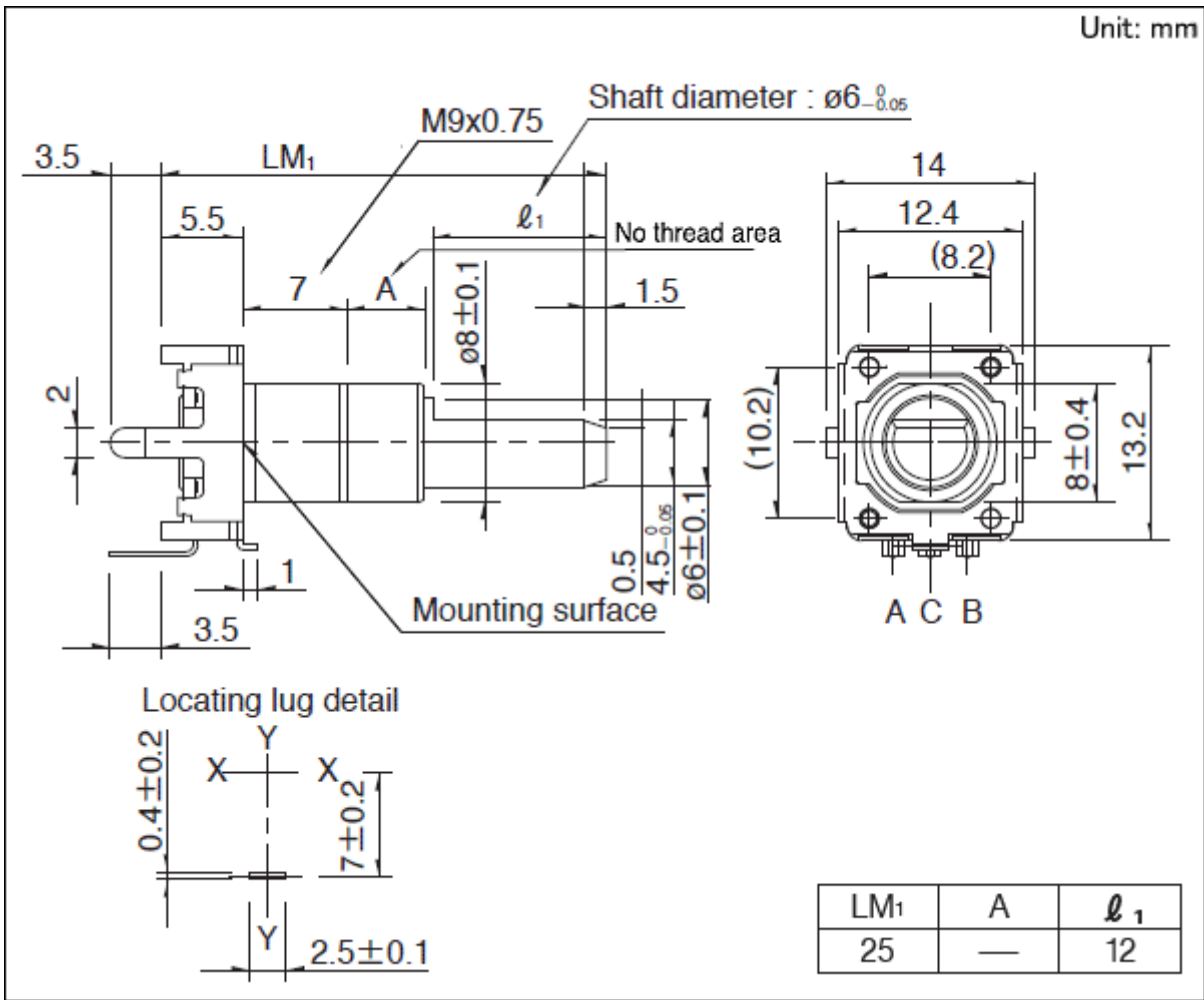


## 12mm Size Insulated Shaft Type EC12 Series

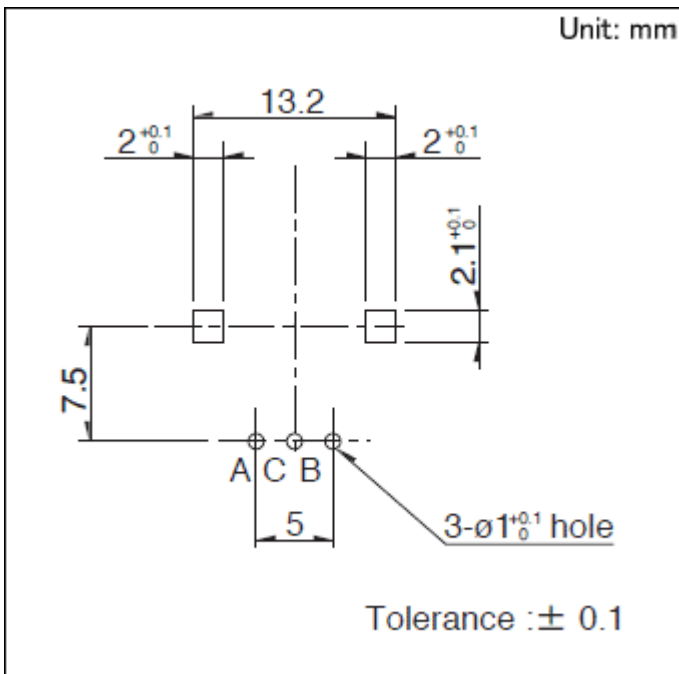
### With Bushing Type

Actuator length		25mm
Torque		Standard 3 to 20mN·m
Number of detent		24
Number of pulse		24
Operating direction		Vertical
Operating temperature range		-10°C to +70°C
Electrical performance	Ratings	0.5mA 5V DC
	Output signal	Two phase A and B
	Max./min. operating current(Resistive load)	5mA/0.5mA
	Insulation resistance	10MΩ min. 50V DC
	Voltage proof	50V AC for 1 minute
Mechanical performance	Detent torque	3 to 20mN·m
	Push-pull strength	80N
Durability	Operating life	30,000 cycles
Minimum order unit (pcs.)	Japan	1,900
	Export	1,900

### Dimensions

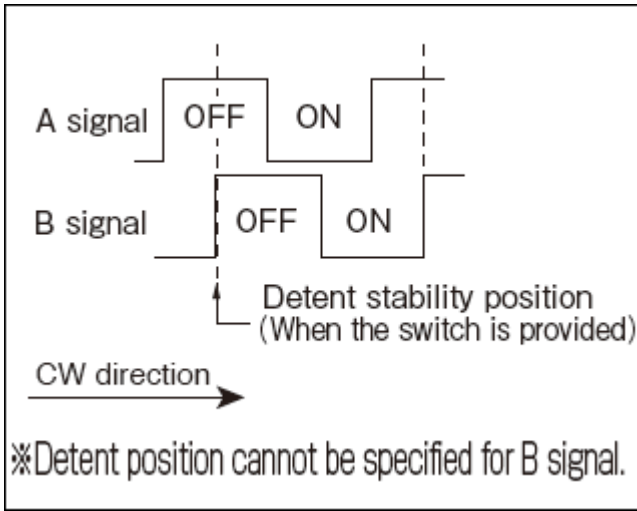


### Mounting Hole Dimensions

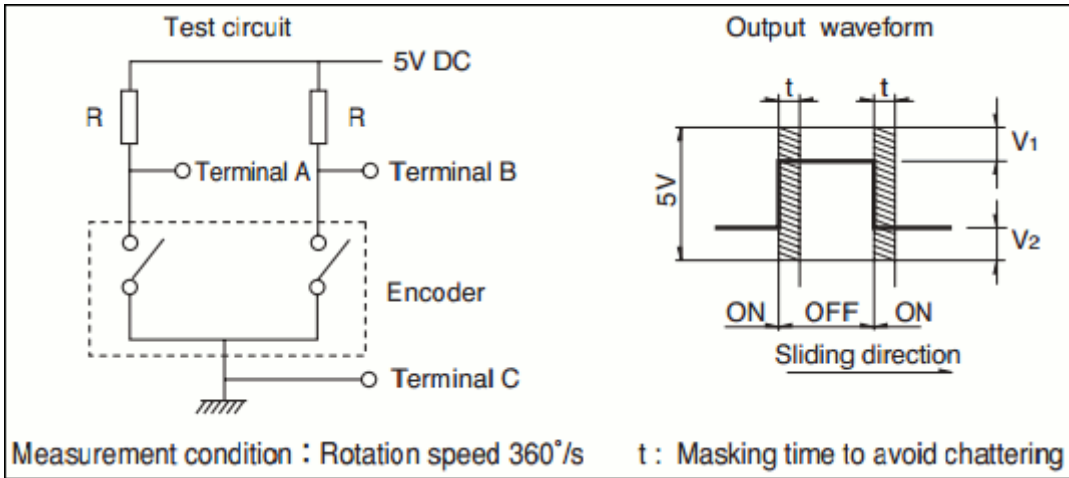


Viewed from mounting face.

### Output Wave



Sliding Noise



V1 = V2 = 1.5V max.

At R=10kΩ Chattering: 3ms max. Bounce: 2ms max.

Packing Specifications

Tray

Number of packages 1 case / Japan 1,900  
 (pcs.)

1 case / export packing 1,900

Export package measurements (mm) 525×369×204

Soldering Conditions

Reference for Dip Soldering

Preheating Soldering surfacetemperature 100°C max.

Heating time 1 min. max.

Dip soldering Soldering temperature 260±5°C

Soldering time 3±1s

No. of solders 2 time max.

**Reference for Hand Soldering**

Tip temperature 350°C max.

Soldering time 3s max.

No. of solders 1 time

**Product Varieties**

**Flat Type**

**With bushing type**

Unit: mm

**Detail dimensions**

LM <sub>1</sub>	L <sub>B</sub>	l <sub>1</sub>
20	—	7
25	—	12
30	5	12
35	5	12

Except 12 detent.

Notes are common to this series/models.

1. This site catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
2. Please place purchase orders per minimum order unit (integer).
3. Products other than those listed in the above chart are also available. Please contact us for details.
4. Nuts and washers are not included. If required, please contact us.
5. This products can be used in vehicles. (EC12D only)

Although these products are designed to perform over a wide operating temperature range, please ensure that you receive and read the formal delivery specifications before use.