

12mm Size Insulated Shaft Type EC12 Series

With Switch Type (Vehicle-compatible)

Part number **EC12D1564402**

Actuator length 17.5mm

Detent torque $10 \pm 5 \text{mN} \cdot \text{m}$

Number of detent 30

Number of pulse 15

Operating direction Vertical

Operating force of switch 3N

Travel of push-on switch 0.5mm

Operating temperature range -40°C to $+85^\circ\text{C}$

Electrical performance Ratings 1mA 5V DC

Output signal Two phase A and B

Max./min. operating current(Resistive load) 10mA/1mA

Insulation resistance 100M Ω min. 250V DC

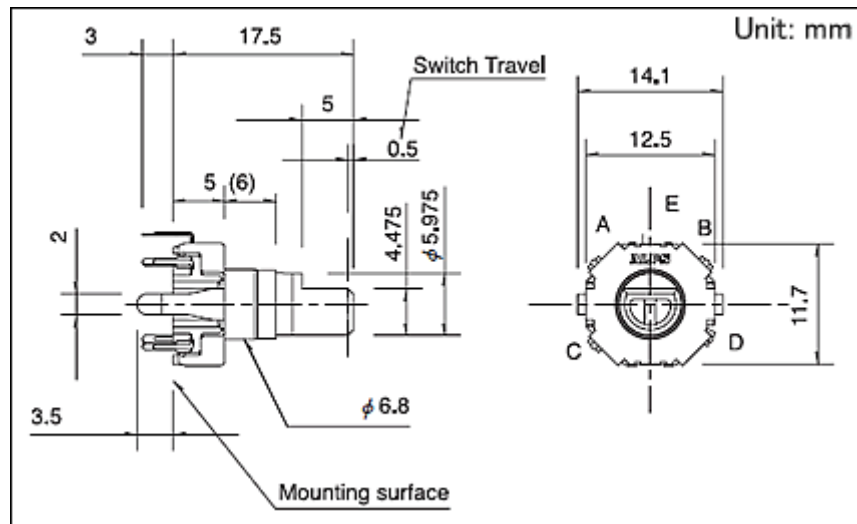
Voltage proof 300V AC for 1 minute or 360V AC for 1s

Mechanical performance	Detent torque	10±5mN·m
	Push-pull strength	100N
Durability	Operating life	30,000 cycles
Push-on switch specifications	Contact arrangement	Single pole single throw (Push-on)
	Travel	0.5±0.3mm
	Operating force	3(+1.5, -1)N
	Rating	1mA 5V DC (10mA 5V DC max. ratings)
	Contact resistance (Initial performance/After lifetime)	100mΩ max./200mΩ max.
	Operating life	30,000 times
Minimum order unit (pcs.)	Japan	1,280
	Export	2,560

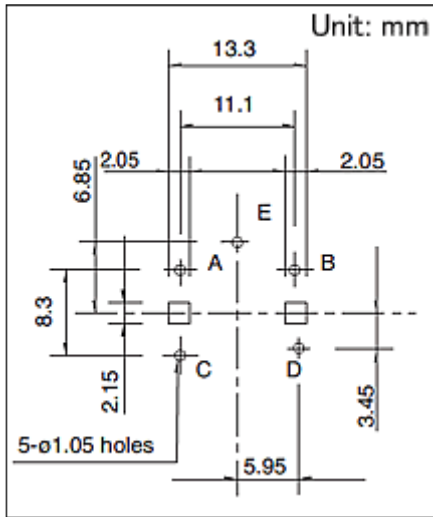
Photo



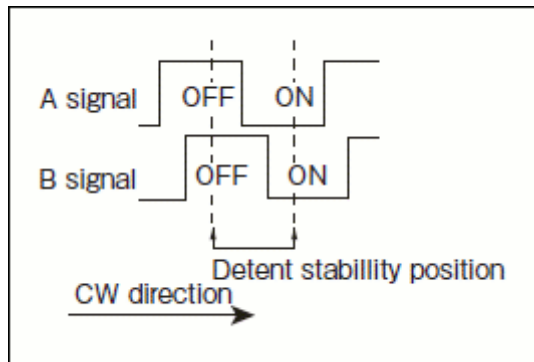
Dimensions



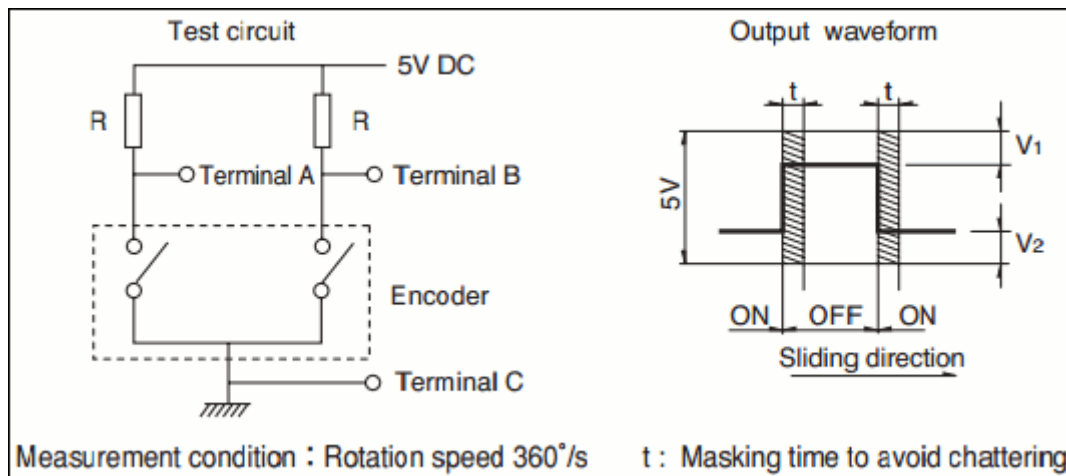
Mounting Hole Dimensions



Output Wave



Sliding Noise



V1 = V2 = 2.5V max.

At R=5kΩ Chattering: 3ms max. Bounce: 2ms max.

Packing Specifications

Tray

Number of packages	1 case / Japan	1,280
(pcs.)		

	1 case / export packing	2,560
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Export package measurements (mm)	360×540×290
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Soldering Conditions

Reference for Dip Soldering

Preheating	Soldering surfacetemperature	100°C max.
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	Heating time	1 min. max.
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Dip soldering	Soldering temperature	260±5°C
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	Soldering time	3±1s
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No. of solders	2 time max.
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Reference for Hand Soldering

Tip temperature	350°C max.
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Soldering time	3s max.
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No. of solders	1 time
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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.