

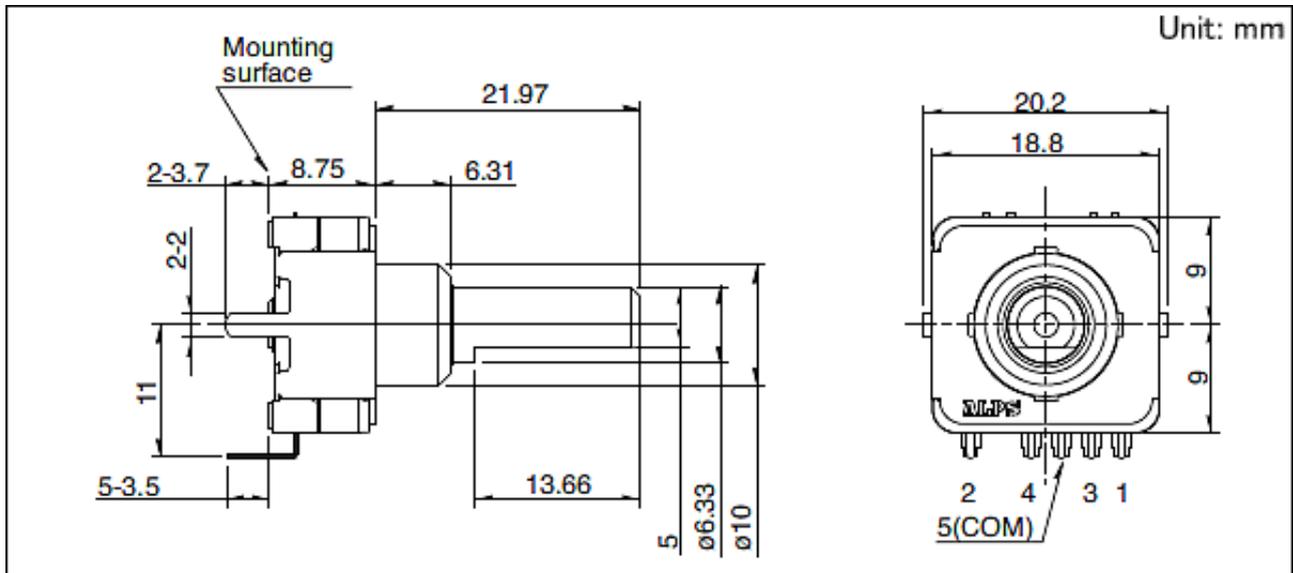
## 18mm Size Insulated Shaft Type EC18A Series

Part number	<b>EC18AGA20402</b>	
Actuator configuration	Flat	
Actuator length	21.97mm	
Detent torque	60±20mN·m	
Operating direction	Vertical	
Positions	12	
Operating temperature range	-20°C to +60°C	
Electrical performance	Rating	1mA 10V DC
	Insulation resistance	10MΩ min. 250V DC
	Voltage proof	50V AC for 1 minute or 60V AC for 2s
Mechanical performance	Push-pull strength	Push 100N / Pull 50N
Durability	Operating life	30,000 cycles
Waterproof Property	Immersion of encoder, not in operation, in water at depth of 1m at normal temperature for 30 minutes.	
Minimum order unit (pcs.)	Japan	450
	Export	900

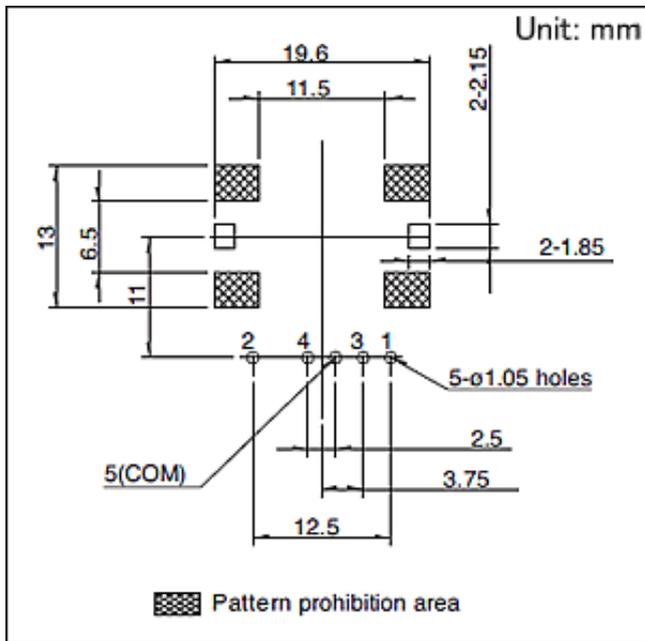
### Photo



### Dimensions



### Mounting Hole Dimensions



### Standard Codes

Position No.		1	2	3	4	5	6	7	8	9	10	11	12
Rotation angle (°)		0	30	60	90	120	150	180	210	240	270	300	330
TERMINAL NO.	1		●	●			●	●			●	●	
	2			●	●	●	●						
	3					●	●	●	●	●	●		
	4									●	●	●	●
	5(COM)	●	●	●	●	●	●	●	●	●	●	●	●

### Packing Specifications

#### Tray

Number of packages 1 case / Japan 450  
(pcs.)

1 case / export packing 900

Export package measurements (mm) 540×360×270

### Soldering Conditions

#### Reference for Dip Soldering

Preheating Soldering surfacetemperature 100°C max.

Heating time 2 min. max.

Dip soldering Soldering temperature 260±5°C

Soldering time 5±1s

No. of solders 2 time max.

**Reference for Hand Soldering**

---

Tip temperature	350°C max.
<hr/>	
Soldering time	3s max.
<hr/>	
No. of solders	1 time

---

**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.