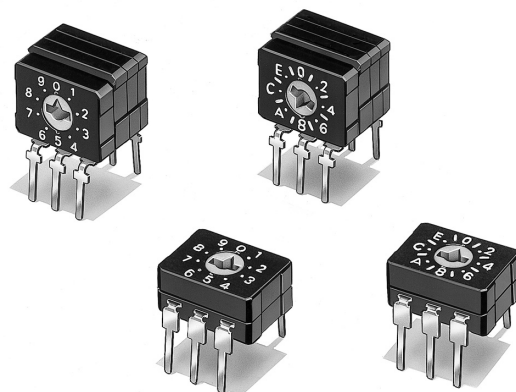


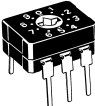
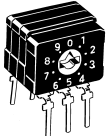
# Sealed Rotary DIP Switch A6C/A6CV

## Highly Reliable Subminiature DIP Switch

- A precise rotary cam and contact driving mechanism achieve compactness for high-precision mounting.
- Top-actuated and side-actuated models included in series.
- Insert-molded terminals and an O-ring sealed rotor combine to form a sealed construction equivalent to IP64 (IEC 60529) that prevents flux penetration and provides high contact reliability even in dusty locations and locations where water is used.
- Offset between terminal pins and side of case allows simple circuit inspection
- RoHS Compliant



## Ordering Information

		Part numbers	
		Top actuated	Side actuated
			
<b>Output code</b>	<b>No. of positions</b>	<b>A6C-10R(N)</b>	<b>A6CV-10R</b>
BCD 1-2-4-8	10	<b>A6C-16R(N)</b>	<b>A6CV-16R</b>
BCD Hexadecimal 1-2-4-8	16		

**Important Note:** Switches cannot be water-washed.

## Specifications

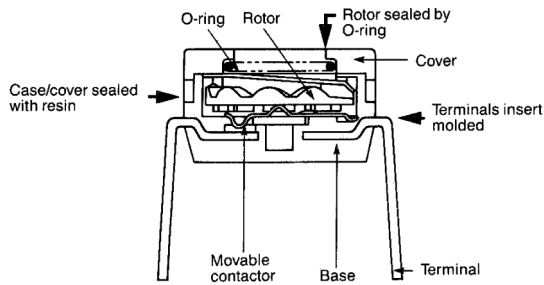
### ■ Characteristics

<b>Switching capacity</b>		100 mA at 30 VDC
<b>Minimum Permissible load</b>		10 μA at 3.5 VDC min.
<b>Contact resistance</b>		200 MΩ max.
<b>Insulation resistance</b>		100 MΩ min. (at 250 VDC)
<b>Dielectric strength</b>		250 VAC for 1 minute between terminals
<b>Operating torque</b>		100 g-cm (0.98 x 10 <sup>-2</sup> N·m) max.
<b>Vibration resistance</b>	<b>Malfunction durability</b>	10 to 55 Hz, 1.5 mm double amplitude
<b>Shock resistance</b>	<b>Malfunction durability</b>	300 m/s <sup>2</sup> (30 G) min.
<b>Ambient operating temperature</b>		-20° to 70°C at 60% RH max. (with no icing or condensation)
<b>Ambient operating humidity</b>		35% to 95% RH (at 5 to 35°C)
<b>Service life</b>	<b>Mechanical</b>	10,000 detent operations min.
	<b>Electrical</b>	2,000 detent operations min.
<b>Weight</b>		Top-actuated: Approx. 0.4 g Side-actuated: Approx. 0.8 g

**Note:** Data shown are of initial value.

## Construction

The movable contactor is moved as the rotor rotates. The terminals are insert molded into the base. The rotor is secured by an O-ring and the case and the cover are made of plastic resin. Therefore, the internal mechanism is effectively sealed.



## Output Codes

### 10-position Models

Terminal No. Position	BCD 1-2-4-8			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

### 16-position Models

Terminal No. Position	BCD/hexadecimal 1-2-4-8			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	
D	●		●	●
E		●	●	●
F	●	●	●	●

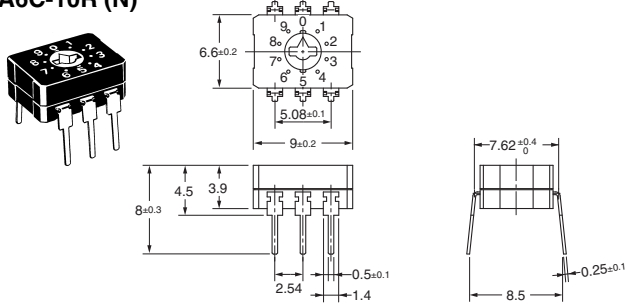
Note: "●" indicates that the internal switch is ON.

## Dimensions

- Note: 1. All units are in millimeters unless otherwise indicated.
- 2. Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.

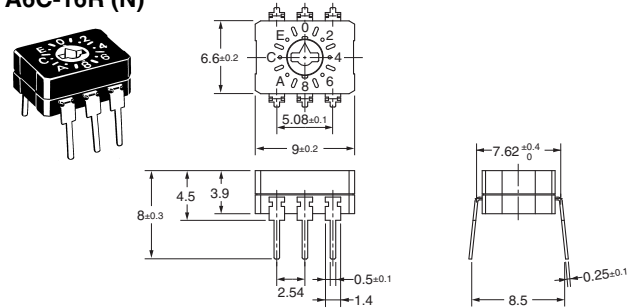
### Top Actuated, 10 Positions

#### A6C-10R (N)



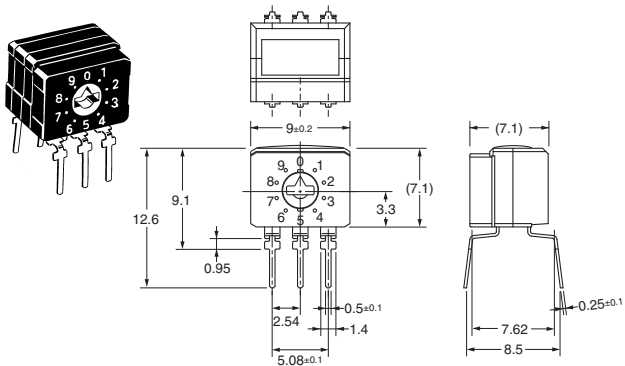
### Top Actuated, 16 Positions

#### A6C-16R (N)



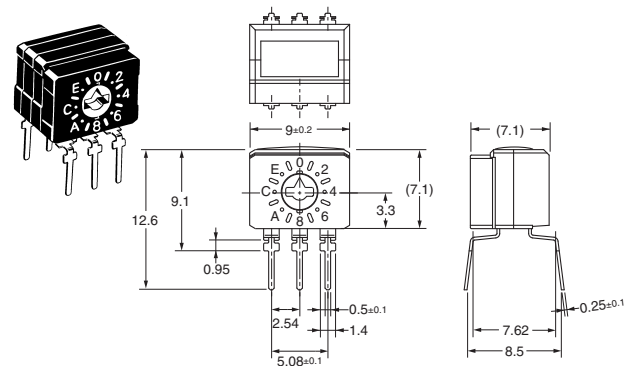
### Side Actuated, 10 Positions

#### A6CV-10R

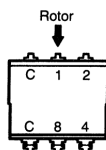


### Side Actuated, 16 Positions

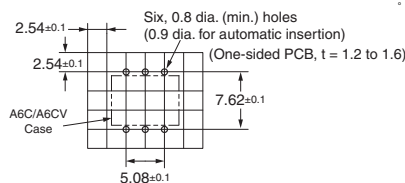
#### A6CV-16R



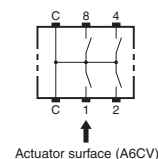
Terminal arrangement (bottom view)

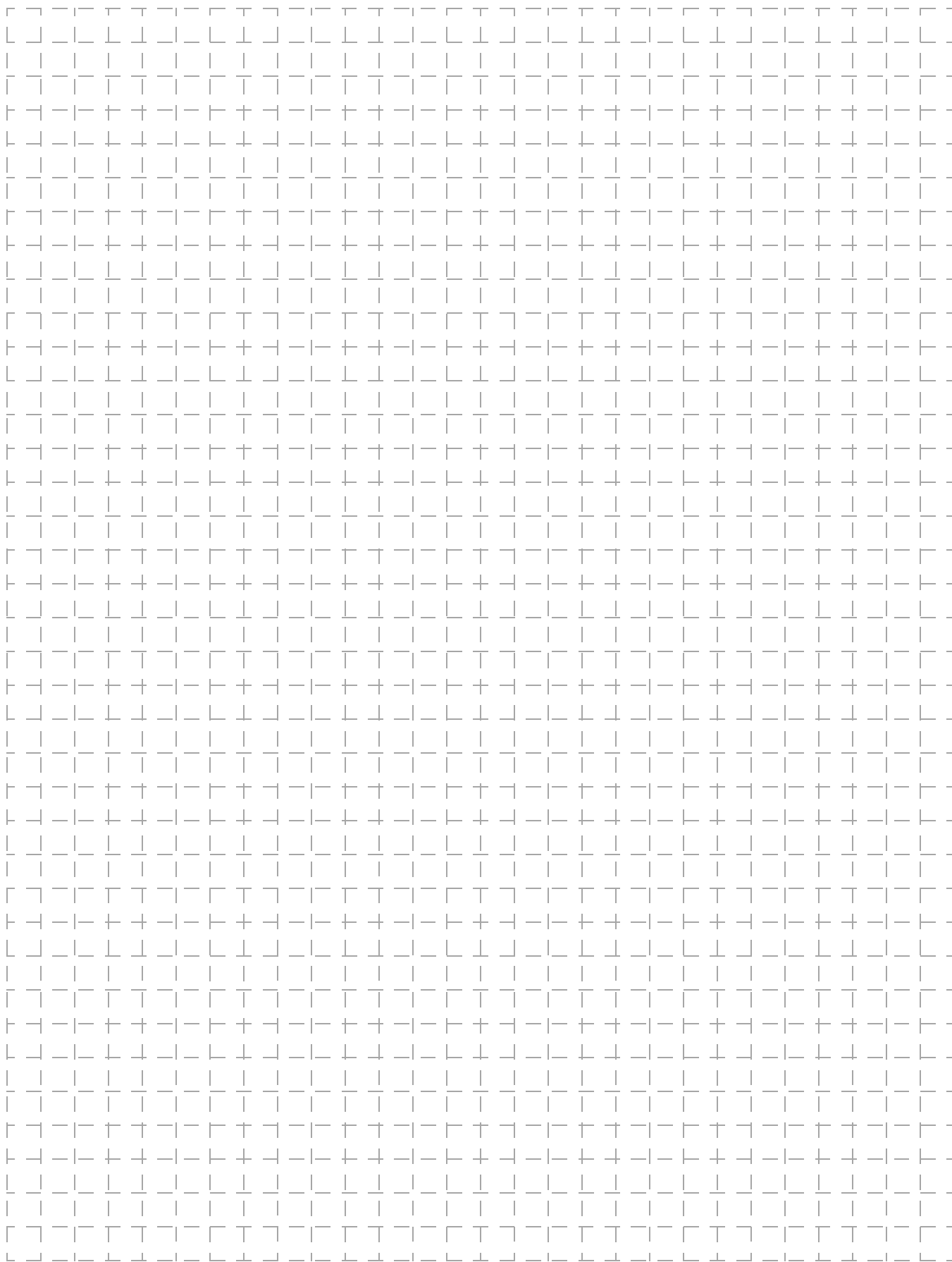


Mounting holes (Top view)



Internal connections (top view)





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**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**  
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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