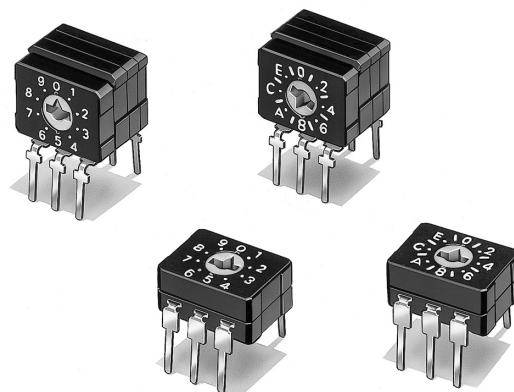


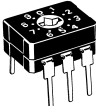
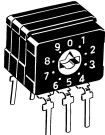
# Sealed Rotary DIP Switch A6C/A6CV

## 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                                                                        |
|                         |                  |  |  |
| Output code             | No. of positions |                                                                                     |                                                                                      |
| BCD 1-2-4-8             | 10               | A6C-10R(N)                                                                          | A6CV-10R                                                                             |
| BCD Hexadecimal 1-2-4-8 | 16               | A6C-16R(N)                                                                          | A6CV-16R                                                                             |

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

## Specifications

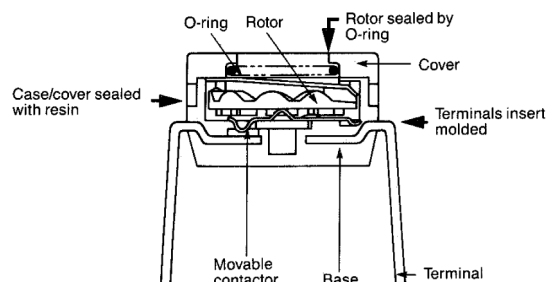
### ■ Characteristics

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

| Type | BCD<br>1-2-4-8 |   |   |   |
|------|----------------|---|---|---|
|      | 1              | 2 | 4 | 8 |
| 0    |                |   |   |   |
| 1    | ●              |   |   |   |
| 2    |                | ● |   |   |
| 3    | ●              | ● |   |   |
| 4    |                |   | ● |   |
| 5    | ●              |   | ● |   |
| 6    |                | ● | ● |   |
| 7    | ●              | ● | ● |   |
| 8    |                |   |   | ● |
| 9    | ●              |   |   | ● |

### 16-position Models

| Type | BCD/hexadecimal<br>1-2-4-8 |   |   |   |
|------|----------------------------|---|---|---|
|      | 1                          | 2 | 4 | 8 |
| 0    |                            |   |   |   |
| 1    | ●                          |   |   |   |
| 2    |                            | ● |   |   |
| 3    | ●                          | ● |   |   |
| 4    |                            |   | ● |   |
| 5    | ●                          |   | ● |   |
| 6    |                            | ● | ● |   |
| 7    | ●                          | ● | ● |   |
| 8    |                            |   |   | ● |
| 9    | ●                          |   |   | ● |
| A    |                            | ● |   | ● |
| B    | ●                          | ● |   | ● |
| C    |                            |   | ● | ● |
| D    | ●                          |   | ● | ● |
| E    |                            | ● | ● | ● |
| F    | ●                          | ● | ● | ● |

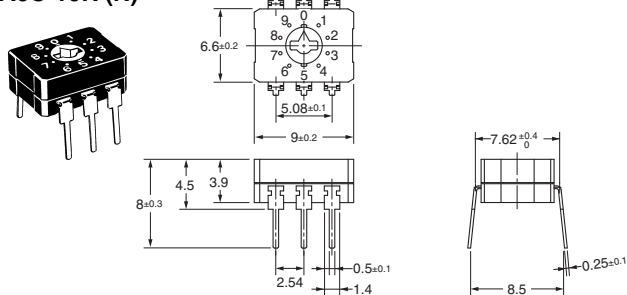
Note: "●" indicates that the internal switch is ON.

## 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.

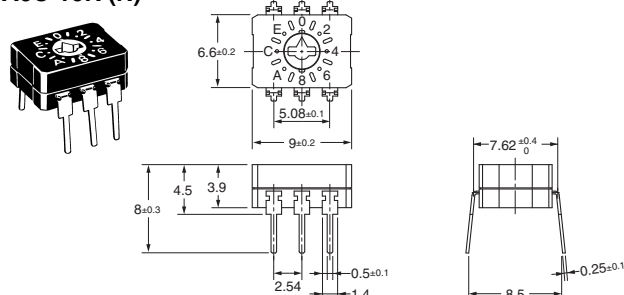
### Top Actuated, 10 Positions

#### A6C-10R (N)



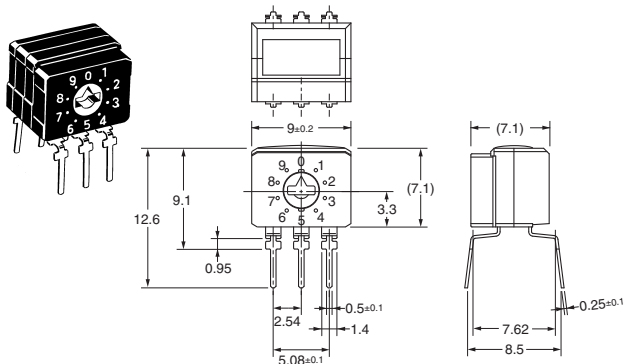
### Top Actuated, 16 Positions

#### A6C-16R (N)



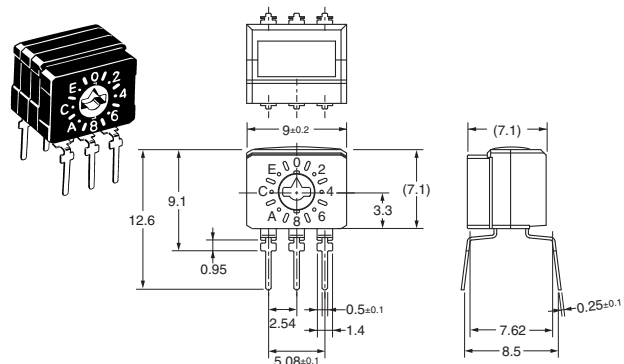
### Side Actuated, 10 Positions

#### A6CV-10R

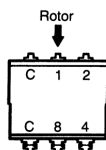


### Side Actuated, 16 Positions

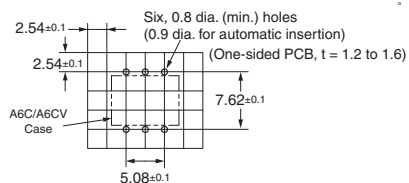
#### A6CV-16R



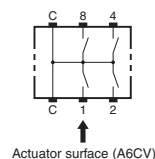
Terminal arrangement  
(bottom view)



Mounting holes  
(Top view)



Internal connections  
(top view)



A large grid of small, faint, repeating geometric patterns, likely a decorative background or a placeholder for a complex image. The patterns are arranged in a regular, repeating fashion across the entire page, creating a textured, grid-like appearance. The patterns themselves are small, stylized geometric shapes, possibly resembling a combination of 'L' and 'T' shapes, arranged in a way that creates a larger, more complex repeating motif. The overall effect is a subtle, intricate background that adds depth and visual interest to the page.

All sales are subject to Omron Electronic Components LLC standard terms and conditions of sale, which can be found at [http://www.components.omron.com/components/web/webfiles.nsf/sales\\_terms.html](http://www.components.omron.com/components/web/webfiles.nsf/sales_terms.html)

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

---

**OMRON**<sup>®</sup>

**OMRON ELECTRONIC  
COMPONENTS LLC**

55 E. Commerce Drive, Suite B  
Schaumburg, IL 60173

**847-882-2288**

**OMRON ON-LINE**

Global - <http://www.omron.com>

USA - <http://www.components.omron.com>

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Omron:

[A6C-16R\(N\)](#) [A6C-10R\(N\)](#) [A6CV-16R](#) [A6CV-10R](#)