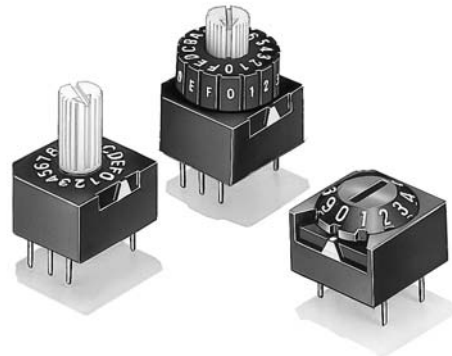


## Rotary DIP Switch

## A6A

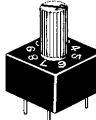
### Sealed Rotary DIP Switch with Various selections for Code-setting.

- Top/Side-visible. Flat/Cone shaped/Extended-actuator models available.
- A slider lock and rotating PCB mechanism ensure stable contact reliability.
- Sealed structure equivalent to IP64 (IEC-60529) prevents flux penetration and provides high contact reliability even in dusty locations.



RoHS Compliant

### List of Models

| Type (actuation color)     |                            |                  | Cone type (black)                                                                 | Flat type (white)                                                                 | Extended actuator wheel type (white)                                                | Wheel type (White with Black Wheel)                                                 |
|----------------------------|----------------------------|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| No. of switching positions | Output code                | Quantity per box |  |  |  |  |
| 10                         | BCD Decimal                | 100              | A6A-10R                                                                           | A6A-10RF                                                                          | A6A-10RS                                                                            | A6A-10RW                                                                            |
|                            | BCD Decimal complement     |                  | A6A-10C                                                                           | A6A-10CF                                                                          | A6A-10CS                                                                            | A6A-10CW                                                                            |
| 16                         | BCD Hexadecimal            |                  | A6A-16R                                                                           | A6A-16RF                                                                          | A6A-16RS                                                                            | A6A-16RW                                                                            |
|                            | BCD Hexadecimal complement |                  | A6A-16C                                                                           | A6A-16CF                                                                          | A6A-16CS                                                                            | A6A-16CW                                                                            |

Note: 1. Contact your OMRON sales representative to request special markings or designations.  
2. Order in multiples of the package quantity.

### Ratings/Characteristics

|                                    |                   |                                                                                                      |
|------------------------------------|-------------------|------------------------------------------------------------------------------------------------------|
| Rating (resistive load)            |                   | 0.1 A at 28 VDC<br>1 mA (minimum current) at 5 VDC                                                   |
| Ambient operating temperature      |                   | -10 to +70°C 60%RH max. (with no icing or condensation)                                              |
| Ambient operating humidity         |                   | 45% to 85%RH (at +5 to +35°C)                                                                        |
| Insulation resistance              |                   | 10 MΩ min. (at 250 VDC with insulation tester)                                                       |
| Contact resistance (initial value) |                   | 200 mΩ max.                                                                                          |
| Dielectric strength                | Between terminals | 250 VAC for 1 min                                                                                    |
| Vibration resistance               | Malfunction       | 10 to 55 Hz, 1.5-mm double amplitude                                                                 |
| Shock resistance                   | Malfunction       | 300 m/s <sup>2</sup> min.                                                                            |
| Durability                         | Electrical        | 2,000 steps min.                                                                                     |
| Washing                            |                   | Possible                                                                                             |
| Degree of protection               |                   | Internally sealed (IEC IP64)                                                                         |
| Operating torque                   |                   | 1.18 to 2.45 × 10 <sup>-2</sup> N·m {1.2 to 2.5 gf·m}                                                |
| Weight                             |                   | Cone: Approx. 0.8 g<br>Flat: Approx. 0.7 g<br>Extended actuator: Approx. 0.8g<br>Wheel: Approx. 1.0g |

## Output Codes

### 10-position Models

| Type | BCD Decimal code |   |   |   | BCD Decimal complement code |           |           |           |
|------|------------------|---|---|---|-----------------------------|-----------|-----------|-----------|
|      | 1                | 2 | 4 | 8 | $\bar{1}$                   | $\bar{2}$ | $\bar{4}$ | $\bar{8}$ |
| 0    |                  |   |   |   | ●                           | ●         | ●         | ●         |
| 1    | ●                |   |   |   |                             | ●         | ●         | ●         |
| 2    |                  | ● |   |   | ●                           |           | ●         | ●         |
| 3    | ●                | ● |   |   |                             |           | ●         | ●         |
| 4    |                  |   | ● |   | ●                           | ●         |           | ●         |
| 5    | ●                |   | ● |   |                             | ●         |           | ●         |
| 6    |                  | ● | ● |   | ●                           |           |           | ●         |
| 7    | ●                | ● | ● |   |                             |           |           | ●         |
| 8    |                  |   |   | ● | ●                           | ●         | ●         |           |
| 9    | ●                |   |   | ● |                             | ●         | ●         |           |

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

### 16-position Models

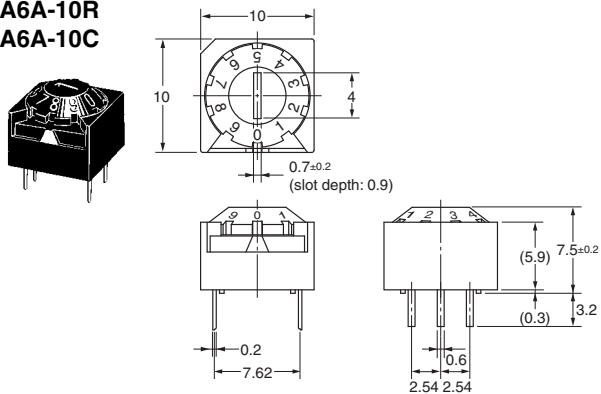
| Type | BCD Hexadecimal code |   |   |   | BCD Hexadecimal complement code |           |           |           |
|------|----------------------|---|---|---|---------------------------------|-----------|-----------|-----------|
|      | 1                    | 2 | 4 | 8 | $\bar{1}$                       | $\bar{2}$ | $\bar{4}$ | $\bar{8}$ |
| 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 (Unit: mm)

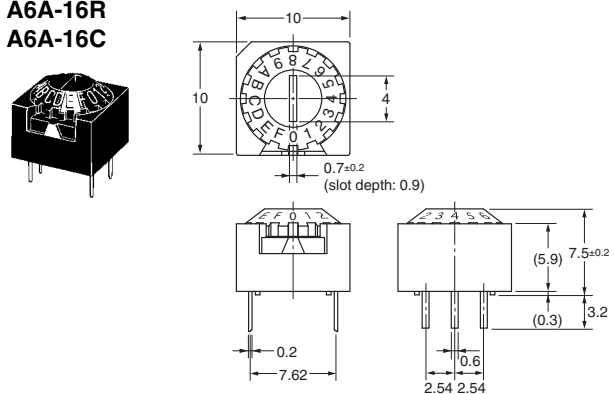
### ● Cone Type, 10 Positions

A6A-10R  
A6A-10C



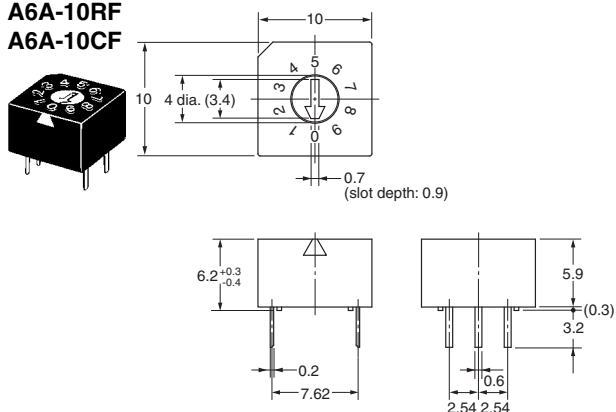
### ● Cone Type, 16 Positions

A6A-16R  
A6A-16C



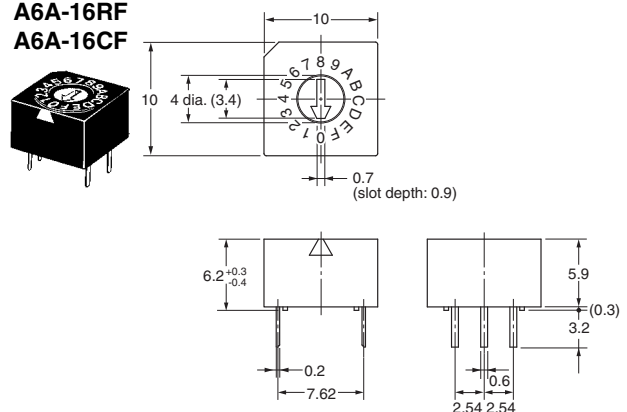
### ● Flat Type, 10 Positions

A6A-10RF  
A6A-10CF



### ● Flat Type, 16 Positions

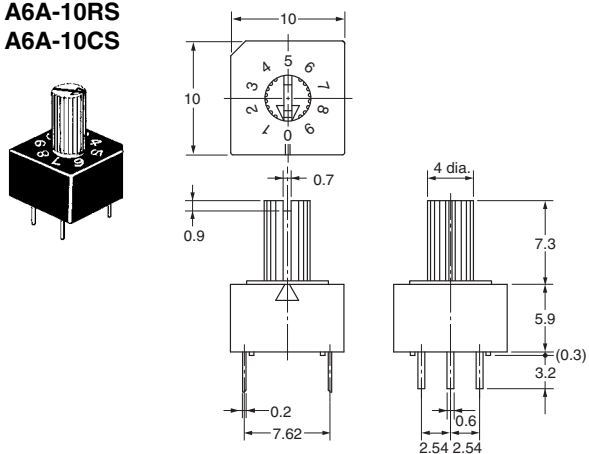
A6A-16RF  
A6A-16CF



Note: Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.

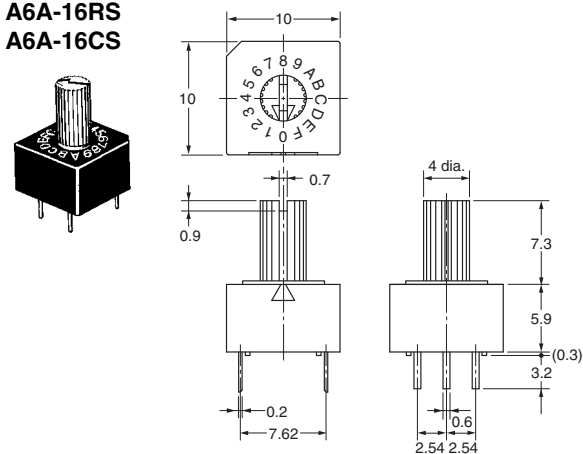
● Extended Actuator Type, 10 Positions

A6A-10RS  
A6A-10CS



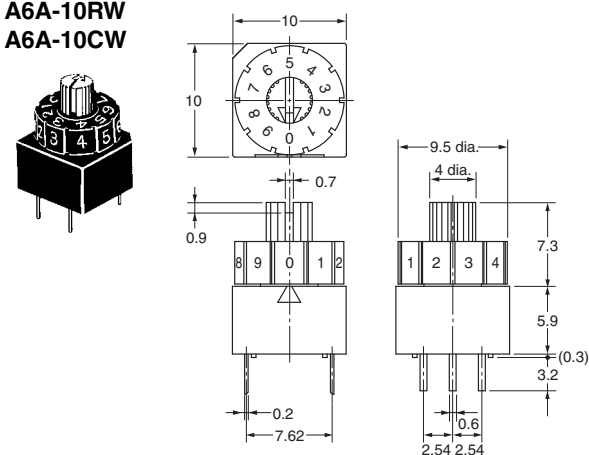
● Extended Actuator Type, 16 Positions

A6A-16RS  
A6A-16CS



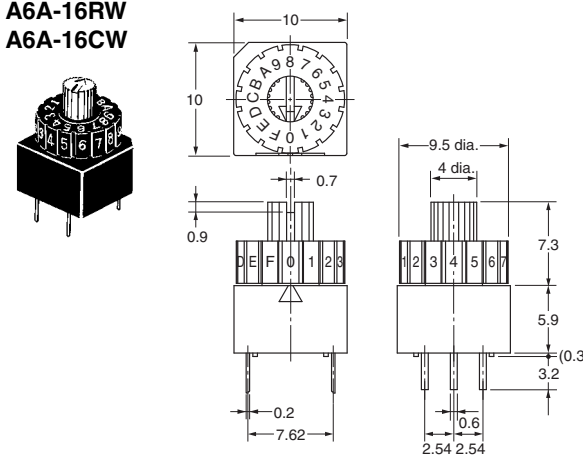
● Wheel Type, 10 Positions

A6A-10RW  
A6A-10CW



● Wheel Type, 16 Positions

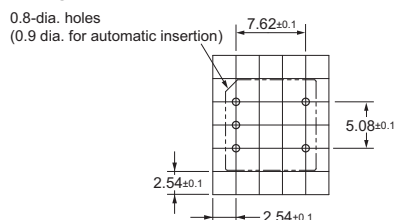
A6A-16RW  
A6A-16CW



**Note:** Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.

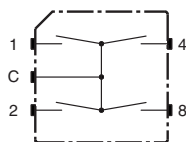
■ PCB Dimensions (Top View)

(Single-sided PCB,  $t = 1.2$  to  $1.6$ )



■ Internal Connections

Contact Form (Top View)



■ Precautions

Be sure to read the Safety precautions common to all DIP Switches for correct use.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**

**OMRON Corporation**

Electronic and Mechanical Components Company

Contact: [www.omron.com/ecb](http://www.omron.com/ecb)

Cat. No. A213-E1-02  
1014(0207)(O)