## omron

## Sealed Rotary DIP Switch

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

■ Top/Side-visible. Flat/Cone shaped/Extendedactuator 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.



## Ordering Information

## 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.

## Specifications

## Ratings/Characteristics

| Rating | 0.1 A at $28 \mathrm{VDC}, 1 \mathrm{~mA}$ (minimum current) at 5 VDC |
| :--- | :--- |
| Ambient operating temperature | -10 to $70^{\circ} \mathrm{C} 60 \%$ RH max. (with no icing or condensation) |
| Ambient operating humidity | $45 \%$ to $85 \% \mathrm{RH}$ (at 5 to $35^{\circ} \mathrm{C}$ ) |
| Insulation resistance | $10 \mathrm{M} \Omega$ min. (at 250 VDC ) |
| Contact resistance | $200 \mathrm{~m} \Omega$ max. (initial value) |
| Dielectric strength | 250 VAC for 1 min between terminals |
| Vibration resistance | Malfunction: 10 to $55 \mathrm{~Hz}, 1.5$-mm double amplitude |
| Shock resistance | Malfunction: $300 \mathrm{~m} / \mathrm{s}^{2} \mathrm{~min}$. |
| Durability | Electrical: 2,000 steps min. |
| Operating torque | 1.18 to $2.45 \times 10^{-2} \mathrm{~N} \cdot \mathrm{~m}\{1.2$ to 2.5 gf.m $\}$ |
| Weight | Cone: Approx. 0.8 g <br> Flat: Approx. 0.7 g <br> Extended actuator: Approx. 0.8 g <br> Wheel: Approx. 1.0 g |

## ■Output Codes

10-position Models

| Type | BCD Decimal code |  |  |  | BCD Decimal complement code |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position | 1 | 2 | 4 | 8 | $\overline{1}$ | $\overline{2}$ | $\overline{4}$ | $\overline{8}$ |
| 0 |  |  |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 1 | $\bigcirc$ |  |  |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 2 |  | $\bigcirc$ |  |  | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ |
| 3 | $\bigcirc$ | $\bigcirc$ |  |  |  |  | $\bigcirc$ | $\bigcirc$ |
| 4 |  |  | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |
| 5 | $\bigcirc$ |  | $\bigcirc$ |  |  | $\bigcirc$ |  | $\bigcirc$ |
| 6 |  | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |  |  | $\bigcirc$ |
| 7 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |  |  | $\bigcirc$ |
| 8 |  |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |
| 9 | $\bigcirc$ |  |  | $\bigcirc$ |  | - | $\bigcirc$ |  |

Note: " $\bullet$ " indicates that the internal switch is ON.

16-position Models

| Type | BCD Hexadecimal code |  |  |  | BCD Hexadecimal complement code |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position | 1 | 2 | 4 | 8 | $\overline{1}$ | $\overline{2}$ | $\overline{4}$ | $\overline{8}$ |
| 0 |  |  |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 1 | $\bigcirc$ |  |  |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 2 |  | $\bigcirc$ |  |  | $\bigcirc$ |  | $\bigcirc$ | - |
| 3 | $\bigcirc$ | $\bigcirc$ |  |  |  |  | $\bigcirc$ | - |
| 4 |  |  | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |
| 5 | $\bigcirc$ |  | $\bigcirc$ |  |  | $\bigcirc$ |  | $\bigcirc$ |
| 6 |  | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |  |  | - |
| 7 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |  |  | $\bigcirc$ |
| 8 |  |  |  | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |
| 9 | $\bigcirc$ |  |  | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ |  |
| A |  | $\bigcirc$ |  | $\bullet$ | $\bigcirc$ |  | $\bigcirc$ |  |
| B | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |  |  | $\bigcirc$ |  |
| C |  |  | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |  |  |
| D | $\bullet$ |  | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |  |  |
| E |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |  |
| F | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |  |  |

Note: " $\bullet$ " 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 $\pm 0.4 \mathrm{~mm}$ applies to all dimensions.

## - Cone Type, 10 Positions



## - Flat Type, 10 Positions



- Cone Type, 16 Positions

A6A-16R
A6A-16C


Flat Type, 16 Positions


## - Extended Actuator Type, 10 Positions

A6A-10RS
A6A-10CS


## - Wheel Type, 10 Positions

A6A-10RW
A6A-10CW


## PCB Dimensions (Top View)

(Single-sided PCB, $\mathrm{t}=1.2$ to 1.6 )
0.8 -dia. holes
( 0.9 dia. for automatic insertion)


## Internal Connections

## Contact Form (Top View)



## Precautions

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

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

