OMRON

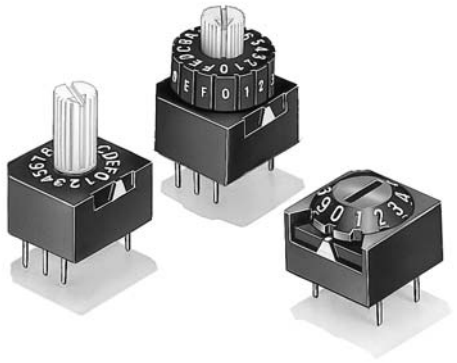
Rotary DIP Switch

A6A

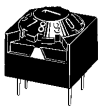
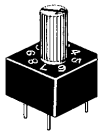
Sealed Rotary DIP Switch with Various selections for Code-setting.

- 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

No. of switching positions	Output code	Quantity per box	Type (actuation color) Cone type (black)	Flat type (white)	Extended actuator wheel type (white)	Wheel type (White with Black Wheel)
						
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 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^2 min.
Durability	**Electrical**	2,000 steps min.
Washing		Possible
Degree of protection		Internally sealed (IEC IP64)
Operating torque		1.18 to 2.45 × 10^{-2} N·m {1.2 to 2.5 gf·m}
Weight		Cone: Approx. 0.8 g Flat: Approx. 0.7 g Extended actuator: Approx. 0.8g Wheel: Approx. 1.0g

■Output Codes

10-position Models

Type / Terminal No. / Position	BCD Decimal code				BCD Decimal complement code			
	1	2	4	8	$\overline{1}$	$\overline{2}$	$\overline{4}$	$\overline{8}$
0					●	●	●	●
1	●					●	●	●
2		●			●		●	●
3	●	●					●	●
4			●		●	●		●
5	●		●			●		●
6		●	●		●			●
7	●	●	●					●
8				●	●	●	●	
9	●			●		●	●	

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

16-position Models

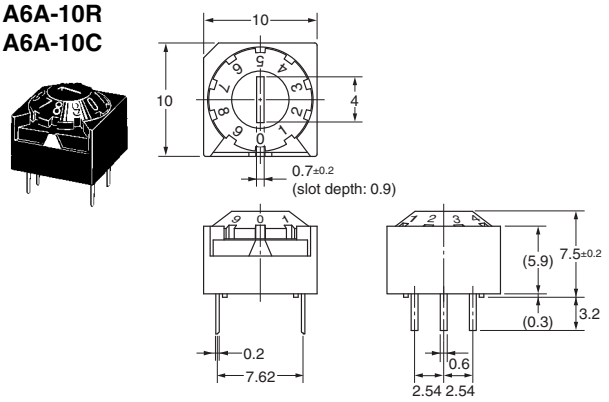
Type / Terminal No. / Position	BCD Hexadecimal code				BCD Hexadecimal complement code			
	1	2	4	8	$\overline{1}$	$\overline{2}$	$\overline{4}$	$\overline{8}$
0					●	●	●	●
1	●					●	●	●
2		●			●		●	●
3	●	●					●	●
4			●		●	●		●
5	●		●			●		●
6		●	●		●			●
7	●	●	●					●
8				●	●	●	●	
9	●			●		●	●	
A		●		●	●		●	
B	●	●		●			●	
C			●	●	●	●		
D	●		●	●		●		
E		●	●	●	●			
F	●	●	●	●				

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

■Dimensions (Unit: mm)

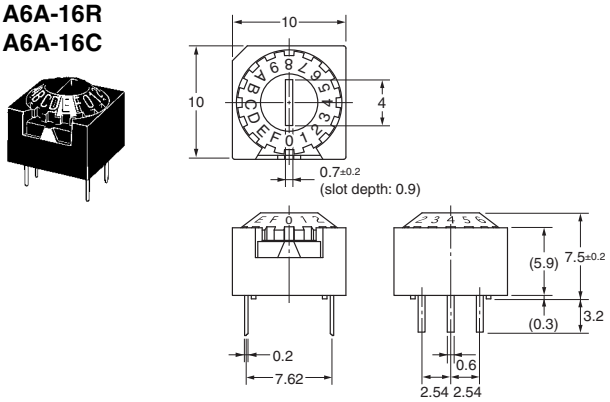
● Cone Type, 10 Positions

A6A-10R
A6A-10C



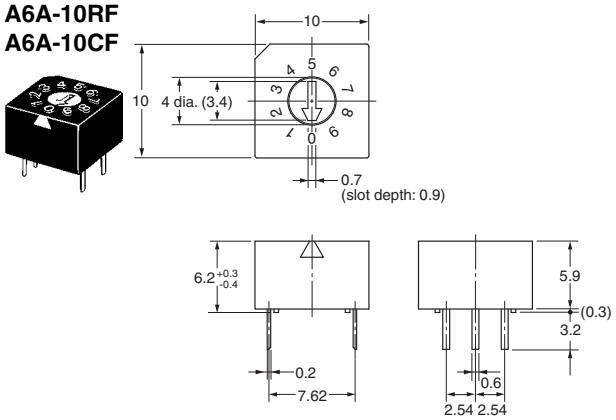
● Cone Type, 16 Positions

A6A-16R
A6A-16C



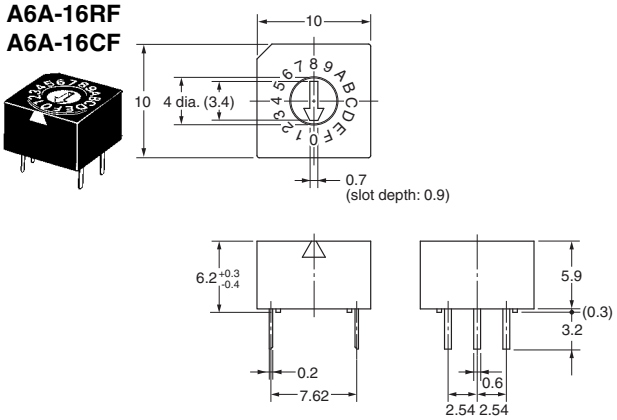
● Flat Type, 10 Positions

A6A-10RF
A6A-10CF



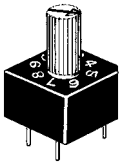
● Flat Type, 16 Positions

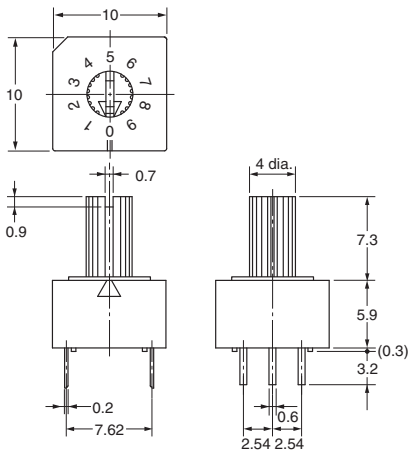
A6A-16RF
A6A-16CF



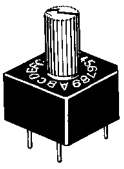
Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

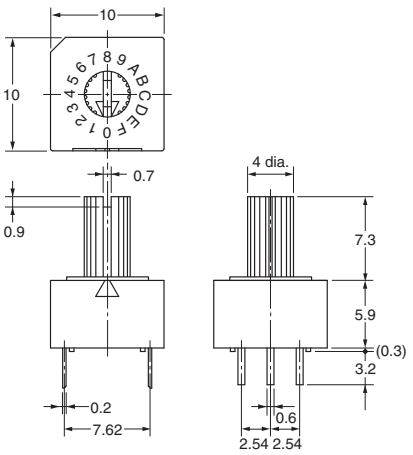
● **Extended Actuator Type, 10 Positions**
A6A-10RS
A6A-10CS



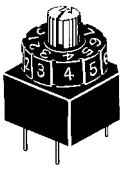


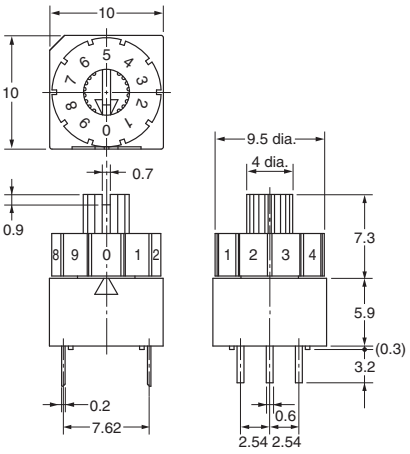
● **Extended Actuator Type, 16 Positions**
A6A-16RS
A6A-16CS



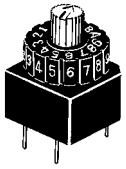


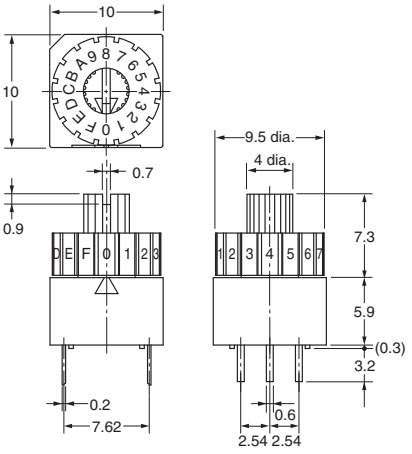
● **Wheel Type, 10 Positions**
A6A-10RW
A6A-10CW





● **Wheel Type, 16 Positions**
A6A-16RW
A6A-16CW

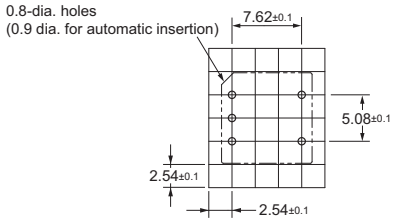




Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

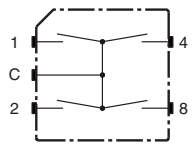
■PCB Dimensions (Top View)

(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**
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