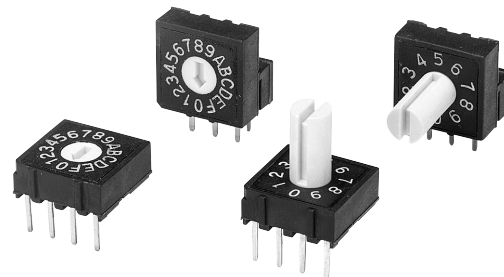


Through-hole Mounting Rotary DIP Switches

- Top/side-actuated, and Flat/extended-actuator models are available.
- Actuator with an O-ring sealed structure prevents the ingress of dirt and dust.
- Terminal arrangement of 4 × 1 and 3 × 3 allow high flexibility in the PCB design.



List of Models

				Type	Top-actuated, Flat	Top-actuated, Extended-actuator	Side-actuated, Flat	Side-actuated, Extended-actuator
Number of positions	Quantity per tube	Terminal arrangement	Output code					
10	48	4 × 1	BCD Decimal		A6R-101RF	A6R-101RS	A6RV-101RF	A6RV-101RS
		3 × 3			A6R-102RF	A6R-102RS	A6RV-102RF	A6RV-102RS
16	48	4 × 1	BCD Hexadecimal		A6R-161RF	A6R-161RS	A6RV-161RF	A6RV-161RS
		3 × 3			A6R-162RF	A6R-162RS	A6RV-162RF	A6RV-162RS

Note: Order in multiples of the package quantity.

Ratings/Characteristics

Rating (resistive load)	25 mA at 24 VDC 10 μA (minimum current) at 3.5 VDC
Ambient operating temperature	−25 to +80°C 60%RH max. (with no icing or condensation)
Ambient operating humidity	35% to 95% (at +5 to +35°C)
Insulation resistance	100 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 5,000 steps min.
Washing	Not possible
Degree of protection	IEC IP60
Operating torque	1.96 × 10 ^{−2} N·m (2 gf·m) max.
Weight	Top-actuated: Approx. 0.6 g Side-actuated: Approx. 0.8 g (Add 0.13 g for the extended-actuator type of each model.)

Output Codes

10-position Models

Code	BCD Decimal code			
Position	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

16-position Models

Code	BCD Hexadecimal code			
Position	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

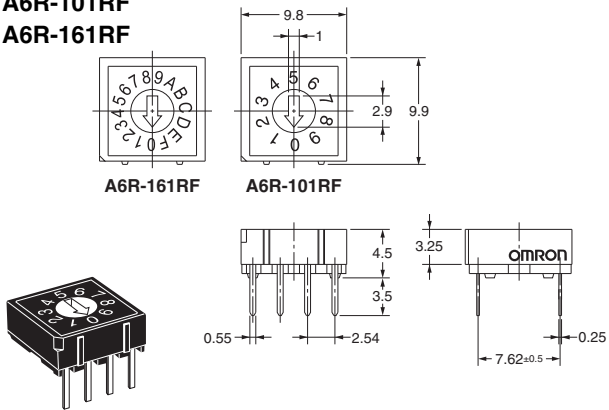
Note: "●" indicates that the internal switch is ON.

■ Dimensions (Unit: mm)

● Top-actuated Flat Models with 4 × 1 Terminal Arrangement

A6R-101RF

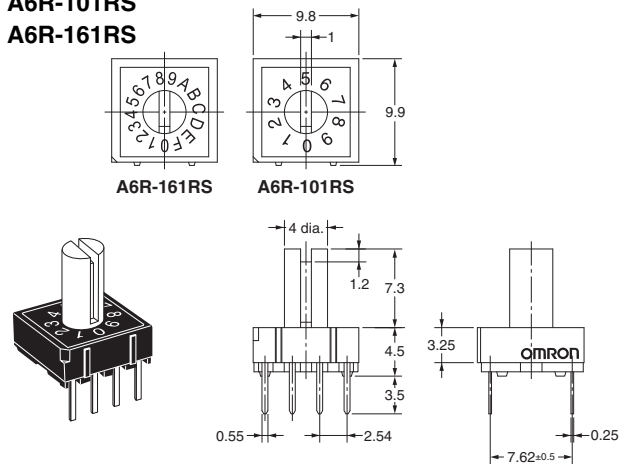
A6R-161RF



● Top-actuated Extended-actuator Models with 4 × 1 Terminal Arrangement

A6R-101RS

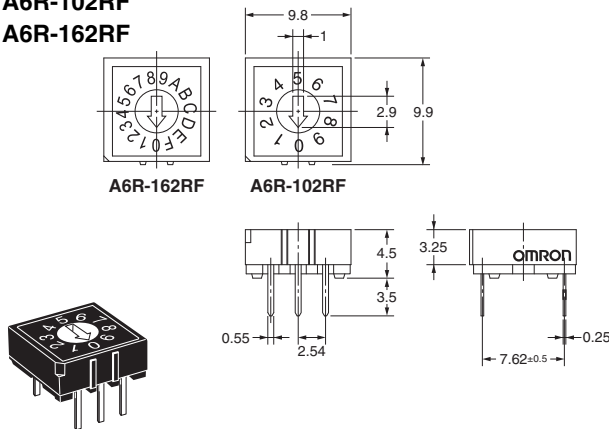
A6R-161RS



● Top-actuated Flat Models with 3 × 3 Terminal Arrangement

A6R-102RF

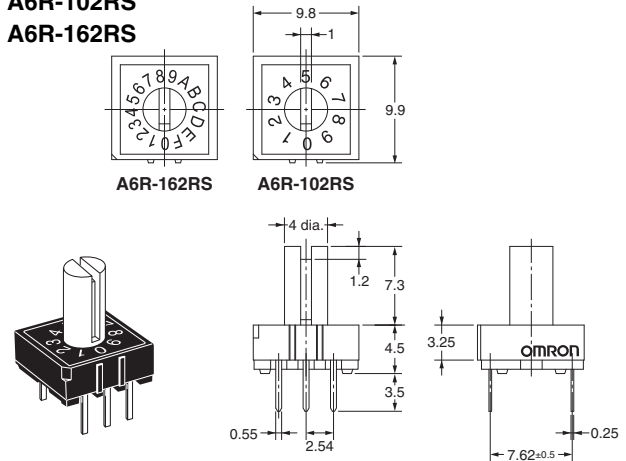
A6R-162RF



● Top-actuated Extended-actuator Models with 3 × 3 Terminal Arrangement

A6R-102RS

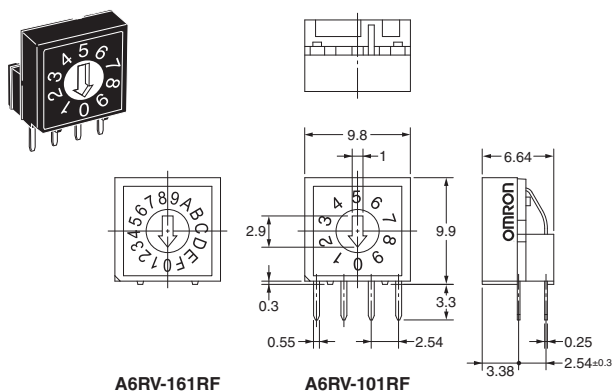
A6R-162RS



● Side-actuated Flat Models with 4 × 1 Terminal Arrangement

A6RV-101RF

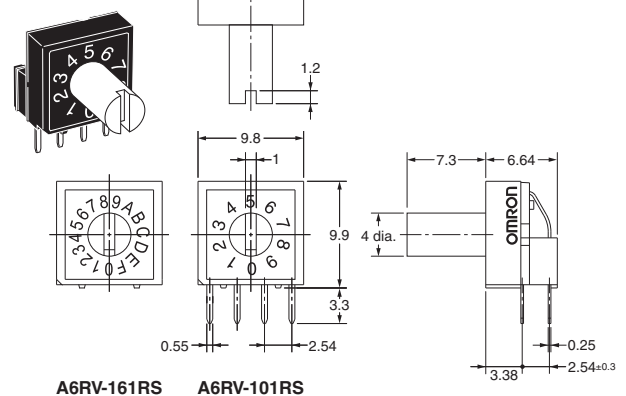
A6RV-161RF



● Side-actuated Extended-actuator Models with 4 × 1 Terminal Arrangement

A6RV-101RS

A6RV-161RS

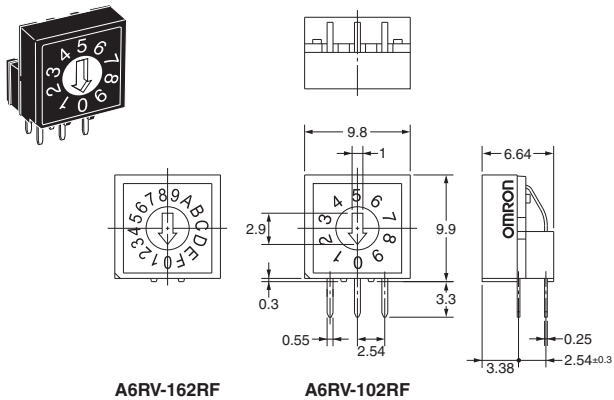


Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

● Side-actuated Flat Models with 3 × 3 Terminal Arrangement

A6RV-102RF

A6RV-162RF



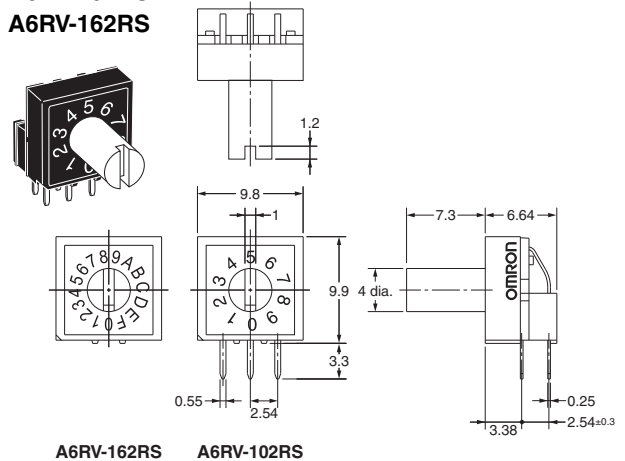
A6RV-162RF

A6RV-102RF

● Side-actuated Extended-actuator Models with 3 × 3 Terminal Arrangement

A6RV-102RS

A6RV-162RS



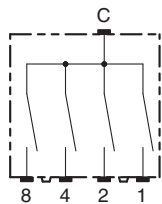
A6RV-162RS

A6RV-102RS

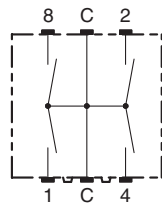
■ Internal Connections

Contact Form (Top View)

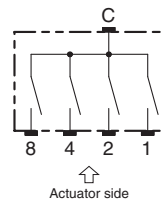
Top-actuated Models
with 4 × 1 Terminal
Arrangement



Top-actuated Models
with 3 × 3 Terminal
Arrangement

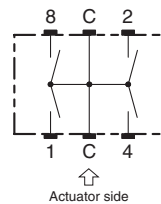


Side-actuated Models
with 4 × 1 Terminal
Arrangement



Actuator side

Side-actuated Models
with 3 × 3 Terminal
Arrangement

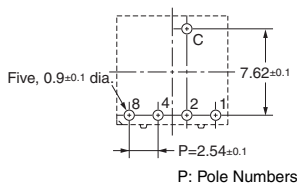


Actuator side

■ PCB Dimensions (Reference) (Unit: mm)

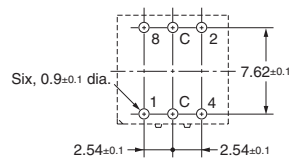
(Top View)

Top-actuated Models
with 4 × 1 Terminal
Arrangement

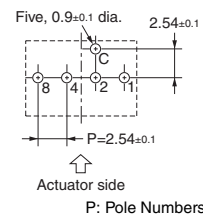


P: Pole Numbers

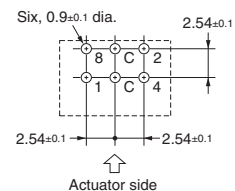
Top-actuated Models
with 3 × 3 Terminal
Arrangement



Side-actuated Models
with 4 × 1 Terminal
Arrangement

Actuator side
P: Pole Numbers

Side-actuated Models
with 3 × 3 Terminal
Arrangement



Actuator side

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

■ Precautions

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

Please check each region's Terms & Conditions by region website.

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