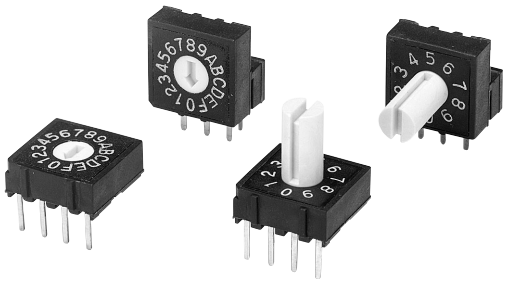
OMRON

Rotary DIP Switch

A6R/A6RV

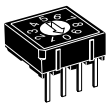
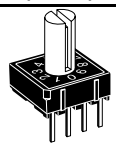
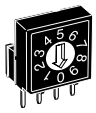
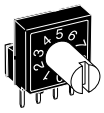
Low-cost Rotary DIP Switches

- Series includes top-actuated, side-actuated, flat, and extended-shaft models.
- The rotor has an O-ring sealed construction that prevents the ingress of dirt and dust.
- Two different types of terminal arrangement are available for each model to allow flexibility in the circuit design.



Ordering Information

■ List of Models

Type (rotor color)				Top-actuated, flat (White)	Top-actuated, extended shaft (White)	Side-actuated, flat (White)	Side-actuated, extended shaft (White)
Appearance							
Number of positions	Quantity per stick	Terminal arrangement	Output code				
10	48	4 × 1	Real code	A6R-101RF	A6R-101RS	A6RV-101RF	A6RV-101RS
		3 × 3	Real code	A6R-102RF	A6R-102RS	A6RV-102RF	A6RV-102RS
16	48	4 × 1	Real code	A6R-161RF	A6R-161RS	A6RV-161RF	A6RV-161RS
		3 × 3	Real code	A6R-162RF	A6R-162RS	A6RV-162RF	A6RV-162RS

Note: Switches are delivered in units of 48. Orders must be made in multiples of 48.

Specifications

■ Ratings/Characteristics

Rating	25 mA at 24 VDC
Ambient operating temperature	−25 to 80°C (with no icing or condensation)
Ambient operating humidity	35% to 95%
Insulation resistance	100 MΩ min. (at 250 VDC)
Contact resistance	200 mΩ max. (initial value)
Dielectric strength	250 VAC for 1 minute between terminals of the same polarity
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction: Approx. 300 m/s^2
Electrical life expectancy	5,000 steps min.
Operating torque	1.96×10^{-2} N·m max.
Weight	4×1, top-actuated: 0.64 g 3×3, top-actuated: 0.62 g 4×1, side-actuated: 0.8 g 3×3, side-actuated: 0.83 g (Add 0.13 g for the extended-shaft version of each model.)

■ Output Codes

10-position Models

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

16-position Models

Code	Real 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.

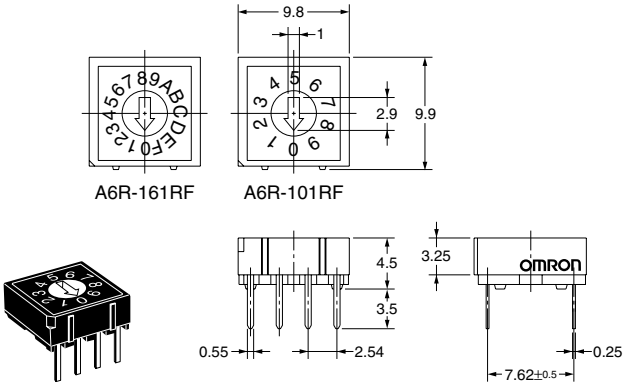
Dimensions

Note: **1.** All units are in millimeters unless otherwise indicated.

2. A tolerance of ±0.4 mm applies to the above dimensions unless otherwise specified.

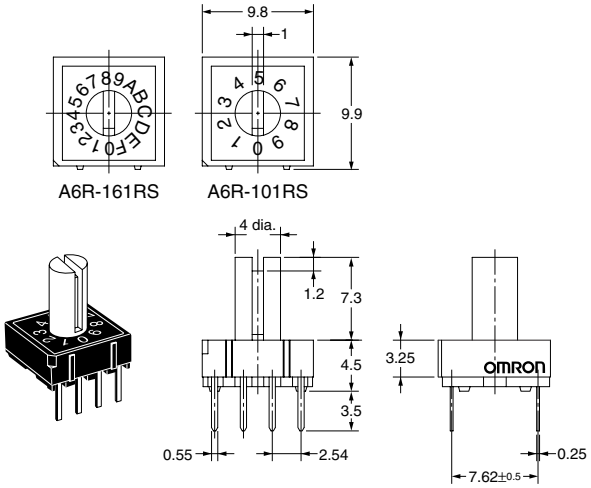
Top-actuated Flat Models with 4×1 Terminal Arrangement

A6R-101RF
A6R-161RF



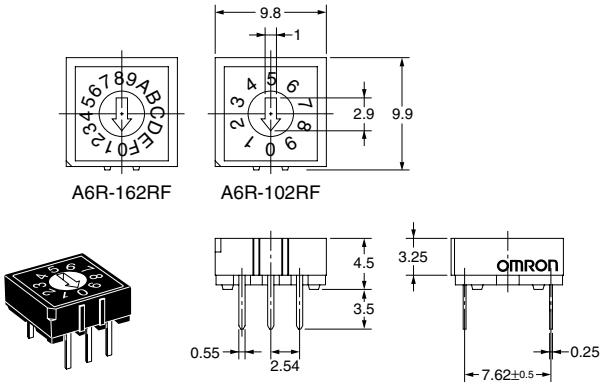
Top-actuated Extended-shaft Models with 4×1 Terminal Arrangement

A6R-101RS
A6R-161RS



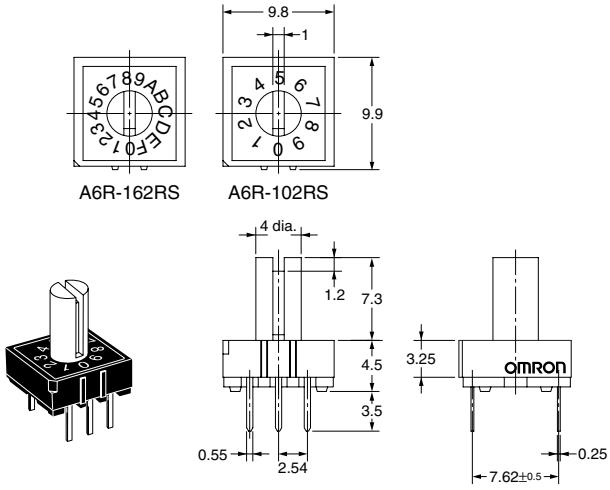
Top-actuated Flat Models with 3×3 Terminal Arrangement

A6R-102RF
A6R-162RF



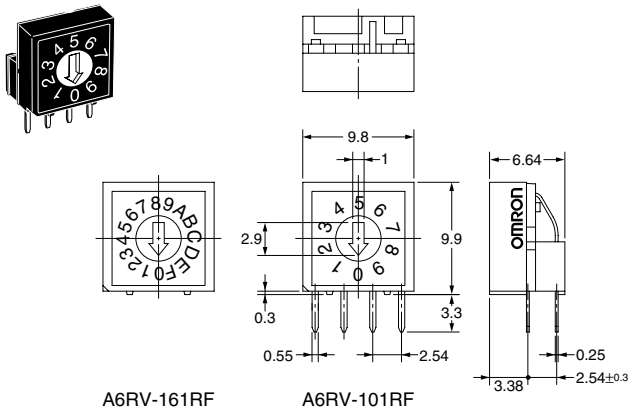
Top-actuated Extended-shaft Models with 3×3 Terminal Arrangement

A6R-102RS
A6R-162RS



Side-actuated Flat Models with 4×1 Terminal Arrangement

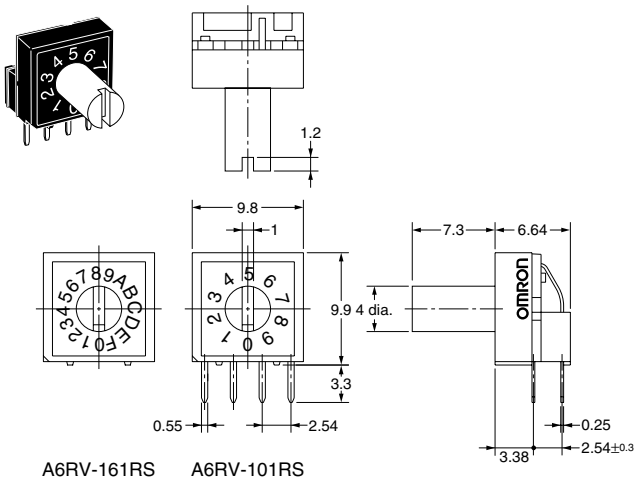
A6RV-101RF
A6RV-161RF



A6RV-161RF A6RV-101RF

Side-actuated Extended-shaft Models with 4×1 Terminal Arrangement

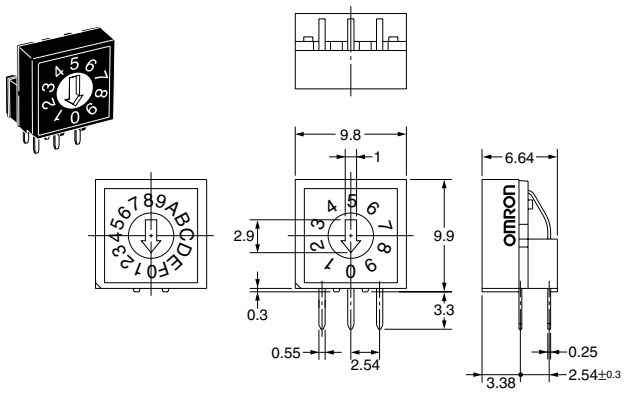
A6RV-101RS
A6RV-161RS



A6RV-161RS A6RV-101RS

Side-actuated Flat Models with 3×3 Terminal Arrangement

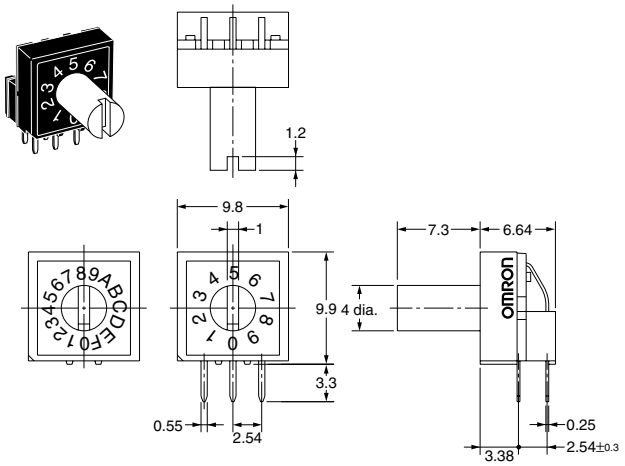
A6RV-102RF
A6RV-162RF



A6RV-162RF A6RV-102RF

Side-actuated Extended-shaft Models with 3×3 Terminal Arrangement

A6RV-102RS
A6RV-162RS

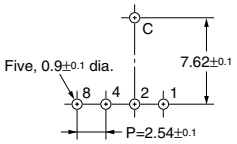


A6RV-162RS A6RV-102RS

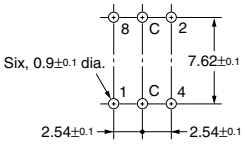
■ PCB Cutout Dimensions

Top-actuated Models

4×1 Terminal Arrangement

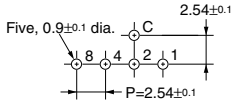


3×3 Terminal Arrangement

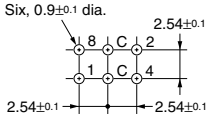


Side-actuated Models

4×1 Terminal Arrangement



3×3 Terminal Arrangement



Precautions

Be sure to refer to General Precautions on pages 4 to 6 for details on proper 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.

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