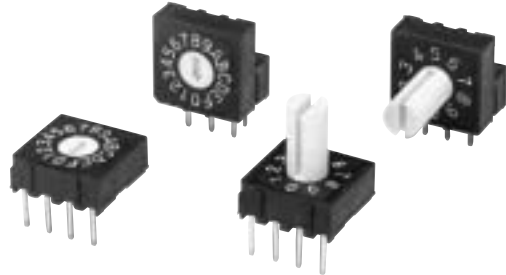


Rotary DIP Switch

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

Number of positions	Quantity per stick	Terminal arrangement	Output code	Type (rotor color)			
				Top-actuated, flat (White)	Top-actuated, extended shaft (White)	Side-actuated, flat (White)	Side-actuated, extended shaft (White)
				Appearance			
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

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

16-position Models

Position	Code			
	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.

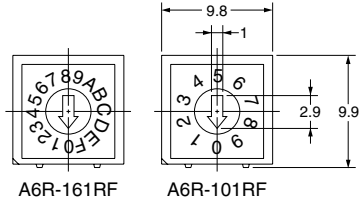
Dimensions

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.

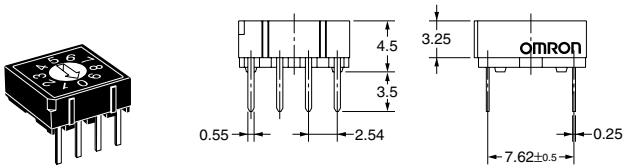
Top-actuated Flat Models with 4x1 Terminal Arrangement

A6R-101RF
A6R-161RF



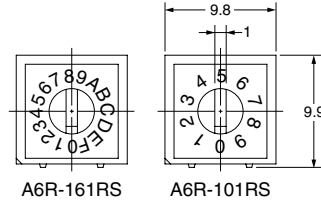
A6R-161RF

A6R-101RF



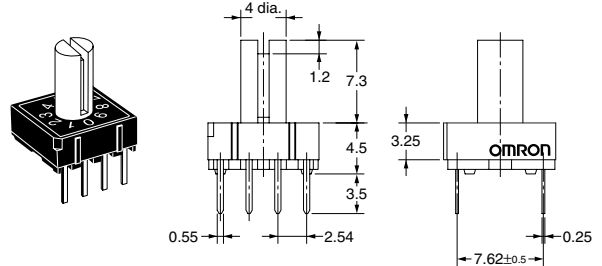
Top-actuated Extended-shaft Models with 4x1 Terminal Arrangement

A6R-101RS
A6R-161RS



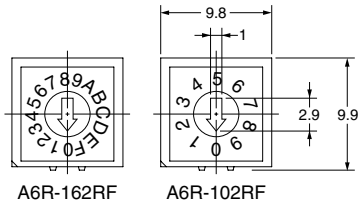
A6R-161RS

A6R-101RS



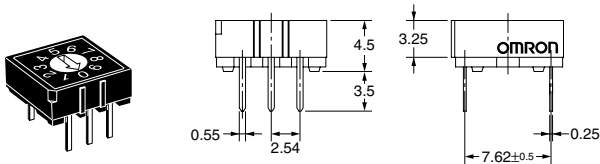
Top-actuated Flat Models with 3x3 Terminal Arrangement

A6R-102RF
A6R-162RF



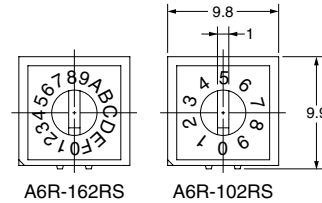
A6R-162RF

A6R-102RF



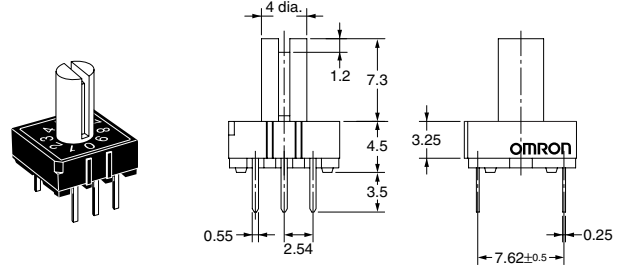
Top-actuated Extended-shaft Models with 3x3 Terminal Arrangement

A6R-102RS
A6R-162RS



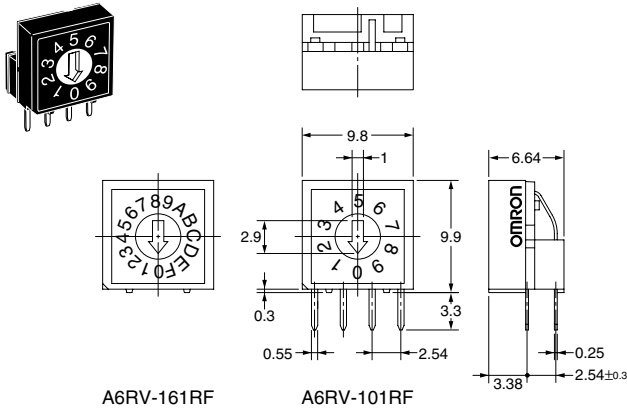
A6R-162RS

A6R-102RS



Side-actuated Flat Models with 4×1 Terminal Arrangement

A6RV-101RF
A6RV-161RF

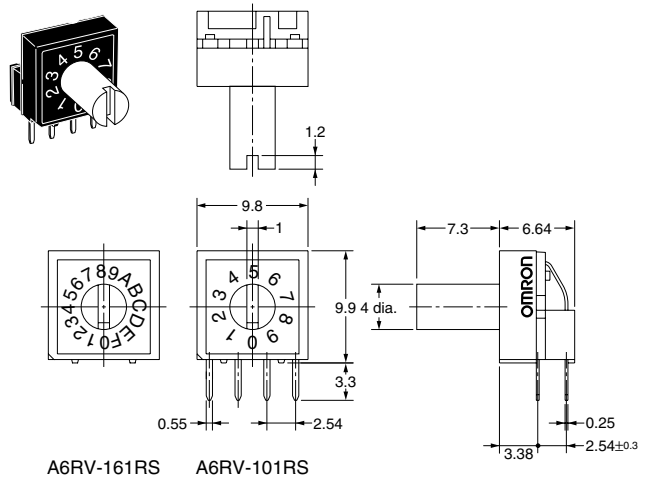


A6RV-161RF

A6RV-101RF

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

A6RV-101RS
A6RV-161RS

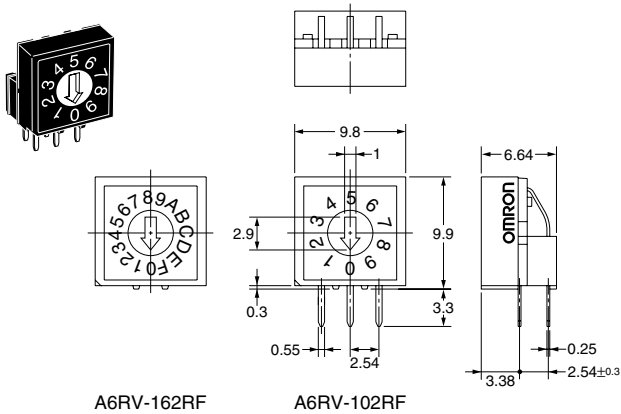


A6RV-161RS

A6RV-101RS

Side-actuated Flat Models with 3×3 Terminal Arrangement

A6RV-102RF
A6RV-162RF

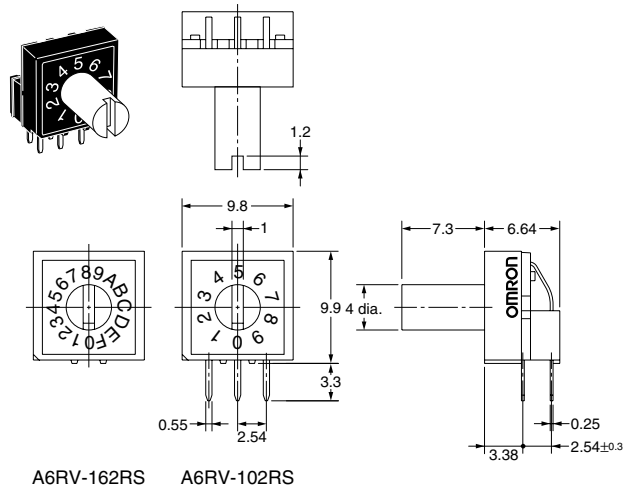


A6RV-162RF

A6RV-102RF

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

A6RV-102RS
A6RV-162RS



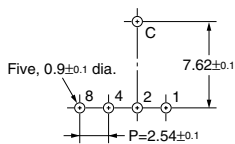
A6RV-162RS

A6RV-102RS

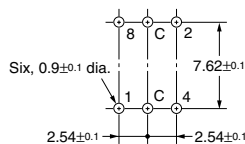
PCB Cutout Dimensions

Top-actuated Models

4×1 Terminal Arrangement

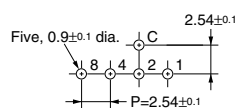


3×3 Terminal Arrangement

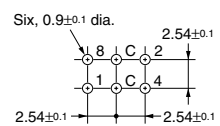


Side-actuated Models

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.