

A6R/ A6RV



Cost Effective Rotary Switch

- O-Ring sealed construction to prevent the ingress of dirt and dust
- Top Actuated Rotor, with flush or extended shaft
- Real Code Output, Decimal or Hexadecimal
- Choose from 4x1 (101 and 161) or 3x3 (102 and 162) terminal arrangement
- RoHS Compliant

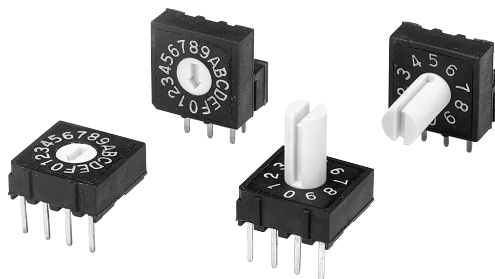
Part	Number of Poles or Positions	Output Code Type	Actuator types	Operating Force	Dielectric strength (AC for 1 min)	Termination Style	Packaging Type
A6R-101RF	10	BCD, 1-2-4-8	Rotary, Top Actuated / Flat	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-101RS	10	BCD, 1-2-4-8	Rotary, Top Actuated / Extended Shaft	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-102RF	10	BCD, 1-2-4-8	Rotary, Top Actuated / Flat	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-102RS	10	BCD, 1-2-4-8	Rotary, Top Actuated / Extended Shaft	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-161RF	16	BCD Hexadecimal	Rotary, Top Actuated / Flat	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-161RS	16	BCD Hexadecimal	Rotary, Top Actuated / Extended Shaft	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-162RF	16	BCD Hexadecimal	Rotary, Top Actuated / Flat	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6R-162RS	16	BCD Hexadecimal	Rotary, Top Actuated / Extended	200 g-cm max	250 VAC	Through-Hole PCB - Straight	N/A

			Shaft				
A6RV-101RF	10	BCD, 1-2-4-8	Rotary, Side Actuated / Flat	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-101RS	10	BCD, 1-2-4-9	Rotary, Side-Actuated / Extended Shaft	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-102RF	10	BCD, 1-2-4-10	Rotary, Side Actuated / Flat	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-102RS	10	BCD, 1-2-4-11	Rotary, Side-Actuated / Extended Shaft	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-161RF	16	BCD Hexadecimal	Rotary, Side Actuated / Flat	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-161RS	16	BCD Hexadecimal	Rotary, Side-Actuated / Extended Shaft	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-162RF	16	BCD Hexadecimal	Rotary, Side Actuated / Flat	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A
A6RV-162RS	16	BCD Hexadecimal	Rotary, Side-Actuated / Extended Shaft	200g-cm max	250 VAC	Through-Hole PCB - Straight	N/A

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 arrangements are available for each model to allow flexibility of circuit design.
- RoHS Compliant.



Ordering Information

List of Models

				Type	Top-actuated, flat	Top-actuated, extended shaft	Side-actuated, flat	Side-actuated, extended shaft
				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. Order 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	ON			
2		ON		
3	ON	ON		
4			ON	
5	ON		ON	
6		ON	ON	
7	ON	ON	ON	
8				ON
9	ON			ON

16-position Models

Position	Code			
	1	2	4	8
0				
1	ON			
2		ON		
3	ON	ON		
4			ON	
5	ON		ON	
6		ON	ON	
7	ON	ON	ON	
8				ON
9	ON			ON
A		ON		ON
B	ON	ON		ON
C			ON	ON
D	ON		ON	ON
E		ON	ON	ON
F	ON	ON	ON	ON

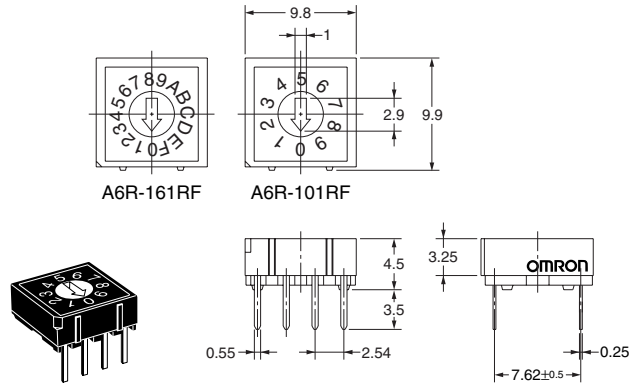
Note: "ON" indicates that the internal switch is ON.

Dimensions

Unit: mm

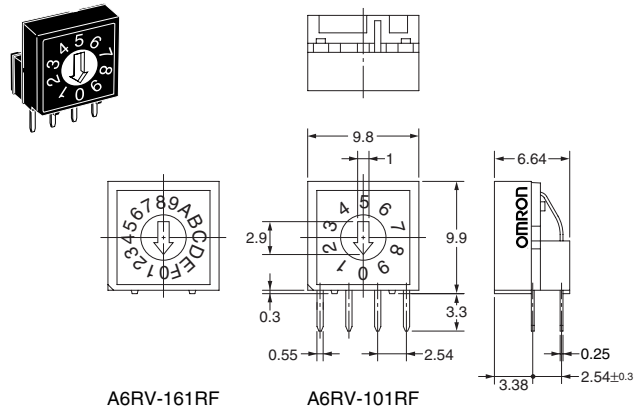
Top-Actuated Flat Models with 4x1 Terminal Arrangement

A6R-101RF
A6R-161RF



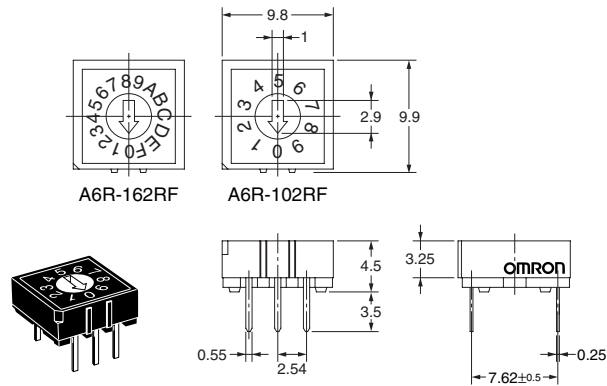
Side-Actuated Flat Models with 4x1 Terminal Arrangement

A6RV-101RF
A6RV-161RF



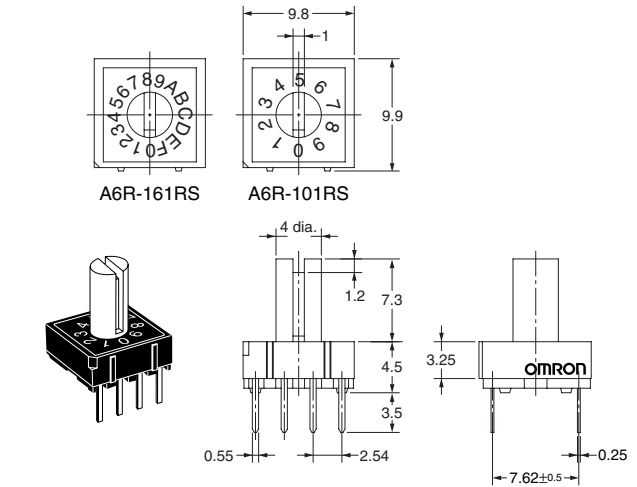
Top-Actuated Flat Models with 3x3 Terminal Arrangement

A6R-102RF
A6R-162RF



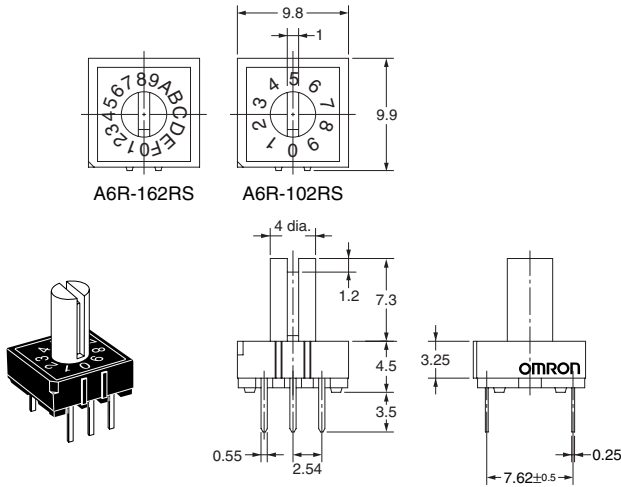
Top-Actuated Extended-Shaft Models with 4x1 Terminal Arrangement

A6R-101RS
A6R-161RS



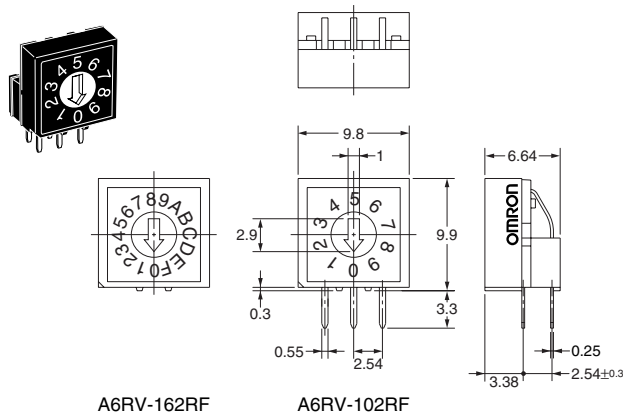
Top-Actuated Extended-Shaft Models with 3x3 Terminal Arrangement

**A6R-102RS
A6R-162RS**



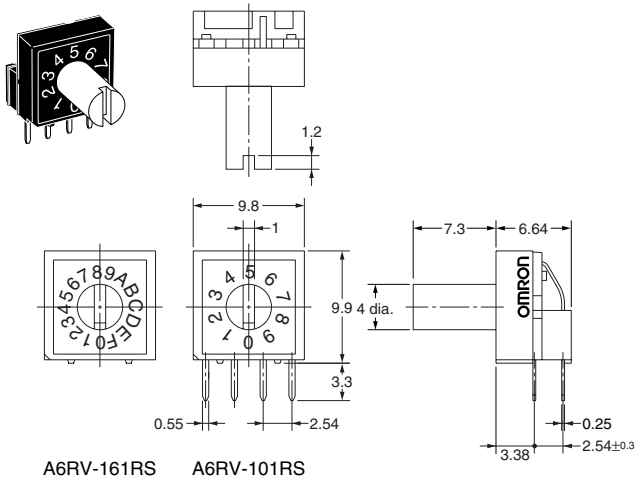
Side-Actuated Flat Models with 3x3 Terminal Arrangement

**A6RV-102RF
A6RV-162RF**



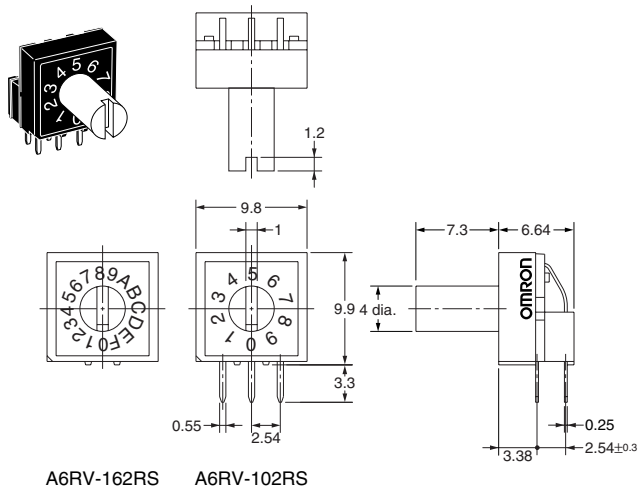
Side-Actuated Extended-Shaft Models with 4x1 Terminal Arrangement

**A6RV-101RS
A6RV-161RS**



Side-Actuated Extended-Shaft Models with 3x3 Terminal Arrangement

**A6RV-102RS
A6RV-162RS**

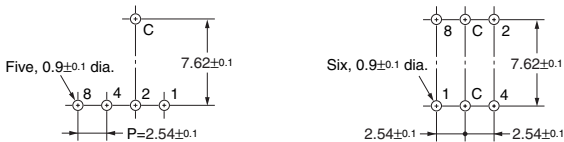


Note: A tolerance of ± 0.4 mm applies to the above dimensions unless otherwise specified.

PCB Cutout Dimensions

Top-Actuated Models

4x1 Terminal Arrange- 3x3 Terminal Arrange-



Side-Actuated Models

4x1 Terminal Arrange- 3x3 Terminal Arrange-

