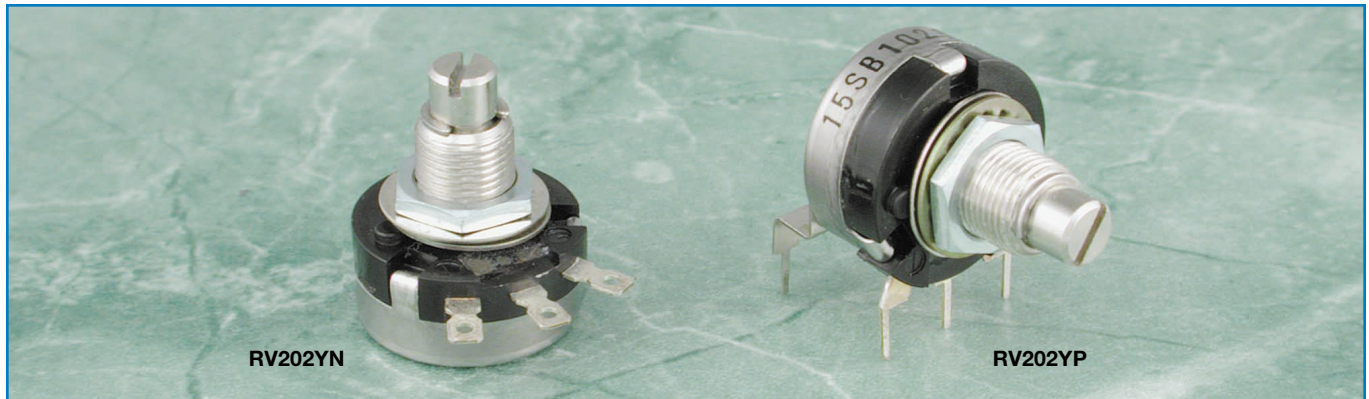


20mm Diameter, Single-Turn, Carbon Industrial Panel Controls



Features

- 20mm diameter, single-turn industrial panel controls
- Carbon film element
- Single unit, single shaft
- Linear or audio tapers
- Available in right angle mounting styles only
- Metal shaft and bushing
- 6mm diameter shafts in slot, flat or round end styles
- Standard 15mm or 20mm shaft length
- Panel or PC board mounting styles
- Lug or right angle mount pin terminals

Specifications

Electrical

| | |
|--|--|
| Standard Resistance Range | B = 500Ω to 2MΩ A,C = 1kΩ to 2MΩ |
| Resistance Tolerance | ±10% standard |
| End Resistance | 3Ω max. |
| Resistance Taper | B = linear; A = CW audio (logarithm); C = CCW audio (logarithm) |
| Peak Noise (C.R.V.) | .2% max. |
| Power Rating | B = 0.25 watt; A,C = 0.125 watt at +40°C, 0 watt at +85°C |
| Maximum Input Voltage | 350VDC or power rating, whichever is smaller |
| Insulation Resistance | 100MΩ minimum at 1,000VDC |
| Dielectric Strength | 1,000VAC, 1 minute |
| Adjustment Travel | 270° ±10° |

Mechanical

| | |
|--------------------------------------|---|
| Mechanical Travel | 290° ±5° |
| Shaft Torque | 50 to 300 gf·cm (0.693 to 4.159 oz·in) |
| Stop Strength | 9 kgf·cm (124.76 oz·in) max. |
| Mounting Nut Torque | 15 kgf·cm (207.94 oz·in) max. |
| Solderability | 235°C, 5 seconds |
| Marking | Model type, taper, resistance code, shaft type, terminal identification, date code |

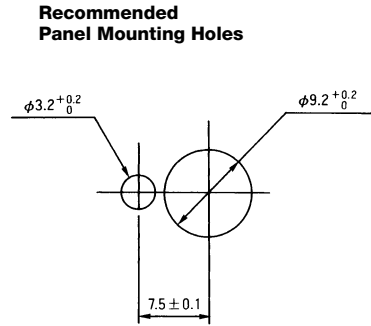
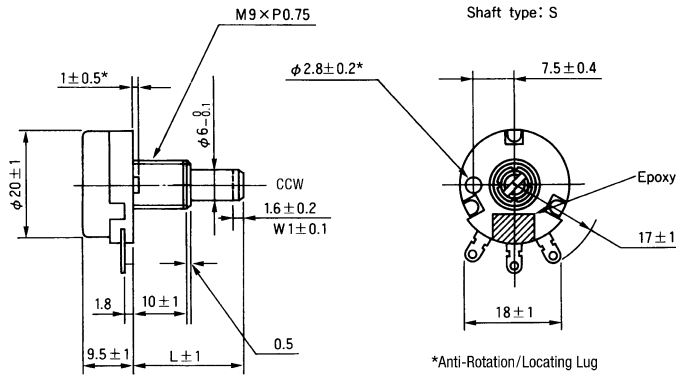
Environmental

| | |
|--|---|
| Temperature Range | -10°C to +85°C |
| Temperature Characteristics | +80°C, 5 hours without load ΔT/R ≤ ±10% |
| Load Life | +40°C, 0.25 watt, 1,000 hours ΔT/R ≤ ±10% |
| Moisture and Load Life | +40°C, 90-95% RH, 500 hours with rated load ΔT/R ≤ ±10% |
| Thermal Shock | -10°C ~ +85°C, 5 cycles without load ΔT/R ≤ ±10% |
| Vibration | 10-55Hz, 1.5mm amplitude, 3 directions, 2 hours each ΔT/R ≤ ±4% |
| Soldering Heat Resistance | 350°C, 3 seconds ΔT/R ≤ ±2% |
| Rotational Life | 15,000 cycles without load ΔT/R ≤ ±7% |

R = Total Resistance Value; ΔT/R = Total Resistance Change

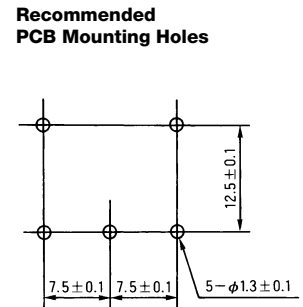
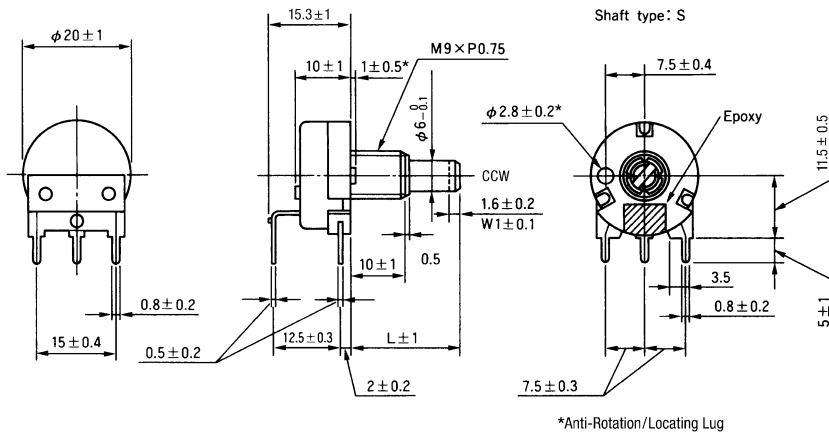
RV202YN

**Panel Mount, Single Unit, Single Shaft
Right Angle Ear-Lug Terminals**



RV202YP

**PCB Mount, Single Unit, Single Shaft
Right Angle Mount Pin Terminals, 3-Pin Inline Pattern, 2-Pin Standoff Rear Support Bracket**



RV 202 Y N 20 S B 103 K

NOTE: FMS = From Mounting Surface

- ➔ **Resistance Tolerance: K** = ±10% (standard).
- ➔ **Resistance Code:** Expressed in ohms. A three digit code where the first two digits are significant figures, and the third digit indicates the number of zeros that follow these figures (i.e., 100 = 10Ω; 101 = 100Ω; 102 = 1,000Ω; 103 = 10,000Ω; 105 = 1,000,000Ω). See table for standard resistance values.
- ➔ **Resistance Taper: B** = Linear.
A = CW Audio (logarithm).
C = CCW Audio (logarithm).
- ➔ **Shaft End Style: S** = Slotted.
F = Flatted.
R = Round.
- ➔ **Standard Shaft Length: 15** = 15mm FMS.
20 = 20mm FMS.
 Up to 30mm shaft length available (special order).
- ➔ **Style: N** = Panel Mount, Single Unit, Single Shaft, Right Angle Ear-Lug Terminals.
P = PCB Mount, Single Unit, Single Shaft, Right Angle Mount Pin Terminals, 3-Pin Inline Pattern, 2-Pin Standoff Rear Support Bracket.
- ➔ **Operating Temperature Range: Y** = -10°C to +85°C.
- ➔ **Size and Style: 20** = 20mm Diameter; **2** = Style of 20mm Size.
- ➔ **TOCOS Series Name: RV** = Carbon Film Element.

Standard Resistance Values and Part Numbering Codes

Standard Nominal Total Resistance Values and Part Numbering Codes

| Resistance (Ω) | Code | Resistance (Ω) | Code | Resistance (Ω) | Code | Resistance (Ω) | Code | Resistance (Ω) | Code |
|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|
| 500 | 501 | 1,000 | 102 | 10,000 | 103 | 100,000 | 104 | 1,000,000 | 105 |
| | | 2,000 | 202 | 20,000 | 203 | 200,000 | 204 | 2,000,000 | 205 |
| | | 5,000 | 502 | 50,000 | 503 | 500,000 | 504 | | |

Refer to Shaft End Styles Specifications and Hardware Specifications for details and availability.
 For additional information, refer to Guidelines and Precautions for Using Panel Controls.