



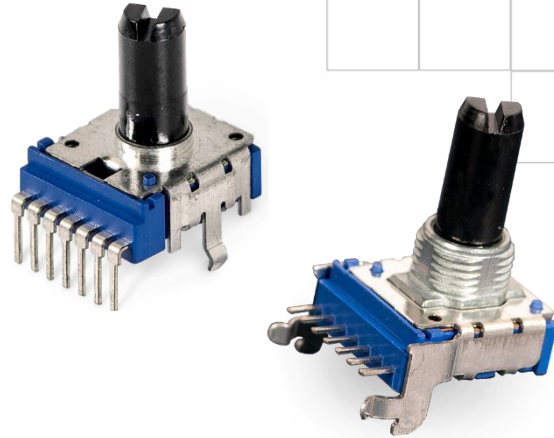
Series 14VR

14mm Panel Potentiometer

- Standard 14mm package size
- Rotational life (15,000 cycles)
- Wide temperature range (-10°C to +70°C)
- Dual output with excellent tracking (± 2 dB)
- Variety of standard resistances & tapers

Applications

- Consumer portable electronics
- Commercial appliances
- Instrument amplifiers and guitar effects
- Keyboards and synthesizers
- Communications equipment



Ordering Information

Series	Element	Terminal Configuration	Shaft Length	Shaft Trim	Mechanical Travel	Detent Option	Resistance Code	Resistance Taper																																						
14VR	2	H	20	F	2	N	103	B1																																						
		<table><tr><th>Code</th><th>Spec.</th></tr><tr><td>X</td><td>Horizontal/Side Mount Bushingless, PC Pins, 10mm Height</td></tr><tr><td>H</td><td>Vertical/Rear Mount Thread Bushing, PC Pins</td></tr><tr><td>K</td><td>Vertical/Rear Mount Sleeve Bushing, PC Pins</td></tr><tr><td>Y</td><td>Horizontal/Side Mount Thread Bushing, PC Pins, 10mm Height</td></tr><tr><td>U</td><td>Vertical/Rear Mount Bushingless, PC Pins</td></tr></table>	Code	Spec.	X	Horizontal/Side Mount Bushingless, PC Pins, 10mm Height	H	Vertical/Rear Mount Thread Bushing, PC Pins	K	Vertical/Rear Mount Sleeve Bushing, PC Pins	Y	Horizontal/Side Mount Thread Bushing, PC Pins, 10mm Height	U	Vertical/Rear Mount Bushingless, PC Pins	<table><tr><th>Code</th><th>Spec.</th></tr><tr><td>F</td><td>Flatted</td></tr></table>	Code	Spec.	F	Flatted			<table><tr><th>Code</th><th>Spec.</th></tr><tr><td>N</td><td>No Detent</td></tr><tr><td>C</td><td>Center Detent</td></tr></table>	Code	Spec.	N	No Detent	C	Center Detent	<table><tr><th>Code</th><th>Spec.**</th></tr><tr><td>A2</td><td>10% Log</td></tr><tr><td>A3</td><td>15% Log</td></tr><tr><td>B1</td><td>linear</td></tr><tr><td>C3</td><td>15% Antilog</td></tr></table>	Code	Spec.**	A2	10% Log	A3	15% Log	B1	linear	C3	15% Antilog							
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* See shaft trim options for available lengths.

** Other JIS tapers are available. See charts.

Electrical Specifications

	Min	Typical	Max	Unit
Total Resistance Tolerance	-20	—	+20	%
Power Rating	—	+0.05	—	watt
Operating Voltage	—	—	+50	VAC
Residual Resistance	—	—	+30	Ω
Slider Noise	—	—	+100	mV
Tracking Error	-2	—	+2	dB
Insulation Resistance	250 VDC for 1 min.	+100		M Ω
Dielectric Strength	300 VAC for 1 min. no arcing			
Taper	Linear and audio options (see charts)			

Mechanical

Total Mechanical Travel	300° $\pm$ 5°
Operating Torque	30 to 200 gf-cm
Shaft Wobble	
Bushingleess	0.7 x L/20mm p-p max.; L = Shaft Length
With Bushing	0.7 x L/30mm p-p max.; L = Shaft Length
Shaft Push-Pull Strength	8 kgf for 3 sec.
Stop Strength	5 kgf-cm min.
Detent Position	150° $\pm$ 5°
Detent Torque	30 to 300 gf-cm
Rotational Life	15,000 cycles
Panel Nut Tightening Torque	10 kgf-cm
IP Rating	40
Mounting Hardware	One flat washer and one mounting hex nut supplied with bushing option
Packaging	Tray
Weight	3 grams

Environmental

	Min	Typical	Max	Unit
Operating Temperature	-10	—	+70	°C
Storage Temperature	-30	—	+70	°C
Soldering Conditions				
Wave Solder	Preheat: 100°C max for 2 min max; Solder temperature: 260°C $\pm$ 5°C for 5 sec max.; No clean foam flux recommended			
Manual Solder	350°C $\pm$ 5°C for 3 sec max.; Sn95Ag5 no clean solder			
Wash	Not recommended			
Moisture Sensitivity Level	1			
ESD Classification (HBM)	Not applicable			

All testing is performed at room ambient conditions except as noted. Users should verify device actual performance in their specific applications
This product is compliant to RoHS3 Directive 2015/863 Amendments of Annex II on 31 March 2015, and REACH SVHC Directive EC 1907/2006 Amendments of Annex XIV & Annex XVII on 15 January 2018.
Custom and value-added options available on request. Please contact your sales representative for additional information.



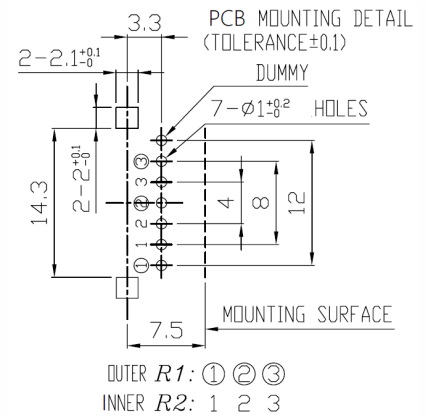
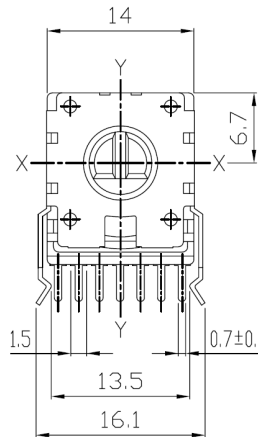
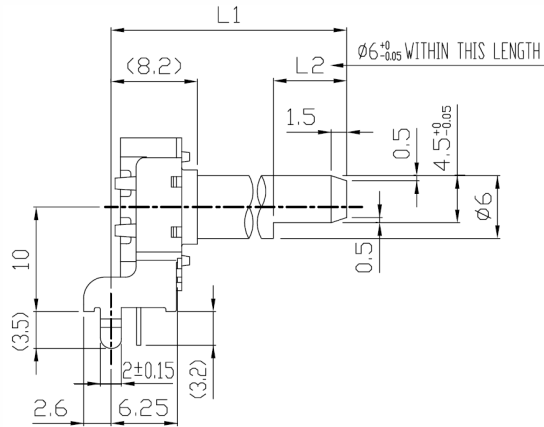
Available Shaft Trim Combinations by Terminal Configuration And Shaft Length

	Shaft Length Options	Shaft Trim Flatted
14VR2X	12.5 mm	
	15 mm	•
	17.5 mm	
	20 mm	•
	22.5 mm	•
	25 mm	•
	27.5 mm	•
	30 mm	•
14VR2H	12.5 mm	•
	15 mm	•
	17.5 mm	•
	20 mm	•
	22.5 mm	•
	25 mm	•
	27.5 mm	
	30 mm	•
14VR2K	12.5 mm	
	15 mm	
	17.5 mm	
	20 mm	•
	22.5 mm	•
	25 mm	•
	27.5 mm	•
	30 mm	•
14VR2Y	12.5 mm	•
	15 mm	•
	17.5 mm	•
	20 mm	•
	22.5 mm	•
	25 mm	•
	27.5 mm	
	30 mm	•
14VR2U	12.5 mm	
	15 mm	•
	17.5 mm	
	20 mm	•
	22.5 mm	•
	25 mm	•
	27.5 mm	•
	30 mm	•

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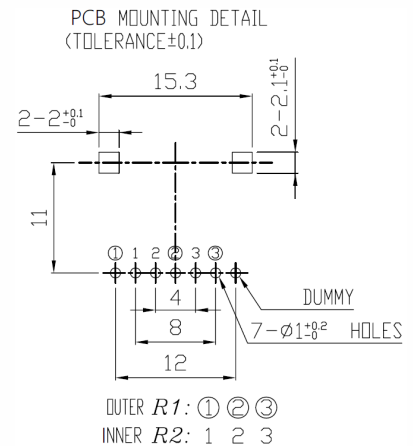
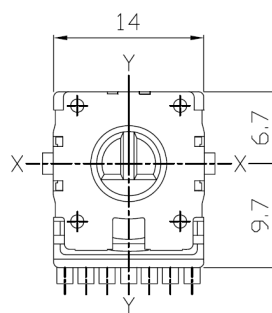
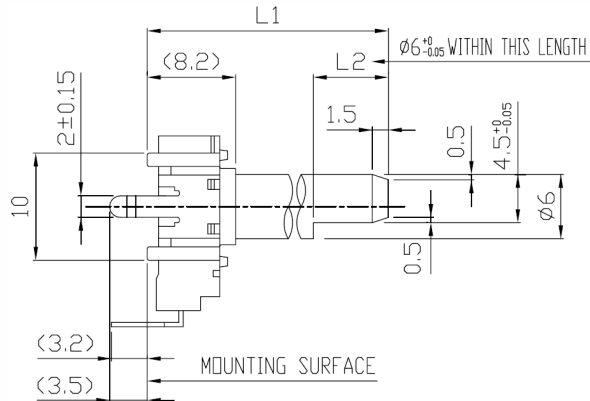
Mechanical Specifications

Series 14VR Horizontal/Side Mount Bushingless

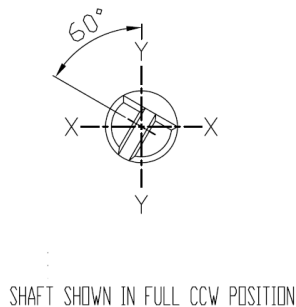


SHAFT SHOWN IN CENTER POSITION
OR CENTER CLICK POSITION

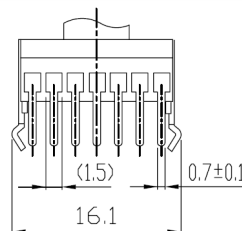
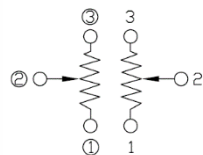
Series 14VR Vertical/Rear Mount Bushingless



SHAFT SHOWN IN CENTER POSITION
OR CENTER CLICK POSITION



CIRCUIT DIAGRAM



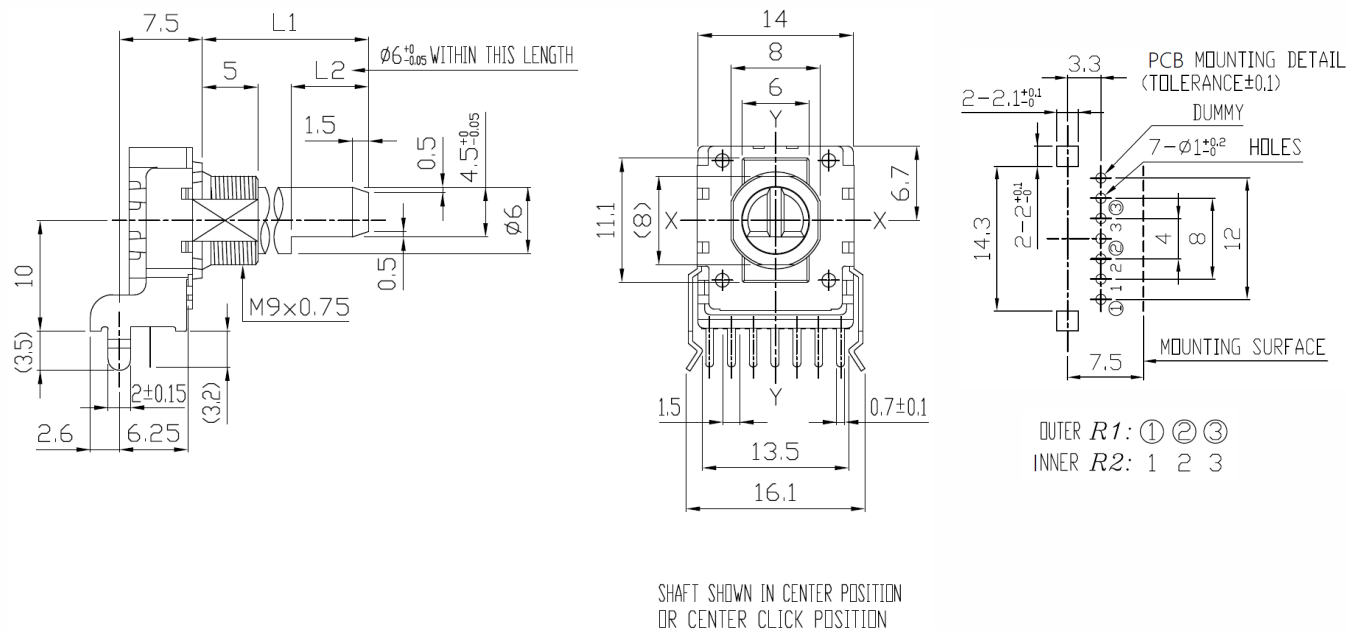
LENGTH	
L1	L2
20	7
22.5	7
25	12
27.5	12
30	12

Unit: mm

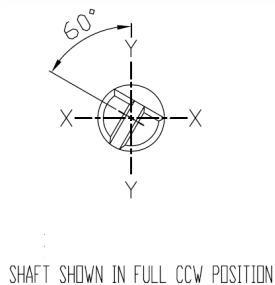
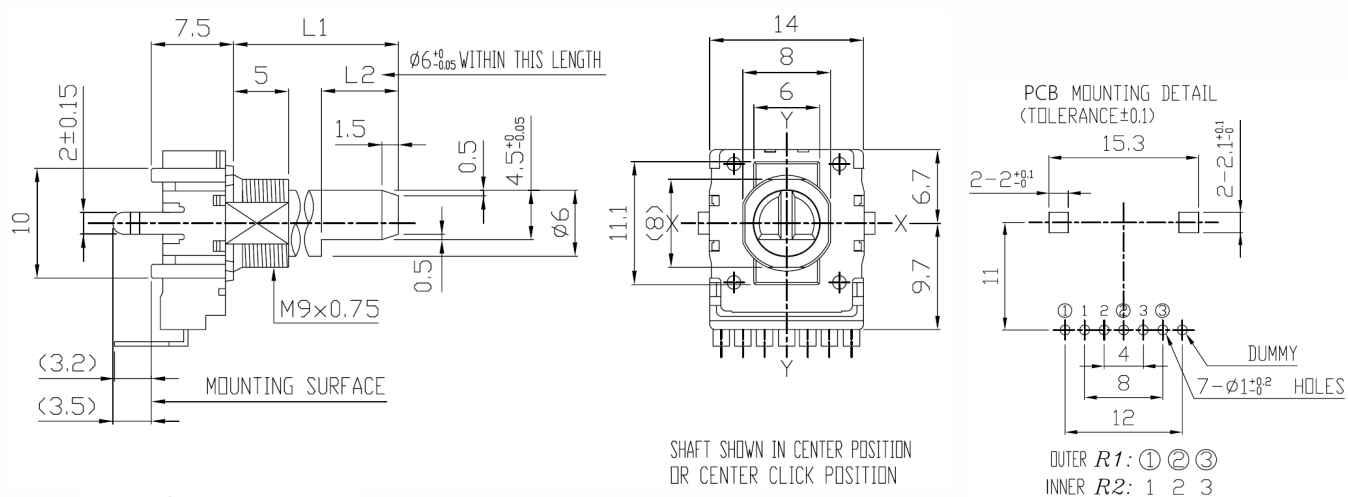
TOLERANCES UNLESS OTHERWISE SPEC	
$L \leq 10$	± 0.3
$10 < L \leq 100$	± 0.5
$100 < L$	± 0.8
ANGULAR DIMENSION	$\pm 5^\circ$

Mechanical Specifications

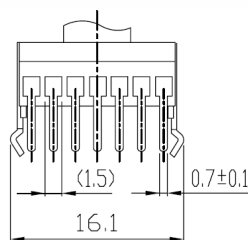
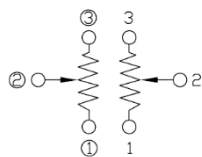
Series 14VR Horizontal/Side Mount with Threaded Bushing



Series 14VR Vertical/Rear Mount with Threaded Bushing



CIRCUIT DIAGRAM



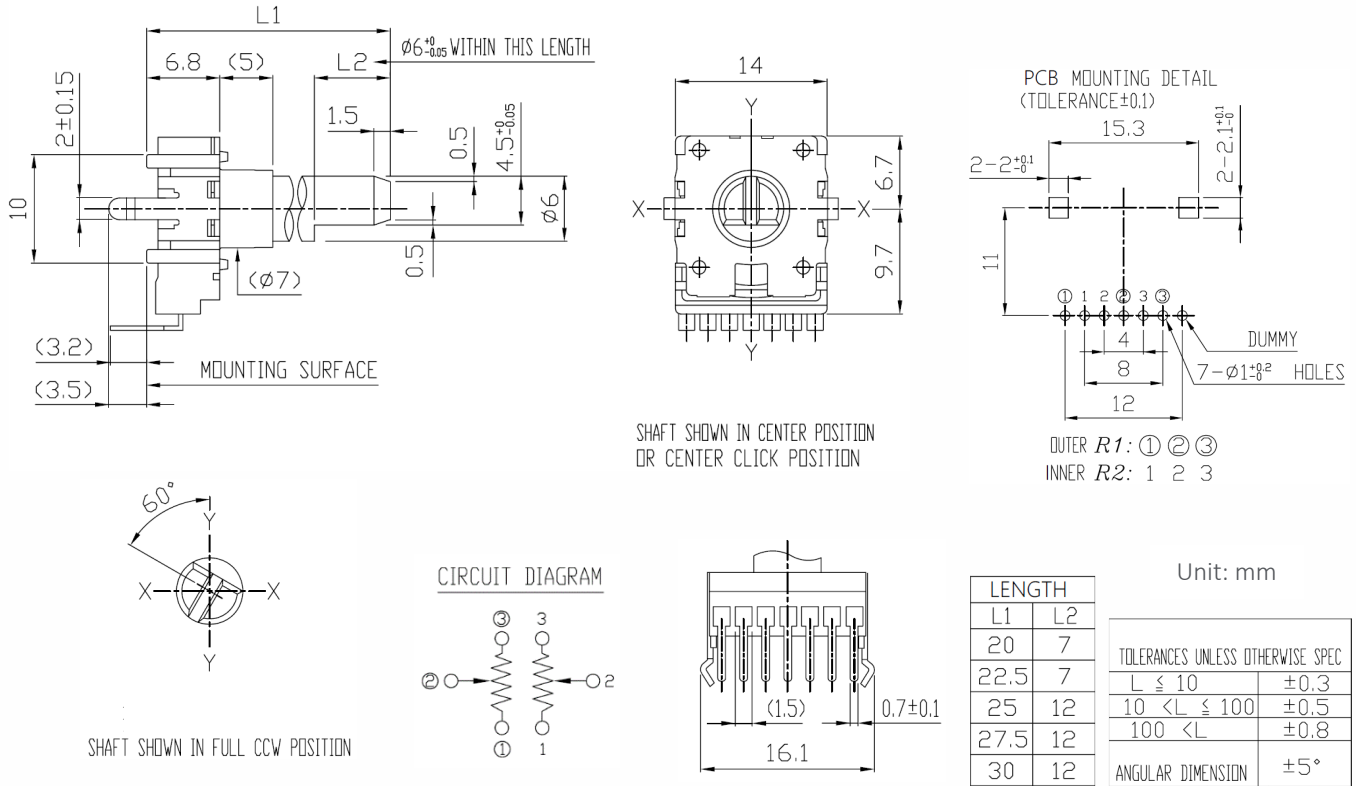
LENGTH	
L1	L2
12.5	7
15	7
17.5	12
20	12
22.5	12
25	12
30	12

Unit: mm

TOLERANCES UNLESS OTHERWISE SPEC	
$L \leq 10$	± 0.3
$10 < L \leq 100$	± 0.5
$100 < L$	± 0.8
ANGULAR DIMENSION	$\pm 5^\circ$

Mechanical Specifications

Series 14VR Vertical/Rear Mount with Sleeve Bushing



Electrical Specification

Series 14VR Taper Graphs

