

Fully Sealed Potentiometer Cermet or Conductive Plastic

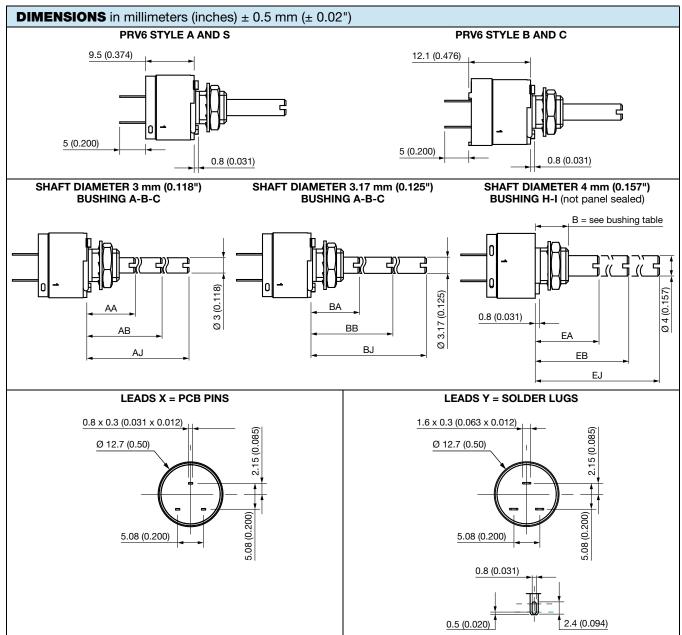


FEATURES





- PRV6A 0.75 W at 70 °C (conductive plastic)
- Tests according to CECC 41000 or IEC 60393-1
- Military performances
- Low cost
- Fully sealed and panel sealed
- Compatible RV6 (MIL R 94)
- Mechanical endurance 50 000 cycles
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912





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ELECTRICAL SP	ECIFICATIONS							
		PRV6S, F		PRV6A, PRV6C				
Resistive element		cerm		conductive plastic				
Electrical travel				270° ±	± 15°			
B	linear taper (A)	20 Ω to 10 M Ω			1 k Ω to 1 M Ω			
Resistance range	non-linear taper (F-L)	470 Ω to 1 MΩ			470 Ω to 500 k Ω (± 20 %)			
Taper		V _S % 90 % 50 % 10 % 25° 50° 75° Electrical travel 270° Mechanical travel 300°						
	standard	± 20	06				± 20 %	
Tolerance	on request	± 10 %,					± 20 /0 (1 kΩ to 100	kO)
Circuit diagram		a O			√√√° (3) → cw			
Power rating at 70 °C	linear	1.5 W at			0.75 W at 70 °C			
	other tapers	0.75	W		0.4 W			
Power rating chart		1.50 BOWER IN WATT	PRV6S, PRV6B non-linear taper PRV6A, PRV6C linear taper O.4 PRV6A, PRV6C non-linear taper					
Temperature coefficient (typical)		± 150 ppm/°C ± 500 ppm/°C						
Limiting element voltage		350 V						
Contact resistance va		2 % or 3 Ω						
End resistance (typica		1 Ω						
Dielectric strength (RM		1750 V _{RMS}						
		10 ⁶ MΩ						
Insulation resistance (500 V _{DC})		10. MZ5						



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MECHANICAL SPECIFICATIONS	MECHANICAL SPECIFICATIONS							
Mechanical travel	300° ± 5°							
Operating torque (Ncm (oz.in.))	0.5 to 2 (0.7 to 3)							
End stop torque (max. Ncm (lb.in.))	35 (3)							
Tightening torque (max. Ncm (lb.in.))	150 (13)							

ENVIRONMENTAL SPECIFICATIONS								
PRV6S, PRV6B PRV6A, PRV6C								
Temperature range	- 55 °C to + 125 °C	- 40 °C to + 125 °C						
Climatic category	55/125/56	40/125/56						
Sealing	Fully sealed contailer; IP67 and panel sealed							

PERFORMANCES										
TESTS	CONDITIONS		TYPICAL VALUES AND DRIFTS							
12313	CONDITIONS	$\Delta R_{T}/R_{T}$ (%)	$\Delta R_{1-2}/R_{1-2}$ (%)	OTHER						
Electrical endurance	1000 h at rated power 90'/30' - temperature 70 °C	± 1 %		CRV < 3 % Rn						
Climatic sequence	Phase A dry heat 100 °C Phase B damp heat Phase C cold - 55 °C Phase D damp heat 5 cycles	± 0.5 %	± 1 %							
Damp heat, steady state	56 days	± 0.5 %	± 1 %	Insulation resistance: > $10^4 M\Omega$						
Change of temperature	5 cycles, - 55 °C to + 125 °C	± 0.5 %								
Mechanical endurance	50 000 cycles	± 3 %		CRV < 2 % Rn						
Shock	50 <i>g</i> at 11 ms 3 successive shocks in 3 directions	± 0.1 %	± 0.2 %							
Vibration	10 Hz to 55 Hz 0.75 mm or 10 <i>g</i> during 6 h	± 0.1 %	± 0.2 %							

STANDARD RESISTANCE ELEMENT DATA										
STANDARD	PRV6S	AND PRV6B WITH L	INEAR TAPER	PRV6S ANI	PRV6S AND PRV6B WITH NON-LINEAR TAPER					
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CURRENT	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CURRENT				
Ω	W	V	mA	W	V	mA				
20	1.5	5.48	274							
50	1.5	8.66	173							
100	1.5	12.2	122							
200	1.5	17.3	87							
500	1.5	27.4	55	0.75	19.4	39				
1K	1.5	38.7	38.7	0.75	27.3	27.4				
2K	1.5	54.8	27.4	0.75	38.2	19.3				
5K	1.5	86.6	17.3	0.75	61.2	12.2				
10K	1.5	122.5	12.2	0.75	87	8.7				
20K	1.5	173	8.26	0.75	122	6.1				
50K	1.5	274	5.65	0.75	194	3.9				
100K	1.22	350	3.5	0.75	273	2.74				
220K	0.61	350	1.75	0.61	350	1.75				
500K	0.25	350	0.70	0.25	350	0.7				
1M	0.12	350	0.35	0.12	350	0.35				
2M	0.06	350	0.17							
5M	0.025	350	0.070							
10M	0.012	350	0.035							





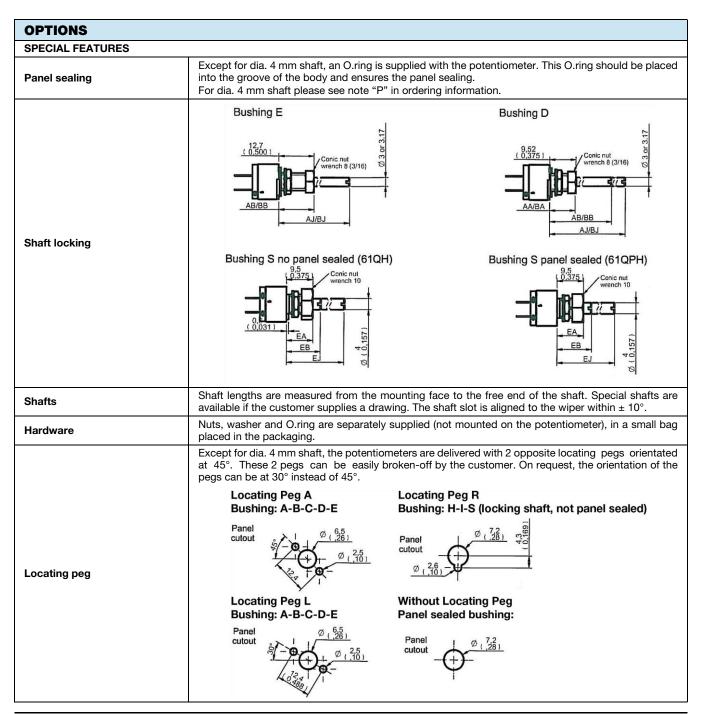


MARKING

- · Vishay trademark
- Part number
- · Manufacturing date code
- Terminal: 1

PACKAGING

• Box of 15, 20, 25, or 50 pieces, code B12, B15, B17, or B25, depending of body and shaft construction





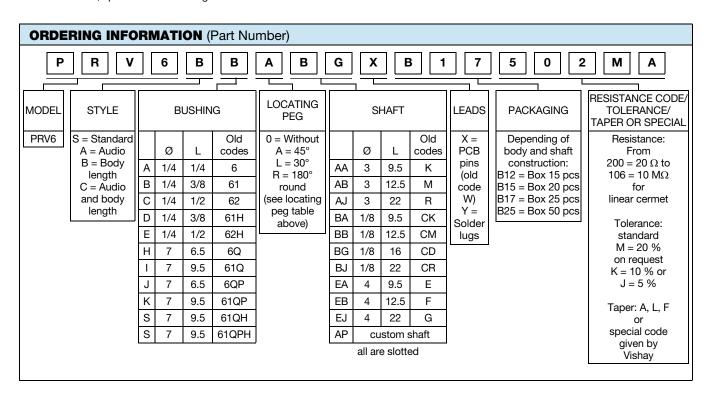
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LOCATING PEG CODE										
BUSHING	BUSHING OLD CODE		L	R	0					
Α	6	х	х		x ⁽¹⁾					
В	61	х	х		x ⁽¹⁾					
С	62	х	х		x ⁽¹⁾					
D	61H	х	х		x ⁽¹⁾					
E	62H	х	х		x ⁽¹⁾					
Н	6Q			Х						
I	61Q			Х						
J	6QP				X					
K	61QP				Х					
S	61QH			Х						
S	61QPH				Х					

Note

⁽¹⁾ Not standard, special manufacturing



PART	PART NUMBER DESCRIPTION (for information only using old codes)												
PRV	S	61	W	CD	5K	20 %	Α		ВО				e3
MODEL	BUSHING	LEADS	SPECIAL	SHAFT	VALUE	TOLERANCE	TAPER	SPECIAL	PACKAGING	SPECIAL	AP Nº	SPECIAL	LEAD FINISH



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