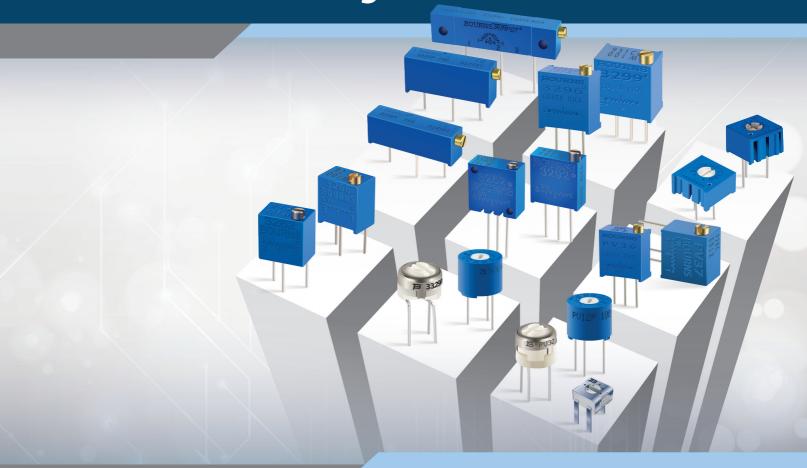


# Bourns® Sealed Through-Hole Cermet Trimming Potentiometers



**BOURNS**®



# **Applications by Market**

#### **Aerospace & Military**

- Avionics
- Control Systems
- Laser Altimeters
- Military Radios
- Radar Systems
- Transmission Equipment

#### **Communications**

- Power Supplies
- Base Stations
- GPS Navigation
- Portable/Handheld Devices
- Satellite Systems
- Set-Top Boxes

#### **Industrial**

- 3D Printers
- Automation Equipment
- Automated Gates/Doors
- Barcode Scanners
- CCTV Cameras
- Fire Alarms

#### **Industrial (Continued)**

- Industrial/Graphic Printers
- Laser Diode Drivers
- Metal Detectors
- Power Supplies
- Proximity Sensors
- Relays
- RFID Systems
- Sensors
- Smoke Detectors

#### Instrumentation

- Analytical Equipment
- Calibration Equipment
- Counters
- Laser Scanners
- Medical Diagnostic Equipment
- Network Analyzers
- Oscilloscopes
- Power Supplies
- Radiation and X-ray Testers
- Timers

#### **Professional Audio**

- Electric Guitars
- Instrument Amplifiers
- Keyboards
- Mixing Consoles
- Sound Processors
- Sound Recording Equipment
- Video Editing Stations

#### **Medical**\*

- Blood Chemical Analyzers
- Communication Equipment
- Medical Diagnostic Equipment
- Medical Meters
- Power Supplies
- Scanners
- Temperature and Respiratory Monitors







<sup>\*</sup> Bourns® products have not been designed for and are not intended for use in "lifesaving," "life-critical" or "life-sustaining" applications nor any other applications where failure or malfunction of the Bourns® product may result in personal injury or death. See Legal Disclaimer Notice http://www.bourns.com/docs/legal/disclaimer.pdf.

### Introduction

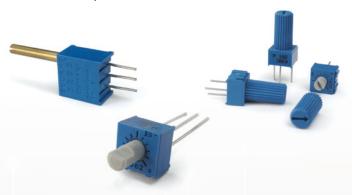
Bourns Trimpot Potentiometer Product Line offers the widest array of through-hole sealed trimming potentiometers in the industry and has continued to expand with four new trimmers acquired from Murata's PV trimming potentiometer product line. The Bourns Trimpot Potentiometer Product Line was developed using all of Bourns' core competencies; ceramics, thick-film printing, welding and brazing to offer the most reliable electronic products. Bourns is the ONLY company in the world manufacturing high-reliability (RJR, MIL-PRF-39035) military trimmers, along with the broadest offering of QPL Approved (RJ, MIL-PRF-22097) military trimmers.

90 80 Percent Voltage Ratio Output 70 60 50 40 30 20 10 0 40 50 60 70 Percent Effective Electrical Clockwise Rotation This chart depicts Linear CW the various taper **CCW** options available. **Dual Audio** 

Bourns® Trimpot® Potentiometer products are available in RoHS compliant\* versions. All of our manufacturing facilities are ISO 9001 and ISO 14001 certified. Bourns® Trimpot® Potentiometer products are manufactured in IATF16949 compliant facilities.

The Bourns® Trimpot Potentiometer Product Line offers various special options for your specific application. Product is available in extended and shortened terminals, shaft extensions, long-life resistance elements, tighter total resistance tolerances, audio tapers and hardware-mounted. Bourns Trimpot Potentiometers offer specials from prototypes to high volume quantities, allowing for customized product to meet your needs.

Visit our website, www.bourns.com, for the most up-todate specifications. Purchase through Bourns® authorized distributors to ensure a continual supply of genuine Bourns® products.



Madal	Number	r of Turns			Packaging Options	Adjustment				
Model Number	Single	Multi	6 mm (1/4")	6 mm (5/16 ")	9 mm (3/8 ")	12 mm (1/2 ")	19 mm (3/4")	31 mm (1-1/4")	See Note 1	See Note 2
3006		Х					х		Т	S
3009		х					Х		T	S
3059		х						x	T, B	S
3082		х				х			T	S
3252		х				х			T, B	T, S
3262		х	х						Т	T, S
3266		х	х						T, R	T, S
3292		х			х				T, B	T, S
3296		Х			х				T, R	T, S
3299		х			X				Т	T, S
3329	x		х						T, R	T, S
3339		х		X					Т	T, S
3362	x		х						T, R	T, S
3386	х				х				T, R	T, S
PV32	х		х						T, R	T, S
PV36		х			х				T, R	T, S
PV37		х	х						T, R	T, S
PV12		х		Х					/T	T, S

**Note 1:** T = Tube, B = Bulk, R = Tape and Reel **Note 2:** T = Top Adjustment, S = Side Adjustment

# **Bourns® Sealed Through-Hole Cermet Trimming**

3006	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	ı	eatures
	200 cycles	15	0.75 Watts @ 70°C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +125°C	• 34" Rectangular • Low PCB profile • Available with transparent housing (P style only)	<ul> <li>Sealed to IP 67</li> <li>Panel mount available</li> <li>RoHS compliant*</li> </ul>
3009	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	1	Features
	200 cycles	15	0.75 Watts @ 70°C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +125°C	• ¾" Rectangular • Available with transparent housing (P style only)	<ul><li>Sealed to IP 67</li><li>Panel mount option</li><li>RoHS compliant*</li></ul>
3059	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	ı	eatures
ACCORDANCE .	200 cycles	22	1.0 Watts @ 70°C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +150°C	• 1¼ "Rectangular • Sealed to IP 67 • Panel mount option • J-hook pin style	<ul> <li>Listed on the QPL for RJ12 per MIL-PRF-22097</li> <li>RoHS compliant*</li> </ul>
3082	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	ı	eatures
3082P-1. 502 1CCW CW3 2	200 cycles	10	0.3 Watts @ 85 °C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-65 °C to +150 °C	• 11/4" Rectangular • Sealed to IP 67 • Space saver: 0.100" x 0.150" x 0.500	<ul> <li>Available with or without standoffs</li> <li>RoHS compliant*</li> </ul>
3252	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	ı	eatures
2350 and 235	200 cycles	25	0.75 Watts @ 85°C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-65 °C to +150 °C	• ½ "Square • Panel mount option • Flexible L "flying" terminal version available	<ul> <li>Sealed to IP 67</li> <li>Listed on the QPL for RJ22 per MIL-PRF-22097</li> <li>RoHS compliant*</li> </ul>
3262	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	/	eatures
	200 cycles	12	0.25 Watts @ 85°C	10 Ohms to 1 Megohm	±10 %	±100 ppm/°C	-65 °C to +150 °C	• ¼ "Square • Low PCB profile • Listed on the QPL for RJ26 per MIL-PRF-22097	<ul> <li>Sealed to IP 67</li> <li>Listed on the QPL for RJR26 per High-Rel MIL-PRF-39035</li> <li>RoHS compliant*</li> </ul>
3266	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
	200 cycles	12	0.25 Watts @ 70 °C	10 Ohms to 1 Megohm	±10%	±100 ppm/°C	-55°C to +125°C	• 1⁄4 "Square • Standoffs allow thorough PCB washing • Tape & reel and ammo pack packaging available (Z & Y pin styles only)	<ul> <li>Sealed to IP 67</li> <li>Listed on the QPL for RJR26 per MIL-PRF-39035 (A &amp; B pin styles only)</li> <li>RoHS compliant*</li> </ul>
3292	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
32328 32528	200 cycles	25	0.5 Watts @ 85 °C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-65 °C to +150 °C	• 3/8 " Square • Thin body profile (0.150 ") • Sealed to IP 67 • Flexible L "flying" terminal version available	Listed on the QPL for RJ24     per MIL-PRF-22097     (L pin style only)     RoHS compliant*
3296	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
BOOMS 1 2 2 G	200 cycles	25	0.5 Watts @ 70°C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +125°C	3/8 "Square     Sealed to IP 67     Five terminal styles     Tape & reel and ammo pack     packaging available     (X&W pin styles only)	<ul> <li>Panel mount option</li> <li>Listed on the QPL for RJ24 per MIL-PRF-22097</li> <li>Listed on the QPL for RJR24 per High-Rel MIL-PRF-39035</li> <li>RoHS compliant*</li> </ul>

# **Potentiometers**

3299	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
32957 100000000 100000000	200 cycles	25	0.5 Watts	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55 °C to +125 °C	• 3/8 " Square • Sealed to IP 67	Five terminal styles     RoHS compliant*
3314H	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
1	100 cycles	1	0.25 Watts @ 70 °C	10 Ohms to 1 Megohm	±20 %	±100 ppm/°C	-55 °C to +125 °C	• 4 mm Square • Sealed to IP 67	• One terminal style • RoHS compliant*
3329	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
1	200 cycles	1	0.5 Watts @ 85 °C	10 Ohms to 1 Megohm	±10 %	±100 ppm/°C	-55°C to +150°C	• ¼ "Round • Sealed to IP 67 • Tape & reel and ammo pack packaging available (M&U pin styles only)	<ul> <li>Listed on the QPL for RJ50 per MIL-PRF-22097</li> <li>Listed on the QPL for RJR50 per High-Rel MIL-PRF-39035</li> <li>RoHS compliant*</li> </ul>
3339	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
	200 cycles	4	0.5 Watts @ 85 °C	10 Ohms to 1 Megohm	±10 %	±100 ppm/°C	-55 °C to +150 °C	• 5/16 "Round • Sealed to IP 67	<ul> <li>Multiturn in a single-turn package</li> <li>RoHS compliant*</li> </ul>
3362	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
	200 cycles	1	0.5 Watts @ 70°C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +125°C	1/4 " Square     Sealed to IP 67     Tape & reel and ammo pack packaging available (M, U & P pin styles only)	<ul> <li>Available with a knob for manual adjustment</li> <li>RoHS compliant*</li> </ul>
3386	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
	200 cycles	1	0.5 Watts @ 85 °C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +125°C	3/8 "Square     Sealed to IP 67     Tape & reel and ammo pack packaging available (W&U pin styles only)	<ul> <li>Available with a knob for manual adjustment</li> <li>RoHS compliant*</li> </ul>
PV32	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range	0 11 1	Features
(Sample)	200 cycles	1	0.5 Watts @ 70 °C	10 Ohms to 1 Megohm	±20 %	±100 ppm/°C	-55 °C to +125 °C	• 1/4" Round • Sealed to IP 67	Available with plastic spacer     RoHS compliant*
PV36	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
P V 3 G	200 cycles	25	0.5 Watts @ 70 °C	10 Ohms to 2 Megohms	±10 %	±100 ppm/°C	-55°C to +125°C	• 3/8" Square • Sealed to IP 67	Mounting hardware available     RoHS compliant*
PV37	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
PAVS Z ROURNS GWywy	200 cycles	12	0.25 Watts @ 85 °C	10 Ohms to 1 Megohm	±10 %	±150 ppm/°C	-55 °C to +125 °C	• 1/4" Square • Sealed to IP 67	Standoffs allow thorough     PCB washing     RoHS compliant*
PV12	Rotational Life	Number of Turns	Power Rating	Resistance Range	Resistance Tolerance	Temp. Coefficient	Temp. Range		Features
PU12P 103	200 cycles	4	0.5 Watts @ 70 °C	10 Ohms to 1 Megohm	±10 %	±100 ppm/°C	-55°C to +125°C	Unique Planetary drive offers precise wiper setting     Sealed to IP 67	Top and side adjust styles     RoHS compliant*



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