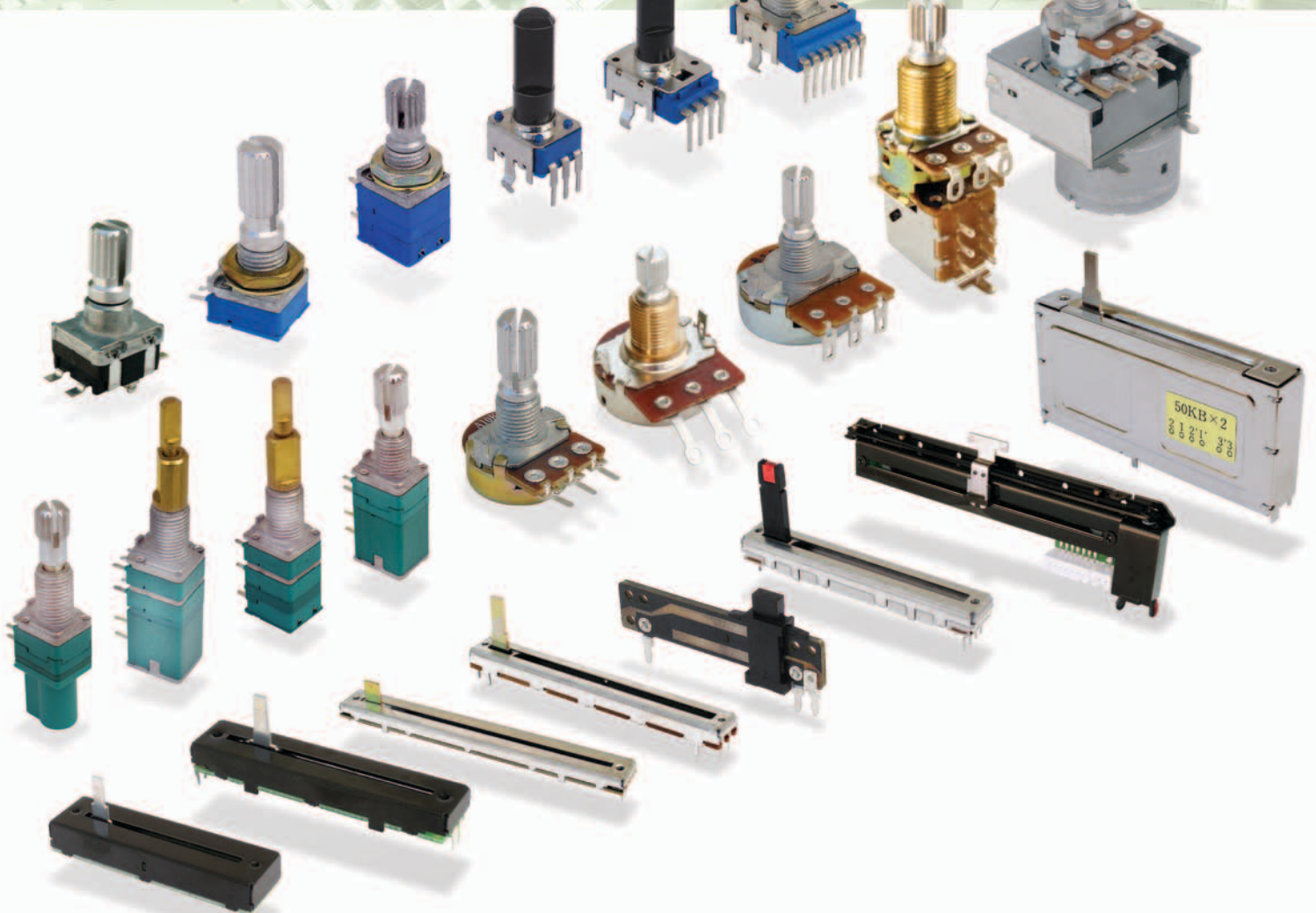


# Bourns® Commercial Panel Controls

*Short Form Brochure*



**BOURNS®**

# Introduction

Bourns® Sensors and Controls Product Line is committed to providing customers with an expanding array of commercial panel controls suitable for use in a wide variety of commercial and consumer applications. Bourns portfolio of commercial panel controls is designed to provide the consumer electronics market with cost-effective yet durable rotary and slide panel control solutions.

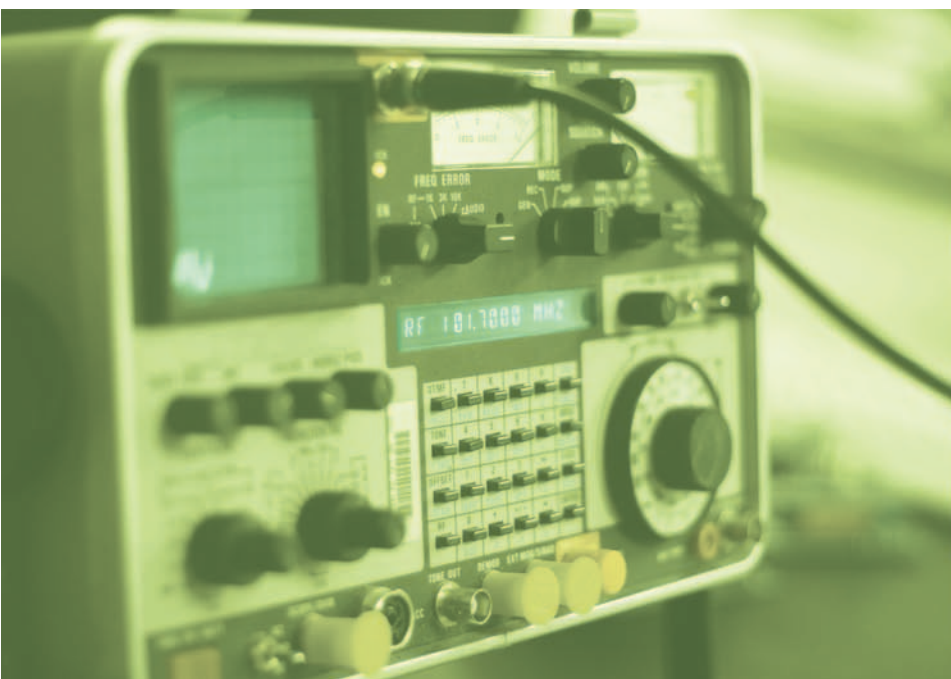
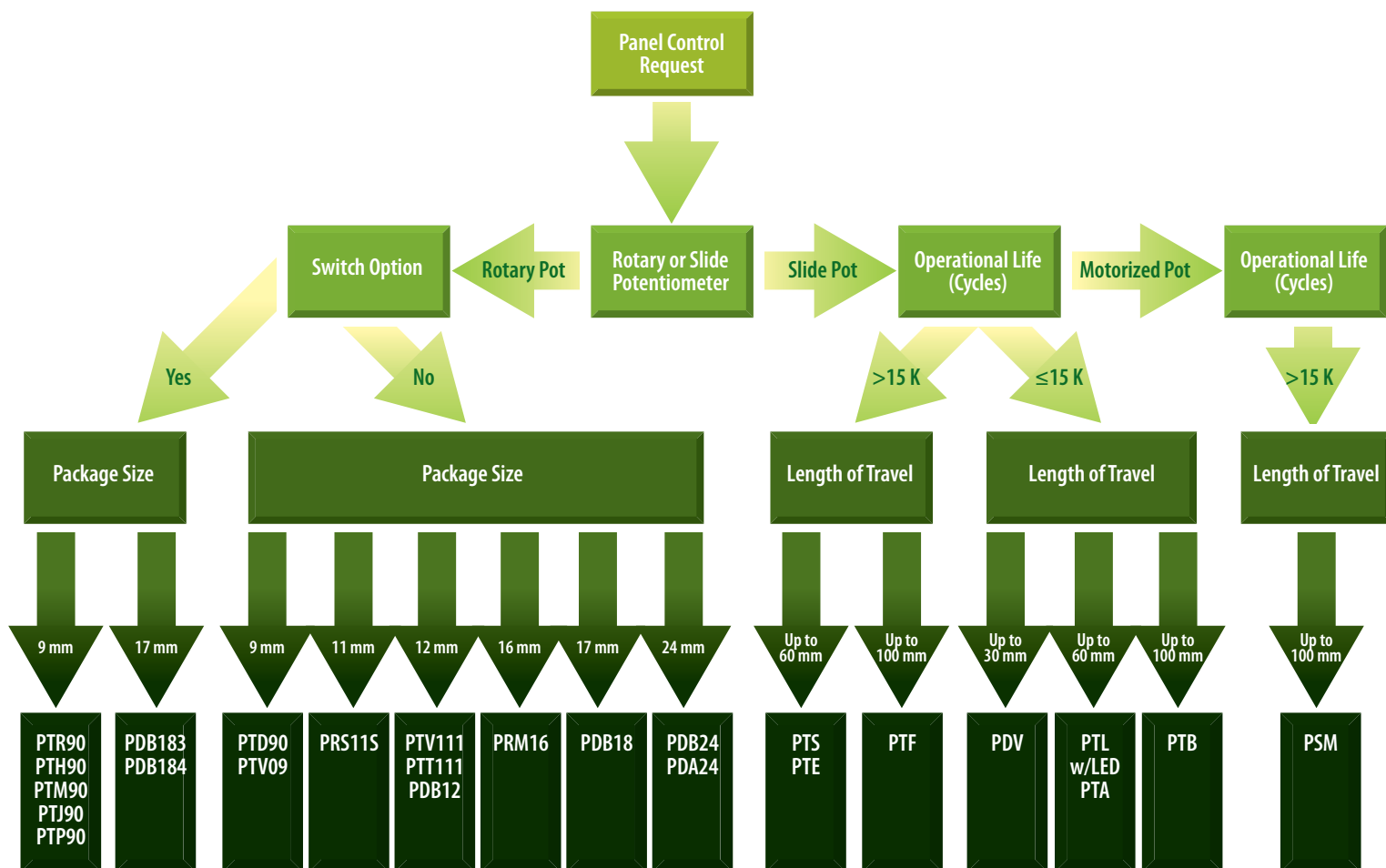
Bourns® commercial rotary panel control products include 9 - 24 mm package sizes, and offer a variety of shaft lengths, multiple section options, center detent, insulated or metal shaft, audio or linear taper, different terminal styles, and a variety of other standard options.

In addition to its rotary line of panel controls, Bourns offers a family of slide potentiometers. Features include travel lengths ranging from 15 mm to 100 mm with options such as dual gang element, motorized, center detent, multicolored LED, various lever styles, and many other standard features and options.



# Commercial Panel Controls Selection Guide

The adjoining flowchart will assist you in selecting the appropriate commercial panel control model for your application.



# Array of Applications



## Popular Professional and Commercial Audio

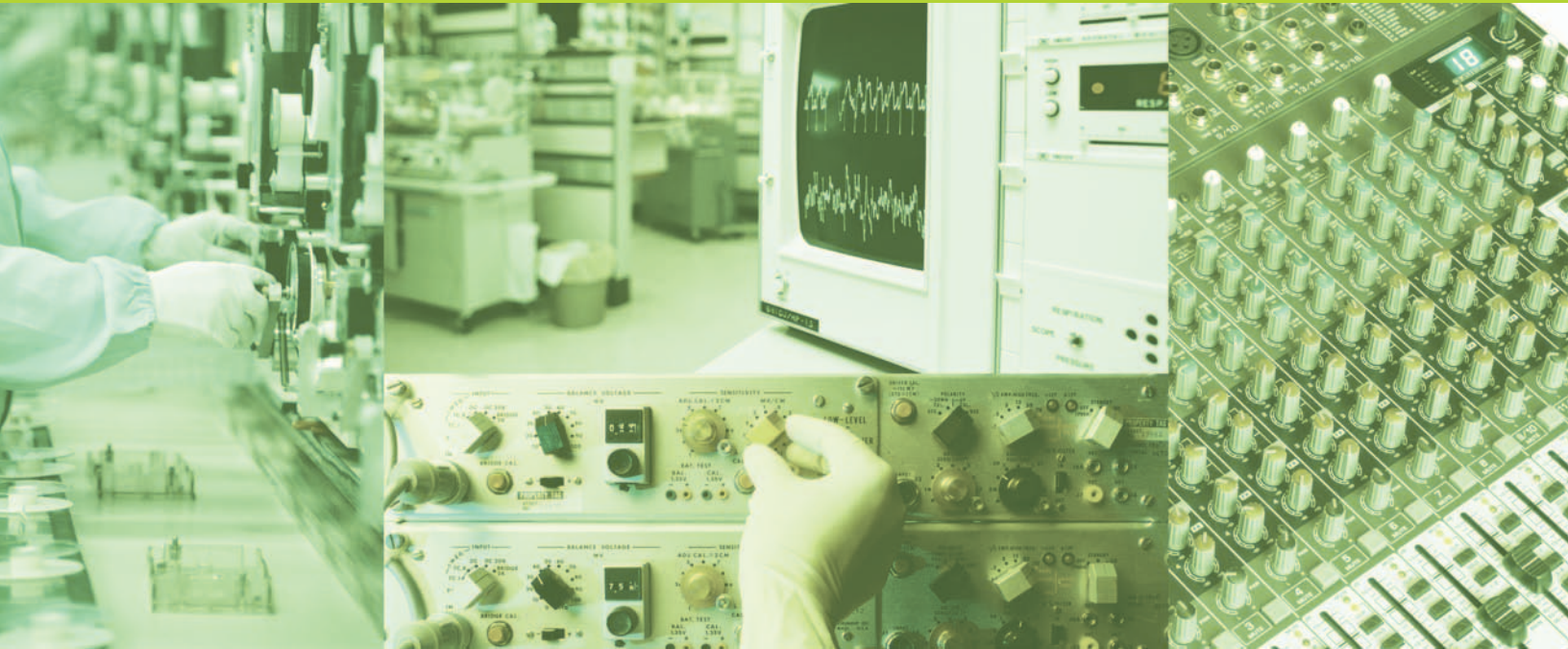
- *Audio mixers*
- *Broadcast consoles*
- *Digital drums*
- *Digital pianos*
- *Electric guitars*
- *Electronic keyboards*
- *Game stations*
- *Home sound systems*
- *Lighting systems*
- *Mobile DJ systems*
- *Portable stereos*
- *Video editing stations*

## Popular Portable Electronics Product Applications

- *2-way radios*
- *Appliances*
- *Bar code scanners*
- *Battery chargers*
- *Copiers*
- *Cordless phones*
- *CO<sub>2</sub>-, gas-, heat- and humidity-detectors*
- *Intercom systems*
- *Irrigation controllers*
- *Multimeters*
- *Portable monitoring equipment*
- *Power generators*
- *Radio systems*
- *Scanners*

## Consumer (White) Goods

- *Blenders*
- *Clothes dryers*
- *Clothes washers*
- *Food processors*
- *Hand mixers*
- *Microwaves*
- *Refrigerators*
- *Stove top controls*




## Popular Test and Measurement Product Applications

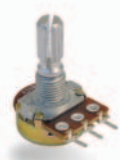
- *Appliance testers*
- *Backplane testers*
- *Battery testers*
- *Board in-circuit testers*
- *Cable testers*
- *Calibration equipment*
- *Component testers*
- *Continuity testers*
- *Counters*
- *Cycle testers*
- *Disk drive testers*
- *Distortion testers*
- *Electric motor testers*
- *Electrostatic testers*
- *Environmental chambers and testers*
- *High voltage testers*
- *Hi-pot testers*
- *Integrated circuit testers*
- *Laser and fiber optic testers*
- *Light testers*
- *Logic and spectrum analyzers*
- *Oscilloscopes*
- *Power supply testers*
- *Radiation & X-ray testers*
- *Signal level testers*
- *Telecom line testers*
- *Timers*
- *Transmission testers*
- *Tube testers*
- *TV/Video generation testers*
- *Ultrasonic testers*


## Telecommunications Product Applications


- *2-wire communication interfaces*
- *2-way radios*
- *Access equipment*
- *CB and shortwave base stations*
- *Computerized telephone equipment*
- *Data communications equipment*
- *Digital television cable boxes*
- *Hardwired communication interfaces*
- *Hardwired remote controls*
- *Headset amplifiers*
- *Internet telephony equipment*
- *Mobile phone equipment*
- *Mobile phone headsets*
- *Satellite systems*
- *Video conferencing equipment*
- *Wireless remote controls*


# Bourns® Commercial Panel Controls


PDB12	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	N/A	Yes	-10 to +50 °C	0.04 to 0.08 watts	<ul style="list-style-type: none"> <li>• Assortment of pin layouts</li> <li>• Insulated shaft style</li> <li>• Variety of resistance values</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> <li>• Wide range of resistance tapers</li> </ul>


PDB18	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.06 to 0.2 watts	<ul style="list-style-type: none"> <li>• Variety of pin styles</li> <li>• Assortment of shaft lengths</li> <li>• Variety of detent options</li> <li>• RoHS compliant*</li> <li>• Wide range of resistance tapers</li> <li>• Variety of resistance values</li> </ul>


PDB183	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	2	Yes	-10 to +50 °C	0.1 to 0.2 watts	<ul style="list-style-type: none"> <li>• PC pin or solder lug options</li> <li>• Push-pull switch</li> <li>• Assortment of resistance values</li> <li>• Variety of shaft lengths</li> <li>• Wide range of resistance tapers</li> <li>• RoHS compliant*</li> </ul>


PDB184	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	N/A	No	-10 to +50 °C	0.06 to 0.125 watts	<ul style="list-style-type: none"> <li>• PC pin or solder lug options</li> <li>• Rotary switch</li> <li>• Assortment of resistance values</li> <li>• Variety of shaft lengths</li> <li>• Wide range of resistance tapers</li> <li>• RoHS compliant*</li> </ul>

PTV09	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	N/A	1	Yes	-10 to +50 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Insulated shaft</li> <li>• Snap-in clip</li> <li>• Center detent</li> <li>• RoHS compliant*</li> </ul>

PTV/PTT111	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Insulated shaft</li> <li>• Snap-in clip</li> <li>• Center detent</li> <li>• RoHS compliant*</li> <li>• Assorted pin layouts</li> <li>• Center tap option (PTV/PTT111)</li> </ul>


PTV142B	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Insulated shaft</li> <li>• Snap-in clip</li> <li>• RoHS compliant*</li> <li>• Assorted pin layouts</li> <li>• Center detent option</li> </ul>


PDB24	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	Standard: 15K Cycles  High: 500K Cycles	Carbon	No	N/A	Yes	-10 to +70 °C	0.25 to 0.5 watts	<ul style="list-style-type: none"> <li>• High rotational life</li> <li>• Metal shaft style</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> <li>• Wide range of resistance tapers</li> </ul>


PDA24	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	100K Cycles	Carbon	No	N/A	NO	-10 to +70 °C	0.25 to 0.5 watts	<ul style="list-style-type: none"> <li>• Standard or high torque option</li> <li>• Long life carbon element</li> <li>• Plain or knurled shaft option</li> <li>• Audio or linear taper options</li> <li>• Variety of resistance values</li> <li>• RoHS compliant*</li> </ul>


# Bourns® Commercial Panel Controls

PRM16	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	No	-10 to +70 °C	0.05 to 0.1 watts	<ul style="list-style-type: none"> <li>• Remote controllable</li> <li>• Suitable for motorized /manual operation</li> <li>• Dual gang option</li> <li>• Smooth manual operating feel</li> <li>• Various taper options</li> <li>• RoHS compliant*</li> </ul>
PRS11S	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	N/A	No	-10 to +70 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Standard SMT profile compatible</li> <li>• Assorted resistances and tapers</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Wide operating temperature range</li> <li>• RoHS compliant*</li> </ul>
PTD90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	8	Yes	-10 to +50 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Knurled and flatted shaft styles</li> <li>• Audio taper option</li> <li>• Tracking error within ±3 db</li> <li>• Ganging up to 8 sections available</li> <li>• RoHS compliant*</li> </ul>
PTH90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	2	Yes	-10 to +55 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Dual concentric shaft</li> <li>• Dual gang element</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>

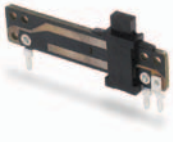
PTJ90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	Yes	2	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Dual concentric shaft</li> <li>• Slotted or flatted shaft styles</li> <li>• Dual gang element</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>

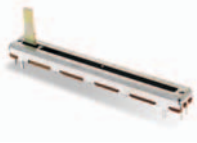
PTM90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	2	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Variety of shaft lengths</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>


PTP90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Push latching shaft</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>


PTR90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	8	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Knurled and flatted shaft styles</li> <li>• Audio taper option</li> <li>• Tracking error within <math>\pm 3</math> db</li> <li>• Ganging up to 8 sections available</li> <li>• RoHS compliant*</li> </ul>


# Bourns® Slide Potentiometers


PDV	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.05 to 1.0 watts	<ul style="list-style-type: none"> <li>• 10 to 30 mm travel</li> <li>• Single or dual gang</li> <li>• Center detent</li> <li>• RoHS compliant*</li> </ul>


PTA	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.015 to 0.25 watts	<ul style="list-style-type: none"> <li>• Metal housing</li> <li>• Single and dual gang elements</li> <li>• Dust cover option</li> <li>• Center detent</li> <li>• RoHS compliant*</li> </ul>


PTB	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +60 °C	0.015 to 0.5 watts	<ul style="list-style-type: none"> <li>• Metal housing</li> <li>• 45, 60 and 100 mm travel</li> <li>• Dust cover option</li> <li>• Center detent</li> <li>• RoHS compliant*</li> </ul>

PTE	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	100K Cycles	Carbon	No	2	No	-10 to +55 °C	0.1 to 0.2 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• 45 and 60 mm travel lengths</li> <li>• Single and dual gang elements</li> <li>• Long operational life</li> <li>• Tracking error within <math>\pm 2</math> db</li> <li>• RoHS compliant*</li> </ul>

PTF	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	100K Cycles	Carbon	No	2	No	-10 to +55 °C	0.125 to 0.5 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• 45, 60 and 100 mm travel lengths</li> <li>• Single and dual gang elements</li> <li>• Long operational life</li> <li>• Tracking error within <math>\pm 2</math> db</li> <li>• RoHS compliant*</li> </ul>

PTL	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	N/A	Yes	-10 to +55 °C	0.025 to 0.2 watts	<ul style="list-style-type: none"> <li>• Assortment of LED colors</li> <li>• 20 to 60 mm travel lengths</li> <li>• Center detent option</li> <li>• Assortment of resistance tapers</li> <li>• Various travel lengths</li> <li>• Various lever sizes</li> <li>• RoHS compliant*</li> </ul>

PTS	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	100K Cycles	Carbon	No	2	No	-10 to +55 °C	0.25 to 0.5 watts	<ul style="list-style-type: none"> <li>• High grade, long life</li> <li>• Single and dual gang</li> <li>• Assortment of resistance tapers</li> <li>• Tracking error within <math>\pm 3</math> db</li> <li>• 45, 60 and 100 mm sizes</li> <li>• Wide operating temperature range</li> <li>• RoHS compliant*</li> </ul>

PSM	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	100K Cycles	Carbon	No	N/A	No	-10 to +55 °C	0.25 to 0.5 watts	<ul style="list-style-type: none"> <li>• Long life carbon element</li> <li>• Assortment of resistance tapers</li> <li>• 100 mm travel length</li> <li>• Touch sense lever</li> <li>• PC terminals or snap-in connector option</li> </ul>

## Worldwide Sales Offices

Country	Phone	Fax
Americas:	+1-951-781-5500	+1-951-781-5006
Brazil:	+55 11 5505 0601	+55 11 5505 4370
China:	+86 21 64821250	+86 21 64821249
Europe:	+41 (0)41 768 5555	+41 (0)41 768 5510
Japan:	+81 49 269 3204	+81 49 269 3297
Singapore:	+65 6348 7227	+65 6348 1272
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### Technical Assistance

Region	Phone	Fax
Asia-Pacific:	+886 2 25624117	+886 2 25624116
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[www.bourns.com](http://www.bourns.com)

Bourns® products are available through an extensive network of manufacturer's representatives, agents and distributors. To obtain technical applications assistance, a quotation, or to place an order, contact a Bourns representative in your area.

Specifications subject to change without notice. Actual performance in specific customer applications may differ due to the influence of other variables. Customers should verify actual device performance in their specific applications.

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