

Introduction



Bourns Sensors and Controls Product Line is committed to providing customers with an expanding array of potentiometers 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 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.

Select models have integrated rotary, push-pull, or push latching switches for added function in a single control. Select models also offer dual concentric shafts to facilitate the adjustment of multi-section panel controls separately. With a wide variety of panel controls and options, Bourns has a solution to fit most every application.

Commercial Panel Controls Selection Guide Panel Control Request This flowchart will assist you in selecting the appropriate commercial panel control model for your application. **Switch Option** Package Size Package Size 17 mm 14 mm PRS11R **PDB183** PRS14R PDB08 PRS11S PTV111 PRM16 PDB18 PDB24 PTH90 PTD90 PTT111 **PTM90** PTV09 PDB12 PRS12R PTJ90 **PTP90**

Array of Applications



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

Portable Electronics Product Applications

- · 2-way radios
- Appliances
- Bar code scanners
- Battery chargers
- Copiers
- Cordless phones
- CO2-, gas-, heat- and humiditydetectors
- · Intercom systems
- Irrigation controllers
- Multimeters
- · Portable monitoring equipment
- · Power generators
- · Radio systems
- Scanners

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

Consumer (White) Goods

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

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

PDB08	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles Min.	Carbon	No	2	Yes	-10 to +60 °C	0.03 watts	Plastic Shaft Low Profile Center Detent Audio & Linear Tapers PC-Pin Layout for Board-mount RoHS compliant*
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	 Assortment of pin layouts Insulated shaft style Variety of resistance values Center detent option RoHS compliant* Wide range of resistance tapers
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	Variety of pin styles Assortment of shaft lengths Variety of detent options RoHS compliant* Wide range of resistance tapers Variety of resistance values
PDB182	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	No	-10 to +50 °C	0.06 watts	Center detent standard Rear solder lugs or PC pins 250K & 500K standard resistance values Standard M and N taper RoHS compliant*
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	 PC pin or solder lug options Push-pull switch Assortment of resistance values Variety of shaft lengths Wide range of resistance tapers RoHS compliant*

PDB185	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
S 000	15K Cycles	Carbon	Yes	N/A	No	-10 to +70 °C	0.1 to 0.05 watts	Split knurled or plain shaft options DPDT latching-push switch Metal bushing and shaft Linear and audio taper options RoHS compliant*
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	 High rotational life Metal shaft style Center detent option RoHS compliant* Wide range of resistance tapers
PDF24	Rotational	Element	College Outline	Multi-section	Detent	Operating Temp.	Power	
	Life	Element	Switch Option	(Max.)	Option	Range	Rating	Features
	Life 500K Cycles	Carbon	No No					• Long Life Carbon Element • Plain or slotted shaft option • Anti-rotation pin • Audio or linear taper options • Variety of resistance values • RoHS compliant*
PRM16				(Max.)	Option	Range	0.5 to 0.25	Long Life Carbon Element Plain or slotted shaft option Anti-rotation pin Audio or linear taper options Variety of resistance values

Bourns® Commercial Panel Controls

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	Standard SMT profile compatible Assorted resistances and tapers Flatted, slotted and knurled shaft styles Wide operating temperature range RoHS compliant*
PRS11R	Rotational Life	Element	Switch Option	Multi-section	Detent	Operating Temp.	Power	Features
	15K Cycles	Carbon	Yes	(Max.) No	Option No	-20 to +70 °C	Rating 0.05 watts	Flatted Metal Shaft Option Horizontal & Vertical Mount Option Audio & Linear Tapers PC-Pin Layout for Board-mount RoHS compliant*
	Rotational			Multi-section	Detent	Operating Temp.	Power	
PRS12R	Life	Element	Switch Option	(Max.)	Option	Range	Rating	Features
	10K Cycles	Carbon	No	No	Yes	-10 to +70 °C	0.05 watts	Various Metal Shaft Option Horizontal & Vertical Mount Option Dual-Potentiometer Audio & Linear Tapers PC-Pin Layout for Board-mount RoHS compliant*
DDC44D	Rotational			Multi-section	Detent	Operating Temp.	Power	
PRS14R	Life	Element	Switch Option	(Max.)	Option	Range	Rating	Features
	15K Cycles	Carbon	No	No	Yes	-10 to +70 °C	0.05 watts	Flatted Plastic Shaft Option Horizontal & Vertical Mount Option Dual-Potentiometer Center Tap Option Audio & Linear Tapers PC-Pin Layout for Board-mount ROHS compliant*
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PTV09	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	N/A		Yes	-10 to +50 °C	0.05 watts	 Insulated shaft Snap-in clip Center detent RoHS compliant*
	Rotational			Multi-section	Detent	Operating Temp.	Power	
PTV/PTT111	Life	Element	Switch Option	(Max.)	Option	Range	Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.05 watts	 Insulated shaft Snap-in clip Center detent RoHS compliant* Assorted pin layouts Center tap option

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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	 Knurled and flatted shaft styles Audio taper option Tracking error within ±3 db Ganging up to 8 sections available RoHS compliant*
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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	Assortment of resistance tapers Dual concentric shaft Dual gang element Flatted, slotted and knurled shaft styles Center detent option RoHS compliant*
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	Assortment of resistance tapers Dual concentric shaft Slotted or flatted shaft styles Dual gang element Center detent option RoHS compliant*
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PTM90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
PTM90		Element Carbon	Switch Option Yes					• Assortment of resistance tapers • Variety of shaft lengths • Flatted, slotted and knurled shaft styles • Center detent option • RoHS compliant*
PTM90	Life		·	(Max.)	Option	Range	0.025 to	Assortment of resistance tapers Variety of shaft lengths Flatted, slotted and knurled shaft styles Center detent option
PTM90 PTP90	Life		·	(Max.)	Option	Range	0.025 to	Assortment of resistance tapers Variety of shaft lengths Flatted, slotted and knurled shaft styles Center detent option
	Life 15K Cycles Rotational	Carbon	Yes	(Max.) 2 Multi-section	Option Yes Detent	-10 to +55 °C Operating Temp.	0.025 to 0.05 watts	Assortment of resistance tapers Variety of shaft lengths Flatted, slotted and knurled shaft styles Center detent option RoHS compliant*
	15K Cycles Rotational Life	Carbon Element	Yes Switch Option	(Max.) 2 Multi-section (Max.)	Yes Detent Option	-10 to +55 °C Operating Temp. Range	0.025 to 0.05 watts Power Rating	Assortment of resistance tapers Variety of shaft lengths Flatted, slotted and knurled shaft styles Center detent option RoHS compliant* Features Assortment of resistance tapers Push latching shaft Flatted, slotted and knurled shaft styles Center detent option
	15K Cycles Rotational Life	Carbon Element	Yes Switch Option	(Max.) 2 Multi-section (Max.)	Yes Detent Option	-10 to +55 °C Operating Temp. Range	0.025 to 0.05 watts Power Rating	Assortment of resistance tapers Variety of shaft lengths Flatted, slotted and knurled shaft styles Center detent option RoHS compliant* Features Assortment of resistance tapers Push latching shaft Flatted, slotted and knurled shaft styles Center detent option



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