# APP45 Anderson Powerpole Connector Set: 45 Amp



Price: CAD \$26.99

**SKU**: APP45-10

Product Categories: APP Anderson PowerPole, Connectors, HAM Radio, In The

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**Product Page:** 

https://www.modernoutpost.com/product/app45-anderson-powerpole-connectors-4 5-amp/

## **Product Summary**

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What Is An Anderson Powerpole Connector?

Anderson Power Products Powerpole connectors are available bagged in popular sized sets with volume pricing. A "Set" includes all the parts needed for a single connector. For the 15, 30 & 45 amp Powerpole connectors; a set includes (1) red housing, (1) black housing, (2) contacts and (1) roll pin.

A 10 set bag contains 10 connectors, the same as 5 mated connector pairs, or exactly (10) red housings, (10) black housings, (20) contacts and (10) roll pins.

Custom pricing for volume purchases of 100 sets or more is available upon request. 15, 30 & 45 amp Powerpole connectors will mate with each other

The 15, 30 & 45 amp contacts all use the same housing. Therefore, they all connect to each other. The size of the flat contact area is actually the same for all contacts. The only difference between the 15, 30 & 45 amp contacts is the size of the receiving barrel that accepts the wire.

- 15 amp contacts are recommended for 20-16 gauge wire - 30 amp contacts are recommended for 14-12 gauge wire - 45 amp contacts are recommended for 10 gauge wire **Powerpole connectors are both genderless and** 

### polarized connectors

Powerpole connectors are genderless, meaning the supply and load connectors are the same. Since there are no male or female parts, all Powerpole connectors mate with themselves.

Powerpole connectors become polarized when the red and black housings slide together via molded-in dovetails on the housings. Connections can be quickly made and remade sightlessly or in the dark.

### **Unassembled vs. Permanently Bonded**

Unassembled sets can be assembled in any configuration. As two housings slide together via molded-in dovetails, two half rounds align to form a channel that accepts a slotted roll pin. This prevents the housings from sliding apart. The roll pin is a compression fit and will not fall out in operation.

Powerwerx now offers Red/Black Powerpole sets that have been ultrasonically welded together which creates a permanent bond between the red and black housings. This can save assembly time, guarantee correct configuration, eliminate the need for a roll pin and enable the use of Powerpole accessories such as retaining clips or block-lok clamps.

#### The Anderson Powerpole singlepole connector family

The Powerpole family spans a range of sizes covering up to 180 amps and accepting a different gauges of wire from 20 thru 1/0 AWG. Here is a size comparison diagram for the 15/30/45, 75, 120, 180 amp Powerpole Housings:

#### High current rating, low resistance

The size of the wire a Powerpole contact will accept is the primary limitation of their ability to carry a load. The size of the flat contact area is actually the same for all 15, 30 & 45 amp contacts. Powerpole connectors will safely handle higher loads or surges, please read the PP30 data sheet for additional information.

The contacts are made of highly conductive silver-plated copper for minimal contact resistance at high currents. The average contact resistance is 600 micro-ohms.

### Flat wiping contact system

This system allows for minimal contact resistance at high current. The self-wiping action cleans contact surfaces during connection/disconnection. The contacts are rated at 10,000 no-load connect/disconnect cycles. When two pairs are mated together, it takes approximately 3 pounds of tension to pull them apart.

### Stainless steel spring

Good connectors should not lose contact tension under use or vibration. Powerpole connectors use a stainless steel spring which applies 25 lbs. of pressure to hold the silver-plated copper contacts firmly together and maintain constant contact. This is ideal for frequent connect/disconnect cycles. Other cheaper connectors simply depend upon soft copper that eventually spreads apart and becomes loose.

### **Durable polycarbonate housing**

The Powerpole insulated housings use a durable, high impact-resistant, high temperature polycarbonate plastic with a UL94 V-0 flammability rating. The

connector design allows air to flow through the housing, assisting in cooling.

Powerpole housings have a modular design that allows for multi-pole
(multi-conductor) configurations. Housings slide together via molded-in dovetails.

Powerpole® is a registered trademark of Anderson Power Products, Inc.

#### **Product Attributes**

- Dimensions: 6 × 6 × 2 cm

- Weight: .1 kg