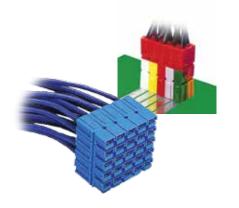
Powerpole[®] Connectors PP15/45 - Up to 55 Amps



PP15/45 series are the smallest Powerpole[®] housings. They can be used for wire-to-wire or wire-to-board applications. Wire sizes from 20 to 10 AWG (0.75 to 6 mm²) offer power capabilities up to 55 amps per pole. Finger proof housings and the ability to incorporate first-mate last-break ground connectors enhance the capabilities of this Powerpole[®] series.

High Power Density

Up to 55 amps in a compact footprint

 Wire-to-Wire & Wire-to-Board Configurations Wire & PCB contacts can be used in the same housings

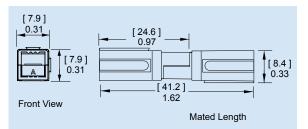
Finger Proof Housings Available Protects against accidental contact with live circuits

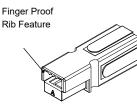
PP15/45 ORDERING INFORMATION

PP15/45 Finger Proof Housings Improved on the original APP® design by adding ribs to mating interface to protect against accidental contact with live circuits. Meets the requirements of UL1977 section 10.2 and is rated IP20. Will not mate with standard housings.

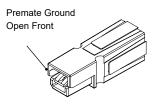
Description	Part Numbers		
Minimum Quantity	2,500	200	
Red	1327FP-BK	1327FP	
Green	1327G5FP-BK	1327G5FP	
Black	1327G6FP-BK	1327G6FP	
White	1327G7FP-BK	1327G7FP	
Blue	1327G8FP-BK	1327G8FP	
Yellow	1327G16FP-BK	1327G16FP	

Finger Proof, Standard & Ground Housing Dimensions









PP15/45 Standard Housings

This original housing design has an open interface and is available in a wide array of colors. Will not mate with finger proof housings.

Description	Part Numbers			
Minimum Quantity	2,500	200		
Red	1327-BK	1327		
Green	1327G5-BK	1327G5		
Black	1327G6-BK	1327G6		
White	1327G7-BK	1327G7		
Blue	1327G8-BK	1327G8		
Yellow	1327G16-BK	1327G16		
Orange	1327G17-BK	1327G17		
Gray	1327G18-BK	1327G18		
Brown	1327G21-BK	1327G21		
Pink	1327G22-BK	1327G22		
Purple	1327G23-BK	1327G23		

45A Premate Ground Housings - for use with ground contacts only

Will mate with standard Powerpole® housings.

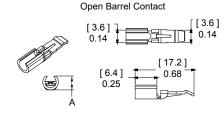
Description	Part Num	bers
Minimum Quantity	2,500	200
Green	1827G1-BK	1827G1



PP15/45 Tin Plated Power Contacts

Offer cost effective performance up to 1,500 mating cycles. See specifications and temperature charts for amperage ratings by wire size.

						Dimens	sions
			Mating	Loose Piece	Reeled	- A -	-
Barrel	AWG	mm²	Force	Part Numb	pers	inches	mm
Minimu	m Quantity			200	5,000		
Open Open Open Open Open Open Open	14 to 10 K * 14 to 10 K * 14 to 10 SF * 14 to 10 SF * 16 to 12 16 to 12 20 to 16 20 to 16	2.1 to 5.3 2.1 to 5.3 2.1 to 6.0 2.1 to 6.0 1.3 to 3.3 1.3 to 3.3 0.52 to 1.3 0.52 to 1.3	High Low High Low High Low High Low	269G3-LPBK 261G2-LPBK 201G1H-LPBK 200G1L-LPBK 269G1-LPBK 269G2-LPBK 262G1-LPBK	269G3 261G2 201G1H 200G1L 269G1 261G1 269G2 262G1	0.21 0.20 0.24 0.24 0.18 0.18 0.16 0.16	5.33 5.08 6.10 6.10 4.57 4.57 4.06 4.06



[17.27]

[3.81] 0.15

[16.26]

0.64

┣

[3.81] 0.15

0.68 -

Open Barrel Contact

Closed Barrel Contact

B

[6.35]

0.25

[7.35]

0.29

K * - For #10 AWG class K stranded wire or smaller. For larger wires use superflex contacts. SF*- Indicates wires with high stranding such as Super Flex.

PP15/45 Silver Plated Power Contacts

Maximize performance by offering up to 10,000 mating cycles and are recommended for circuit interrupt or hot plug applications. See specifications and temperature charts for amperage ratings by wire size. Only closed barrel contacts are suitable for soldering.

								Dimen	sions	
			Mating	Loo	se Piece	Reeled	- /	4 -	- B	-
Barrel	AWG	mm²	Force	Part	Numbers	Part Numbers	inches	s mm	inches	mm
Minimum	Quantity			5,000	200	5,000				
Open Open Open	14 to 10 K * 14 to 10 SF *	* 2.1 to 6.0	Low Low	-	261G3-LPBK 200G3L-LPBK 262G2-LPBK	261G3 200G3L 262G2	0.20 0.24 0.16	5.08 6.10 4.06	-	-
Closed Closed	20 to 16 16 to 12 20 to 16	0.52 to 1.3 1.3 to 3.3 0.52 to 1.3	Low Low Low	- 1331-BK 1332-BK		- -	0.16 0.15 0.12	4.06 3.81 3.05	- 0.10 0.07	- 2.54 1.78

K * - For #10 AWG class K stranded wire or smaller. For larger wires use superflex contacts. SF*- Indicates wires with high stranding such as Super Flex.

45A Premate Ground Wire Contacts - for use with ground housing only

Tin or silver plated contacts are rated for ground or power. Hand tools are available for loose piece contacts. Reeled contacts can be used with high volume press and applicator tooling. Tin contacts are rated for up to 1,500 mating cycles. Silver contacts are rated up to 10,000 mating cycles.

Туре	AWG	mm²	Mating Force	Loose Piece Part Numbers	Reeled Part Numbers
Minimum Qua	ntity			200	2,500
Open, Tin Open, Silver	14 to 10 14 to 10	2.1 to 6.0 2.1 to 6.0	Low Low	1830G1-LPBK 1830G2-LPBK	1830G1 1830G2

25A Right Angle PCB Contacts Tin Plated

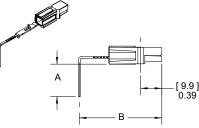
Suitable for right angle applications up to 25A per pole. Tin plating enhances solderability. Cannot be mixed with 45A PCB contacts. For mating with wire contacts only.

				Dime	nsions	
Mating	Loose I	Piece	- A	۸-	- B -	
Force	Part Nu	mbers	inches	mm	inches	mm
n Quantity	1,000	100				
Low High	1377G1-BK 1317G1-BK	1377G1 1317G1	0.58	14.80	1.52	38.60
Low	1377G2-BK 1317G2-BK	1377G2 1317G2	0.29	7.20	1.36	34.50
Low	1377G11-BK	1377G11	0.58	14.80	1.21	30.70
Low	1377G12-BK	1377G12	0.29	7.20	1.01	25.70
	Force n Quantity Low High Low High Low High	Force Part Nu n Quantity 1,000 Low 1377G1-BK High 1317G1-BK Low 1377G2-BK High 1317G2-BK Low 1377G1-BK Low 1377G2-BK High 1317G1-BK Low 1377G11-BK Low 1377G12-BK	Force Part Numbers n Quantity 1,000 100 Low 1377G1-BK 1377G1 High 1317G2-BK 1317G2 High 1317G1-BK 1317G1 Low 1377G1-BK 1317G2 High 1317G1-BK 1317G11 Low 1377G11-BK 1317G11 Low 1377G12-BK 1317G11 Low 1377G12-BK 1377G12	Force Part Numbers inches n Quantity 1,000 100 100 Low 1377G1-BK 1377G1 0.58 High 1317G1-BK 1317G1 0.29 High 1317G2-BK 1317G2 0.29 High 1317G1-BK 1317G2 0.58 High 1317G1-BK 1317G1 0.58 High 1317G1-BK 1317G11 0.58 High 1317G12-BK 1317G11 0.58 High 1317G12-BK 1317G12 0.29	Mating Force Loose Piece - A - Part Numbers inches mm n Quantity 1,000 100 Low 1377G1-BK 1317G1 High 1317G1-BK 1317G1 Low 1377G2-BK 1317G2 Low 1377G2-BK 1317G2 Low 1377G1-BK 1317G2 Low 1377G11-BK 1317G11 Low 1377G11-BK 1317G11 Low 1377G12-BK 137G11 J317G12-BK 1377G12 0.29 7.20	Force Part Numbers inches m inches n Quantity 1,000 100

25A Vertical PCB Contacts Tin Plated

For mating with wire contacts only. Suitable for vertical applications up to 25A per pole, tin plating enhances solderability.

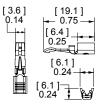
Mating Force	Loose Piece Part Numbers		- /	ensions A - s mm
Minimum Quantity Low High Low High Low High	1,000 1377G3-BK 1317G3-BK 1377G4-BK 1317G4-BK 1377G13-BK 1317G13-BK		2.22 2.22 1.76 1.76 1.17 1.17	56.40 56.40 44.70 44.70 29.70 29.70



Use mounting staples with right angle contacts (see accessories).
See website for PCB layout drawing.

[3.1] 0.12 Housing end

Open Barrel Premate Contact



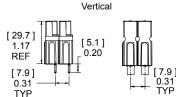


- 31 -

45A Right Angle and Vertical PCB Contacts Tin Plated

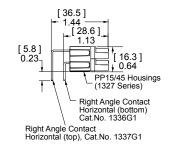
Suitable for right angle or vertical applications up to 45A per pole. Tin plating enhances solderability. Right angle contacts cannot be mixed with 25A PCB contacts. For mating with wire contacts only.

	Loose F	Piece
Description	Part Nu	mbers
Minimum Quantity	1,000	100
Vertical Right Angle Bottom Row Right Angle Top Row	3-5911P1 3-5912P1 3-5913P1	1335G1 1336G1 1337G1



Use mounting staples with right angle

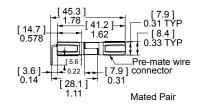
contacts (see accessories).



45A Premate Ground PCB Contacts

Right angle contacts are suitable for power or ground. Use to mate with 45A ground wire contacts. Tin plated contacts are rated up to 1,500 mating cycles. Can be used with other 45A PCB connectors in the bottom row.

	Mating Force	Loose P Part Nur	
Minimum Quantity	Low	1000	100
PCB, Bottom Row		3-5952P1	1836G1



PP15/45 ULTRASONICALLY BONDED ASSEMBLIES

Assemblies feature housings that are ultrasonically welded to create a one piece connector unit using an APP® special process. After welding, retaining pins are no longer required to secure the stacked housings to each other. This allows Powerpole® 15/45 connectors to be used as a durable one piece connector header. Contact customer service for configurations not shown below.

Single Row 1x2 Assemblies

POWERPOLE[®] PP15/45

		Housings with	Housings with	
		45A Vertical	45A Right Angle	Color & Type
Circuit Description	Housings Only	PCB Contacts	PCB Contacts	Position Matrix
Minimum Quantity	500	500	500	1 2
DC 2 Wire Standard Housings	ASMPP30-1X2-RK	ASMPV45-1X2-RK	ASMPR45-1X2-RK	RED/STD BLK/STD
DC 2 Wire Reverse Standard Housings	ASMPP30-1X2-KR	ASMPV45-1X2-KR	ASMPR45-1X2-KR	BLK / STD RED / STD
DC 2 Wire Finger Proof	ASMFP30-1X2-RK	ASMFV45-1X2-RK	ASMFR45-1X2-RK	RED / FP BLK / FP
DC 2 Wire Finger Proof Reverse	ASMFP30-1X2-KR	ASMFV45-1X2-KR	ASMFR45-1X2-KR	BLK / FP RED / FP

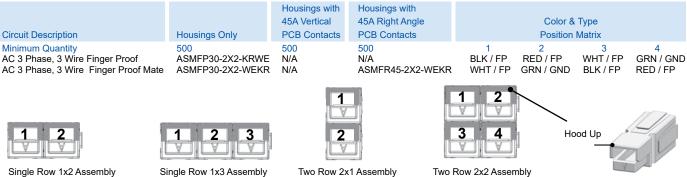
Single Row 1x3 Assemblies

		Housings with			
		45A Right Angle	Color & Type		
Circuit Description	Housings Only	PCB Contacts	Position Matrix		
Minimum Quantity DC 2 Wire Finger Proof with Ground AC Single Phase Finger Proof	500 ASMFP30-1X3-KER ASMFP30-1X3-KEW	500 ASMFR45-1X3-KER ASMFR45-1X3-KEW	1 BLK / FP BLK / FP	2 GRN / GND GRN / GND	3 RED / FP WHT / FP

Two Row 2x1 Assemblies

		Housings with	Housings with		
		45A Vertical	45A Right Angle	Color &	Туре
Circuit Description	Housings Only	PCB Contacts	PCB Contacts	Position	Matrix
Minimum Quantity	500	500	500	1	2
DC 2 Wire Finger Proof	ASMFP30-2X1-KR	ASMFV45-2X1-KR	ASMFR45-2X1-KR	BLK / FP	RED / FP
DC 2 Wire Finger Proof Mate	ASMFP30-2X1-RK	ASMFV45-2X1-RK	ASMFR45-2X1-RK	RED / FP	BLK / FP

Two Row 2x2 Assemblies



Type

- 32 -

STD = Standard Housing

FP = Finger Proof Housing

```
GND = Ground Housing
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Two Row 2x2 Assembly



Powerpole[®] Pak Connectors PP15/45



Powerpole[®] Pak connector shells enclose stacked groupings of PP15/45 sized housings in a durable black shell for a finished connector appearance and additional features. Inline, panel mount, and blindmate configurations are available. Plug shells offer the option of integral latches and strain relief to help secure your connection.

- Package Groupings of PP15/45 Connectors Provides a finished appearance while protecting the individual connectors with an outer shell
- Inline, Panel Mount, "T" or Blindmate Configurations Allows one connection system to meet multiple needs
- Optional Latching and Strain Relief Secures your connection and wires

For environmentally sealed connector shells to hold Powerpole[®] 15 to 180 connectors, see SPEC Pak[®] product series on our website <u>www.andersonpower.com</u>

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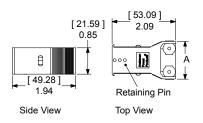


POWERPOLE® PAK ORDERING INFORMATION - Powerpole® housings and contacts are sold separately

Plug Shell Without Latch

Can mate inline with other plug shells with or without latches, or mate to a panel mount receptacle. For use with Powerpole® wire connectors only. Cable Clamp and Hardware Pak or Retaining Pins must be ordered separately.

				Dimen	isions
				- A	-
Description	Pa	rt Numbers		inches	mm
Minimum Quantity	1,000	500	25		
Black, 2 to 4 Poles	1461G1-BK	-	1461G1	1.24	31.50
Black, 5 to 6 Poles	-	1461G2-BK	1461G2	1.56	39.62
Black, 7 to 8 Poles	-	1461G3-BK	1461G3	1.87	47.50



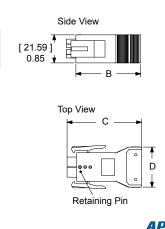
NOTE: Retaining pins are used to secure and position Powerpole^{*} housings in one of three positions in plug shells.

Max wire O.D. for 2 to 4 pole plug shells is 0.60 inches (15.2 mm²). For all other plug shells is 0.63 inches (16.0 mm²).

Plug Shell With Latch

Can mate inline with other plug shells without latches, or mate to a panel mount receptacle. For use with Powerpole[®] wire connectors only. Cable Clamp and Hardware Pak or Retaining Pins must be ordered separately.

				Dimensions					
				- B	-	- C	- (- D	-
Description	P	art Numbers		inches	mm	inches	mm	inches	mm
Minimum Quantity	1,000	500	25						
Black, 2 to 4 Poles	1460G1-BK	-	1460G1	1.94	49.28	2.25	57.15	1.24	31.50
Black, 5 to 6 Poles	-	1460G2-BK	1460G2	1.94	49.28	2.25	57.15	1.56	39.62
Black, 7 to 8 Poles	-	1460G3-BK	1460G3	1.94	49.28	2.25	57.15	1.87	47.50
Black, 9 to 10 Poles	-	1460G4-BK	1460G4	2.51	63.75	2.82	71.63	1.84	46.74

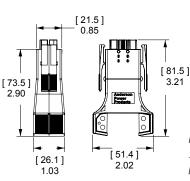




Plug Shell With Latch & Non-Conductive Strain Relief

New 2X3 Powerpole® Pak offers an improved ergonomic shell for easier latch operation as well as a plastic, non-conductive strain relief. The new strain relief can accommodate up to a 6 conductor 10 AWG cable. Can mate to a panel mount receptacle. For use with Powerpole® wire connectors only. Cable Clamp and Hardware Pak or Retaining Pins must be ordered separately. To be used with 115G23 cable clamp only.

Description	Part Numbers	
Minimum Quantity	1,000	25
Black, 5 to 6 Poles	1460G23-BK	1460G23

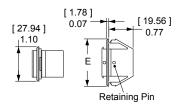


NOTE: Max wire O.D. for 1460G23 is 0.80 inches [20.3 mm²].

Snap-in Receptacle Shell

Mate to plug shells with or without latches, or mate to another panel mount receptacle to create a bulkhead to bulkhead connection. For use with Powerpole® wire or PCB connectors. Order the number of retaining pins for each receptacle as shown below separately.

				Number of Retaining	Dimens - E		Knock O - Wid	
Description	Par	t Numbers		to Order	inches	mm	inches	mm
Minimum Quantity	1,000	500	25					
Black, 2 to 4 Poles	1470G1-BK	-	1470G1	1	1.50	38.10	1.25	31.75
Black, 5 to 6 Poles	-	1470G2-BK	1470G2	2	1.88	47.75	1.62	41.15
Black, 7 to 8 Poles	-	1470G3-BK	1470G3	3	2.13	54.10	1.88	47.75
Black, 9 to 10 Poles	-	1470G4-BK	1470G4	4	2.44	61.98	2.19	55.63
* Height = (25.4 mm) 1 0 in							



3.21

NOTE: Retaining pins are used to secure and position Powerpole® housings in one of two positions in receptacle shells.

Height = (25.4 mm) 1.0 in.

Cable Clamp & Hardware Pak

Includes cable clamp, 2 screws, and required amount of retaining pins for each configuration.

	Screw	Cable			
Description	Head Type	Туре	Pa	rt Numbers	
Minimum Qua	ntity		1,000	500	25
2 to 4 Poles	Straight Slot	Bundled	115G1-BK	-	115G1
5 to 6 Poles	Straight Slot	Bundled	115G2-BK	-	115G2
7 to 8 Poles	Straight Slot	Bundled	115G3-BK	-	115G3
9 to 10 Poles	Straight Slot	Bundled	-	115G4-BK	115G4
2 to 4 Poles	Phillips	Bundled	115G7-BK	-	115G7
5 to 6 Poles	Phillips	Bundled	115G8-BK	-	115G8

Cable Clamp & Hardware Pak

Includes 2 cable clamp halves, 2 screws and 2 retaining pins. To be used with 1460G23 Plug Shell only.

	Screw	Cable		
Description	Head Type	Туре	Part Nur	nbers
Minimum Quantity			1,000	25
5 to 6 Poles	Philips	Bundled	115G23-BK	115G23

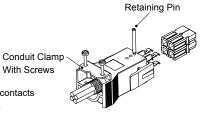
Flexible Conduit Clamp & Hardware Pak

Includes cable clamp, 2 screws, and need amount of retaining pins for each configuration.

Description	Part Number
Minimum Quantity	100
2 to 4 Poles	110G10

Retaining Pins Clar

Shell, housing and contacts are sold separately.



Plug Shell With Latch Shown

Shell and housing are sold separately.

Retaining Pin for Snap-in Receptacle Order the number of retaining pins for each receptacle shown in the Snap-in Receptacle

Shell ordering information. Pins are also required for the plug side when the Cable Clamp & Hardware Pak is not ordered.

Description	Part Numbers		
Minimum Quantity	1,000	100	
Retaining Pin	110G9-BK	110G9	

- 34 -



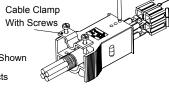
All Data Subject To Change Without Notice

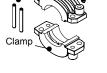
Retaining Pin

Plug Shell Without Latch Shown

Shell, housing and contacts are sold separately.

Screws





Blindmate Pak Connector

2x4 Blindmate Plug Shell, Hardware & Pins

2x4 Blindmate Receptacle Shell, Hardware & Pins

[‡] [21.5] <u>≢</u> 0.85

Description

Minimum Quantity

2x4 Blindmate Plug Shell

Hardware Bag Plug Side

[30.2]

1.19

2x4 Blindmate Receptacle Shell

Hardware Bag Receptacle Side

[4.4]

0.17

Ideal for panel to panel, bulkhead to bulkhead, or rack mount applications that require the power connector to compensate for up to 0.45 in. (11.43 mm) of misalignment in either axis. Eight positions can be filled with Powerpole® 10 to 45 connectors. The receptacle side can be used with wire or PCB contacts. Hardware bag includes retaining pins.

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BMHSG-R

[88.6]

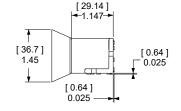
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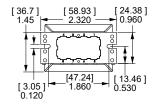
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[38.6]

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See our innovative MARC Connector that offers straight-on or rotational blindmate capability. MARC holds 6 PP15/45 power contacts and 2 PP15/45 premate ground contacts in a high temperature housing. Visit our website <u>www.andersonpower.com</u> to learn more.

Part Numbers

25

-

110G50

110G51

[50.8]

2.00

BMPP10-45P

BMPP10-45R



[86.2]

3.39

[53] 2.09

[51.1]

2.01

[85.8]

3.38

"T" Pak 2 Way Splitter

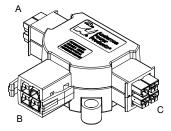
The Powerpole[®] "T" Pak connector is a 2 way electrical splitter that splits electrical current from one incoming circuit into two outgoing circuits. The standard configuration is pre-wired for AC 3 phase, 3 wire plus ground configurations. The "T" Pak can also be used for AC single phase plus ground or DC 2 wire plus ground applications by not using either the red or white power positions. "T" Pak is pre-wired from the factory allowing plug and play field installation of modular office and industrial equipment. UL recognition up to 20 amps and 600 volts is achieved when mating Powerpole[®] Pak plugs with 12 AWG wire.

For OEM manufacturing scale applications, the "T" Pak can be loaded with custom configurations of any of our finger proof, standard, or ground housings and contacts in the PP15/45 series. Contact sales or customer service for additional information.

Description	Part Numbers
Minimum Quantity	80
Assembled "T" Pak	20-01
Mating Plug Shell with Latch 2x2	26-01
Mating Plug Shell without Latch 2x2	27-01

Standard configuration for each side of the T includes (1) each Red, Black, and White Standard PP15/45 Housings & 261G2-LPBK contacts with (1) 45A Green Premate Ground Housing and 1830G1-LPBK contact.

Mating plug shells include (1) each Red, Black, and White Standard PP15/45 Housings & (3) 261G2-LPBK contacts with (1) 45A Green Premate Ground Housing and 1830G1-LPBK contact. Cable clamp & hardware pack also included.



27 - 01 Mates With B



[102.2] 4.03

> [43.2] 1.70

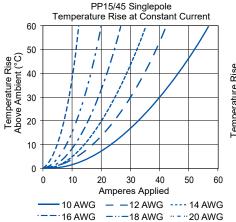
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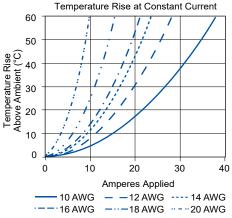
26 - 01 Mates With A & C



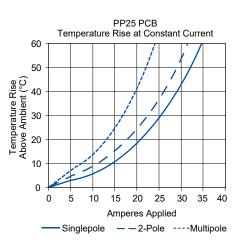
25°C ambient temperature.

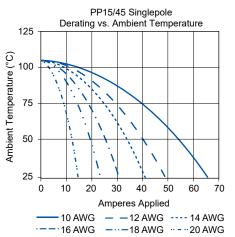
Current - Temperature Derating per IEC 60512-5-2 Test 5B

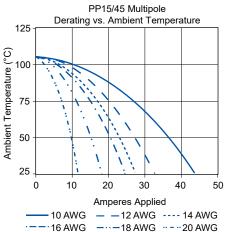


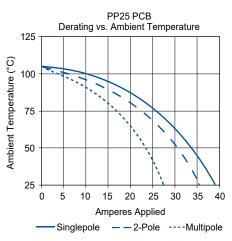


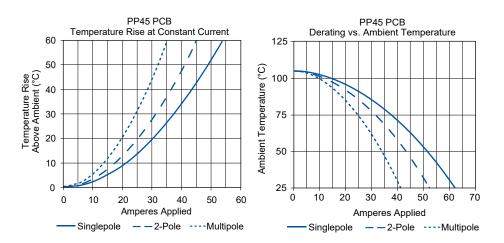
PP15/45 Multipole











NOTE: PP25 PCB charts based on 0.002 in² foil on board side, mated to 12 AWG conductor on wire side. PP45 PCB charts based on 10 AWG equivalent copper foil on board side, mated to 10 AWG conductor on wire side.

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PP15/45 & POWERPOLE® PAK SPECIFICATIONS

•		
ELECTRICAL		
Current Rating Amperes ¹	UL 1977	CSA / TUV
Singlepole Wire-to-Wire (10 AWG)	55	40
Singlepole Ground Wire-to-Wire or PCB (10 AWG)	45	35
3x3 Block Wire-to-Wire (10 AWG)	40	27
Singlepole 25A PCB-to-Wire (12 AWG)	25	-
2x3 Block 25A PCB-to-Wire (12 AWG)	25	22 *
Singlepole 45A PCB-to-Wire (10 AWG)	45	40 *
2x3 Block 45A PCB-to-Wire (10 AWG)	45	25 *
Voltage Rating AC/DC		
UL 1977	600	
Dielectric Withstanding Voltage		
Volts AC	2,200	
Avg. Mated Contact Resistance Milliohms ¹		
15A Wire Contact with 5/8" of 16 AWG	0.875	
30A Wire Contact with 5/8" of 12 AWG	0.600	
45A Wire Contact with 5/8" of 10 AWG	0.525	
45A PCB Contact to Contact	0.500	
25A PCB Contact to Contact	0.600	
UL Hot Plug Current Rating Amperes ⁵		
250 Cycles at 72V DC	45A	
250 Cycles at 120V DC	30A	
UL Ground Short Time Current Test - 45A Premate Gr	ound	
750 Amps, 10 AWG Wire	4 Seconds	
470 Amps, 12 AWG Wire	4 Seconds	

MATERIAL

Housing	
Plastic Resin	Polycarbonate
Contact Retention Spring	Stainless Steel
Housing Flammability Rating	
UL94	V-0
Glow Wire	825°C (GWFI) / 800°C (GWIT)
Contact	
Base	Copper Alloy
Plating	Tin or Silver
Contact Termination Methods	
Crimp ³	Wire Contacts
Hand Solder	1331, 1332 & PCB Contacts
Solder Dip	PCB Contacts
Wave Solder	PCB Contacts
Wave Solder	PCB Contacts





MECHANICAL		
Wire Size Range	AWG	mm²
	20 to 10	0.75 to 6.0
Max. Wire Insulation Diameter	in.	mm
	0.175	4.450
Operating Temperature ²	°F	°C
Powerpole [®] Housings & Powerpole [®] Pak Shells	-4° to 221°	-20° to 105
Mating Cycles No Load by Plating	Silver (Ag)	Tin (Sn)
PCB-to-Wire	-	1,500
Wire-to-Wire	10,000	1,500
Avg. Mating / Unmating Force	Lbf.	Ν
Low Force Wire, High Force PCB, & Ground	3	13
High Force Wire	5	22
Low Force PCB	2	9
Min. Contact / Spring Retention Force	Lbf.	Ν
	20	90
Powerpole [®] Pak Latch	Lbf.	Ν
Avg. Defeat Force	150	667
PCB Specifications		
Mounting Style	Plated Through	Hole
PCB Thickness - in. (mm)	0.090 to 0.150	2.3 to 3.8
25A PCB Recommended Traces	12 AWG Cross S	ection
45A PCB Recommended Traces	10 AWG Cross S	ection
Mechanical Shock ⁴		
MIL-STD-202	213 Condition A	50g′s
Vibration High Frequency ⁴		
MIL-STD-202	204 Condition A	10g's

NOTE 1: See IEC 60664-1 for working voltage.

NOTE 2: Amp ratings are stated per position and based on all positions being fully loaded.

* No TUV Recognition

1 - Based on: 105°C rated or better cable of the largest size, Properly calibrated APP® recommended tooling, and a 25°C ambient temperature. UL rating not to exceed the maximum operating temperature. CSA rating below a 30°C temperature rise.

- 2 Limited by the thermal properties of the connector plastic housing.
- 3 Use APP® recommended tooling only. Alternate tools may adversely affect the performance of our connectors along with UL and CSA recognition.
- 4 Tested with contact part number 261G2.
- 5 Based on 2 housings blocked together.



IEC INFORMATION

Connector Series	Configurations		Creepage / Clearance per IEC 60950-1	Material Group
	Single Pole	Unmated	1.64 mm	
		Mated	1.64 mm	
	Stacked Powerpole®	Unmated	1.64 mm	
PP15/45		Mated	1.64 mm	
Standard	РСВ - 25А	Unmated	1.64 mm	Illa
		Mated	1.64 mm	
	РСВ - 45А	Unmated	1.39 mm	
		Mated	1.39 mm	

Connector Series	Configurations		Creepage / Clearance per IEC 60950-1	Material Group
	Single Pole	Unmated	1.64 mm	
		Mated	4.20 mm	
	Stacked Powerpole®	Unmated	1.64 mm	
PP15/45		Mated	4.20 mm	
Finger Proof	РСВ - 25А	Unmated	1.64 mm	llla
		Mated	2.90 mm	
	РСВ - 45А	Unmated	1.39 mm	
		Mated	1.39 mm	

ATTRIBUTES	PP45	PP45 FINGER PROOF
AMP Rating AC/DC	45	45
Voltage Rating AC/DC (Steady State)	160 V AC/DC (Operational)	400 V AC/DC (Operational)
Breaking Capacity - AMP Rating / Cycles	30 Amp / 10 Cycles	30 Amp / 10 Cycles
Voltage Rating (Breaking Capacity)	220 VDC	220 VDC
FINGER Safety - Mated Only	IEC 60529 - IP20	IEC 60529 - IP20 *
Wire Size Tested	6 mm²	6 mm² (10AWG)
Contact Series Tested	200G3L	200G3L
Climatic Testing (Cold, Heat & MFG)	IEC 60512 Test - 11j, 11i & 11g	IEC 60512 Test-11j, 11i & 11g
Cycle Life	IEC 60512 Test 9a - 5,000 Cycles	IEC 60512 Test 9a- 5,000 Cycles
Mechanical Strength Impact	IEC 60512-5 @ 29.5 Inches - Dropped 8 Times	IEC 60512-5 @ 29.5 Inches - Dropped 8 Times
Temperature Range	-20°C to 105°C	-20°C to 105°C
	-4°F to 221°F	-4°F to 221°F

 Δ

* Mated and unmated for the PP15/45 FP version only

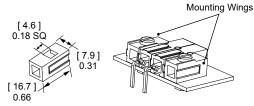
PROTECTION	
Touch Safety with Finger Proof Hou PCB Mating Interface	usings & Wire Contacts or
UL1977 Sec. 10.2	Pass
IEC 60950	Pass
IEC 60529	IP20
Touch Safety With Standard Housi	ngs
IEC 60529	IP10

POWERPOLE® 15/45 ACCESSORIES

Mounting Wing

Secure dovetailed Powerpole® 15/45 series housings by passing fasteners through the wings in either a horizontal or vertical orientation. Useful for sheet metal panels, printed circuit boards, and many other mounting surfaces. Fasteners not included.

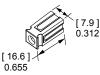
Description	Part Nun	nbers
Minimum Quantity	2,500	100
Red	1399G9-BK	1399G9
Blue	1399G8-BK	1399G8



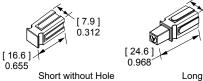
Spacer

Used to separate housings under high power to minimize derating. They are recommended for squaring off a block of Powerpole® 15/45 housings for use in connector shells and mounting clamps. Use a combination of long and short spacers opposite each other in a mated block to add keying features or use two short spacers to avoid interference. Spacers with holes can also be used to fasten the blocked housings to a surface with a fastener.

Description	Part Num	bers
Minimum Quantity	2,500	100
Red, Short w/ Hole	1399G1-BK	1399G1
Red, Long	1399G2-BK	1399G2
Red, Short	1399G6-BK	1399G6
Black, Long	1399G10-BK	1399G10
Blue, Short	1399G13-BK	1399G13
White, Short w/ Hole	1399G14-BK	1399G14
White, Long	1399G17-BK	1399G17



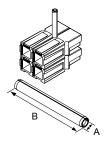
Short with Hole





Keep stacked Powerpole[®] 15/45 series housings from separating. Retaining pins are inserted in the circular opening between two housings stacked side by side.

				Dimensions		
			- A -		- B -	
Description	Part Nur	mbers	inches	mm	inches	mm
Minimum Quantity	1,000	100				
1 Block High	H1507P38	110G16	0.093 / 0.103	2.360 / 2.62	0.250	6.350
2 Block High	111812P5	110G17	0.093 / 0.103	2.360 / 2.62	0.440	11.180



Mounting Clamp

Mounting clamps can be used for fastening a block of Powerpole® 15/45 series housings to a panel. Connector blocks must be a complete square for the clamps to work properly. Fastening hardware not included.

art Numbers
00 sets of 2
462G1
462G2
462G3









4 or 8 Pole

[7.9]

0.312



PCB Mounting Staples

PCB staples are soldered into place to secure Powerpole® 15/45 series housings in a horizontal configuration to the board. Reduce strain on soldering joints during mating and unmating.

				Dime	ensions	
Part			- A	-	- E	3 -
Numbers	HxW	Length	inches	mm	inches	mm
Minimum Qu	uantity 10	00				
114555P1	1 x 1	Short	0.47	12.0	0.28	7.0
114555P2	1 x 2	Short	0.47	12.0	0.57	14.5
114555P3	1 x 3	Short	0.47	12.0	0.89	22.5
114555P7	1 x 4	Short	0.47	12.0	1.20	30.5
114555P10	2 x 1	Short	0.79	20.0	0.28	7.0
114555P6	2 x 2	Short	0.79	20.0	0.57	14.5
114555P9	2 x 2	Long	0.91	23.0	0.57	14.5



Retention Clip

Retention clips prevent Powerpole® 15/45 blocks from unintended disconnects. They feature a tab for easy insertion and removal.

Description	Part Number
Minimum Quantity	100
1 Block High	110G68

Block Lok

Block locks secure mated Powerpole® 15/45 series housings together. For use in high vibration or shock applications where connectors are unmated infrequently.

Description	Part Numbers
Minimum Quantity	100
2 Pole, Black	110G21
4 Pole, Black	110G12

Splash Boot

Splash boots protect a 2x2 block of any combination of Powerpole® 15/45 series housings and feature snip off sealed ends for flexibility in wire O.D. Designed for through panel or inline applications. Not a hermetic seal.

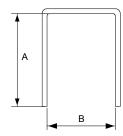
Description	Part Numbers
Minimum Quantity	25
Female, Black	1441G1
Male, Black	1442G1

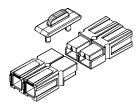
Dust Cover for Powerpole® Pak

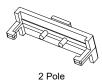
Protect your Powerpole[®] Pak connector from most foreign material and potentially prevent premature degradation of the product. Contact customer service for the other possible configurations.

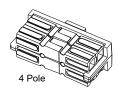
Description	Part Numl	pers	Dimensions - A -
Minimum Quantity 2x2, Orange 2x3, Orange	2,500 2-8831P1-BK 2-8831P2-BK	500 2-8831P1 2-8831P2	1.32 (33.5) 1.42 (36.0)

For environmentally sealed connector shells to hold Powerpole[®] 15 to 180 connectors, see SPEC Pak[®] product series on our website <u>www.andersonpower.com</u>



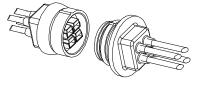


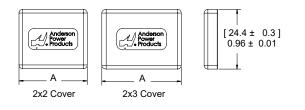




Shown without Powerpoles

Shown with Powerpoles







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Powerpole®

Tooling Information - APP[®] Applicators are Mechanical Feed Style and do not Require an Air Feed Kit.

AWGmm ⁴ The PlatingSilver PlatingHand TooORBench*Die*Dicatorof I6161.3 to 0.52N/A1332130962130962130962131013101309621310130962131013096213101309621310130962131013096213101309621309631309	Wire	Size	Loose Piece	Loose Piece Contact Crimp Tools										
16 to 20 1.3 to 0.52 N/A 1332 1309G2 0'' 1309G3	NG	mm²	Tin Plating	Silver Plating	Hand Tool	OR	Bench	+	Die	+	Locator	Number of Crimps		
12 to 16 3.3 to 1.3 N/A 1331 130962 13052 26261-PBK 26261-PBK 130962 130963				PP15 / 4	45 Flat Wiping	g Pow	er & Ground							
11.1 1.1 10 11.1 10 <td>to 20</td> <td>1.3 to 0.52</td> <td>N/A</td> <td>1332</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	to 20	1.3 to 0.52	N/A	1332										
16 1 2 0.0 1.3 1 0.0 1.5 0.0 20 0 0.0 1.7 0 0.0 1.7 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	to 16	3.3 to 1.3	N/A	1331										
161 to 20 26962-UBK N/A Image: Constraint of the sector o	to 20	1.3 to 0.52	262G1-LPBK	262G2-LPBK										
1010 14 5.3 to 2.1 26162-PBK 26163-PBK 130963 <	to 20	1.3 to 0.52	269G2-LPBK	N/A										
100 143.5 0 2.1200 10 K200 10 K200 10 K012 to 163.3 to 1.3269 G1-IPBKN/A1309 G81309 G8N/A	to 16	3.3 to 1.3	261G1-LPBK	N/A										
12 to 16 3.3 to 1.3 269G1-LPBK N/A 1309G8 10 to 14 5.3 to 2.1 269G3-LPBK N/A 10 to 14 5.3 to 2.1 200G1L-LPBK 200G3L-LPBK 1309G6 10 to 14 5.3 to 2.1 201G1H-LPBK N/A 1309G6 1309G6 10 to 14 5.3 to 2.1 201G1H-LPBK N/A 1309G6 10066 11006 310 to 14 5.3 to 2.1 1830G1-LPBK 1830G2-LPBK 1309G6 110066 11006 6 8.4 5950 1875G1 1388G61 1389G61 1388G63 1388G63 138	to 14	5.3 to 2.1	261G2-LPBK	261G3-LPBK							N/A	Single		
101014 5.3 to 2.1 269G3-LPBK N/A - <	to 16	3.3 to 1.3	269G1-LPBK	N/A			N/A		N/A					
10 to 14 53 to 2.1 201G H-LPBK N/A 1309G6 1309G6 Image: Section of the secti	to 14	5.3 to 2.1	269G3-LPBK	N/A										
10 to 14 5.3 to 2.1 201G 11-LPBK IXA 0 1309G8 0 10	to 14	5.3 to 2.1	200G1L-LPBK	200G3L-LPBK										
310 to 14 3.5 to 2.1 1830G1-LPBK 1830G2-LPBK 130968 I	to 14	5.3 to 2.1	201G1H-LPBK	N/A										
6 13.3 1307 1307 1307 138960 138960 138961	0 to 14	5.3 to 2.1	1830G1-LPBK	1830G2-LPBK										
6 13.3 5900 5900 187561 5952 138761 5952 138761 5952 138761 138866 1389621 1389624			I		PP7	5	1		1		1	1		
8.4 187561 138866 1389621 952 130964 138761 138866 1389621 10 to 12 5.3 to 3.3 167562 130964 138761 138867 138966 1389621 10 to 12 5.3 to 3.3 167562 130964 138761 138867 138966 138962 10 to 12 5.3 to 3.3 137563 137563 138867 138966 138966 10 to 12 5.3 to 3.3 132362 132361 138868 138863 138864 138964 514 10 to 12 53.5 131964 1368 Series 138761 138864 138964 514 10 to 12 53.5 131964 1368 Series 138761 138864 138964 514 10 to 12 131964 131964 138864 138864 138964 514 10 to 12 131964 131964 138864 138864 188964 514 10 to 12 131964 131964 138964 188964 188964 188964 188964 188964 188964 188964 <td< td=""><td></td><td></td><td></td><td>1307</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>				1307										
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10 to 12 5.3 to 3.3 187562 138964 138761 4.4 1389621 1389624 1		8.4		1875G1	_		1388G6	1388G6		1389G21	1			
10 to 12 5.3 to 3.3 Image: state st				5952	100001		100701						1389G6	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10 to 12	5.3 to 3.3	N/A	1875G2	- 1309G4 	1	1387G1					1389G21	Single	
5915 5915 138867 138867 100 1389621 187563 187563 1389621 1389621 1389621 100 53.5 132362 132361 138867 138863 138863 138964 1				5953								100000		
1/0 53.5 1323G2 1323G1 1388G3 1388G3 1388G4 1389G4				5915							13		1388G7	1388G7
				1875G3								1389G21		
1 42.4 2 33.6 4 21.2 5 1319G4 1319G4 1319G4 1319G4 1388G4 1319G4 1388G4 1319G4 1319G4 1319G6 1388G4 1319G4 1319G4 1319G4 1319G4 1319G4 1319G4 1319G4 1319G6			1	_	PP12	20	1							
1 42.4 2 33.6 4 21.2 5 1319G4 1319G4 1319G4 1319G4 1319G4 1319G4 1319G4 1319G6 1388G4 1319G6 1388G4 1319G6 1388G4 1319G6 1388G4 1319G6 1388G4	0	53.5		1323G2					1200.02					
4 21.2 131964 138864 6 13.3 131966 138864		42.4		1323G1					138863					
6 13.3 1319G6 I		33.6	N/A	1319	1368 Series		1387G1			1389G4	1389G4	Single		
PP180 3/0 85 1328G2		21.2		1319G4					1388G4					
3/0 85 1328G2 1303G12		13.3		1319G6										
1303G12					PP18	30								
2/0 53.5 1328G1	D	85		1328G2	1368 Series		138762	1	1202012					
	D	53.5		1328G1					1303012	303G12	1204622	Double		
1/0 53.5 1382 1387C2 1387C2 1304C32 Da	D	53.5		1382				1303G13						
1 42.4 N/A 1347 1368 Series		42.4	N/A	1347						1304G32	Double			
2 33.6 1383		33.6		1383					1202013	.ο				
4 21.1 1384		21.1		1384										
6 13.3 1348 1387G1 1388G4 1389G3 Sin		13.3		1348			1387G1		1388G4		1389G3	Single		
Insertion / Extraction Tool for PP15/45 Contacts = 111038G2			ol for PP15/45 Co		2	1			1	1	1			

NOTE: see website for the most current information.

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Wir	Wire Size Reeled Part Number		Reeled Cont	tact	Crimp Tools				
AWG	mm²	Tin Plating	Silver Plating	APP [®] Applicator	+	APP [®] Press			
PP15/45 Flat Wiping Power & Ground									
16 to 20	1.3 to 0.52	262G1	262G2						
16 to 20	1.3 to 0.52	269G2	N/A						
12 to 16	3.3 to 1.3	261G1	N/A	TD0101					
10 to 14	5.3 to 2.1	261G2	261G3	100101					
12 to 16	3.3 to 1.3	269G1	N/A			115V = TE0101 230V = TE0102			
10 to 14	5.3 to 2.1	269G3	N/A			2001 120102			
10 to 14	5.3 to 2.1	200G1L	200G3L						
10 to 14	5.3 to 2.1	201G1H	N/A	TD0102					
10 to 14	5.3 to 2.1	1830G1	1830G2						

Your Best Connection™

2020-0055 DS-PP1545 REV C7

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