Powerpole® Connectors - PP15 to PP45: 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 AWG (0.75 mm²) to #10 (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

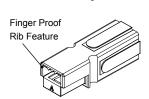
Finger Proof Housings Available

Protects against accidental contact with live circuits

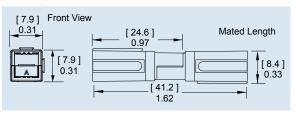
PP15-45 ORDERING INFORMATION |

PP15-45 Finger Proof HousingsImproved 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 Nun	nbers
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



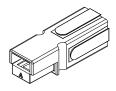
PP15-45 Finger Proof & Standard & Ground **Housing Dimensions**



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 Num	bers
Minimum Quantity	2,500	200
Red Green	1327-BK 1327G5-BK	1327 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

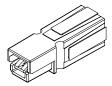


45A Premate Ground Housings - (for use with ground contacts only)

Green housings are keyed to prevent accidental mating with

standard or finger proof Powerpole® housings.

Description ----- Part Numbers -----Minimum Quantity ... 2,500 200 ... Green 1827G1-BK 1827G1



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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.

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

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

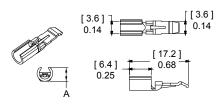
Maximize performance by offering up to 10,000 mating cycles and are recommended for circuit interrupt or hot plug applications. See specifications and temperature charts for amperage ratings by wire size. Only closed barrel contacts are suitable for soldering.

							Dimension		nsions	
			Mating	Loc	se Piece	Reeled	- A	١-	- B	-
Barrel	AWG	mm²	Force	Part	Numbers	Part Numbers	inches	mm	inches	mm
Minimum	Quantity			5,000	200	5,000				
Open	14 to 10 K*	2.1 to 5.3	Low	-	261G3-LPBK	261G3	0.20	5.08	-	-
Open .	14 to 10 SF*	2.1 to 6.0	Low	-	200G3L-LPBK	200G3L	0.24	6.10	-	-
Open	20 to 16	0.52 to 1.3	Low	-	262G2-LPBK	262G2	0.16	4.06	-	-
Closed	16 to 12	1.3 to 3.3	Low	1331-BK	1331	-	0.15	3.81	0.10	2.54
Closed	20 to 16	0.52 to 1.3	Low	1332-BK	1332	-	0.12	3.05	0.07	1.78

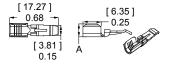
K* - For #10 AWG class K stranded wire or smaller. For larger wires use superflex contacts.

SF*- Indicates wires with high stranding such as Super Flex.

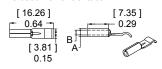
Open Barrel Contact



Open Barrel Contact



Closed Barrel Contact



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.

					Reeled
			Mating	Loose Piece	Part
Туре	AWG	mm²	Force	- Part Numbers -	- Numbers -
Minimum Qua	ntity	200	5,000		
Open, Tin	14 to 10	2.1 to 6.0	Low	1830G1-LPBK	1830G1
Open, Silver	14 to 10	2.1 to 6.0	Low	1830G2-LPBK	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.

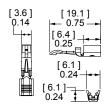
					Dime	nsions	
	Mating	Loose I	Piece	- A	١-	- B	3 -
Row	Force	Part Nur	mbers	inches	mm	inches	mm
Minimum	Quantity .	1,000	100				
Тор	Low	1377G1-BK	1377G1	0.59	14.80	1.52	38.60
	High	1317G1-BK	1317G1				
Bottom	Low	1377G2-BK	1377G2	0.29	7.20	1.36	34.50
	High	1317G2-BK	1317G2				
Тор	Low	1377G11-BK	1377G11	0.59	14.80	1.21	30.70
	High	1317G11-BK	1317G11				
Bottom	Low	1377G12-BK	1377G12	0.29	7.20	1.01	25.70
	High	1317G12-BK	1317G12				

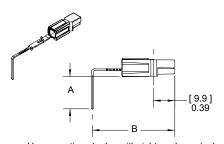
25A Vertical PCB Contacts Tin Plated

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

an planing crimarious solutionality.									
	Dimensions								
Loose Piece	:	- 4	A -						
Part Numbers	inches	s mm							
n Quantity 1,000	100								
1377G3-BK	1377G3	2.22	56.40						
1317G3-BK	1317G3	2.22	56.40						
1377G4-BK	1377G4	1.76	44.70						
1317G4-BK	1317G4	1.76	44.70						
1377G13-BK	1377G13	1.17	29.70						
1317G13-BK	1317G13	1.17	29.70						
	Loose Piece ———————————————————————————————————	Loose Piece ———————————————————————————————————	Loose Piece - inches n Quantity 1,000 100 1377G3-BK 1377G3 2.22 1317G3-BK 1317G3 2.22 1377G4-BK 1377G4 1.76 1317G4-BK 1317G4 1.76 1377G13-BK 1317G1 1.17						

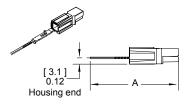






Use mounting staples with right angle contacts (see accessories).

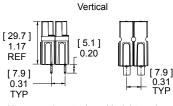
See website for PCB layout drawing.

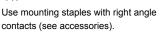


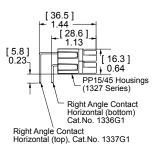
45A Right Angle and Vertical PCB Contacts Tin Plated

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.

	Lo	oose Piece
Description	Pa	art Numbers
Minimum Quantity	1,000	100
Vertical	3-5911P1	1335G1
Right Angle Bottom R	ow 3-5912P1	1336G1
Right Angle Top Row	3-5913P1	1337G1



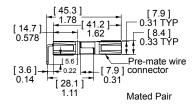




45A Premate Ground PCB Contacts

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	Loose Piece				
	Force	Part Numbers				
Minimum Quantity		1000	100			
PCR Bottom Row	Low	3-5052P1	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

		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		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

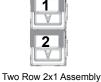
Two Row 2x1 Assemblies

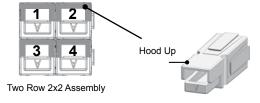
		Housings with	Housings with		
		45A Vertical	45A Right Angle	Color &	Туре
Circuit Description	Housings Only	PCB Contacts	PCB Contacts	Position	Matrix
Minimum Quantity		500	500	1	2
DC 2 Wire Finger Proof	ASMFP30-2X1-KR	ASMFV45-2X1-KR	ASMFR45-2X1-KR	BLK / FP	RED / FP
DC 2 Wire Finger Proof Mate	ASMFP30-2X1-RK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

Two Row 2x2 Assemblies

		Housings with	Housings with				
		45A Vertical	45A Right Angle		Color &	Туре	
Circuit Description	Housings Only	PCB Contacts	PCB Contacts		Position I	Matrix	
Minimum Quantity	500	500	500	1	2	3	4
AC 3 Phase, 3 Wire Finger Proof	ASMFP30-2X2-KRWE	N/A	N/A	BLK / FP	RED / FP	WHT / FP	GRN / GND
AC 3 Phase, 3 Wire Finger Proof Mate	ASMFP30-2X2-WEKR	N/A	ASMFR45-2X2-WEKR	WHT / FP	GRN / GND	BLK / FP	RED / FP







Single Row 1x2 Assembly

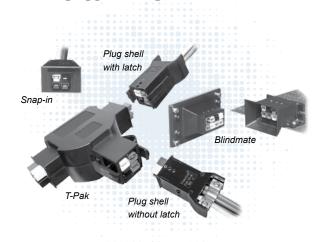
Single Row 1x3 Assembly

FP = Finger Proof Housing

GND = Ground Housing



Powerpole® Pak Connectors - PP15 to PP45



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® 15-180 connectors, see SPEC Pak® product series on our website, <u>www.andersonpower.com</u>



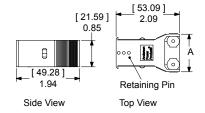
| POWERPOLE® PAK ORDERING INFORMATION |

Powerpole® housings and contacts are sold separately. See page 20 for ordering information.

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.

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



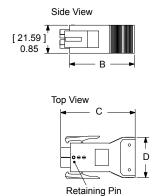
NOTE: Retaining pins are used to secure and position Powerpole® housings in one of three positions in plug shells.

Max wire O.D. for 2-4 pole plug shells is 0.60 inches [15.2mm²]. 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 seperately.

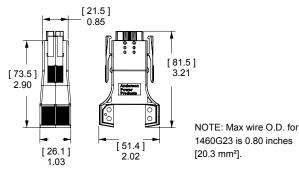
					Din	nensions		
			- B	-	- C	; -	- D) -
Pa	rt Numbers		inches	mm	inches	mm	inches	mm
1,000	500	25						
1460G1-BK	-	1460G1	1.94	49.28	2.25	57.15	1.24	31.50
-	1460G2-BK	1460G2	1.94	49.28	2.25	57.15	1.56	39.62
-	1460G3-BK	1460G3	1.94	49.28	2.25	57.15	1.87	47.50
-	1460G4-BK	1460G4	2.51	63.75	2.82	71.63	1.84	46.74
	1,000 1460G1-BK -	1,000 500 1460G1-BK - - 1460G2-BK - 1460G3-BK	1460G1-BK - 1460G1 - 1460G2-BK 1460G2 - 1460G3-BK 1460G3	Part Numbers	1,000 500 25	-B - C inches mm inches inches mm inches inches mm inches	-B - C - inches mm inches mm	



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, 5-6 Poles	1460G23-BK	1460G23	



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.

Description	Pa	art Numbers		Number of Retaining Pins to Order	Dimen: - E inches	-	Knock (- Wid inches	
Minimum Quantity	1,000	500	25					
Black, 2-4 Poles	1470G1-BK	-	1470G1	1	1.50	38.10	1.25	31.75
Black, 5-6 Poles	-	1470G2-BK	1470G2	2	1.88	47.75	1.62	41.15
Black, 7-8 Poles	-	1470G3-BK	1470G3	3	2.13	54.10	1.88	47.75
Black, 9-10 Poles	-	1470G4-BK	1470G4	4	2.44	61.98	2.19	55.63
* Hoight - [25.4 mn	n1 1 0 in							

^{[27.94] 0.07 [19.56] 0.77 [19.56]}

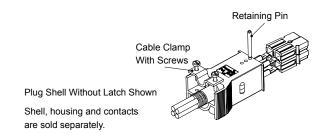
NOTE: Retaining pins are used to secure and position Powerpole® housings in one of two positions in receptacle shells.

* 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.

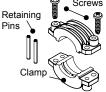
	Screw Head	Cable			
Description	Type	Type	Pa	rt Numbers -	
Minimum Qua	ntity		1,000	500	25
2-4 Poles	Straight Slot	Bundled	115G1-BK	-	115G1
5-6 Poles	Straight Slot	Bundled	115G2-BK	-	115G2
7-8 Poles	Straight Slot	Bundled	115G3-BK	-	115G3
9-10 Poles	Straight Slot	Bundled	-	115G4-BK	115G4
2-4 Poles	Philips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

Description	Screw Head Type	Cable Type	Part Num	nbers
Minimum Qua	antity	Rundled	1,000 115G23-BK	25 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
2-4 Poles	110G10

Conduit Clamp With Screws Plug Shell With Latch Shown Shell, housing and contacts 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 Number			
Minimum Quantity	1,000	100		
Retaining Pin	110G9-BK	110G9		



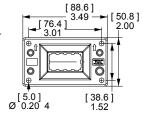


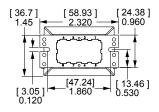
Shell and housing are sold separately.

Blindmate Pak Connector

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® 10-45 connectors. The receptacle side can be used with wire or PCB contacts. Hardware bag includes retaining pins.

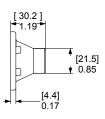
Description	Part I	Numbers
Minimum Quantity	50	25
2x4 Blindmate Plug Shell, Hardware & Pins	-	BMPP10-45P
2x4 Blindmate Receptacle Shell, Hardware & Pins	-	BMPP10-45R
2x4 Blindmate Plug Shell	BMHSG-P	-
2x4 Blindmate Receptacle Shell	BMHSG-R	-
Hardware Bag Plug Side	-	110G50
Hardware Bag Receptacle Side	-	110G51

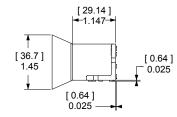




Plug Outline

Receptacle Outline





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, www.andersonpower.com to learn more.



"T" Pak 2 Way Splitter

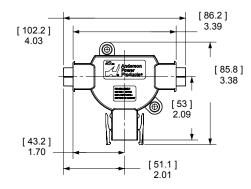
The Powerpole® "T" Pak connector is a 2 way electrical splitter that splits electrical current from one incoming circuit into two outgoing circuits. The standard configuration is pre-wired for AC 3 phase, 3 wire plus ground configurations. The "T" Pak can also be used for AC single phase plus ground 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.

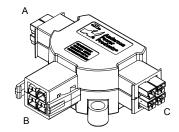
For OEM manufacturing scale applications, the "T" Pak can be loaded with custom configurations of any of our finger proof, standard, or ground housings and contacts in the PP15-45 series. Contact sales or customer service for additional information.

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 PP 15-45 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 PP 15-45 Housings & (3) 261G2-LPBK contacts with (1) 45A Green Premate Ground Housing and 1830G1-LPBK contact. Cable clamp & hardware pak also included.







| 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 Pre	mate Grou	ınd
750 Amps, #10 AWG Wire	4 Seconds	3
470 Amps, #12 AWG Wire	4 Seconds	3

470 Amps, #10 AWG Wire	4 Seconds
	. 3000.100
Materials	
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

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.	N
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.	N
	20	90
Powerpole® Pak Latch Avg. Defeat Force	Lbf.	N
-	150	667
PCB Specifications		
Mounting Style	Plated Through Hole	
PCB Thickness- in. [mm]	0.090 - 0.150	(2.3-3.8)
25A PCB Recommended Traces	#12 AWG Cross Section	
45A PCB Recommended Traces	#10 AWG Cross Section	
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
- ¹Based 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	Connector Series	Configurations		Creepage / Clearance per IEC 60950-1	Material Group											
	Single Pole	Single Pole Unmated 1.64 mm	mm		Single Pole	Unmated	1.64 mm													
	Cirigio i dio	Mated	1.64 mm	Illa	IIIa		onigio i olo	Mated	4.20 mm											
	Stacked Powerpole®	Unmated	1.64 mm			ilia		Stacked Powerpole®	Unmated	1.64 mm										
PP15/45 Standard	Stacked Fowerpole®	Mated	1.64 mm				Illa	Illa	Illa	Illa	Illa	Illa	IIIa	Illa	IIIa	ilia -	PP15/45 Finger Proof	· ·	Mated	4.20 mm
Otaridard	PCB - 25A	Unmated	1.64 mm			i iliger i roor	PCB - 25A	Unmated	1.64 mm											
	PCB - 25A	Mated	1.64 mm				PCB - 25A	Mated	2.90 mm											
	PCB - 45A	Unmated	1.39 mm			PCB - 45A	Unmated	1.39 mm												
	Mate		1.39 mm			100 70/1	Mated	1.39 mm												

Attributes *	PP45	PP45 FP
Attributes	1140	114011
AMP Rating AC/DC	45	45 Amp
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 - 5000 Cycles	IEC 60512 Test 9a - 5000 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

^{*} Inmated and unmated condition

Protection

Touch Safety with Finger Proof Housings & Wire Contacts or PCB Mating Interface
UL1977 Sec. 10.2 Pass

UL1977 Sec. 10.2 Pass IEC 60950 Pass IEC 60529 IP20

Touch Safety With Standard Housings

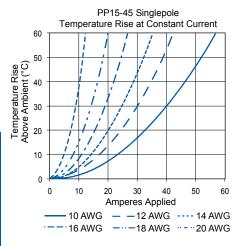
IEC 60529 IP10

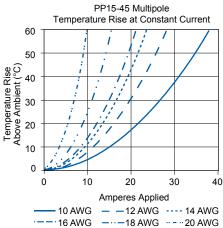


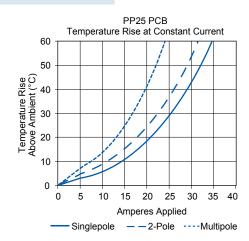
NOTE 3: Refer to the Constructional Data form for additional information on our website., www.andersonpower.com

PP15-45 TEMPERATURE CHARTS | Temperature rise charts are based on a 25°C ambient temperature.

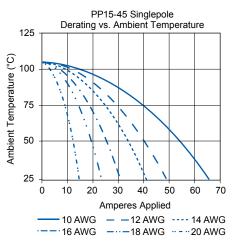
For Temperature Rise Above 60°C, Consult the Extended Temperature Rise Charts in the Appropriate Product Section on the Website.

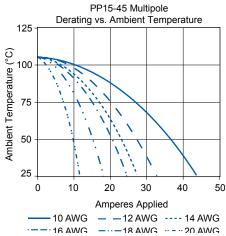


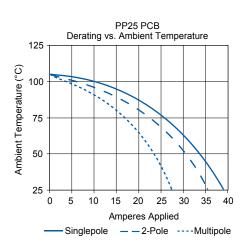




Current - Temperature Derating per IEC 60512-5-2 Test 5B

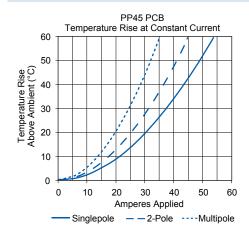


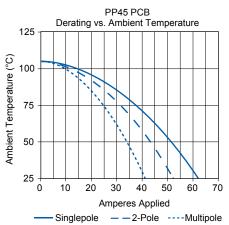




For Temperature Rise Above 60°C, Consult the Extended Temperature Rise Charts in the Appropriate Product Section on the Website.

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





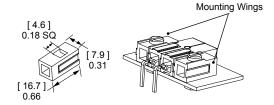
NOTE: PP25 PCB charts based on 0.002 in² foil on board side, mated to #12 AWG conductor on wire side. PP45 PCB charts based on #10 AWG equivalent copper foil on board side, mated to #10 AWG conductor on wire side.

| 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.

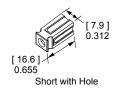
Description	Part Nu	mbers
Minimum Quantity	2,500	100
Red	1399G9-BK	1399G9
Blue	1399G8-BK	1399G8

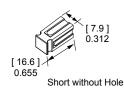


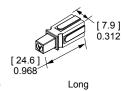
Spacer

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



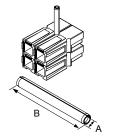




Retaining Pins

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 -		- E	3 -
Description	Part Num	bers	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.

Description	Part Numbers
Minimum Quantity	100 sets of 2
2 or 4 Pole	1462G1
3 or 6 Pole	1462G2
4 or 8 Pole	1462G3







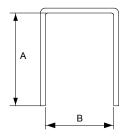


4 or 8 Pole

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.

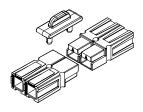
	Dimensions					
Part			- A		- E	3 -
Numbers	$H \times W$	Length	inches	mm	inches	mm
Minimum Qu	uantity 10	00				
114555P1	1 x 1	Short	0.47	12.0	0.28	7.0
114555P2	1 x 2	Short	0.47	12.0	0.57	14.5
114555P3	1 x 3	Short	0.47	12.0	0.89	22.5
114555P7	1 x 4	Short	0.47	12.0	1.20	30.5
114555P10	2 x 1	Short	0.79	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.

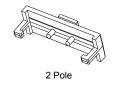
Description	Part Number
Minimum Quantity	100
1 Block High	110G68



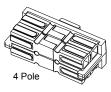
Block Lok

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



Shown without Powerpoles

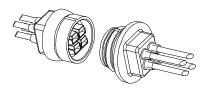


Shown with Powerpoles

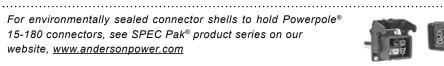
Splash Boot

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



For environmentally sealed connector shells to hold Powerpole® 15-180 connectors, see SPEC Pak® product series on our website, www.andersonpower.com













Powerpole® - Tooling Information

Wire Size		Reeled Pa	art Numbers	Reeled Contact Crimp Tool							
AWG	mm²	Tin Plating	Silver Plating	APP Applicator	+ APP Press						
PP15 / 45 Flat Wiping Power & Ground											
#16 / 20	1.3 / 0.52	262G1	262G2								
#16 / 20	1.3 / 0.52	269G2	N/A								
#12 / 16	3.3 / 1.3	261G1	N/A	TD0101							
#10 / 14	5.3 / 2.1	261G2	261G3	100101	115V= TE0101 230V = TE0102						
#12 / 16	3.3 / 1.3	269G1	N/A								
#10 / 14	5.3 / 2.1	269G3	N/A								
#10 / 14	5.3 / 2.1	200G1L	200G3L								
#10 / 14	5.3 / 2.1	201G1H	N/A	TD0102							
#10 / 14	5.3 / 2.1	1830G1	1830G2								

 $^{^{\}star}$ APP applicators are mechanical feed style and do not require an air feed kit.

			Loose Piece Part Numbers		Loose Piece Contact Crimp Tool							
AWG	mm²	Tin Plating	Silver Plating	Hand Tool C	Pneumatic Bench Tool	+ Die -	Locator	Number of Crimps				
PP15 / 45 Flat Wiping Power & Ground												
#16 / 20 1.3	3 / 0.52	N/A	1332		N/A	N/A	N/A	Single				
#12 / 16 3	.3 / 1.3	N/A	1331	1309G2 or								
#16 / 20 1.3	3 / 0.52	262G1-LPBK	262G2-LPBK	1309G8								
#16 / 20 1.3	3 / 0.52	269G2-LPBK	N/A									
#12 / 16 3	.3 / 1.3	261G1-LPBK	N/A	1309G3 or 1309G8								
#10 / 14 5	.3 / 2.1	261G2-LPBK	261G3-LPBK									
#12 / 16 3	.3 / 1.3	269G1-LPBK	N/A									
#10 / 14 5	.3 / 2.1	269G3-LPBK	N/A									
#10 / 14 5	.3 / 2.1	200G1L-LPBK	200G3L-LPBK	1309G6								
#10 / 14 5	.3 / 2.1	201G1H-LPBK	N/A	or 1309G8								
310 / 14 5	.3 / 2.1	1830G1-LPBK	1830G2-LPBK									
			PF	75								
#6	13.3		1307		1387G1	1388G6	1389G6	Single				
			5900	1309G4								
#8	8.4		1875G1				1389G21					
	53/33	N/A	5952				1389G6 1389G21					
#10 / 12 5			1875G2 5953			1388G7	1309G21					
	.0 / 0.0		5915				1389G6					
			1875G3				1389G21					
				120								
1/0	53.5		1323G2	1368 Series	1387G1	1388G3	1389G4	Single				
#1	42.4		1323G1									
#2	33.6	N/A	1319			1388G4						
#4	21.2		1319G4									
#6	13.3		1319G6									
PP180												
3/0	85		1328G2	1368 Series	1387G2	1303G12 1303G13	1304G32	Double				
2/0	53.5		1328G1									
	53.5		1382									
#1	42.4	N/A	1347									
#2	33.6		1383									
#4	21.1		1384									
#6	13.3		1348		1387G1	1388G4	1389G3	Single				

^{1.} NOTE: See website for the most current information.

^{2.} NOTE: Insertion / Extraction fool for PP15/45 contacts = 111038G2

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Anderson Power Products:

110G10 110G12 110G16 110G17 110G21 110G68 110G9 110g9-bk 114555P1 114555P2 114555P3

114555P6 114555P8 114555P9 115G1 1201G1 1327 1327-BK 1327FP 1327FP-BK 1327G16 1327G16-BK

1327G16FP-BK 1327G17 1327G17-BK 1327G18 1327G18-BK 1327G21 1327G21-BK 1327G22 1327G22-BK

1327G23 1327G23-BK 1327G5 1327G5-BK 1327G5FP 1327G5FP-BK 1327G6 1327G6-BK 1327G6FP

1327G6FP-BK 1327G7 1327G7-BK 1327G7FP 1327G7FP-BK 1327G8-BK 1327G8-BK 1327G8FP-BK

1395 1399G2-BK 1399G6 1399G8-BK 1399G9-BK 1441G1 1442G1 1450G1 1450G3 1451G1 1451G3 1452G1

1452G2 1452G3 1453G2 1453G3 1454G1 1454G2 1454G3 1460G3 1460g4 1461G1-BK 1462G1 1462G2

1462G3 1470G2 1470G3 1470g4 1827G1 1827G1-BK 1307-BK 1317G1 1317G12 1317G12-BK 1317G13

1317G13-BK 1317G14 1317G15 1317G2 1317G3 1317G4 1317G4-BK 1319G4 1319G4-BK 1331-BK 1332-BK

1335G1 1336G1 1337G1 1377G1 1377G13