

Powerpole® Connectors

PP120 - Up to 240 Amps

POWERPOLE® PP120



PP120 series Powerpole® housings are designed to accommodate up to 1/0 AWG (50 mm²) wires and handle high currents up to 240 amps. Reducing bushings allow PP120 to accept down to 8 AWG (10 mm²) wires. Multiple colors of stackable housings combine with low resistance flat wiping technology to offer powerful connection capability.

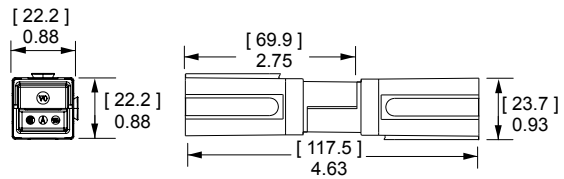
- Large Wire Range Accommodates up to 1/0 (50 mm²) Wire**
Reducing bushings allow as small as 8 (10 mm²) wire to be used
- Low Resistance Silver Plated Copper Contacts**
Allows currents up to 240 amps
- UL Rated for Hot Plugging up to 60 Amps**
Great for battery or other applications where the ability to interrupt circuits is required

PP120 ORDERING INFORMATION

PP120 Housings

The second to largest Powerpole® housing can be used with wire contacts for up to 1/0 AWG (50 mm²) or busbar contacts.

Description	Part Numbers	
Minimum Quantity	500	50
Blue	1321-BK	1321
Black	1321G1-BK	1321G1
White	1321G2-BK	1321G2
Red	1321G3-BK	1321G3
Green	1321G4-BK	1321G4
Orange	1321G5-BK	1321G5
Brown	1321G6-BK	1321G6
Yellow	1321G7-BK	1321G7
Gray	1321G8-BK	1321G8

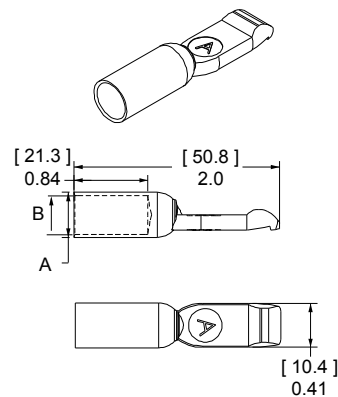


PP120 Silver Plated Wire Contacts

Silver plated contacts offer superior electrical performance and durability up to 10,000 mating cycles. New contacts for 1 to 1/0 AWG (35 to 50 mm²) offer extended capability in the same housings. See reducing bushings in accessory section for smaller wires.

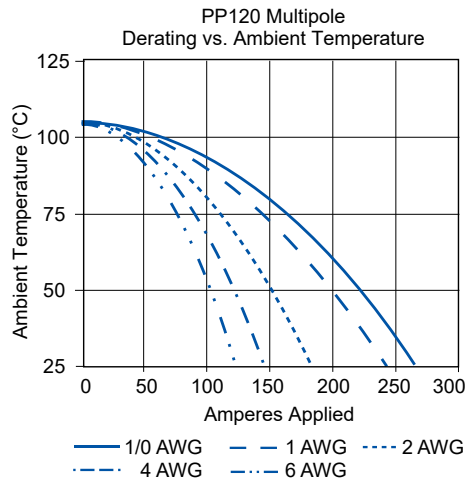
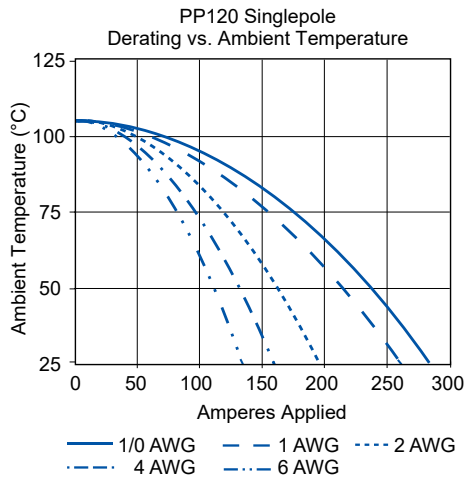
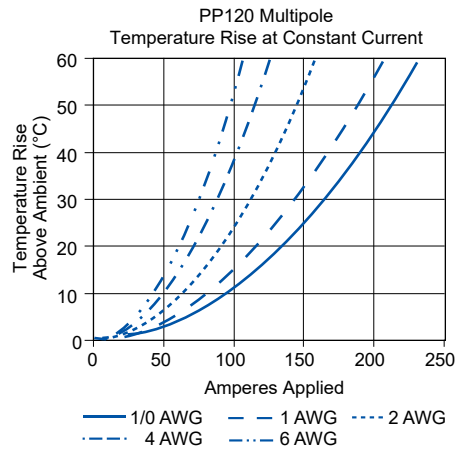
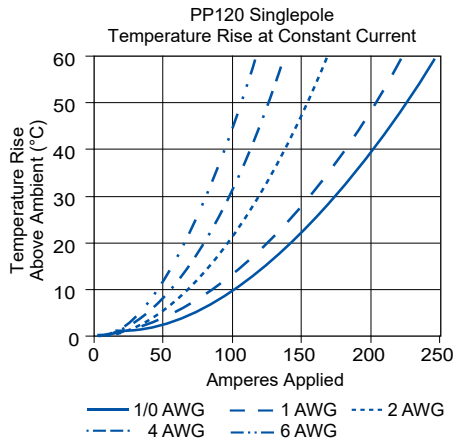
AWG	mm ²	Mating Force	Loose Piece Part Numbers			- A -		- B -	
			600	500	50	inches	mm	inches	mm
1/0	53.5	Low	1323G2-BK	-	1323G2 *	0.52	13.21	0.44	11.18
1	42.4	Low	1323G1-BK	-	1323G1 *	0.47	11.94	0.39	9.91
2	33.6	High	-	1319-BK	1319	0.44	11.18	0.34	8.64
4	21.1	High	-	1319G4-BK	1319G4	0.44	11.18	0.29	7.37
6	13.3	High	-	1319G6-BK	1319G6	0.44	11.18	0.22	5.59

* Extended range



PP120 CONNECTOR TEMPERATURE CHARTS - Temperature rise charts are based on a 25°C ambient temperature.

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



POWERPOLE® PP120

PP120 SPECIFICATIONS

ELECTRICAL

Current Rating Amperes ¹	UL 1977	CSA
Singlepole UL 1977 (1/0 AWG)	240	155
2x2 Block UL 1977 (1/0 AWG)	200	110
Voltage Rating AC/DC		
UL 1977	600	
Dielectric Withstanding Voltage		
Volts AC	2,200	
Avg. Mated Contact Resistance Milliohms ¹		
5 1/2" of 2 AWG Wire	0.136	
UL Hot Plug Current Rating Amperes ⁴		
250 Cycles at 120V DC	60A	

MATERIALS

Housing		
Plastic Resin	Polycarbonate	
Contact Retention Spring	Stainless Steel	
Housing Flammability Rating		
UL94	V-0	
Glow Wire	960°C (GWFI) / 850°C (GWIT)	
Contact		
Base	Copper Alloy	
Plating	Silver	
Contact Termination Methods		
Crimp ³	Wire Contacts	
Hand Solder	Wire Contacts	

MECHANICAL

Wire Size Range	AWG	mm²
Wire Contacts with Bushings	10 to 1/0	5.3 to 53.5
Max. Wire Insulation Diameter		
	in.	mm
	0.600	15.240
Operating Temperature ²		
	°F	°C
	-4° to 221°	-20° to 105°
Mating Cycles No Load by Plating		
	Silver (Ag)	
Wire Contacts	10,000	
Avg. Mating / Unmating Force		
	Lbf.	N
	8	36
Min. Contact / Spring Retention Force		
	Lbf.	N
	60	267



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.

- 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 - Based on 2 housings blocked together.

IEC INFORMATION

Connector Series	Configurations	Creepage / Clearance per IEC 60950-1	Material Group
PP120	Single Pole	Unmated	4.36 mm
		Mated	4.36 mm
	Stacked Powerpole®	Unmated	4.36 mm
		Mated	4.36 mm

PROTECTION

Touch Safety with Wire Contacts

IEC 60529 IP10



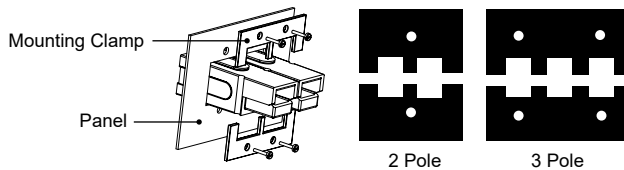
ATTRIBUTES	PP120
AMP Rating AC/DC	120
Voltage Rating AC/DC (Steady State)	400 V AC/DC (Operational)
Breaking Capacity - AMP Rating / Cycles	120 Amp / 10 Cycles
Voltage Rating (Breaking Capacity)	220 VDC
FINGER Safety - Mated Only	IEC 60529- IP20
Wire Size Tested	50 mm ²
Contact Series Tested	1323G2
Climatic Testing (Cold, Heat & MFG)	IEC 60512 Test- 11j, 11i & 11g
Cycle Life	IEC 60512 Test 9a- 5,000 Cycles
Mechanical Strength Impact	IEC 60512-5 @ 29.5 Inches-Dropped 8 times
Temperature Range	-20°C to 105°C -4°F to 221°F

POWERPOLE® PP120 ACCESSORIES

Mounting Clamp

Mounting clamps can be used for fastening a block of Powerpole® 120 series housings to a panel. Connector blocks must be a complete square for the clamps to work properly. Fastening hardware not included.

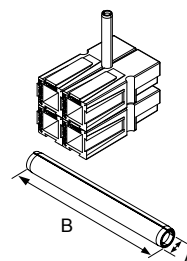
Description	Part Numbers
Minimum Quantity	20 sets of 2
2 Pole	1464G1
3 Pole	1464G2



Retaining Pins

Retaining pins are used to keep stacked Powerpole® 120 series housings from separating. Retaining pins are inserted in the circular opening between two housings stacked side by side. Dimension B is +/- 0.015 in or 0.38 mm.

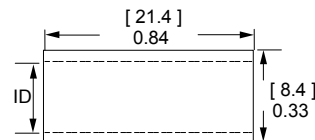
Description	Part Numbers		Dimensions			
			- A -		- B -	
	inches	mm	inches	mm	inches	mm
Minimum Quantity	1,000	100				
1 Block High	111812P7	110G19	0.196 / 0.207	4.98 / 5.26	0.560	14.220
2 Block High	111812P8	110G20	0.196 / 0.207	4.98 / 5.26	1.500	38.100



Reducing Bushings

Use with contact part number 1319-BK to allow a smaller wire to be used with the connector. Electrical capability is derated with smaller wire.

Contact Barrel Size		Wire Size		Part Numbers			Dimensions - ID -	
AWG	mm²	AWG	mm²				inches	mm
Minimum Quantity				2,000	1,000	100		
2	33.6	4	21.2	5919-BK	-	5919	0.28	7.11
2	33.6	6	16	-	5920-BK	5920	0.23	5.84
2	33.6	10 to 8	5.3 to 8.4	5921-BK		5921	0.18	4.57



NOTE: Combination of a bushing and contact is not UL approved.

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



Powerpole®

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

POWERPOLE® TOOLING

Wire Size		Loose Piece Part Number		Loose Piece Contact Crimp Tools															
AWG	mm ²	Tin Plating	Silver Plating	Hand Tool	OR	Pneumatic Bench Tool	+	Die	+	Locator	Number of Crimps								
PP15 / 45 Flat Wiping Power & Ground																			
16 to 20	1.3 to 0.52	N/A	1332	1309G2 or 1309G8							Single								
12 to 16	3.3 to 1.3	N/A	1331																
16 to 20	1.3 to 0.52	262G1-LPBK	262G2-LPBK																
16 to 20	1.3 to 0.52	269G2-LPBK	N/A																
12 to 16	3.3 to 1.3	261G1-LPBK	N/A	1309G3 or 1309G8		N/A		N/A		Single									
10 to 14	5.3 to 2.1	261G2-LPBK	261G3-LPBK																
12 to 16	3.3 to 1.3	269G1-LPBK	N/A																
10 to 14	5.3 to 2.1	269G3-LPBK	N/A	1309G6 or 1309G8						Single									
10 to 14	5.3 to 2.1	200G1L-LPBK	200G3L-LPBK																
10 to 14	5.3 to 2.1	201G1H-LPBK	N/A																
310 to 14	5.3 to 2.1	1830G1-LPBK	1830G2-LPBK																
PP75																			
6	13.3	N/A	1307	1309G4		1387G1		1388G6		1389G6	Single								
			5900																
8	8.4		1875G1																
			5952																
			1875G2																
10 to 12	5.3 to 3.3		5953																
			5915																
			1875G3																
								1388G7		1389G6									
										1389G21									
PP120																			
1/0	53.5	N/A	1323G2	1368 Series		1387G1		1388G3		1389G4	Single								
1	42.4		1323G1																
2	33.6		1319																
4	21.2		1319G4																
6	13.3		1319G6																
								1388G4											
PP180																			
3/0	85	N/A	1328G2	1368 Series		1387G2		1303G12		1304G32	Double								
2/0	53.5		1328G1																
1/0	53.5		1382																
1	42.4		1347																
2	33.6		1383																
4	21.1		1384																
																	1303G13		
6	13.3		1348																
						1387G1		1388G4		1389G3	Single								

Insertion / Extraction Tool for PP15/45 Contacts = 111038G2

NOTE: see website for the most current information.

Wire Size		Reeled Part Number		Reeled Contact Crimp Tools		
AWG	mm ²	Tin Plating	Silver Plating	APP [®] Applicator	+	APP [®] Press
PP15/45 Flat Wiping Power & Ground						
16 to 20	1.3 to 0.52	262G1	262G2	TD0101		115V = TE0101 230V = TE0102
16 to 20	1.3 to 0.52	269G2	N/A			
12 to 16	3.3 to 1.3	261G1	N/A			
10 to 14	5.3 to 2.1	261G2	261G3			
12 to 16	3.3 to 1.3	269G1	N/A			
10 to 14	5.3 to 2.1	269G3	N/A			
10 to 14	5.3 to 2.1	200G1L	200G3L	TD0102		
10 to 14	5.3 to 2.1	201G1H	N/A			
10 to 14	5.3 to 2.1	1830G1	1830G2			

Your Best Connection™

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