Powerpole® & Multipole

Connectors | 10A up to 550A

- *Battery Charging* • *Material Handling* • *E-Mobility*
- *Telecommunications* • *Industrial* • *Commercial Applications*



APP®
Anderson Power Products®

An IDEAL Company

Multipole Family

Overview of SBS®, SB® & SBX® / SBO® Main Differentiating Features



SBS® - The "Storage Battery Safety" connector provides a compact connection with a touch safe interface. The newest series of the Multipole connector family continues to add new features and capabilities. Some models offer auxiliary capabilities or ground options.



SB® - Based on the original "Storage Battery" connector that pioneered flat wiping contact technology over a half century ago. Two to three positions in a genderless mechanically-keyed housing suitable for a wide array of power connection applications.



SBX® - The addition of auxiliary positions to the SB® created the "Storage Battery Auxiliary" connector. Up to 8 auxiliary positions allow expanded capabilities for the Multipole family by allowing intelligent power switching, monitoring of battery charge status, and other signal functions to be integrated into a single connector.



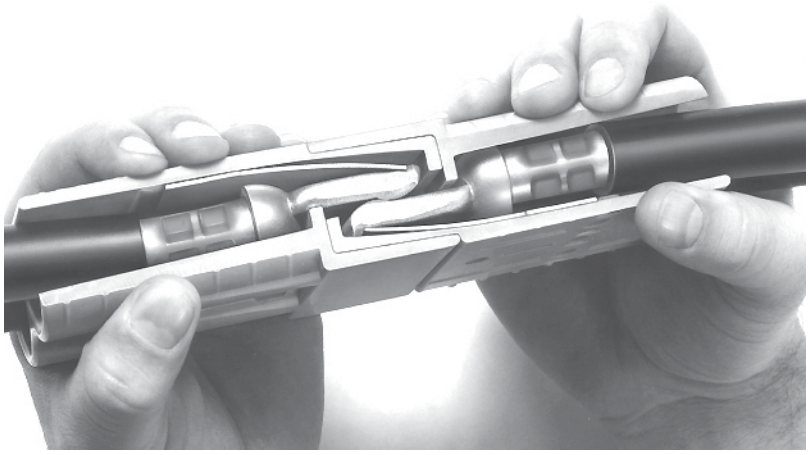
SBE® - By modifying the SBX® housing the "Storage Battery European" connector was created. The SBE® housings are molded from a chemical resistant PBT resin and the SBE® 320 features improved touch safety over the SBX® 350 design.



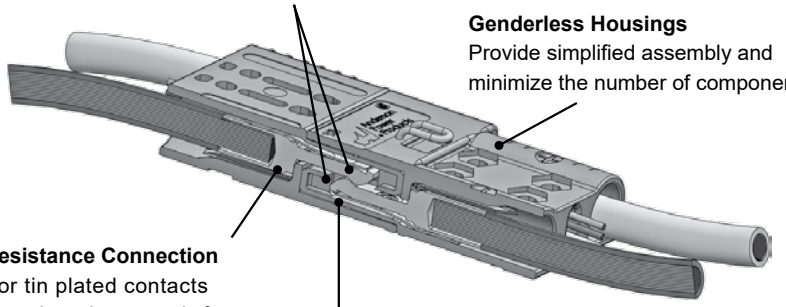
SBO® - Designed to meet the needs of connecting office equipment, the "Storage Battery Office" connector is molded out of durable PC like the original SB® but incorporates the auxiliary positions of the SBX® in a housing similar to the SBE® 80.



SB® SMART - Designed for applications where storage batteries intelligently interact with the system. Two primary power positions are combined with sixteen auxiliary power / signal positions. This allows one connection to be used to route high power lines, low power lines, and signal circuits.



Hot Plugging AC or DC
Contacts feature a sacrificial tip that allow high current circuit interrupt

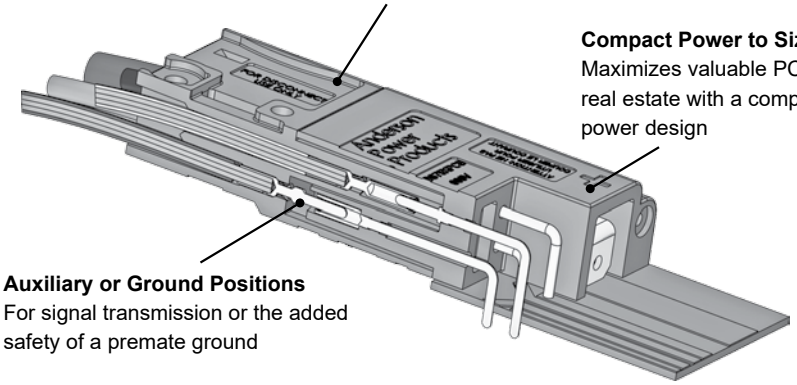


Genderless Housings
Provide simplified assembly and minimize the number of components

Low Resistance Connection
Silver or tin plated contacts inside housings that strongly force the contacts together

Self Securing Design
Stainless steel springs create a robust force between the contacts that holds the connector in the mated condition

Keyed & Color Coded Housings
Prevents accidental cross mating of circuits



Compact Power to Size Ratio
Maximizes valuable PCB edge real estate with a compact high power design

Auxiliary or Ground Positions
For signal transmission or the added safety of a premate ground

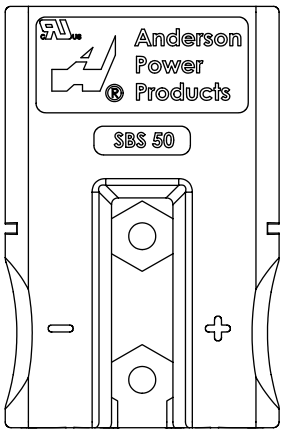
MULTIPOLE FAMILY SELECTION GUIDE

	SBS® Mini	SBS®	SB®	SBO® / SBE® / SBX®	SB® SMART
Page Number	**63**	**67**	**78**	**102**	**124**
Amps Per Pole	Up to 52	Up to 110	Up to 500	Up to 350	Up to 230
Volts (UL) Per Pole	600	600	600	600	600
Wire Gauge - AWG (mm²)	20 to 10K (0.52 to 5.3)	16 to 6 (1.3 to 13.3)	16 to 350 mcm (1.3 to 185)	6 to 300 (24 to 152)	10 to 1/0 (5.3 to 53.5)
Number of Power Circuits	2	2 to 3	2 to 3	2	2
Number of Auxiliary Circuits	0	4	0	8	16
PCB Mount		●	●		
Busbar			●		●
Panel Mount		●	●		
Hot Plug	●	●	●	●	●
Touch Safe	●	●		●	
Mechanically Keyed	●	●	●	●	●
Handle		●	●	●	
Air Supply System				●	
Environmental Protection		●	●		

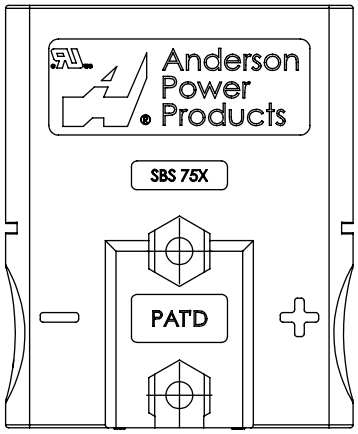
Actual Size - Connector Half



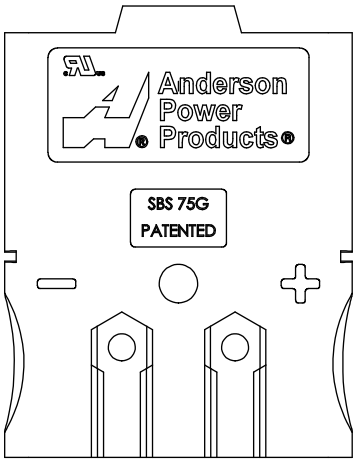
SBS® Mini



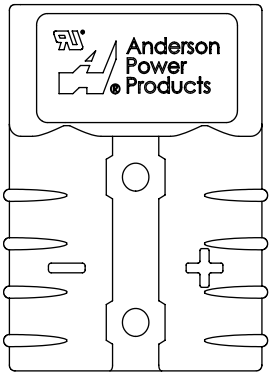
SBS® 50



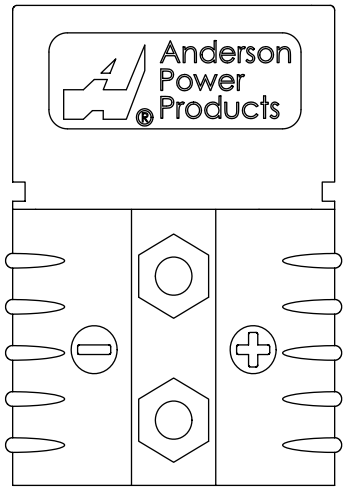
SBS® 75X



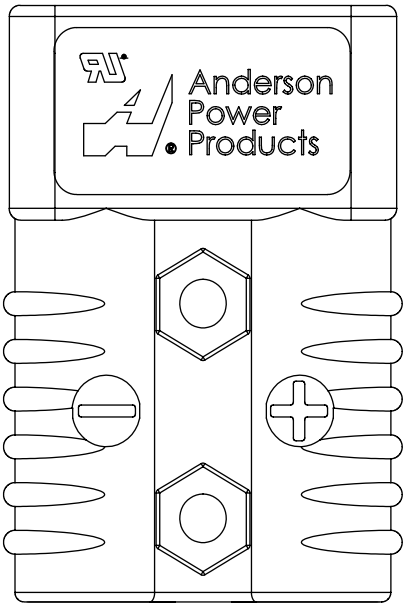
SBS® 75G



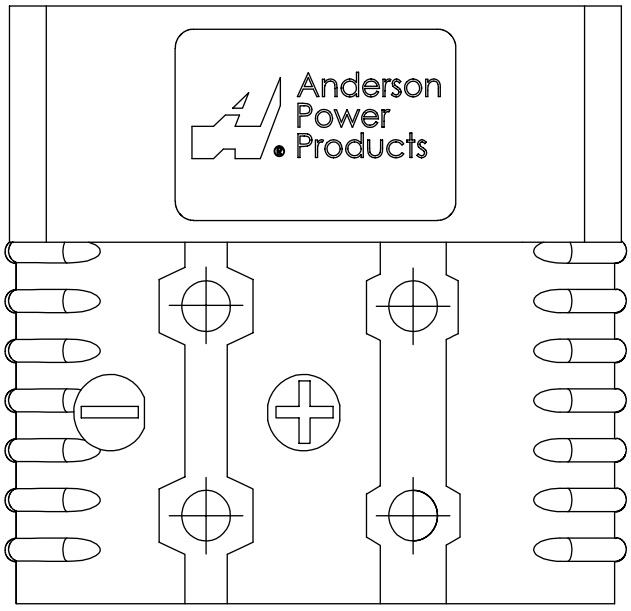
SB® 50



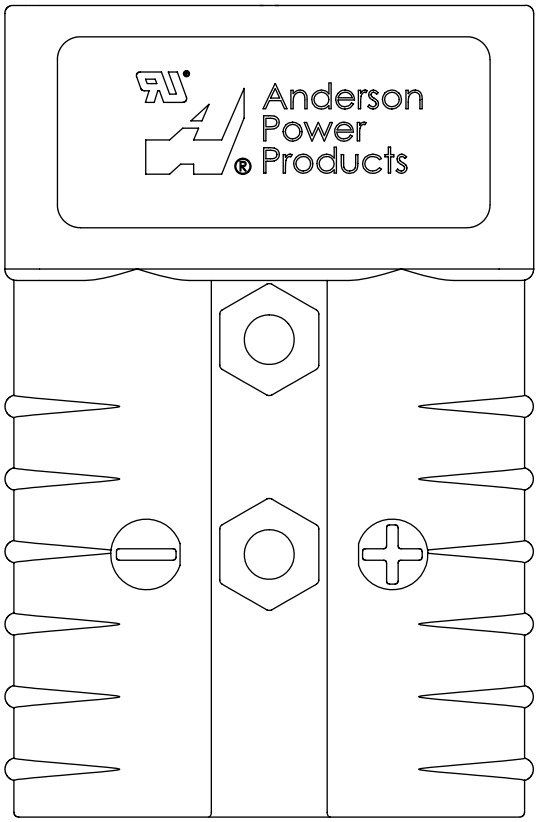
SB® 120



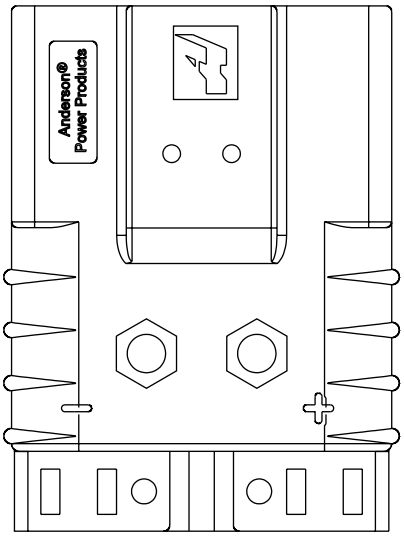
SB® 175 - 2 Pole



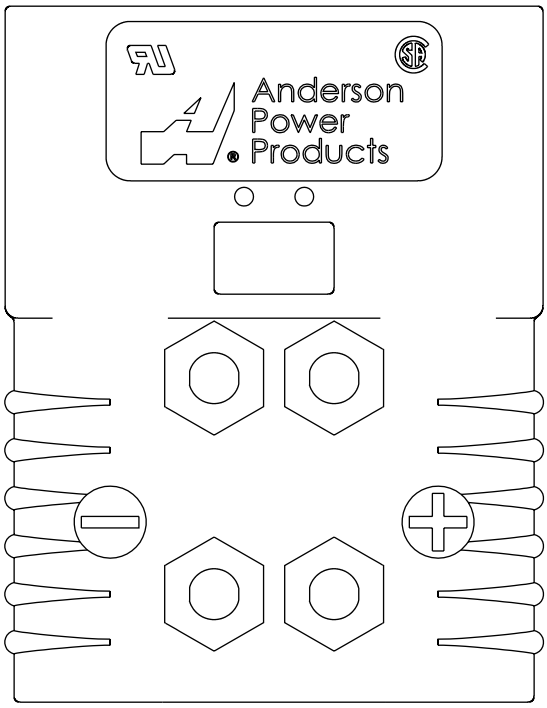
SB® 175 - 3 Pole



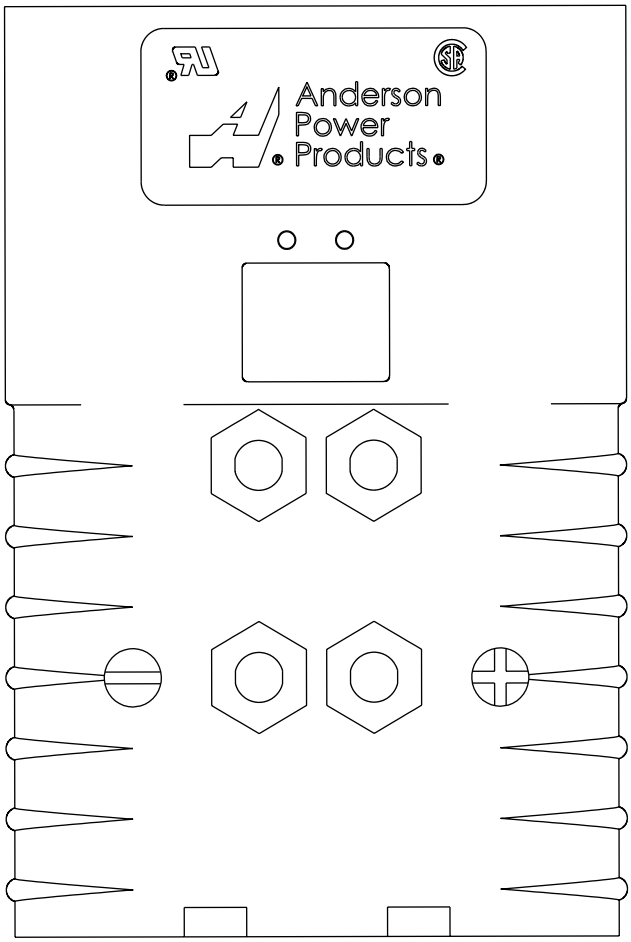
SB® 350



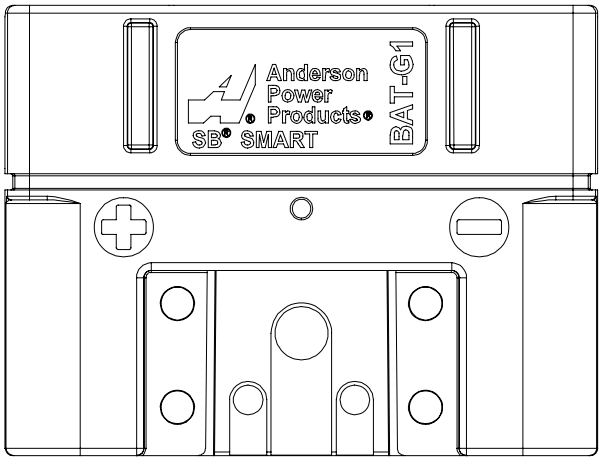
SBE® 80 / SBO® 60



SBE® 160 / SBX® 175



SBE® 320 / SBX® 350



SB® Smart

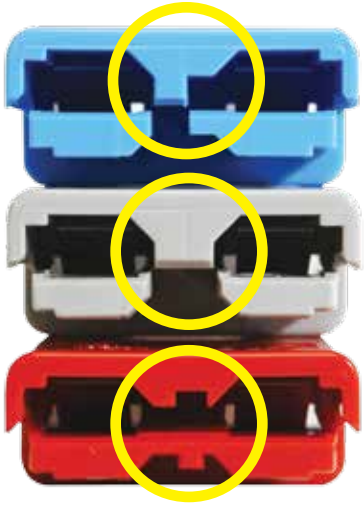
Explanation of Mechanical Voltage Keys

Features molded into the mating interface of the connector housing prevent accidental cross mating of circuits. This molded feature mechanically keys the connection so that only housings with the same mating interface can be mated together.

Different mechanical keys can be easily recognized by the color of the housing. This color coding corresponds to a voltage that industrial trucks, batteries, and chargers have adopted as a standard to prevent incompatible voltages from cross mating.

The same mechanical keying and color coding that is so successful for industrial trucks, is also widely used in power electronics applications. UPS systems, power supplies, personal mobility, and alternative energy applications have all used this feature to ensure user safety.

NOTE: Some housings in the SB® 50, SB® 175, and SB® 350 series have different colored housings with a shared mechanical keying feature. Please see the specific data sheet for details.



Recommended Voltage Key Color-Code

Voltage	12V	18V	24V	36V	48V	72V	80V	96V	120V	144V
Color	Yellow	Orange	Red	Gray	Blue	Green	Black	Brown	Purple	White

SB® 50 Connectors

Up to 120 amps



Based off the design pioneered by Anderson™ in 1953, the two pole SB® connectors set the standard for DC power distribution and battery connections. SB® 50 connectors feature a one piece plastic housing using stainless steel springs to hold low resistance contacts in place. Wires sizes from 16 to 6 AWG (1.5 to 13.3 mm²) are held in the smallest of the SB® series housings.

- **Low Resistance Silver or Tin Plated Copper Contacts**
  Allows UL rated currents up to 120 amps
- **UL Rated for Hot Plugging up to 50 Amps**
  Great for battery or other applications where the ability to interrupt circuits is required
- **Wire, PCB, and Busbar Contacts**
  Allows one connection system to meet multiple needs

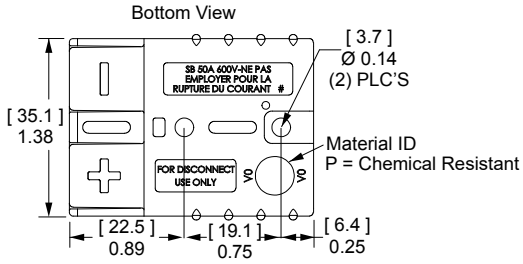
SB® 50 ORDERING INFORMATION

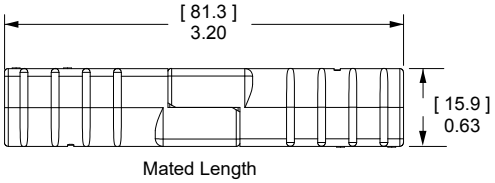
SB® 50 Standard Housings

The smallest SB® housings work with wire contacts up to 6 AWG (10 mm²) as well as PCB, and busbar contacts. Genderless design mates with itself. Mechanical keys are color-coded.

Description	Part Numbers	
Minimum Quantity	500	100
Yellow	992G5-BK	992G5
Orange	992G7-BK	992G7
Red	992G1-BK	992G1
Gray	992-BK	992
Blue	992G4-BK	992G4
Green	992G6-BK	992G6
Black	992G2-BK	992G2

NOTE: SB® 50 Black and Gray housings have the same keying features and can be intermated.





SB® 50 Chemical Resistant Housings

Same features as the Standard SB® 50 but molded in a chemical resistant PBT/PC blend. Suitable for use to -40°C.

Description	Part Numbers	
Minimum Quantity	500	100
Red	P992G1-BK	P992G1
Gray	P992-BK	P992
Black	P992G2-BK	P992G2

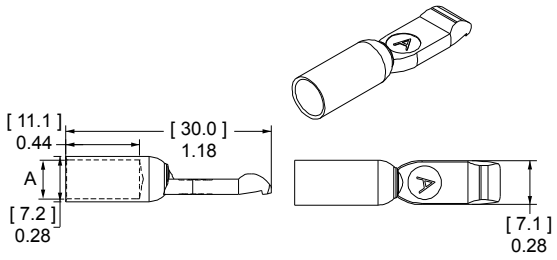
NOTE: SB® 50 Black and Gray housings have the same keying features and can be intermated.

All Data Subject To Change Without Notice

SB® 50 Silver Plated Wire Contacts

Use two silver plated contacts per housing for the best electrical performance and durability up to 10,000 mating cycles. See reducing bushings in accessory section for smaller wires.

AWG	mm²	Mating Force	Loose Piece Part Numbers		Dimensions - A - inches	mm
Minimum Quantity			1,000	100		
6	13.3	Low	1307-BK	1307	0.22	5.59
6	13.3	High	5900-BK	5900	0.22	5.59
8	8.4	High	5952-BK	5952	0.19	4.83
12 to 10	3.3 to 5.3	Low	5953-BK	5953	0.14	3.56
12 to 10	3.3 to 5.3	High	5915-BK	5915	0.14	3.56



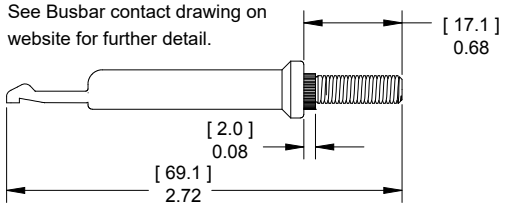
SB® 50 Silver Plated Busbar Contacts

Use 2 busbar contacts per housing to provide a quick disconnect input or output busbar connection. Busbar contacts are for mating with wire contacts only. Part number 75BBS includes lock nuts. Locknuts must be ordered separately for B01915P1.

Type	Thread	Mating Force	Loose Piece Part Numbers	
Minimum Quantity			1,000	20
Busbar	10 to 24	High	B01915P1	75BBS
Lock Nut	10 to 24	-	H1216P8	110G54

NOTE: Has not been tested by UL.

See Busbar contact drawing on website for further detail.



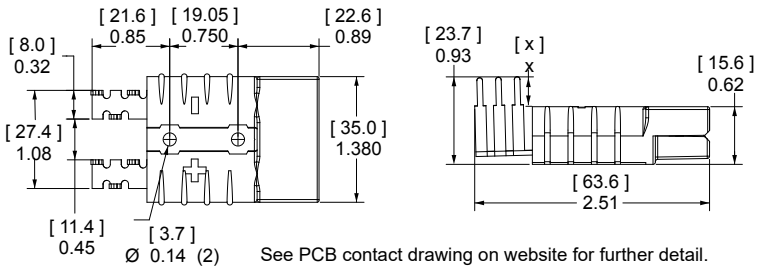
55A Right Angle Standard Powerclaw PCB Contacts

Standard Powerclaw contacts are for use inside a SB® 50 housing and provide a color-coded right angle connection to the PCB.

Description	Loose Piece Part Numbers	
Minimum Quantity	500	100
Tin Plated	PC5930T-BK	PC5930T
Silver Plated	PC5930S-BK	PC5930S

Top View

Side View

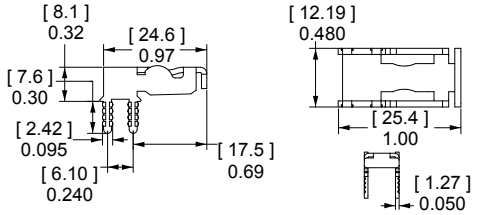


See PCB contact drawing on website for further detail.

55A Right Angle Mini Powerclaw PCB Contacts

Right angle Mini Powerclaw contacts can be used on the PCB edge without a SB® 50 housing on the PCB side. A self polarizing design only allow SB® 50 wire housings to mate to PCB contacts one way.

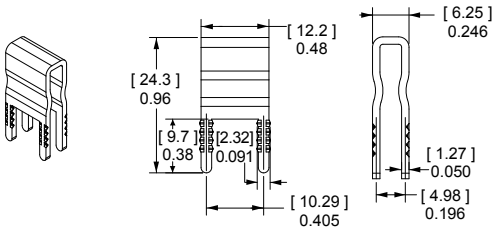
Description	Loose Piece Part Numbers	
Minimum Quantity	1,000	100
Tin Plated	PC5934T-BK	PC5934T
Silver Plated	PC5934S-BK	PC5934S



55A Vertical Mini Powerclaw PCB Contacts

Vertical Mini Powerclaw contacts save space by not requiring a SB® 50 housing on the PCB side. The guide housing is required for to provide a polarized connection. (See SB® 50 accessories).

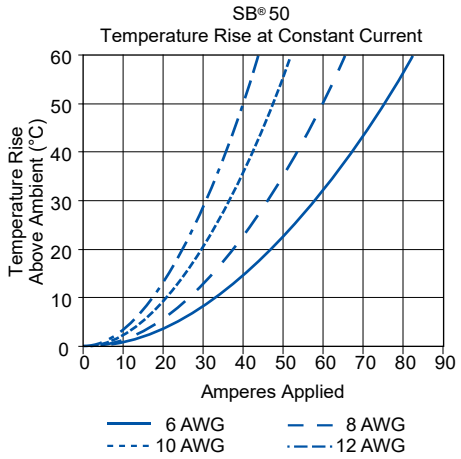
Description	Loose Piece Part Numbers	
Minimum Quantity	1,500	100
Tin Plated	PC5933T-BK	PC5933T
Silver Plated	PC5933S-BK	PC5933S

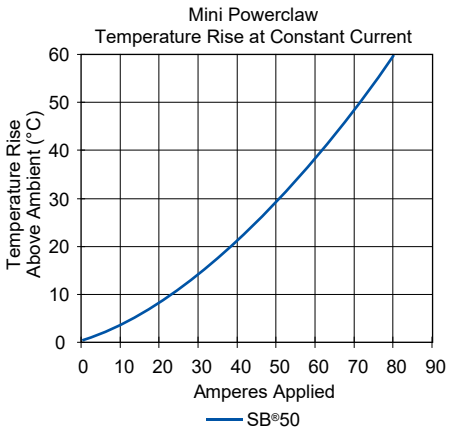


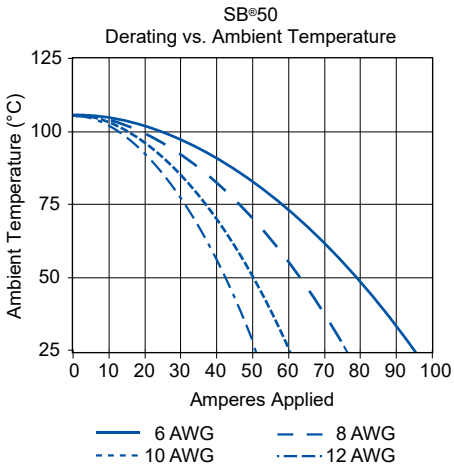
SB® 50

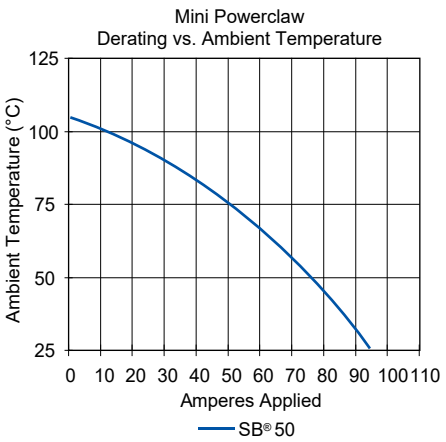
SB® 50 CONNECTOR TEMPERATURE CHARTS - Temperature rise charts are based on a 25°C ambient temperature.

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









NOTE: Powerclaw charts are based on 8 AWG equivalent copper foil on board side, mated to 6 AWG conductor on wire side.

SB® 50 CONNECTOR SPECIFICATIONS

ELECTRICAL

Current Rating Amperes [1]	**UL 1977**	**CSA**
Wire-to-Wire UL 1977 (6 AWG)	120	50
Wire-to-PCB UL 1977 (6 AWG)	50	
Voltage Rating AC/DC		
UL 1977	600	
PCB Connector Recommended Voltage per IEC 60950-1 Table 2L Pollution Degree [2]		
Mini Vert. Contact	522	
Mini Horiz. Contact	504	
Standard Contact	950	
Dielectric Withstanding Voltage		
Volts AC	2,200	
Avg. Mated Contact Resistance Milliohms [1]		
1 1/4" of 6 AWG wire	0.200	
PCB Contact to Wire	0.500	
UL Hot Plug Current Rating Amperes - 250 Cycles at 120V DC		
Wire to Wire	50A	
PCB to Wire (Vertical Mini Powerclaw)	40A	

MATERIALS

Housing	
Standard Plastic Resin	Polycarbonate
Chem. Resistant Resin	Polycarbonate / PBT blend
Contact Retention Spring	Stainless Steel
Housing Flammability Rating	
UL94	V-0
Glow Wire	960°C (GWFI) / 800°C (GWIT)
Contact	
Base	Copper Alloy
Wire Plating	Silver
PCB Plating	Sn or Ag over Ni
Contact Termination Methods	
Crimp [3]	Wire Contacts
Hand Solder	Wire and PCB Contacts
Solder Dip	PCB Contacts
Wave Solder	PCB Contacts
Wrench / Socket	Busbar Contacts

MECHANICAL

Wire Size Range	**AWG**	**mm²**
Wire Contacts with Bushings	16 to 6	1.3 to 13.3
Max. Wire Insulation Diameter	**in.**	**mm**
	0.440	11.200
Operating Temperature [2]	**°F**	**°C**
Standard	-4° to 221°	-20° to 105°
Chemical Resistant*	-40 to 221°	-40° to 105°
*Chemical resistant material not available for PCB guide housings		
Mating Cycles No Load by Plating	**Silver (Ag)**	**Tin (Sn)**
Wire and PCB Contacts	10,000	1,500
Avg. Mating / Unmating Force	**Lbf.**	**N**
Wire to Wire Low Force Contacts	10	44
Wire to Wire High Force Contacts	15	67
Standard Powerclaw to Wire	15	66
Mini Powerclaw to Wire	8	36
PCB Specifications		
Mounting Style	Plated Through Hole	
Max PCB Thickness- in. (mm)	Standard: 0.15 (0.381)	
	Mini: 0.25 (0.635)	
Recommended Traces	8 AWG Cross Section	
Min. Contact / Spring Retention Force	**Lbf.**	**N**
Wire Housing	50	222
Min. Creepage / Clearance Distance	**in.**	**mm**
Standard Powerclaw	0.374	9.5
Mini Vert. Powerclaw	0.213	5.4
Mini Horz. Powerclaw	0.205	5.2
Mechanical Shock [4]		
MIL-STD-202	213 Condition A	50g's
Vibration High Frequency [4]		
MIL-STD-202	204 Condition A	10g's

c US File No. E26226 | © CSA Certified File No. LR25154

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 - Tested with contact part number 5900.

** UL Rated for 65°C largest wire or cable size.*

IEC INFORMATION

ATTRIBUTES	SB® 50
AMP Rating AC/DC	50
Voltage Rating AC/DC (Steady State)	250
Breaking Capacity - AMP Rating / Cycles	50 / 10 Cycles
Voltage Rating (Breaking Capacity)	220 VDC
Finger Safety - Mated Only	IEC 60529 - IP20
Wire Size Tested	16 mm²
Contact Series Tested	5900/1307
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

Connector Series	Configurations	Creepage / Clearance per IEC 60950-1	Material Group
SB® 50	Unmated Mated	2.99 mm 2.99 mm	IIIa

PROTECTION	
Touch Safety with Wire Contacts & PCB Mating Interface	
IEC 60529	IP10 unmated
Environmental Sealing with Boots	
IEC 60529	IP64

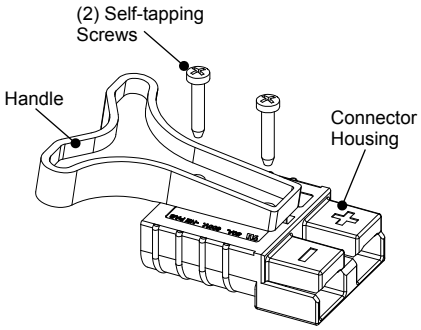
SB® Accessories

"T" Handle *

The "T" handle makes mating and unmating the connector easier. The non-conductive red plastic material is strong and safe. (2) Self tapping screws are used to secure the handle to the connector housing.

Description	Part Numbers	
Minimum Quantity	1,000	50
Red "T" Handle + Hardware Bag	-	SB50-HDL-RED
Hardware Bag (2 Screws)	-	104G17
Red "T" Handle Only	113899P1	-
#8 x 5/8" Screw (Order 2 Per Handle)	H1120P55	-

* Torque value 12 (in - lbs) / 1.4 (Nm)

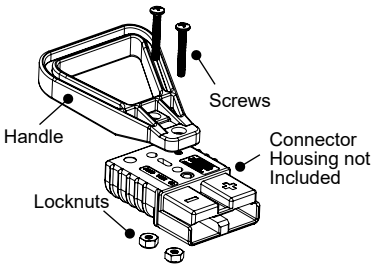


"A" frame handle for SB® 50 *

Handle makes mating and unmating the connector easier. The non-conductive gray plastic material is strong and safe. Machine screws and locknuts included.

Description	Part Number
Minimum Quantity	200
Gray "A" Handle & Hardware	997G1

* Torque value 12 (in - lbs) / 1.4 (Nm)

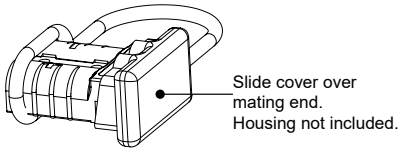


Dust Cover

Prevents dust and dirt from entering the mating interface of the connector when unmated.

NOTE: Not a Hermetic Seal.

Description	Part Numbers	
Minimum Quantity	500	50
Dust Cover with Lanyard Strap, Red	113890P1	134G1

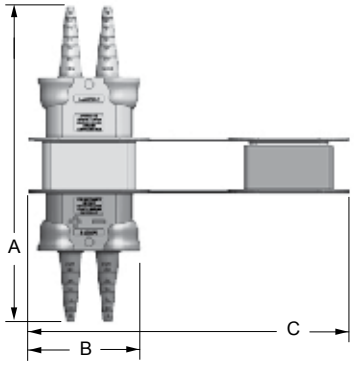


SB® Environmental Boots

SB® Environmental Boots provide water, dirt, chemical and UV protection for SB® 50 connectors. The durable boots shield the connectors from water and dirt to IP64 in both the mated and unmated condition.

Description	Part Numbers	
Minimum Quantity	250	25
SB® 50 Environmental Boot (with cover), Load	3-6054P2-BK	3-6054P2
SB® 50 Environmental Boot (with cover), Source	3-6055P2-BK	3-6055P2
SB® 50 Environmental Boot (no cover), Load	3-6054P1-BK	3-6054P1
SB® 50 Environmental Boot (no cover), Source	3-6055P1-BK	3-6055P1

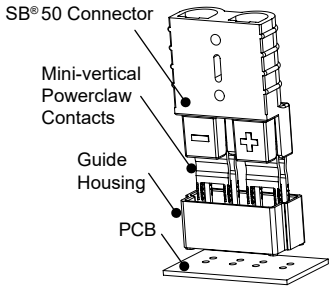
Dimensions					
- A -		- B -		- C -	
in.	mm	in.	mm	in.	mm
5.9	151.4	1.8	45.1	6.3	160



Guide Housings for Vertical Mini Powerclaw Contacts

Prevents polarity being reversed when a SB® 50 is mated to vertical mini Powerclaw contacts.

Description	Part Numbers	
Minimum Quantity	1,000	50
Black Guide Housing	PC-HSG-SB-BK	PC-HSG-SB



Cable Clamps

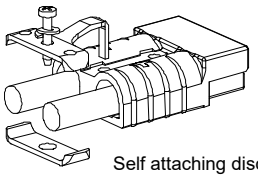
Durable metal cable clamps securely hold cables to prevent accidental strain or pulls from dislodging wire or contacts from the housing. Cable clamps are recommended for solder terminated wires.

Description	Cable Size AWG or (Inches O.D.)	Cable Size mm² or (mm O.D.)	Part Numbers	
Minimum Quantity			500	50
Self Attaching for Discrete Conductor	8 to 6	10	990-BK	990
Self Attaching for Discrete Conductor	12 to 10	4 to 6	990G2-BK	990G2
Bolt on for Discrete Conductor	12 to 6	4 to 10	990G1-BK	990G1
Bolt on for Bundled Conductor	0.320 to 0.450	4.27 to 11.43	5905-BK	5905

* Torque value 12 (in - lbs) / 1.4 (Nm)

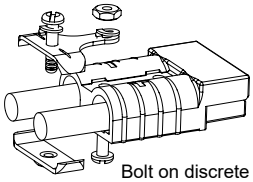
NOTE: For assembly of cable clamp to housing only

The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.



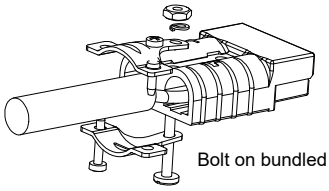
990

Self attaching discrete conductor



990G1

Bolt on discrete conductor



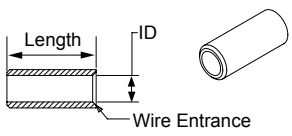
5905

Bolt on bundled conductors

Reducing Bushings

Use with contact part number 5900-BK or 1307-BK to allow a smaller wire to be used with the connector. Electrical capability is derated with smaller wire.

Contact Barrel Size AWG	Contact Barrel Size mm²	Wire Size AWG	Wire Size mm²	Part Numbers			Dimensions - ID - inches	Dimensions - ID - mm	Dimensions - Length - inches	Dimensions - Length - mm
Minimum Quantity				3,000	1,000	100				
6	13.3	8	8.4	-	5912-BK	5912	0.18	4.57	0.45	11.43
6	13.3	12 to 0	3.3 to 5.3	5910-BK	-	5910	0.14	3.56	0.47	11.94
6	13.3	16 to 14	1.3 to 2.1	5913-BK	-	5913	0.09	2.29	0.47	11.94



SB® 120 Connectors

Up to 240 Amps



Like the other Multipole connectors, the SB® 120 offers color-coded mechanically keyed housings. Keys can be used to identify and separate different circuits, or prevent users from accidentally cross mating different voltages. Wires sizes from 10 to 1 AWG (5.3 to 42.4 mm²) are held in the second smallest SB® housing.

- **New Extended Range Contacts Expand Wire Size up to 1 AWG (42.4 mm²)**
  Allows UL rated currents up to 240 amps
- **Chemical Resistant Housing Option**
  Extends temperature range down to -40°C, while offering enhanced UV and chemical resistance
- **Panel Mounting Grooves**
  With use of mounting clamps, can be easily mounted through panels

SB® 120 ORDERING INFORMATION

SB® 120 Standard Housings

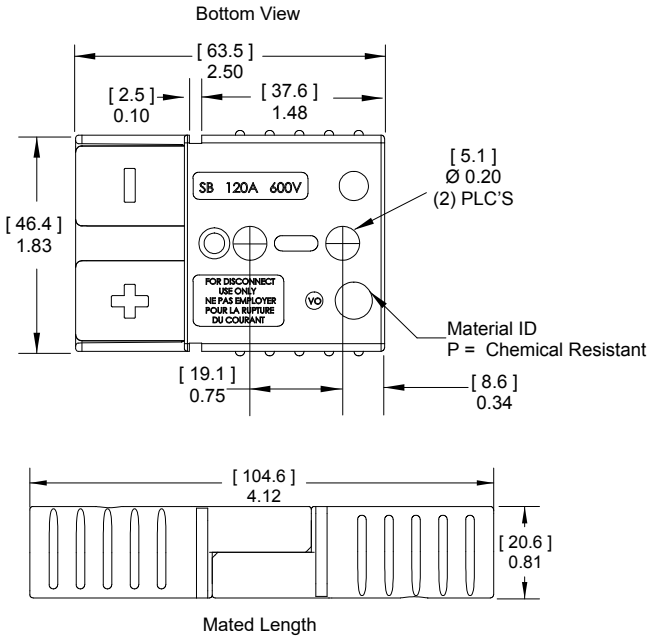
The second to smallest SB® housings work with wire contacts up to 1 AWG (35 mm²) as well as busbar contacts. Genderless design mates with itself. Mechanical keys are color-coded.

Description	Part Numbers	
Minimum Quantity	250	50
Red	6810G3-BK	6810G3
Gray	6810G1-BK	6810G1
Blue	6810G2-BK	6810G2

SB® 120 Chemical Resistant (CR) Housings

Same features as the Standard SB® 120 but molded in a chemical resistant PBT/PC blend. Suitable for use to -40°C.

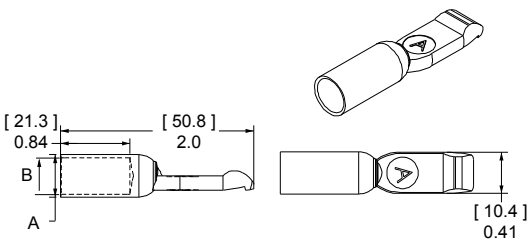
Description	Part Numbers	
Minimum Quantity	250	50
Red	P6810G3-BK	P6810G3
Gray	P6810G1-BK	P6810G1



SB® 120 Silver Plated Wire Contacts

Silver plated contacts offer superior electrical performance and durability up to 10,000 mating cycles.
See reducing bushings in accessory section for smaller wires.

AWG	mm²	Mating Force	Loose Piece Part Numbers			Dimensions - A - inches	Dimensions - A - mm	Dimensions - B - inches	Dimensions - B - mm
Minimum Quantity			600	500	50				
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
1 (set)	42.4	Low	6811G7 (purchase as a set, no minimum quantity)			0.47	11.94	0.39	9.91

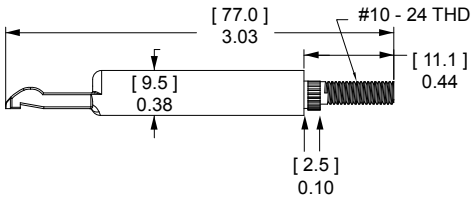


SB® 120 Silver Plated Busbar Contacts

Use 2 busbar contacts per housing to provide a quick disconnect input or output busbar connection. Busbar contacts are for mating with wire contacts only. Part number 120BBS includes lock nuts. Locknuts must be ordered separately for B01997P1.

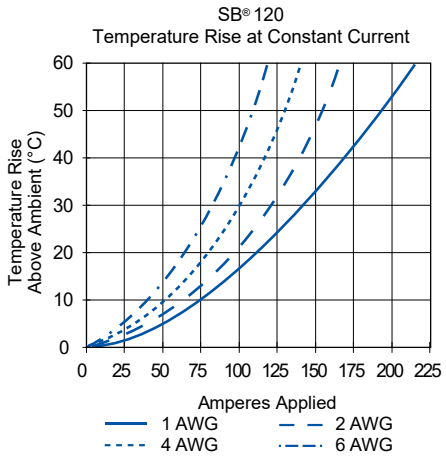
Type	Thread	Mating Force	Loose Piece Part Numbers		
Minimum Quantity			1,000	300	20
Busbar	10 to 24	High	-	B01997P1	120BBS
Lock Nut	10 to 24	-	H1216P8	-	110G54

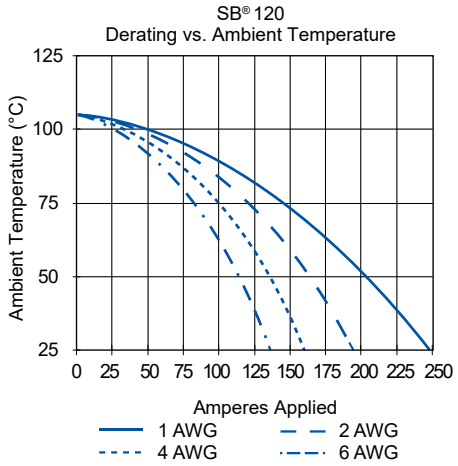
See Busbar contact drawing on website for further detail.



SB® 120 CONNECTOR TEMPERATURE CHARTS - Temperature rise charts are based on a 25°C ambient temperature.

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





SB® 120 CONNECTOR SPECIFICATIONS

MECHANICAL		
Wire Size Range	**AWG**	**mm²**
Wire Contacts with Bushings	10 to 1	5.3 to 42.4
Max. Wire Insulation Diameter	**in.**	**mm**
	0.600	15.240
Operating Temperature [2]	**°F**	**°C**
Standard	-4° to 221°	-20° to 105°
Chemical Resistant	-40 to 221°	-40° to 105°
Mating Cycles No Load by Plating	**Silver (Ag)**	
Wire and Busbar Contacts	10,000	
Avg. Mating / Unmating Force	**Lbf.**	**N**
Wire to Wire	20	89
Min. Contact / Spring Retention Force	**Lbf.**	**N**
	75	333.6

MATERIALS	
Housing	
Standard Plastic Resin	Polycarbonate
Chem. Resistant Resin	Polycarbonate / PBT blend
Contact Retention Spring	Stainless Steel
Housing Flammability Rating	
UL94	V-0
Glow Wire	960°C (GWFI) / 800°C (GWIT)
Wire & Busbar Contacts	
Base	Copper Alloy
Plating	Silver
Contact Termination Methods	
Crimp [3]	Wire Contacts
Hand Solder	Wire Contacts
Wrench / Socket	Busbar Contacts Only

Specifications continued on next page

ELECTRICAL		
Current Rating Amperes [1]	**UL 1977**	**CSA**
Wire-to-Wire (1 AWG)	240	130
Wire-to-Busbar (2 AWG)	120	
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	
Hot Plug Current Rating Amperes - Wire & Busbar		
250 cycles at 120V DC	60A	

c UL us File No. E26226 © CSA Certified File No. LR25154 RoHS COMPLIANT APP REACH COMPLIANCE APP

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.

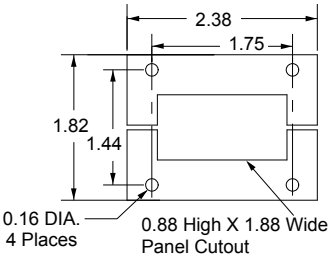
3 - Use APP® recommended tooling only. Alternate tools may adversely affect the performance of our connectors along with UL and CSA recognition.

SB® 120 ACCESSORIES

Mounting Clamp for SB® 120

Mounting clamps can be used for fastening a SB® 120 series housings to a panel. Fastening hardware not included.

Description	Part Number
Minimum Quantity	20 sets of 2
Panel Mount Bracket	1467G1

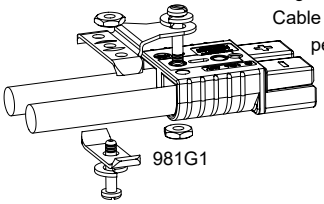


Cable Clamps *

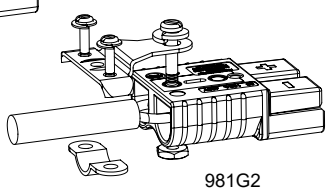
Durable metal cable clamps securely hold cables to prevent accidental strain or pulls from dislodging wire or contacts from the housing. Cable clamps are recommended for solder terminated wires.

Description	Cable Size Min / Max Inches O.D.	Cable Size Min / Max mm O.D.	Part Numbers
Minimum Quantity			50
Bolt on for Discrete Conductor	0.70 to 0.23	17.7 to 5.8	981G1
Bolt on for Bundled Conductor	0.73 to 0.29	18.5 to 7.3	981G2

* Torque value 21 (in lbs) / 2.4 (Nm) *NOTE: For assembly of clamp to housing only*



The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.



IEC INFORMATION

ATTRIBUTES	SB®120
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 mm²
Contact Series Tested	1323
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

Connector Series	Configurations	Creepage / Clearance per IEC 60950-1	Material Group
SB® 120	Unmated Mated	4.10 mm 4.10 mm	IIIa

PROTECTION	
Touch Safety with Wire Contacts	
IEC 60529	IP10 unmated
Environmental Sealing with Boots	
IEC 60529	IP64

All Data Subject To Change Without Notice

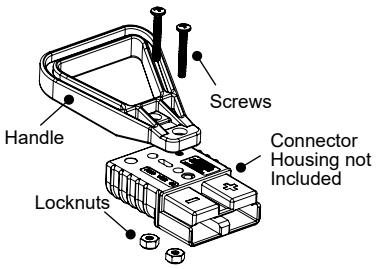
“A” Frame Handle for SB® 120 *

Handle makes mating and unmating the connector easier. The non-conductive gray plastic material is strong and safe. Machine screws and locknuts included.

Description	Part Number
Minimum Quantity	200
Gray “A” Handle & Hardware	997G1

* Torque value 21 (in - lbs) / 2.4 (Nm)

NOTE: For assembly of clamp to housing only



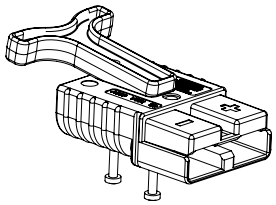
“T” Handle *

The “T” handle makes mating and unmating the connector easier. The non-conductive red plastic material is strong and safe. (2) Self tapping screws are used to secure the handle to the connector housing.

Description	Part Numbers	
Minimum Quantity	1,000	50
Red “T” Handle + Hardware Bag	-	SB120-HDL-RED
Red “T” Handle Only	113899P1	-
#8 x 7/8” Screw (Order 2 Per Handle)	H1120P43	-

* Torque value 21 (in - lbs) / 2.4 (Nm)

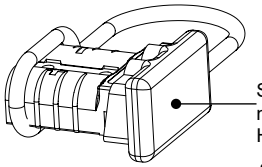
NOTE: For assembly of clamp to housing only



Dust Cover

Prevents dust and dirt from entering the mating interface of the connector when unmated. *NOTE: Not a Hermetic Seal.*

Description	Part Numbers	
Minimum Quantity	100	50
Dust Cover with Lanyard Strap, Black	B02019P1	134G4

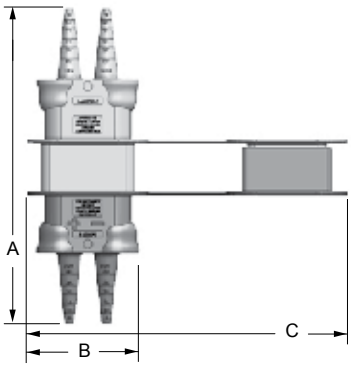


SB® 120 Environmental Boots

Environmental Boots provide water, dirt, chemical and UV protection for SB® 120 connectors. The durable boots shield the connectors from water and dirt to IP64 in both the mated and unmated condition.

Description	Part Numbers	
Minimum Quantity	250	25
SB® 120 Environmental Boot, Load	3-6035P1-BK	3-6035P1
SB® 120 Environmental Boot, Source	3-6034P1-BK	3-6034P1

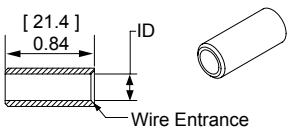
Dimensions					
- A -		- B -		- C -	
in.	mm	in.	mm	in.	mm
7.9	201	2.8	71	8.0	203



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



SB® 175 Connectors

Up to 280 Amps



Wires sizes from 10 to 1/0 AWG (5.3 to 50 mm²) fit in the second to largest connector in the SB® series. The 3 pole SB® 175 adds an additional position for power or grounding. All Multipole wire connector housings are genderless and mate to themselves minimizing inventory and assembly complexity.

- **Silver Plated Wire Contacts up to 1/0 (50 mm²)**
  Allows UL rated currents up to 280 amps
- **Chemical Resistant Housing Option**
  Extends temperature range down to -40°C, while offering enhanced UV and chemical resistance
- **UL Rated for Hot Plugging up to 100 Amps**
  Great for battery or other applications where the ability to interrupt circuits is required

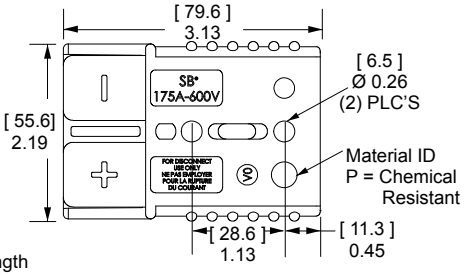
SB® 175 ORDERING INFORMATION

SB® 175 Standard Housings

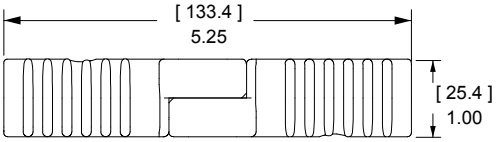
The second to largest SB® housings work with wire contacts up to 1/0 AWG (50 mm²) as well as busbar contacts. Genderless design mates with itself. Mechanical keys are color-coded. *NOTE: SB® 175 black housing is keyless and can be mated with all other colors.*

Description	Part Numbers	
Minimum Quantity	200	50
Yellow	943-BK	943
Orange	942-BK	942
Red	949-BK	949
Gray	940-BK	940
Blue	941-BK	941
Black (Keyless)	2-7252G11	-

Bottom View



Mated Length



SB® 175 Chemical Resistant Housings

Same features as the Standard SB® 175 but molded in a chemical resistant PBT/ PC blend. Suitable for use to -40°C.

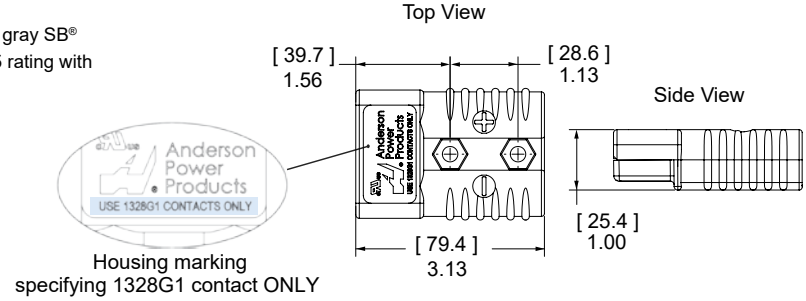
Description	Part Numbers	
Minimum Quantity	200	50
Red	P949-BK	P949
Gray	P940-BK	P940

SB® 175 2/0 Housing

Genderless design mates with itself. Can be cross mated with gray SB® 175 housing, but amperage capability is limited to the SB® 175 rating with the wire and contact used.

Description	Voltage Color-Code	Part Number
Minimum Quantity		100
Gray	36V	115107G1

Top View



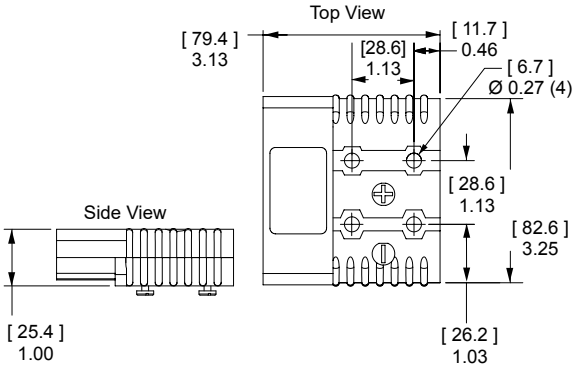
Housing marking specifying 1328G1 contact ONLY

All Data Subject To Change Without Notice

SB® 175 3 Pole Housings & Hardware

A three pole version of the standard SB® 175 housing has a two piece housing with springs and hardware. Useful for DC 2 wire plus ground and AC single phase applications.

Description	Part Numbers	
Minimum Quantity	100	25
Gray Housing and Hardware Kit	-	902
Gray Housing Top Half	2-5048	-
Gray Housing Bottom Half	2-5049	-
Hardware Kit	-	110G34

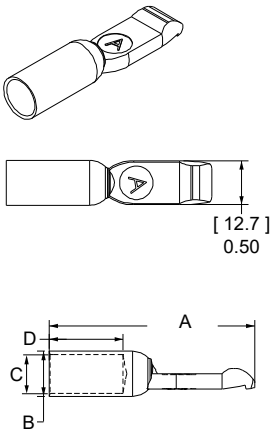


SB® 175 Silver Plated Wire Contacts

Silver plated contacts offer superior electrical performance and durability up to 10,000 mating cycles.
See reducing bushings in accessory section for smaller wires.

AWG	mm²	Mating Force	Loose Piece Part Numbers		Dimensions - A - inches	A - mm	- B - inches	B - mm	- C - inches	C - mm	- D - inches	D - mm
Minimum Quantity			500	50								
1/0	53.5	High	1382-BK	1382	2.35	59.69	0.52	13.21	0.44	11.18	1.04	26.42
1	42.4	High	1347-BK	1347	2.35	59.69	0.52	13.21	0.39	9.91	1.04	26.42
2	33.6	High	1383-BK	1383	2.35	59.69	0.52	13.21	0.35	8.89	1.04	26.42
4	21.1	High	1384-BK	1384	2.35	59.69	0.52	13.21	0.30	7.62	1.04	26.42
6	13.3	High	1348-BK	1348	2.10	53.34	0.37	9.40	0.22	5.59	0.80	26.42
2/0 *	70	Low	1328G1-BK	1328G1	2.35	59.69	0.64	16.26	0.49	12.45	1.04	26.42

* Use with 115107G1 only

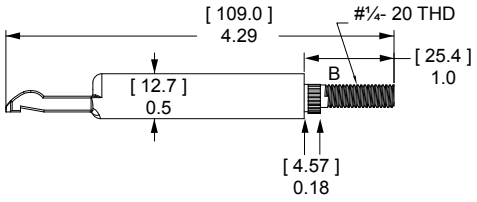


SB® 175 Silver Plated Busbar Contacts

Provides a quick disconnect input or output busbar connection. Busbar contacts are for mating with wire contacts only. Part number 180BBS includes lock nuts. Locknuts must be ordered separately for 180BBS-BK.

Type	Thread	Mating Force	Loose Piece Part Numbers		
Minimum Quantity			1,000	120	10
Busbar	1/4-20	High	-	180BBS-BK	180BBS
Lock Nut	1/4-20	-	H1216P7	110G56	110G55

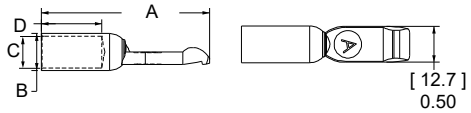
See Busbar contact drawing on website for further detail.



Silver Plated Wire Contacts - use with 2/0 Housing ONLY

Silver plated contacts offer superior electrical performance and durability up to 5,000 mating cycles.

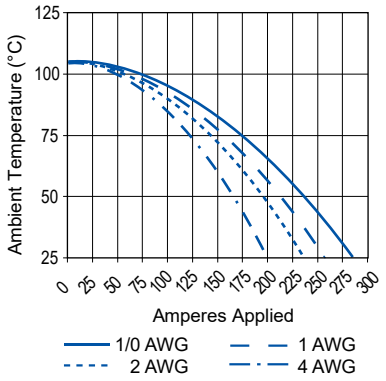
Type	AWG	mm²	Loose Piece Part Numbers		Dimensions - A - inches	A - mm	- B - inches	B - mm	- C - inches	C - mm	- D - inches	D - mm
Minimum Quantity			300	50								
Individual	2/0	70	1328G1-BK	1328G1	2.35	59.69	0.64	16.26	0.49	12.45	1.04	26.42



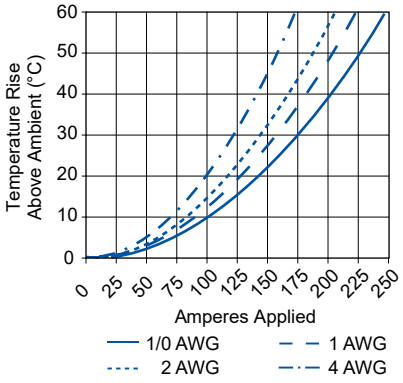
SB® 175 CONNECTOR TEMPERATURE CHARTS - Temperature rise charts are based on a 25°C ambient temperature.

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

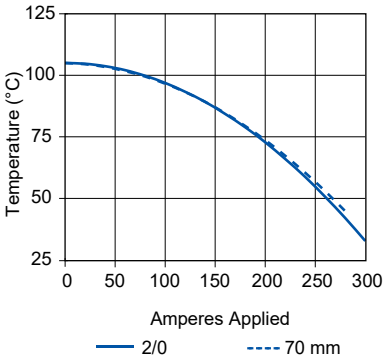
SB® 175
Derating vs. Ambient Temperature



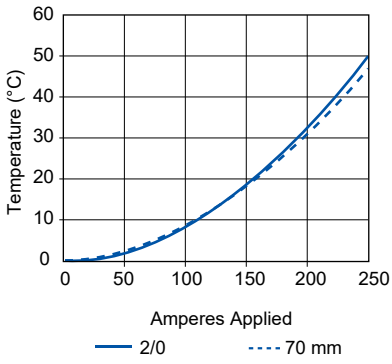
SB® 175
Temperature Rise at Constant Current



SB® 175 2/0
Derating vs. Ambient Temperature



SB® 175 2/0
Temperature Rise at Constant Current



SB® 175 CONNECTOR SPECIFICATIONS

ELECTRICAL		
Current Rating Amperes [1]	**UL 1977**	**CSA**
Wire-to-Wire (1/0 AWG)	280	175
Wire-to-Busbar (1/0 AWG)	200	
3 Pole Wire-to-Wire (1/0 AWG)	175	
Voltage Rating AC/DC		
UL 1977	600	
Dielectric Withstanding Voltage		
Volts AC	2,200	
Avg. Mated Contact Resistance Milliohms [1]		
6" of 1/0 AWG wire	0.100	
Hot Plug Current Rating Amperes - Wire & Busbar		
250 cycles at 120V DC 1/0 Wires	100A	

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**
Standard	-4° to 221°	-20° to 105°
Chemical Resistant	-40 to 221°	-40° to 105°
Mating Cycles No Load by Plating	**Silver (Ag)**	
Wire and Busbar Contacts	10,000	
Avg. Mating / Unmating Force	**Lbf.**	**N**
2 Pole	25	111
3 Pole	35	156
Min. Contact / Spring Retention Force	**Lbf.**	**N**
	150	667
Mechanical Shock [4]		
MIL-STD-202	213 Condition A	50g's
Vibration High Frequency [4]		
MIL-STD-202	204 Condition A	10g's

MATERIALS	
Housing	
Standard Plastic Resin	Polycarbonate
Chem. Resistant Resin	Polycarbonate / PBT blend
Contact Retention Spring	Stainless Steel
Housing Flammability Rating	
UL94	V-0
Glow Wire	960°C (GWFI) / 850°C (GWIT)
Wire & Busbar Contacts	
Base	Copper Alloy
Plating	Silver
Contact Termination Methods	
Crimp [3]	Wire Contacts
Hand Solder	Wire Contacts
Wrench / Socket	Busbar Contacts Only

c UL us File No. E26226 © CSA Certified File No. LR25154

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 - Tested with contact part number 1382.

SB® 175 CONNECTOR IEC INFORMATION

Connector Series	Configurations	Creepage / Clearance per IEC 60950-1	Material Group
SB® 175	Unmated	5.73 mm	IIIa
	Mated	5.73 mm	

PROTECTION	
Touch Safety with Wire Contacts	
IEC 60529	IP10 unmated
Environmental Sealing with Boots	
IEC 60529	IP64

ATTRIBUTES	SB® 175
AMP Rating AC/DC	175
Voltage Rating AC/DC (Steady State)	500 V AC/DC (Operational)
Breaking Capacity - AMP Rating / Cycles	175 Amp / 10 Cycles
Voltage Rating (Breaking Capacity)	220 VDC
Finger Safety - Mated Only	IEC 60529 - IP20
Wire Size Tested	50 mm²
Contact Series Tested	1382
Climatic Testing (Cold, Heat & MFG)	IEC 60512 Test-11j, 11i & 11g
Cycle Life	IEC 60512 Test 9a- 5000 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

SB® 175 2/0 CONNECTOR SPECIFICATIONS

ELECTRICAL		
Current Rating (Amperes) [1]	**UL 1977**	**CSA**
2/0 AWG	340	200
70 mm²	315	185
Voltage Rating (AC/DC)		600
Dielectric Withstanding Voltage (AC)		2,200
AVG Contact Resistance (milli-ohms) [1]		0.045

MATERIALS	
Standard Housing	PC
Flammability Rating	UL94 V-0
Wire Power Contact	Copper Alloy, Silver Plate
Contact Termination Methods	
Crimp [3]	
Hand Solder	

MECHANICAL			
Contact Wire Range (AWG)		2/0	
(mm²)		70	
MAX Wire Insulation Diameter (in)		0.67	
(mm)		17.04	
Operating Temperature [2]		**°C**	**°F**
PC Housing		-20° to 105°	-4° to 221°
AVG Contact Retention Force for Standard PC Housing			
	(lbf)	150 lbf	
	(N)	667 n	
Mating Cycles (no load)		5,000	
Connector AVG Connect / Disconnect	**(lbf)**	55	
	(N)	245	

c UL us File No. E26226

[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.

All Data Subject To Change Without Notice

SB® 175 ACCESSORIES

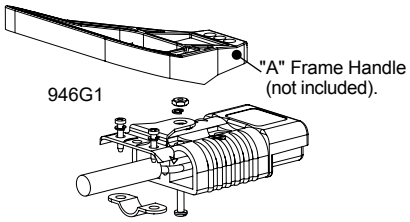
Cable Clamps

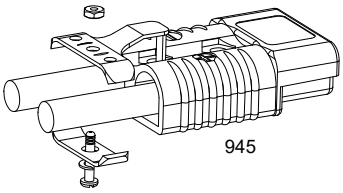
Durable metal cable clamps securely hold cables to prevent accidental strain or pulls from dislodging wire or contacts from the housing. Only Bolt On type clamps can be used with the handles. Cable clamps are recommended for solder terminated wires. Not for use with 3 pole housing.

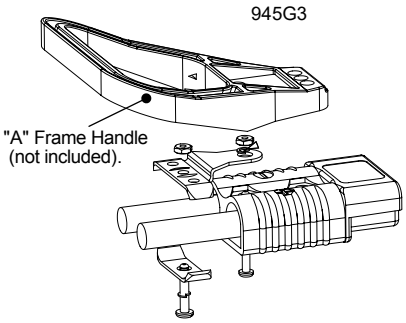
Description	Cable Size Max / Min In. Inches O.D.	Cable Size Max / Min mm mm O.D.	Part Numbers	
Minimum Quantity			100	50
Self Attaching for Discrete Conductor	0.55 to 0.24	14 to 6	105G3	945
Bolt On for Discrete Conductor	0.66 to 0.24	16.7 to 6.2	945G3-BK	945G3
Bolt On for Bundled Conductor	0.75 to 0.29	18.3 to 7.3	946G1-BK	946G1

* Torque value 30 (in - lbs) / 3.4 (Nm)

NOTE: For assembly of clamp to housing only







The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.

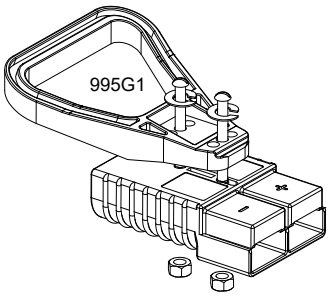
Handles

Handles are made out of durable PC plastic. Hardware to attach to connector body included in kits. Not for use with 3 pole housing.

Description	Part Numbers	
Minimum Quantity	100	25
Gray Handle Kit	-	995G1
Red Handle Kit	-	995G3
Handle Only, Gray	3-5074P1	-
Handle Only, Red	3-5074P3	-
Handle Only, Black	3-5074P5	-
Hardware Bag	-	105G8

* Torque value 30 (in lbs) / 3.4 (Nm)

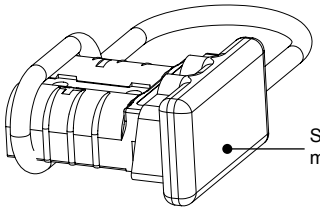
NOTE: For assembly of clamp to housing only



Dust Cover

Prevents dust and dirt from entering the mating interface of the connector when unmated. *NOTE: Not a Hermetic Seal. Not for use with 3 pole housing.*

Description	Part Numbers	
Minimum Quantity	500	50
Dust Cover with Lanyard Strap, Red	113890P2	134G2

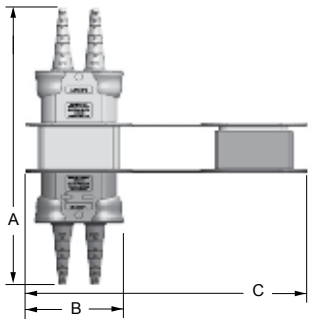


SB® Environmental Boots

SB® Environmental Boots provide water, dirt, chemical and UV protection for SB® 175 connectors. The durable boots shield the connectors from water and dirt to IP64* in both the mated and unmated condition.

Description	Part Numbers		Dimensions - A - in.	mm	- B - in.	mm	- C - in.	mm
Minimum Quantity	250	25						
SB® 175 Environmental Boot, Load	3-6037P1-BK	3-6037P1	9.5	241	3.2	80	9.3	236
SB® 175 Environmental Boot, Source	3-6036P1-BK	3-6036P1	9.5	241	3.2	80	9.3	236

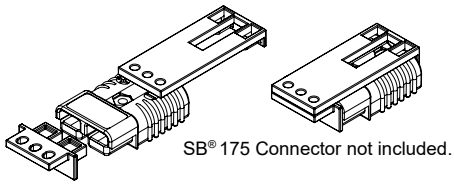
* IP64 test pending



SB® 175 Lockout

Works with standard lockout - tagout equipment to prevent access to the mating interface of the connector. Made from durable PC plastic. Can be used with 3 pole housing to lockout positive and negative positions only.

Description	Part Number
Minimum Quantity	25
Red Lockout - Tagout Kit	SB175-LOCKOUT



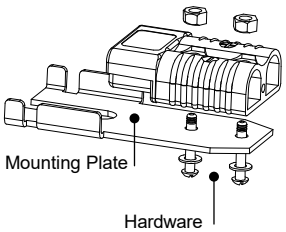
Manual Release Bracket - Mounting Side *

Works with the Locking Side to ease mating and unmating connectors. Not for use with 3 pole housing.

Description	Part Number
Minimum Quantity	10
Mounting Plate and Hardware Kit	924G1

* Torque value 30 (in - lbs) / 3.4 (Nm)

NOTE: For assembly of bracket to housing only



Manual Release Bracket - Locking Side *

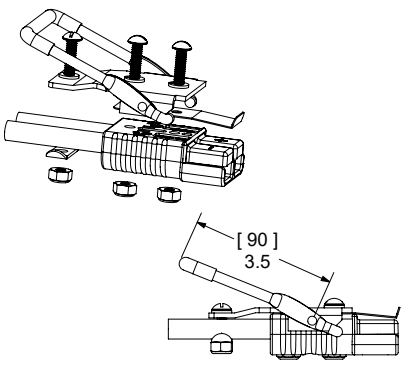
Works with the Mounting Side to ease mating and unmating connectors. Not for use with 3 pole housing.

Description	Cable Size Max / Min Inches O.D.	Max / Min mm O.D.	Part Number
Minimum Quantity			10
Locking plate, handle, clamp and hardware kit.	0.50 to 0.21	12.6 to 5.4	923G1

* Torque value 30 (in - lbs) / 3.4 (Nm)

NOTE: For assembly of bracket to housing only

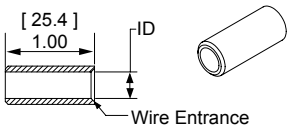
The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.



Reducing Bushings: for Use with Contact Part Number 1382

Use with contact part number 1382-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				1,500	1,000	500	100		
1/0	53.5	1	42.4	-	-	5687-BK	5687	0.39	9.91
1/0	53.5	2	33.6	5690-BK	-	-	5690	0.34	8.64
1/0	53.5	4	21.2	-	5693-BK	-	5693	0.27	6.86
1/0	53.5	6	13.3	-	5663-BK	-	5663	0.22	5.59
1/0	53.5	10 to 8	5.3 to 8.4	5648-BK	-	-	5648	0.19	4.83



SB® 350 Connectors

Up to 500 Amps



The SB® 350 is the largest connector in the series with power capabilities up to 500 amps with a 350 mcm wire. Wires ranging from 1/0 to 350 mcm (53.5 to 185 mm²) fit into the one piece housing available in standard PC or a chemical resistant PBT/PC blend. Silver plated wire or busbar contacts minimize electrical resistance while offering supreme durability and reliability.

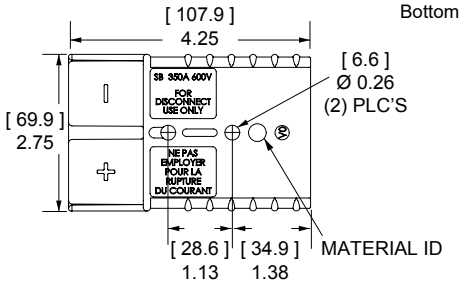
- **Up to 350 mcm (185 mm²) Wires**
  Allows UL rated currents up to 500 amps
- **Chemical Resistant Housing Option**
  Extends temperature range down to -40°C, while offering enhanced UV and chemical resistance
- **Same Housings Used for Wire and Busbar Contacts**
  Enables color-coded mechanically keyed wire to busbar connections

SB® 350 ORDERING INFORMATION

SB® 350 Standard Housings

The largest SB® housings work with wire contacts up to 350 mcm (150 mm²) as well as busbar contacts. Genderless design mates with itself. Mechanical keys are color-coded. *NOTE: SB® 350 Black and Blue Housings have the same keying features and can be intermated.*

Description	Part Numbers	
Minimum Quantity	50	25
Yellow	914-BK	914
Orange	932-BK	932
Red	913-BK	913
Gray	906-BK	906
Blue	912-BK	912
Green	931-BK	931
Black	2-7250G8	-

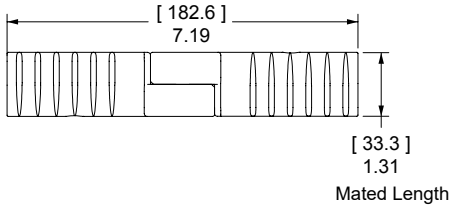


P = Chemical Resistant

SB® 350 Chemical Resistant Housings

Same features as the Standard SB® 350 but molded in a chemical resistant PBT/ PC blend. Suitable for use to -40°C.

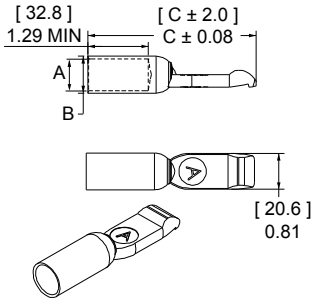
Description	Part Numbers	
Minimum Quantity	50	25
Red	P913-BK	P913
Gray	P906-BK	P906



SB® 350 Silver Plated Wire Contacts

Silver plated contacts offer superior electrical performance and durability up to 10,000 mating cycles. See reducing bushings in accessory section for smaller wires.

AWG	mm²	Mating Force	Loose Piece Part Numbers			Dimensions - A - inches	A - mm	- B - inches	B - mm	- C - inches	C - mm
Minimum Quantity			200	150	50						
350 mcm	185	High	-	910-BK	910 *	0.75	19.05	0.87	22.10	3.04	77.2
300 mcm	152	High	-	910-BK	910 *	0.75	19.05	0.87	22.10	3.04	77.2
4/0	107.2	High	908-BK	-	908 *	0.64	16.26	0.75	19.05	3.03	77.0
3/0	85	High	916-BK	-	916 *	0.58	14.73	0.70	17.78	3.00	76.2
2/0	67.4	High	907-BK	-	907 *	0.49	12.45	0.64	16.26	2.96	75.2
1/0	53.5	High	917-BK	-	917 *	0.44	11.18	0.51	12.95	2.91	73.9



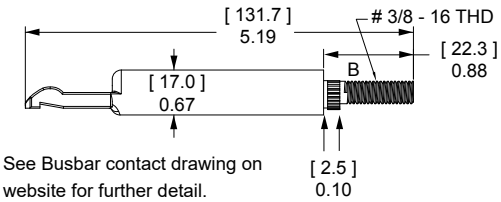
* Sold as pairs. 2 parts shipped for every 1 part ordered.

SB® 350 Silver Plated Busbar Contacts

Use 2 busbar contacts per housing to provide a quick disconnect input or output busbar connection. Busbar contacts are for mating with wire contacts only. Part number 350BBS includes lock nuts. Locknuts must be ordered separately for B01998P1.

Type	Thread	Mating Force	Loose Piece Part Numbers	
Minimum Quantity			50	10
Busbar	3/8-16	High	B01998P1	350BBS
Lock Nut	3/8-16	-	H1216P9	110G73

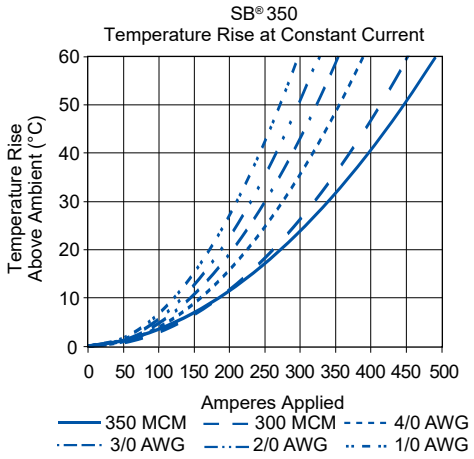
NOTE: Has not been tested by UL.

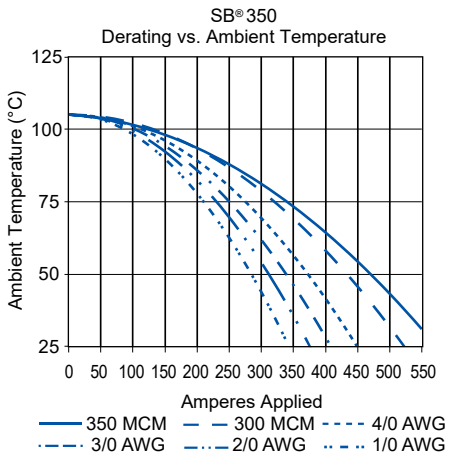


See Busbar contact drawing on website for further detail.

SB® 350 CONNECTOR TEMPERATURE CHARTS - Temperature rise charts are based on a 25°C ambient temperature.

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





SB® 350 CONNECTOR SPECIFICATIONS

ELECTRICAL		
Current Rating Amperes [1]	**UL 1977**	**CSA**
Wire-to-Wire (350 mcm)	500	325
Voltage Rating AC/DC		
UL 1977	600	
Dielectric Withstanding Voltage		
Volts AC	2,200	
Avg. Mated Contact Resistance Milliohms [1]		
2 1/2" of 300 mcm Wire	0.050	
Hot Plug Current Rating Amperes - Wire & Busbar		
250 cycles at 120V DC	100A	

MECHANICAL		
Wire Size Range	**AWG**	**mm²**
Wire Contacts with Bushings	1/0 to 350 mcm	53.5 to 185
Max. Wire Insulation Diameter	**in.**	**mm**
	1.100	27.900
Operating Temperature [2]	**°F**	**°C**
Standard	-4° to 221°	-20° to 105°
Chemical Resistant	-40 to 221°	-40° to 105°
Mating Cycles No Load by Plating	**Silver (Ag)**	
Wire and Busbar Contacts	10,000	
Avg. Mating / Unmating Force	**Lbf.**	**N**
2 Pole	30	133
Min. Contact / Spring Retention Force	**Lbf.**	**N**
	150	667

Specifications continued on next page

MATERIALS	
Housing	
Standard Plastic Resin	Polycarbonate
Chem. Resistant Resin	Polycarbonate / PBT blend
Contact Retention Spring	Stainless Steel
Housing Flammability Rating	
UL94	V-0
Glow Wire	960°C (GWFI) / 800°C GWIT)
Wire & Busbar Contacts [4]	
Base	Copper Alloy
Plating	Silver
Contact Termination Methods	
Crimp [3]	Wire Contacts
Hand Solder	Wire Contacts
Wrench / Socket	Busbar Contacts

c US File No. E26226 © CSA Certified File No. LR25154

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

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 - Has not been tested by UL.

IEC INFORMATION

Connector Series	Configurations	Creepage / Clearance per IEC 60950-1	Material Group
SB® 350	Unmated	5.66 mm	IIIa
	Mated	5.66 mm	

PROTECTION	
Touch Safety with Wire Contacts	
IEC 60529	IP10 unmated

ATTRIBUTES	SB® 350
AMP Rating AC/DC	350
Voltage Rating AC/DC (Steady State)	500 V AC/DC (Operational)
Breaking Capacity - AMP Rating / Cycles	100 Amp / 10 cycles
Voltage Rating (Breaking Capacity)	125 VDC
Finger Safety - Mated Only	IEC 60529 - IP20
Wire Size Tested	120 mm^2
Contact Series Tested	908
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

All Data Subject To Change Without Notice

SB® 350 ACCESSORIES

Cable Clamps *

Durable metal cable clamps securely hold cables to prevent accidental strain or pulls from dislodging wire or contacts from the housing. Cable clamps are recommended for solder terminated wires.

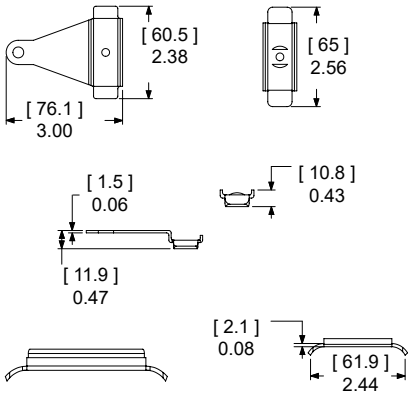
Description	Cable Size Min / Max Inches O.D.	Cable Size Min / Max mm O.D.	Part Number
Minimum Quantity			10
Bolt On for Discrete Conductor	1.00 to 0.35	25.4 to 8.8	996G1

* Torque value 50 (in - lbs) / 5.6 (Nm)

NOTE: For assembly of clamp to housing only

The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.

996G1



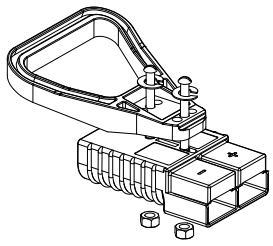
Handles *

Handles are made out of durable PC plastic.
Hardware to attach to connector body included in kits.

Description	Part Numbers	
Minimum Quantity	100	25
Gray Handle Kit	-	995G2
Red Handle Kit	-	995G4
Handle Only, Gray	3-5074P1	-
Handle Only, Red	3-5074P3	-
Handle Only, Black	3-5074P5	-
Hardware Bag	-	106G7

* Torque value 50 (in - lbs) / 5.6 (Nm)

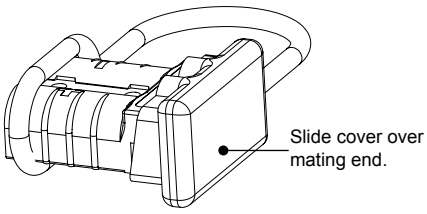
NOTE: For assembly of clamp to housing only



Dust Cover

Prevents dust and dirt from entering the mating interface of the connector when unmated. *NOTE: Not a Hermetic Seal.*

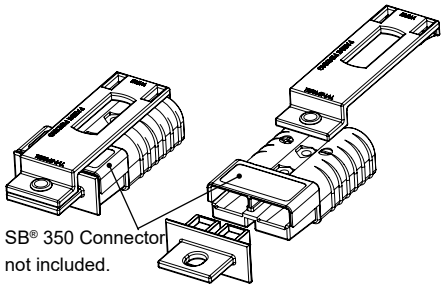
Description	Part Numbers	
Minimum Quantity	500	50
Dust Cover with Lanyard Strap, Red	113890P3	134G3



SB® 350 Lockout

Works with standard lockout - tagout equipment to prevent access to the mating interface of the connector. Made from durable PC plastic.

Description	Part Number
Minimum Quantity	25
Red Lockout - Tagout Kit	SB350-LOCKOUT



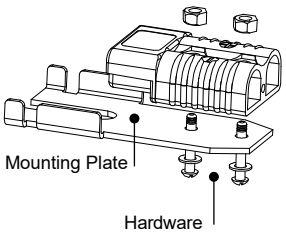
Manual Release Bracket - Mounting Side *

Works with the Locking Side to ease mating and unmating connectors.

Description	Part Numbers		
Minimum Quantity	66	25	10
Bracket and Hardware Kit	-	-	922G1
Bracket Only	B00229P1	-	-
Hardware Bag	-	106G6	-

* Torque value 50 (in - lbs) / 5.6 (Nm)

NOTE: For assembly of brackets to housing only



Manual Release Bracket - Locking Side with Cable Clamp *

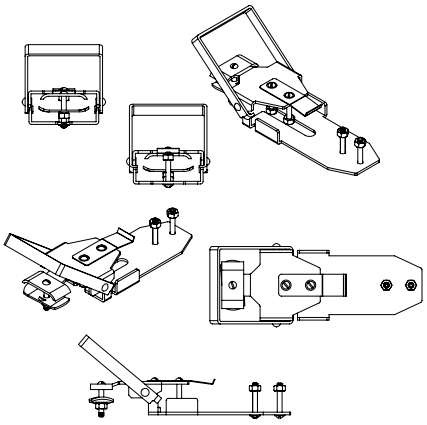
Works with the Mounting Side to ease mating and unmating connectors.

Description	Cable Size Min / Max Inches O.D.	Cable Size Min / Max mm O.D.	Part Number
Minimum Quantity			10
Bracket and Hardware Kit w/ Clamp Kit	0.94 to 0.61	23.7 to 15.5	919

* Torque value 50 (in - lbs) / 5.6 (Nm)

NOTE: For assembly of bracket to housing only

The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.



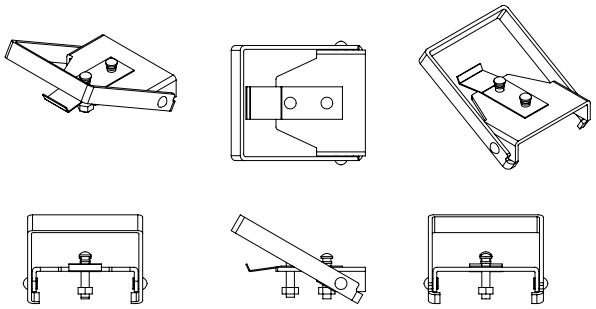
Manual Release Bracket - Locking Side no Cable Clamp *

Works with the Battery side to ease mating and unmating connectors.

Description	Part Number
Minimum Quantity	10
Bracket and Hardware Kit No Clamp Kit	919G1

* Torque value 50 (in lbs) / 5.6 (N - M)

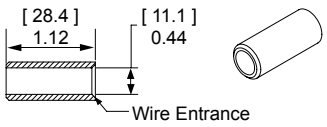
NOTE: For assembly of bracket to housing only



Reducing Bushings: for Use with Contact Part Number 907

Use with contact part number 907-BK to allow a smaller wire to be used with the connector. Electrical capability is derated with smaller wire.

Contact Barrel Size AWG	mm	Wire Size AWG	mm²	Part Numbers	
Minimum Quantity				500	100
2/0	67.4	1/0	53.5	5918-BK	5918



SB® 350

SB® Tooling Information

Wire Size		Loose Piece Part Number	Loose Piece Contact Crimp Tools							
AWG	mm²	Silver Plating	Hand Tool	OR	Pneumatic Tool	+	Die	+	Locator	Number of Crimps
SB® 50										
6	13.3	1307	1309G4		1387G1		1388G6		1389G6	Single
		5900								
8	8.4	5952								
10 to 12	5.3 to 3.3	5953					1388G7		1389G7	
		5915								
SB® 120										
1	42.4	1323G1	1368 Series		1387G1		1388G3		1389G4	Single
2	33.6	1319					1388G4			
4	21.2	1319G4								
6	13.3	1319G6								
SB® 175										
1/0	53.5	1382	1368 Series		1387G2		1303G13		1304G32	Double
1	42.4	1347								
2	33.6	1383								
4	21.1	1384								
6	13.3	1348			1387G1		1388G4		1389G3	Single
SB® 350										
350 mcm	185	910	1368 Series		N/A					Double
300 mcm	152	910								
4/0	107.2	908			1387G2		1303G3		1304G31	
3/0	85	916					1303G12			
2/0	67.4	907								
1/0	53.5	917								

NOTE: See website for the most current information.

SB® 2/0 Tooling Information

Wire Size		Loose Piece Part Number	Loose Piece Contact Crimp Tools							
AWG	mm²	Silver Plating	Hand Tool	OR	Pneumatic Tool	+	Die	+	Locator	Number of Crimps
2/0	53.5	1328G1	1368		1387G2		1303G12		1304G32	Double

NOTE: See website for the most current information.