# SB®350 Connectors - up to 450 Amps



### SB®350 ORDERING INFORMATION |

#### SB®350 Standard Housings

The largest SB® housings work with wire contacts up to 300 mcm [150 mm²] as well as busbar contacts. Genderless design mates with itself. Mechanical keys are color coded. NOTE: SB350 Black and Blue Housings have the same keying features and can be intermated.

	Voltage		
	Color		
Description	Code	Part Number	ers
Minimum Qua	ntity	50	25
Yellow	12V	914-BK	914
Orange	18V	932-BK	932
Red	24V	913-BK	913
Gray	36V	906-BK	906
Blue	48V	912-BK	912
Green	72V	931-BK	931
Black	80V	2-7250G8	-

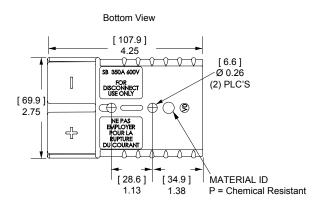
#### SB®350 Chemical Resistant Housings

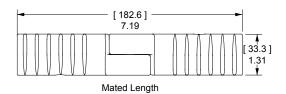
Same features as the Standard SB®350 but molded in a chemical resistant PBT/ PC blend. Suitable for use to -40°C.

	Voltage Color		
Description	Code	Part Nu	ımbers
Minimum Qu	antity	50	25
Red	24V	P913-BK	P913
Gray	36V	P906-BK	P906

The SB®350 is the largest connector in the series with power capabilities up to 450 amps with 4/0 wire. Wires ranging from #1/0 (50 mm²) to 300 mcm (152 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 300 mcm (152 mm²) Wires
   Allows UL rated currents up to 450 amps with 4/0 wire
- 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

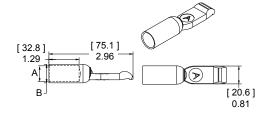




#### SB®350 Silver Plated Wire Contacts

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

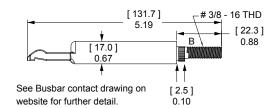
							Dimen	sions	
		Mating				- A	-	- B	i -
AWG	mm²	Force	- Loose F	Piece Part	Numbers -	inches	mm	inches	mm
Minimum	Quantity		200	150	50				
300mcm	152	High	-	910-BK	910 *	0.75	19.05	0.87	22.10
4/0	107.2	High	908-BK	-	908 *	0.64	16.26	0.75	19.05
3/0	85	High	916-BK	-	916 *	0.58	14.73	0.70	17.78
2/0	67.4	High	907-BK	-	907 *	0.49	12.45	0.64	16.26
1/0	53.5	High	917-BK	-	917 *	0.44	11.18	0.51	12.95



#### 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 Pie	ce Part N	umhers -
Minimum (				10	
Busbar	1/4-20	High	B01998P1	350BBS	3
Lock Nut	1/4-20	_	H1216P9	110G73	



## | SB®350 CONNECTOR SPECIFICATIONS |

Electrical		
Current Rating Amperes <sup>1</sup>	UL 1977	CSA
Wire to Wire (4/0 AWG)	450	350
Voltage Rating AC/DC		
UL 1977	600	
Dielectric Withstanding Voltage		
Volts AC	2,200	
Avg. Mated Contact Resistance Milliohi	ms¹	
2 1/2" of 300mcm wire	0.050	
Hot Plug Current Rating Amperes - Win	e & Busbar	
250 cycles at 120V DC	100A	

Materials	
Housing	
Standard Plastic Resin	Polycarbonate
Chem. Resistant Resin	Polycarbonate / PBT blend
Contact Retention Spring	Stainless Steel
Housing Flammability Rating	
UL94	V-0
Wire & Busbar Contacts	
Base	Copper Alloy
Plating	Silver
Contact Termination Methods	
Crimp <sup>3</sup>	Wire Contacts
Hand Solder	Wire Contacts
Wrench / Socket	Busbar Contacts

Mechanical		
Wire Size Range	AWG	mm²
Wire Contacts with Bushings	1/0 to 300 mcm	53.5 to 152
Max. Wire Insulation Diameter	in.	mm
	1.100	27.900
Operating Temperature <sup>2</sup>	°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	150	
N	667	

#### **Protection**

**Touch Safety with Wire Contacts** IEC 60529 IP10

- 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.
- <sup>2</sup> Limited by the thermal properties of the connector plastic housing.
- <sup>3</sup> Use APP® recommended tooling only. Alternate tools may adversely affect the performance of our connectors along with UL and CSA recognition.

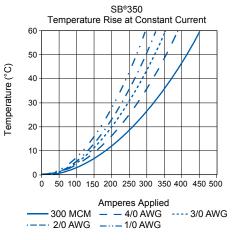


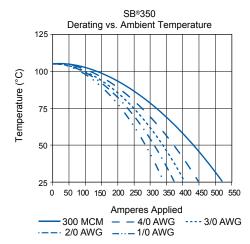




<sup>\*</sup> Sold as pairs. 2 parts shipped for every 1 part ordered.

## | SB®350 CONNECTOR TEMPERATURE CHARTS|





NOTE: Temperature rise charts are based on a 25°C ambient temperature.

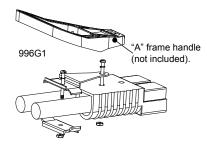
## | SB® 350 Accessories |

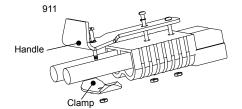
#### **Cable Clamps**

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.

	Cable		
	Min / Max		
Description	Inches O.D.	mm O.D.	- Part Number -
Minimum Quantity			10
Bolt On for Discrete Conductor	1.00 to 0.35	25.4 to 8.8	996G1
Discrete Conductor w/ Integral Handle	0.76 to 0.32	19.3 to 8.2	911

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

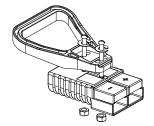




#### **Handles**

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

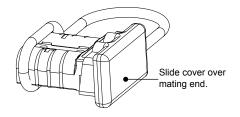
Description	Part Numbers		
Minimum Quantity	100	25	
Gray Handle Kit	-	995G2	
Red Handle Kit	-	995G4	
Handle Only, Gray	3-5074P1	-	
Handle Only, Red	3-5074P3	-	
Handle Only, Black	3-5074P5	-	
Hardware Bag	-	106G7	



#### **Dust Cover**

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

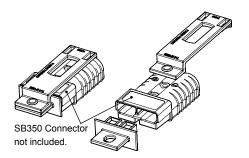
Description	Part Numbers		
Minimum Quantity	500	50	
Dust Cover with Lanyard Strap, Red	113890P3	134G3	



#### SB®350 Lockout

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

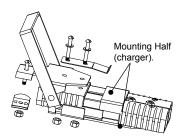
Description	Part Number		
Minimum Quantity	25		
Red Lockout - Tagout Kit	SB350-LOCKOUT		



#### **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	-	

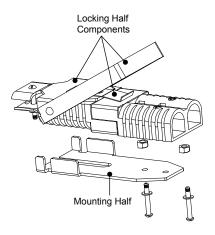


#### Manual Release Bracket - Locking Side with Cable Clamp

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

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

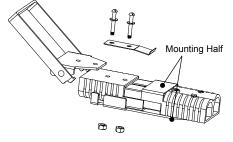
The given wire O.D. information is an estimate. Cable clamps should be evaluated for performance with the actual wire to be used.



#### Manual Release Bracket - Locking Side no Cable Clamp

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

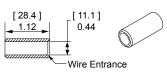
Description	- Part Numbers -		
Minimum Quantity	10		
Bracket and Hardware Kit No Clamp Kit	919G1		



#### Reducing Bushings: for Use with Contact # 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	Wire Size	Part Numbers	
Minimum Quantity		500	100
2/0 AWG [67.4 mm <sup>2</sup> ]	1/0 AWG [53.5 mm <sup>2</sup> ]	5918-BK	5918



15221, DS-SB350 REV C4.0 All Data Subject To Change Without Notice



## - Tooling Information

Wire	Size	Loose Piece Part Numbers	Loose Piece Contact Crimp Tools						
AWG	mm²	Silver Plating	Hand Tool <sub>O</sub>	Pneumatic Bench Tool	Die	Locator	Number of Crimps		
	SB50								
#6	13.3	1307		1309G4 1387G1	1388G6	1389G6	Single		
		5900							
#8	8.4	5952	1309G4						
#10 / 12	5.3 / 3.3	5953			1388G7				
#10712	3.37 3.3	5915							
	SB120								
#1	42.4	1323G1		1387G1	1388G3	1389G4	Single		
#2	33.6	1319	1368 Series		1388G4				
#4	21.2	1319G4		1367 G 1					
#6	13.3	1319G6							
			S	B175					
1/0	53.5	1382							
#1	42.4	1347							
#2	33.6	1383	1368 Series	1387G2	1303G13	1304G32	Double		
#4	21.1	1384							
#6	13.3	1348		1387G1	1388G4	1389G3	Single		
			S	B350					
300mcm	152	910			N/A				
4/0	107.2	908	1368 Series			1303G3			
3/0	85	916			420700		4004004	Double	
2/0	67.4	907			1387G2	1303G12	1304G31		
1/0	53.5	917							

NOTE: See website for the most current information.

www.andersonpower.com

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