Chemical Resistant SB® Connectors

The new Chemical Resistant (CR) SB line of connectors were developed for customers whose applications require robust connector solutions that provide improved resistance to environmental factors that commonly degrade standard products leading to eventual failure. The new housing material offers improved resistance to hydrocarbons and solvents as well as an extended temperature range.

The CR-SB connectors are ideal for a variety of industries that include Automotive, Industrial and Personal Mobility. In addition, these new housings offer all the benefits of the industry standard SB products including colour and mechanical coding, hot plug capability and genderless design.

As with our standard SB line, the housings are keyed to ensure that only connectors of the same colour will mate.* In order to distinguish the CR-SB Connectors from the Standard SB Connectors, there is a “P” moulded on the back side of the housing.

Charging Connectors

SB® Product Family – SB® 50, SB® 175, SB® 350 Conventional Charging and Opportunity Charging

1. Provides a wide range of cable sizes and up to 550 amps maximum.
2. Signal contacts are not required in conventional charging.
3. Colour and mechanically keyed for voltage.
4. Low cost, robust, and easy to assemble.
5. 10,000 mating cycles ideal for multiple daily charge cycles.

Fast Charging

*Not recommended for fast charging due to lack of auxiliary contacts for communication between BMS and battery.

APP® Competitive Edge

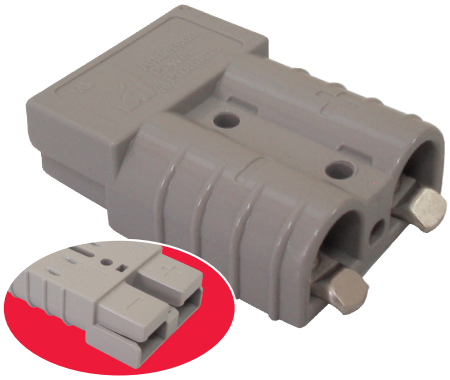
1. APP® original designer of SB®/SBX® series connectors.
2. APP® provides a wide range of housings and contacts for both AWG and metric cable.
3. Complete line of accessories including handles, cable clamps, and dust covers.
4. Global technical support including literature for assembly, crimping, and electrical capability information.
5. Crimp training available.

*Can be used in conjunction with an independent signal connector providing the communication between battery and charger BMS.

Features

- **UV resistant insulator**
  Insulator housing material has outstanding UV resistance, preventing damage to connector from prolonged sun exposure. Meets UL746C (F1) weatherability performance.
- **Superior chemical resistance**
  Superior resistance to hydrocarbons and solvents used in Automotive applications.
- **Impact resistant**
  Resists damage from rough treatment.
- **Fully intermateable and interchangable with standard SB connector line**
  Backward compatibility for upgrading existing solutions.
- **Mechanical keyed housings**
  Prevents accidental mating of components operating at different voltage levels.
- **Single-piece housing and unitized construction**
  Provides industrial quality and durability.
- **Genderless design**
  Makes assembly quick and easy and reduces number of parts stocked.

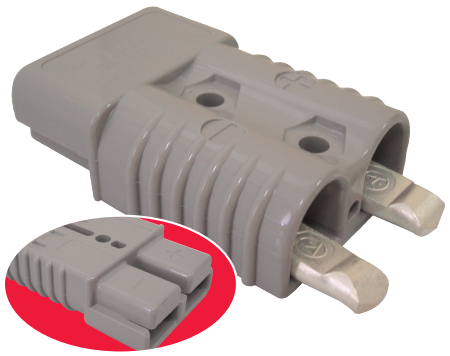
Chemical Resistant SB® Connectors



Specifications

Part no		T210016321
Connector Model		SB® 50
UL Current Rating (Amperes)*		50*
UL Voltage Ratings (Volts)		600*
Contact Barrel Wire Size	(AWG) (mm^2)	#6 to #16 13.3 to 1.3
Maximum Wire Insulation Dia.	(mm)	11.2
AVG Contact Resistance* (micro-ohms)		200
Insulation Withstanding Test Voltage (Volts AC/DC)		2200
Contact Retention Force (lbf)		50
Life a. No load (Contact/Disconnect Cycles) b. Under load (Hot Plug 250 Cycles @120 V)		To 10,000 50 A
Avg. Connection/Disconnect (lbf)		10 - low detent 15 - high detent
Operating Temperature Range °C		-20 °C ~ 105 °C
Flammability Rating of Housing Material		UL94 V-0

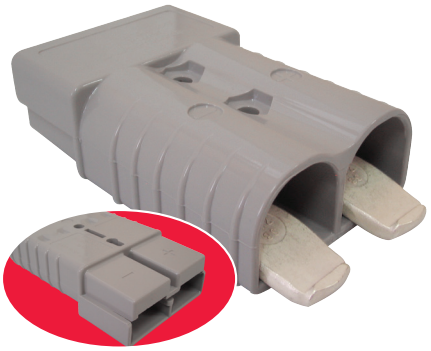
UL Rated for 65 °C largest wire or cable size



Specifications

Part no		T210016322
Connector Model		SB® 175
UL Current Rating (Amperes)*		175*
UL Voltage Ratings (Volts)		600*
Contact Barrel Wire Size	(AWG) (mm^2)	#4 to #1/0 21.1 to 53.5
Maximum Wire Insulation Dia.	(mm)	19.01
AVG Contact Resistance* (micro-ohms)		100
Insulation Withstanding Test Voltage (Volts AC/DC)		2200
Contact Retention Force (lbf)		300
Life a. No load (Contact/Disconnect Cycles) b. Under load (Hot Plug 250 Cycles @120 V)		To 10,000 75 A
Avg. Connection/Disconnect (lbf)		25 (SB 2 Pole) 35 (SB 3 Pole)
Operating Temperature Range °C		-20 °C ~ 105 °C
Flammability Rating of Housing Material		UL94 V-0

UL Rated for 65 °C largest wire or cable size



Specifications

Part no		T210016323
Connector Model		SB® 350
UL Current Rating (Amperes)*		350*
UL Voltage Ratings (Volts)		600*
Contact Barrel Wire Size	(AWG) (mm^2)	2/0 to 300mcm 67.4 to 152.0
Maximum Wire Insulation Dia.	(mm)	27.9
AVG Contact Resistance* (micro-ohms)		50
Insulation Withstanding Test Voltage (Volts AC/DC)		2200
Contact Retention Force (lbf)		500
Life a. No load (Contact/Disconnect Cycles) b. Under load (Hot Plug 250 Cycles @120 V)		To 10,000 100 A
Avg. Connection/Disconnect (lbf)		30
Operating Temperature Range °C		-20 °C ~ 105 °C
Flammability Rating of Housing Material		UL94 V-0

UL Rated for 65 °C largest wire or cable size

These may not be stock items. Please speak to our sales representative about lead times. Lead times, price and availability can only be determined on receipt of an official quote from our supplier. This can sometimes take up to 3 days.

South Africa, Gauteng, Jet Park - Head Office: **T:** +27 (0)11 823 5650

KwaZulu Natal: **T:** +27 (0)31 303 4129

Mpumalanga: **T:** +27 (0)13 692 8132

Free State: **T:** +27 (0)63 257 0505

Botswana, Letlhakane: **T:** +267 297 8568

Northern Cape: **T:** +27 (0)53 723 3415

Western Cape: **T:** +27 (0)21 945 1453

Botswana, Gaborone: **T:** +267 399 4150

Mozambique, Tete: **T:** +258 252 20666

North West: **T:** +27 (0)14 596 5257

Eastern Cape: **T:** +27 (0)81 036 9111

Botswana, Jwaneng: **T:** +267 588 7617

Zambia, Kitwe: **T:** +26 (0)21 222 5338

trading@trysome.cc • www.trysome.co.za • PO Box 13677, Witfield 1467

Call us today!

TRYSOME AUTO-ELECTRICAL ENGINEERING