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## NEW This Summer SBS®X-75A Sealed Waterproof Connectors

In today’s environments where high power, signaling and waterproof protection are required, Anderson Power Products® has you protected. The **New SBSX-75A Sealed Waterproof Connector Series** comes with two power contacts rated up to 120A, along with up to 4 auxiliaries, and the durability of up to 5,000 mating cycles. The IP68 weatherproof rating ensures that the connector will be free from water for up to 30 minutes at 6 feet in the mated condition, or with the use of covers in the unmated condition. Positive metal latches help safeguard against accidental disconnects that may be caused by vibration, while built in cable clamp allows for strain relief on wires.



Does your next project need Ingress Protection against harsh environments? Contact your Anderson™ Power Representative today to learn more about this new connector series coming in 2021.

#### Key Features:

- 2 Power & up to 4 Signals Rated to IP68 for Ingress Protection
- Positive Latching to secure connection for vibration applications
- Operating temperatures -20°C - 105°C
- 5,000 Mating cycles



Male Plug



Female Receptacle



Panel Mount Receptacle



Panel Mount Plug

# General Manager's Corner

I hope this message finds our partners, customers, and their families in good health. Reflecting on where we were one year ago, this summer looks much more promising as our economy reopens. It's hard to believe we have spent the last year mostly in isolation and unable to return to the office or meet with customers, but we have started to turn the corner. At Anderson™ we have been slowly returning to the office to increase collaboration as we execute on our strategy to be the leading supplier of quality interconnect solutions for a range of applications. With the increased use of lithium ion batteries to power equipment from garden equipment to fork lifts, we are working

to bring new products to the market including the new SBS®X-75A sealed connectors that provide advanced features while still providing the quality and reliability that Anderson Power is known for. We are excited for the product launch in the coming months – stay tuned for details!

While the pandemic is mostly behind us, we continue to face challenges with supply chain shortages and significant commodity cost increases. The entire Anderson team is working to reduce these impacts to our customers and ensure critical orders are fulfilled. We appreciate everyone's diligence and patience as we work

together to keep our customers supplied with the Anderson products they need while we look forward to an improved supply chain later this year. As always, do not hesitate to reach out with any questions or support needs.

I hope everyone enjoys a safe and sunny summer.

Sincerely,  
Bill Estes

## Chemical Resistant Material

*Chemical resistant materials can be used in harsh environments for a number of applications. Materials with a high chemical resistance don't need to have their surface treated before use.*

### APPLICATIONS

- Lawn & Garden
- Power Tools
- E-MOBILITY
- Agriculture
- Industrial/Commercial

## SBS® Chemical Resistant Housings in Additional Colors and Additional Certifications

We are pleased to announce that the Chemical Resistant housings for our SBS75X connectors will be available in six colors, certified by UL, CSA, IEC and **EN-1175 standards**.

Part of the popular, patented SBS connector family, the ergonomic compact SBS75X housing offers high power of up to 600V/110A, along with up to four mate-last break-first auxiliary power/signal contacts rated up to 20 amps.

The Auxiliary contacts can be used to power up or power down systems prior to connecting and disconnecting, ensuring protection against accidental contact with live circuits. This is of particular importance in applications where DC voltages exceed 30 volts and can be health threatening.

The line was designed for lead acid and lithium-ion battery technologies, where battery monitoring is essential. Utilize these connectors in your next project where you need high power from the Battery-to-a-Charger or from the Charger-to-a-Battery Monitoring System.

### Features Include

- Touch Safe Interface
- Wire-to-Wire and Wire-to-Board Configurations
- Ground or Auxiliary Positions Integrated into the One-Piece Housing
- Chemical Resistant Line Offers Extended Temperature Range to -40°C



# NEW Accessory

## SBS®50 and SB®50 Cable Clamp



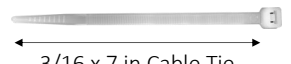
Anderson™ is excited to introduce the NEW SBS50 and SB50 cable clamps. These rugged cable clamps are manufactured out of non-conductive, impact resistant Polycarbonate plastic. The new designs are simple to assemble, offer versatility by accommodating multiple wire sizes, and provide low cost solutions for two wire applications clamping requirements.

### Features

- Robust, Impact Resistant Plastic
- Non-conductive Material
- Works with a wide range of wire sizes (12 to 6 AWG)
- Low cost

### Clamp Kit Includes

- Either 1 Gray SBS or 1 Black SB Clamp
- 4 Screws
- 1 Cable Tie



Part Numbers:

B02647P1

B02644P1

Screws M4 x 8mm  
H1120P60

3/16 x 7 in Cable Tie  
H1835P3

## New “Sales Office” in Stuttgart Germany



As of April 1, 2021, APP® has opened a Sales office in Stuttgart, Germany. It’s conveniently located near the airport and train station. It will be used as a sales office for our Sales Team and a place to hold customer meetings during a trade fair in Stuttgart. Orders will continue to be placed in the Warrington, UK office.

APP is one of IDEAL® Industries businesses, and will occupy the space with two additional IDEAL companies, CMD and enatel. The office is located at Esslinger Strasse 7, D – 70771 Leinfelden-Echterdingen.



<https://www.idealindustries.com/>



<https://www.cmd-ltd.com/>



<https://www.enatel.net/>

# Technical considerations for use of Connectors in High Current Applications Including the use of Parallel Conductors

Material Handling Equipment charging trends are changing. One of the newest trends is called Fast Charging which involves charging battery's/equipment at every possible opportunity and at 3-4 times the rate of conventional systems with power requirements often exceeding 600 amps. This higher amperage requirement exceeds the amperage ratings of standard connectors and cables used in the Material Handling Industry. The available higher amperage connectors are large, heavy, and often cost 6 times as much as traditional connectors. Large, heavy wires are also required that are stiff and add additional costs for this application.

*APP® has created a technical paper that provides Engineers with the information required to successfully design their system for high current applications.*

As a result, companies have resorted to using two mated pairs of standard connectors (4 connectors total) with each pair bolted together. They then split the higher amperages across two contacts. This is less expensive and allows use of standard lower cost connectors and smaller, more flexible wire (Parallel charging). While this concept provides a less expensive and easier to use solution, this system does

present some challenges. Many connectors are not designed to bolt together. Mating two pairs of connectors more than doubles the force required to mate and un-mate the pairs and, without proper alignment, connectors will not engage smoothly. Lastly, engineers need to understand how to design the system to assure the power is evenly distributed. If this is not controlled, one connector of the pair could receive most of the power. This causes mechanical failure due to excessive heat.

As a response to requests from our customers to help solve these problems, APP designed the Double Stack brackets that accomplishes the following:

- Provides features to ease bolting connectors together
- Assures correct alignment when mating the two pair of connectors to reduce mating forces and minimize damage that can be caused when connectors are out of alignment.
- Provides a manual assist lever that greatly reduces the operator force required in mating and un-mating pairs of connectors.
- Assures that connectors are completely mated and stay mated (partially mated connectors can cause damage due to arcing between contacts).

In addition, APP has created a technical paper

that provides Engineers with the information required to successfully design their system for high current applications. When faced with this type of application, it is critical that the connectors and cables used can withstand the heat generated from the ampacity. When fast charging or heavy discharge rates exceed individual component ratings, paralleling conductors can be used to safely manage high currents, provided important guidelines are followed (Parallel charging). Selecting the proper connectors, cables, and understanding the ambient temperature the products will be used in as well as the temperature live connectors will internally generate are key to success. This paper provides background on National Electric code amperage/temperature recommendations for common wire sizes as well as formulas that can be used by an engineer to design their system successfully.

Use of APP Double Stack Brackets as well as understanding the requirements outlined in this technical paper will result in engineering safe and lower cost solutions for higher amperage needs.

To read the full length article on parallel charging, you can find it on our website, <https://www.andersonpower.com/content/dam/app/ecommerce/product-pdfs/1S6832A.pdf>



## Double Stack Manual Assist Brackets for SBE®320 / SBX®350 and DIN E320 and A Series

### Features

- Allows higher amperage using parallel connections
- Uses SBE®320 & SBX®350 and DIN A & E320 connectors
- Ensures correct alignment and provides mounting plate for truck/charger connection
- Reduces operator effort in mating/unmating connectors
- Assures connectors are completely mated in operation
- UL/CUR recognition

# Welcome



We are pleased to announce that Martin Spiegel has joined APP® as the Eastern Regional Sales Manager. Mr. Spiegel has more than 25 years of sales experience in the connectivity industry, working in Global, National and Regional capacities. He will be working with APP Manufacturer's Representative firms to develop client specifications while also helping design solutions with OEM partners. Please join us in welcoming Martin!

<https://www.andersonpower.com/us/en/where-to-buy.html>



Anderson Power Products® welcomes CASELLA, USA to Sterling, Massachusetts. CASELLA has relocated their operations from Buffalo, New York and will share a building with APP®. Both companies are part of the IDEAL® Industries businesses. CASELLA was founded in the United Kingdom and is dedicated to reducing occupational and environmental health risks through effective monitoring solutions. CASELLA prides itself on providing precision instrumentation since 1799, supplying eminent figures including David Livingstone and Charles Darwin with instrumentation for exploration and scientific work. CASELLA offers smart and easy to use solutions for monitoring noise, dust, and vibration. Please join us in welcoming CASELLA to Massachusetts.

<https://www.casellasolutions.com/>



We are pleased to announce that FH Sales has been added to our list of Manufacturers' Representatives. FH Sales is a sales and solutions representative firm in the Midwest. They will be covering KS, NE, MO, and Southern IL. Their team of sales representatives and field engineers have the experience, skill, expertise, and are committed to delivery and customer satisfaction. We look forward to having them as part of the APP team. <https://fh-sales.com>



We are excited to announce that FUSION Sourcing Group has joined our Manufactures' Representatives team. They will cover the New York – Empire Region. Their team is a dedicated group of outside sales engineers and inside sales and administrative support personnel. Each of their sales engineers will provided solutions to their customers, by collaborating and using their technical expertise and experience. Welcome to the APP team.

[www.fusionsourcing.com](http://www.fusionsourcing.com)

# Tech Corner



**Cheryl Scali**

Technical Inside Sales

Representative

[ustechsupport@andersonpower.com](mailto:ustechsupport@andersonpower.com)

## Where do I find Certifications?

- Q. How do I locate Environmental Certifications such as ROHS, REACH, TSCA, TUV, Conflict Minerals, Prop 65, and other documentation?
- A. Environmental and business certifications can be found in the Resources section of our website at <https://www.andersonpower.com/us/en/resources.html>.

## Should I mate housings together without contacts?

Anderson Power connector housings are designed to be mated when crimped/soldered contacts are installed within the housing. Please do not attempt to mate the housings unless the contacts are installed. If you attempt to mate the housings without crimped contacts installed, you could damage the housing or spring.



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