

# SBS<sup>®</sup>XPRO

## Sealed Connector Series

- Rugged Environments • 3 Power/8 Signal Sealed Connector • 140A of Power
- Tested Durability • Suited for Lawn & Garden and Other Outdoor Applications



**ANDERSON**  
**POWER**<sup>™</sup>

## SBS®XPRO

The SBS®XPRO 3 Power/8 Signal sealed connectors were designed with construction & agriculture equipment top of mind. Available in wire-to-wire and wire-to-panel mount configurations to support various applications and requirements. Benefits and features include up to 140A of power, the durability of up to 5,000 mating cycles and the availability of 8 signal positions. Positive metal latches safeguard against accidental disconnects, while the IP68 rating provides protection from water.\*

\* free of water for full protection up to 30 minutes at 6 feet in the mated conditions.



600 Volts / 140A



5,000 Mating Cycles



Operating Temperature  
-20°C to 105°C / -4 °F to 221°F



Dust - Water

## SPECIFICATIONS

| ELECTRICAL                                 |                 | Wire to Wire- 3 Power                   |     | Wire to Panel Mount- 3 Power            |     |
|--------------------------------------------|-----------------|-----------------------------------------|-----|-----------------------------------------|-----|
| Current Rating Amperes <sup>1</sup>        |                 |                                         |     |                                         |     |
| Wire Size                                  |                 |                                         |     |                                         |     |
| AWG                                        | mm <sup>2</sup> | UL                                      | CSA | UL                                      | CSA |
| 4 AWG                                      | 25              | 140                                     | 75  | 140                                     | 85  |
| 6 AWG                                      | 16              | 105                                     | 65  | 105                                     | 65  |
| 8 AWG                                      | 10              | 85                                      | 50  | 85                                      | 50  |
| 10 AWG                                     | 6               | 70                                      | 40  | 70                                      | 40  |
| 12 AWG                                     | 2.5             | 50                                      | 30  | 50                                      | 30  |
| Voltage Rating AC/DC                       |                 |                                         |     |                                         |     |
| UL 1977                                    |                 | 600V                                    |     | 600V                                    |     |
| Dielectric Withstanding Voltage            |                 |                                         |     |                                         |     |
| Volts AC                                   |                 | 2,200V                                  |     | 2,200V                                  |     |
| Average Mated Contact Resistance Milliohms |                 |                                         |     |                                         |     |
| Power: 1/4 in. of 4 AWG (25 mm²) Wire      |                 | 0.16mΩ                                  |     | 0.16mΩ                                  |     |
| Signal: 1/16 in. of 20 AWG (.50 mm²) Wire  |                 | 2.2mΩ                                   |     | 2.2mΩ                                   |     |
| Touch Safe (IP2X)                          |                 | Per UL 62368-1 & IEC 60529 <sup>2</sup> |     | Per UL 62368-1 & IEC 60529 <sup>2</sup> |     |

| MECHANICAL                                                |                  | Wire to Wire- 3 Power/8 Signal      |                        | Wire to Panel Mount- 3 Power/8 Signal |                        |
|-----------------------------------------------------------|------------------|-------------------------------------|------------------------|---------------------------------------|------------------------|
| Wire Size Range                                           |                  |                                     |                        |                                       |                        |
| Power Contacts                                            |                  | 12 to 4 AWG (2.5 to 25.0 mm²)       |                        | 12 to 4 AWG (2.5 to 25.0 mm²)         |                        |
| Signal Contacts                                           |                  | 24 to 20 AWG (0.25 to 0.50 mm²)     |                        | 24 to 20 AWG (0.25 to 0.50 mm²)       |                        |
| Maximum Wire Insulation Diameter                          |                  |                                     |                        |                                       |                        |
| Power                                                     |                  | 0.44 in. (11.18 mm)                 |                        | 0.44 in. (11.18 mm)                   |                        |
| Signal                                                    |                  | 0.250 to 0.280 in.(6.35 to 7.11 mm) |                        | 0.250 to .280 in. (6.35 to 7.11 mm)   |                        |
| 8 Cond. Jacketed Cable                                    |                  |                                     |                        |                                       |                        |
| Operating Temperature <sup>3</sup>                        |                  | -20° to 105°C (-4 to 221°F)         |                        | -20° to 105°C (-4 to 221°F)           |                        |
| Mating Cycles No Load by Plating                          |                  | 5,000                               |                        | 5,000                                 |                        |
| Average Mating / Unmating Force                           |                  |                                     |                        |                                       |                        |
| Wire                                                      |                  | 4 AWG (25 mm²)                      |                        | 4 AWG (25 mm²)                        |                        |
| Lbs / Kg                                                  |                  | 6.5 Lbs (2.95 Kg)                   |                        | 6.5 Lbs (2.95 Kg)                     |                        |
| Minimum Creepage / Clearance Distance Material Group IIIa |                  |                                     |                        |                                       |                        |
|                                                           |                  | Creepage                            | Clearance              | Creepage                              | Clearance              |
| Power                                                     | Power to Power   | 1.302 in. (33.07 mm)                | 0.496 in. (12.60 mm)   | 1.302 in. (33.07 mm)                  | 0.496 in. (12.60 mm)   |
|                                                           | Power to Signal  | 0.809 in. (20.55 mm)                | 0.455 in. (11.56 mm)   | 0.809 in. (20.55 mm)                  | 0.455 in. (11.56 mm)   |
| Signal                                                    | Pin to Pin       | 0.075 in. (1.91 mm)                 | 0.075 in. (1.91 mm)    | 0.075 in. (1.91 mm)                   | 0.075 in. (1.91 mm)    |
|                                                           | Socket to Socket | 0.045 in. (1.14 mm)                 | 0.039 in. (.99 mm)     | 0.045 in. (1.14 mm)                   | 0.039 in. (0.99 mm)    |
|                                                           | Pin to Socket    | 0.063 in. (1.60 mm)                 | 0.057 in. (1.45 mm)    | 0.063 in. (1.60 mm)                   | 0.057 in. (1.45 mm)    |
| Pull Out Force Power Position with Clamp                  |                  |                                     | 60 lb.                 | 60 lb.                                |                        |
| Pull Out Force Auxiliary Position with Clamp              |                  |                                     | 27 lb.                 | 27 lb.                                |                        |
| Push Out Force Auxiliary Position                         |                  |                                     | 10 lb.                 | 10 lb.                                |                        |
| Drop Test                                                 |                  |                                     | Per UL 486A-486B       |                                       |                        |
| IP68                                                      |                  |                                     | Per UL50E <sup>4</sup> |                                       | Per UL50E <sup>4</sup> |
| MATERIALS                                                 |                  |                                     |                        |                                       |                        |
| Housing, Cable Clamps, Covers                             |                  | PC/PBT                              |                        | PC/PBT                                |                        |
| Signal Holder                                             |                  | PC                                  |                        | PC                                    |                        |
| Latches, Spring, Screws                                   |                  | Stainless Steel                     |                        | Stainless Steel                       |                        |
| O-Rings, Grommets                                         |                  | Silicone                            |                        | Silicone                              |                        |
| Panel Mount Gasket                                        |                  | NBR                                 |                        | NBR                                   |                        |
| Housing Flammability Rating                               |                  | UL94 V0                             |                        | UL94 V0                               |                        |
| Glow Wire (1.0 mm)                                        |                  | 960°C per 60695-2-12                |                        | 960°C per 60695-2-12                  |                        |
| Wire Power Contact                                        |                  | Silver Plated Copper Alloy          |                        | Silver Plated Copper Alloy            |                        |
| SBS®X Pro Signal Contacts                                 |                  |                                     |                        |                                       |                        |
| Pin                                                       |                  | Gold Plated Copper Alloy            |                        | Gold Plated Copper Alloy              |                        |
| Socket                                                    |                  | Gold Plated Copper Alloy            |                        | Gold Plated Copper Alloy              |                        |

**NOTES:**

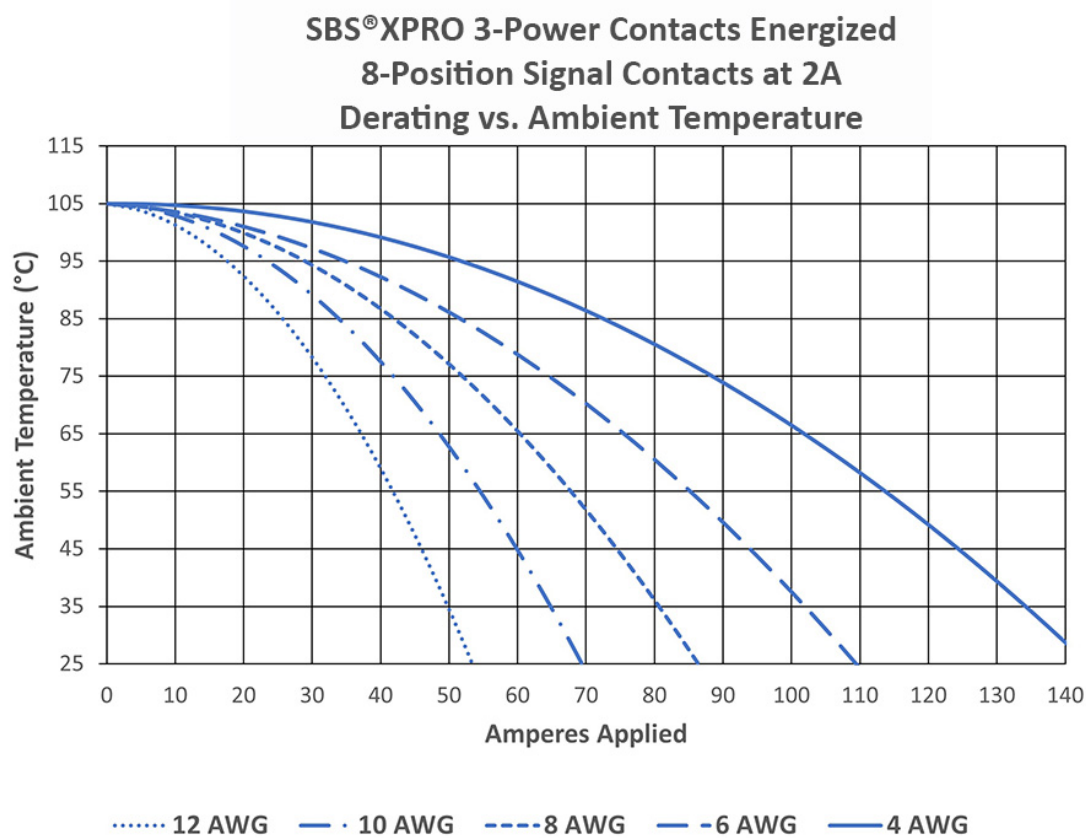
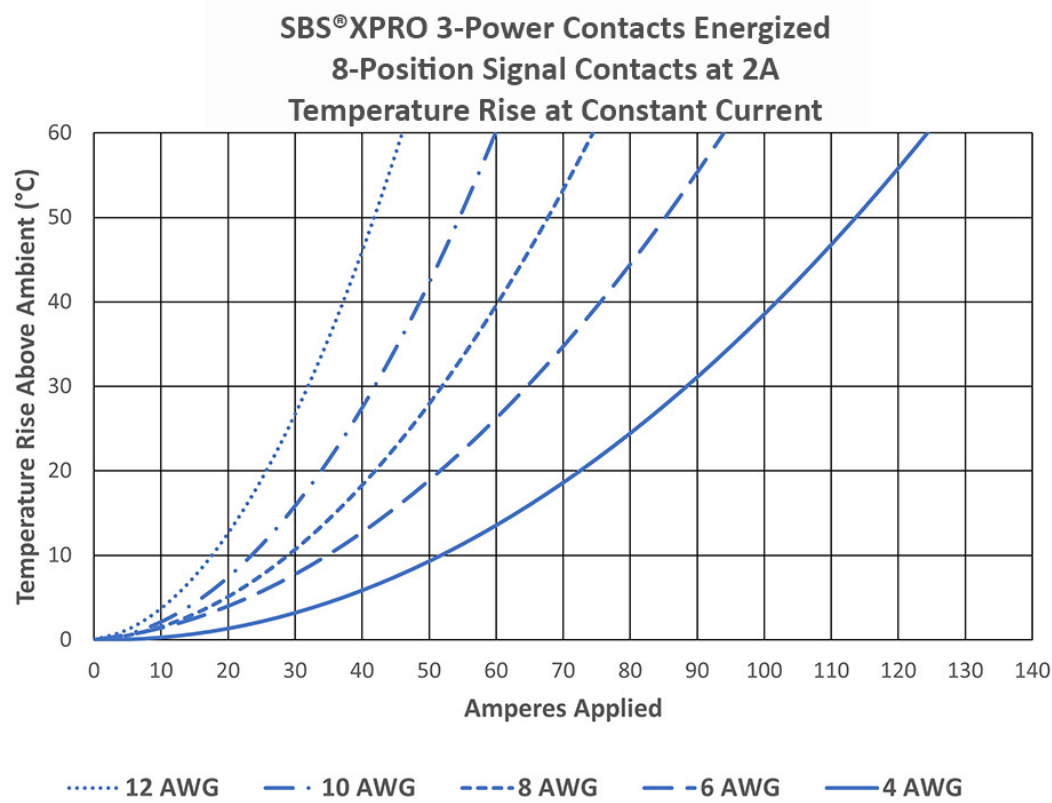
1 - Current amperage ratings are based on 105°C rated or better cable of the largest wire size using properly calibrated Anderson recommended tooling, and a 25°C ambient temperature, or CSA rating below a 30°C temperature rise. UL rating not to exceed the maximum operating temperature. Connector to be assembled and installed according to the manufacturer's instructions.

2 - Sealed Connector Series offers protection against electric shock for finger safety both in mated and unmated condition. The Sealed SBS®XPRO Connector Series was tested for IP Code 1X and 2X per clause 12- & 13 of IEC 60529, Edition 2.2, issued 2013-8 + Corr. 1:2013-10 + Corr. 2:2015-01. The connector was tested for IP1X and IP2X\* in mated and unmated condition, which is representative of protection against access to energized parts contained in UL 62368-1 3rd Edition, 2021-10-22.

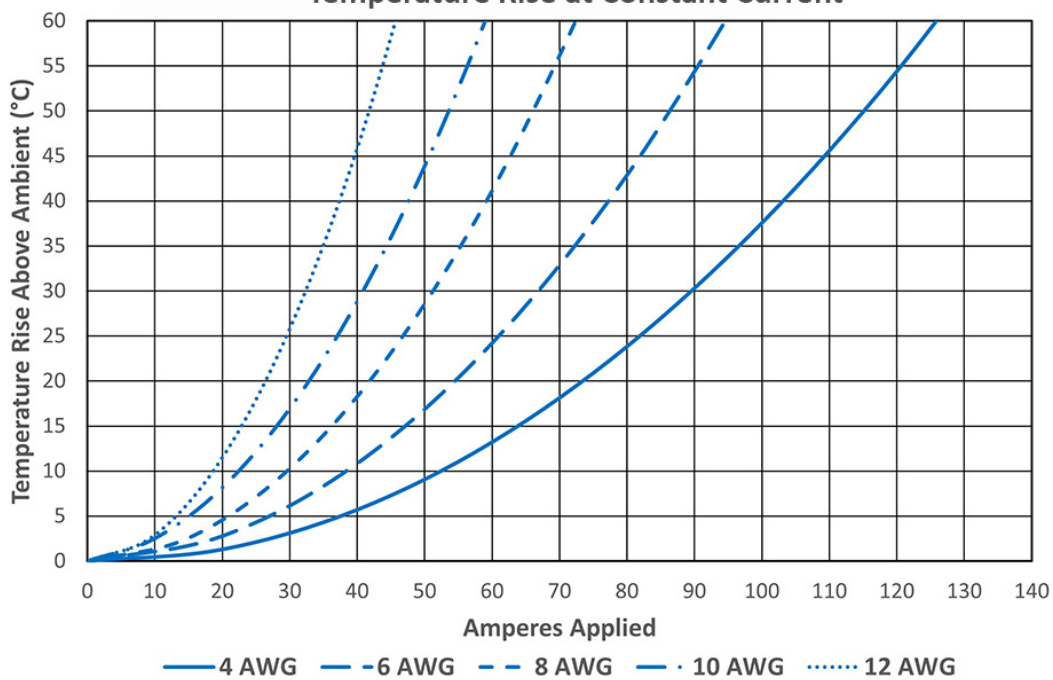
3 - Operating Temperatures are limited by the thermal properties of the connector's plastic housing.

4 - The Sealed SBS®XPRO Connector Series was subjected to submersion test, covered by UL 50E Standard for Enclosures for Electrical Equipment Environmental Considerations, 3rd Edition, with a pressure equivalent to 6 feet of water and for a duration of 30 minutes for the IP68 compliance.

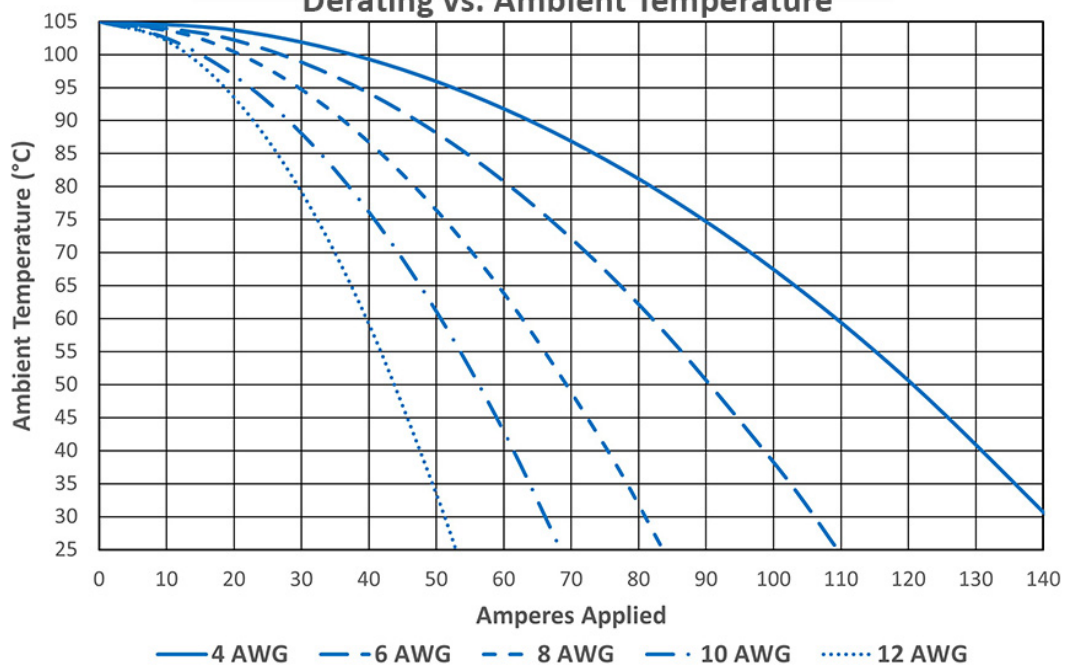
TEMPERATURE CHARTS



**SBS®XPRO Panel Mount Receptacle  
3-Power Contacts Energized  
8-Position Signal Contacts at 2A  
Temperature Rise at Constant Current**

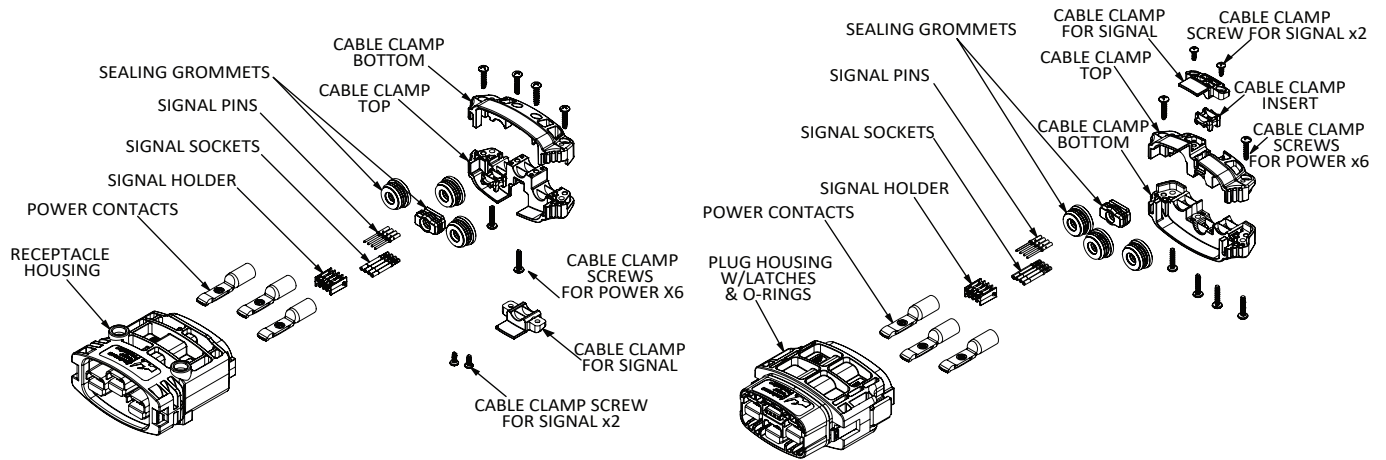


**SBS®XPRO Panel Mount Receptacle  
3-Power Contacts Energized  
8-Position Signal Contacts at 2A  
Derating vs. Ambient Temperature**

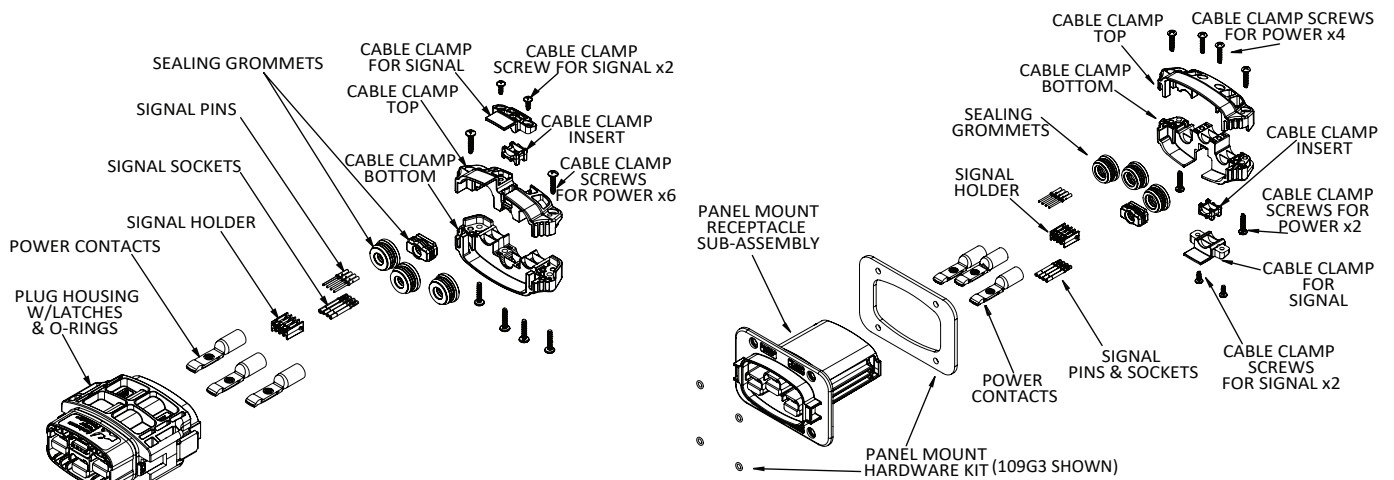


# COMPONENTS

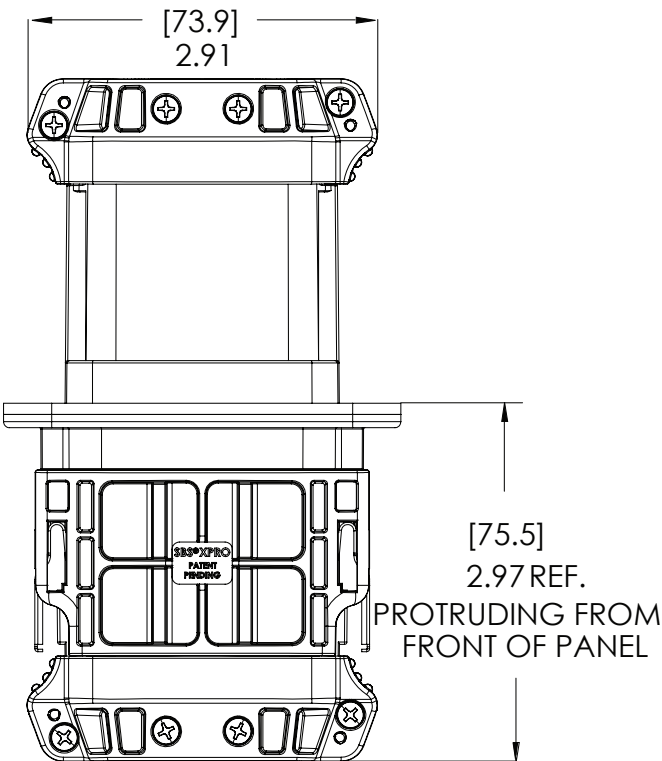
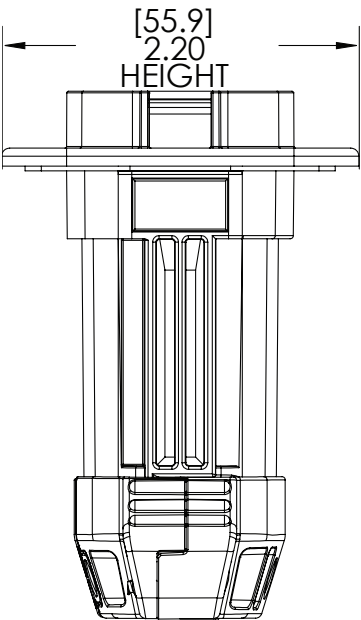
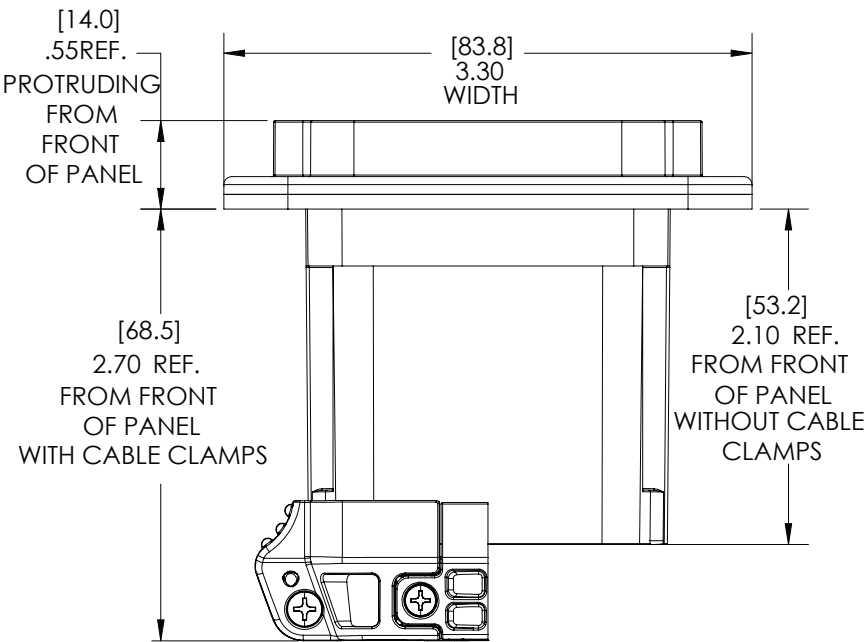
## Wire-to-Wire



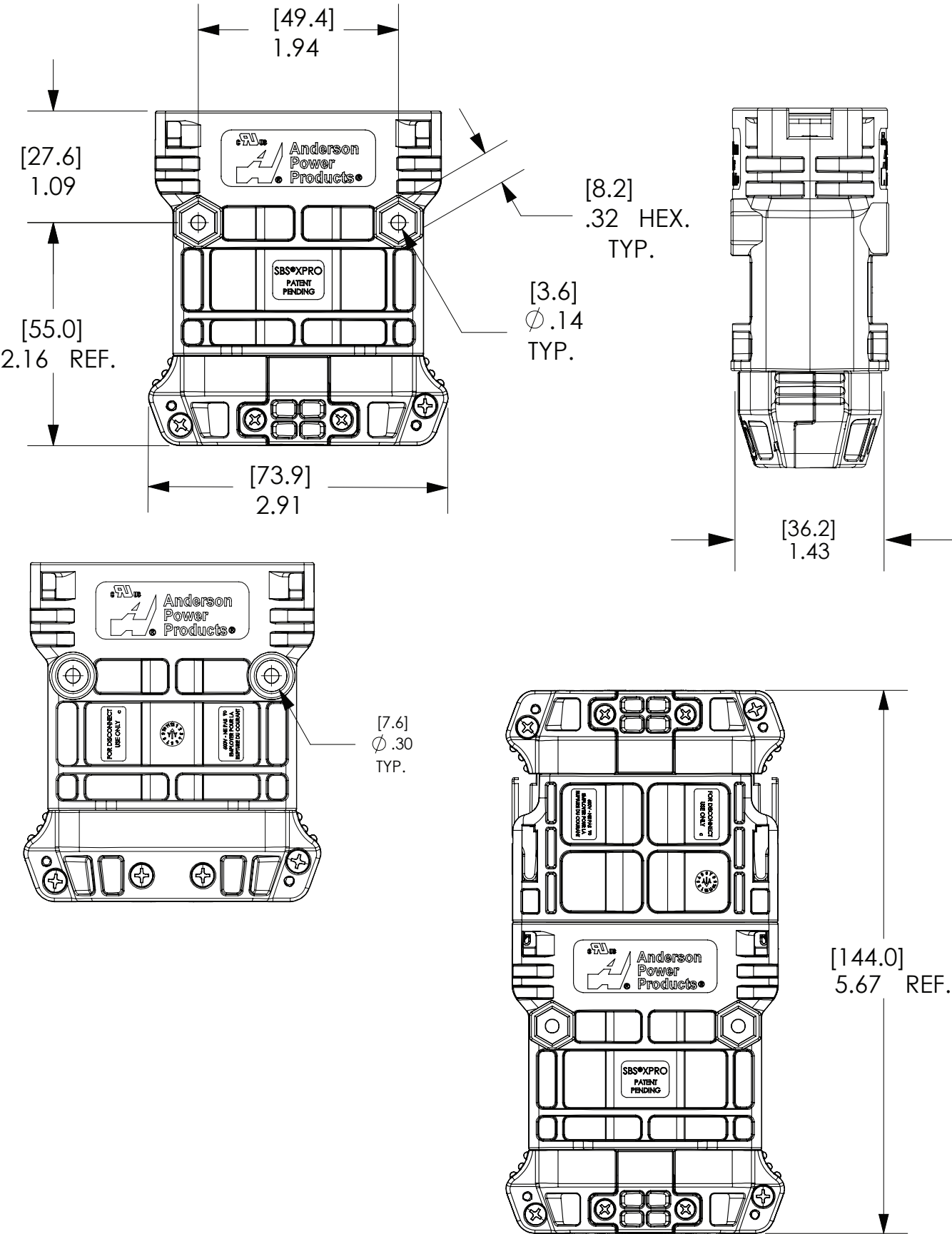
## Wire-to-Panel Mount



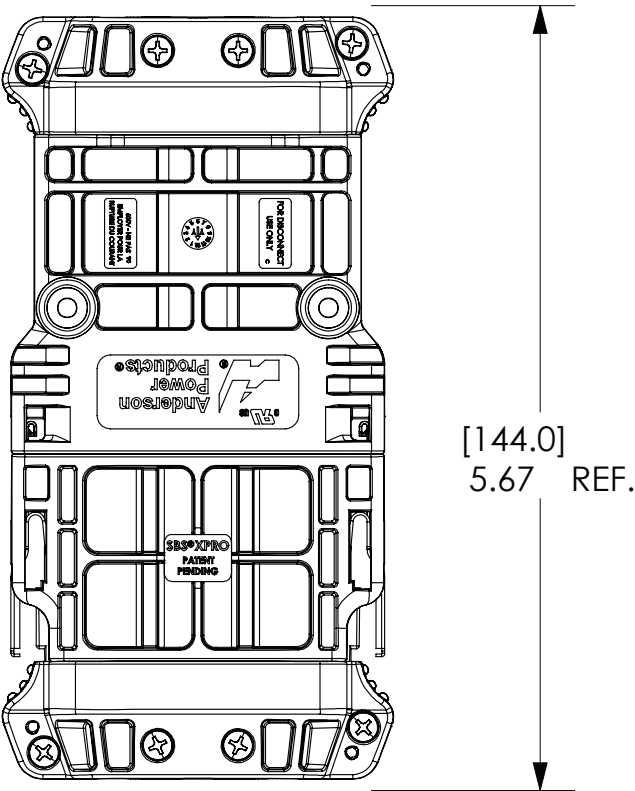
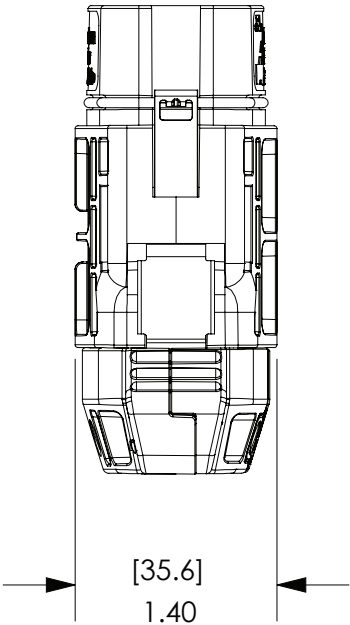
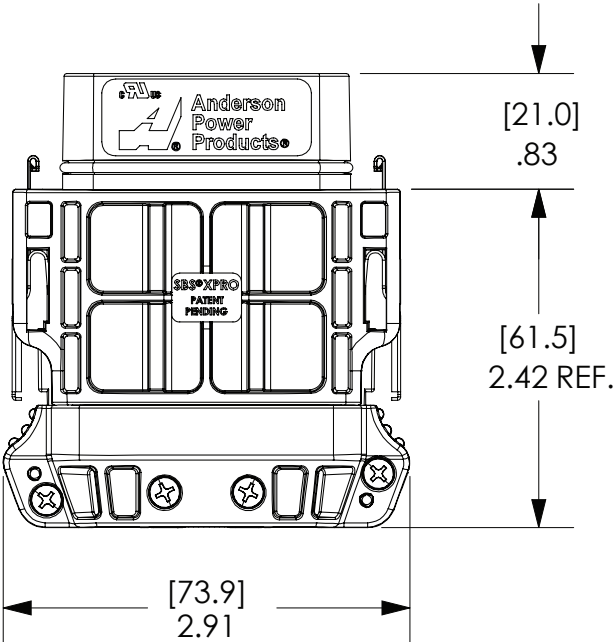
**DIMENSIONS - PANEL MOUNT units in [mm]**



# **DIMENSIONS - RECEPTACLE units in [mm]**



DIMENSIONS - PLUG units in [mm]



## ORDERING INFORMATION

**Step 1: Select the Housing Kit - Packaged as Individual Kits. Contacts and Grommets Sold Separately, See Step 2 & 3**

| Image                                                                             | Part Number            | Description                                 | Kit Includes Below Parts                                                                                                        |
|-----------------------------------------------------------------------------------|------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Minimum Quantity 25</b>                                                        |                        |                                             |                                                                                                                                 |
|  | SBSXPRO-PLUG-KIT-BLK   | SBS®XPRO Plug Housing Kit                   | Connector Assembly, Signal Holder, Cable Clamps (Top, Bottom, Signal, Insert), and Cable Clamp Screws.                          |
|  | SBSXPRO-REC-KIT-BLK    | SBS®XPRO Receptacle Housing Kit             | Connector Assembly, Signal Holder, Cable Clamps (Top, Bottom, Insert), and Cable Clamp Screws.                                  |
|  | SBSXPRO-PMREC1-KIT-BLK | SBS®XPro Panel Mount Receptacle Housing Kit | Connector Assembly, Signal Holder, Cable Clamps (Top, Bottom, Signal, Insert), Cable Clamp Screws and Panel Mount Hardware Kit. |

**Bulk Component Ordering Information - All components sold separately. For grommets and contacts, see step 2 & 3.**

| Image                                                                               | Part Number       | Description- Sealed SBS®XPRO   | Includes Below Parts      |
|-------------------------------------------------------------------------------------|-------------------|--------------------------------|---------------------------|
| <b>Minimum Quantity 100</b>                                                         |                   |                                |                           |
|  | SBSXPRO-PLUG-BLK  | Plug Housing                   | Housing, Latches & O-Ring |
|  | SBSXPRO-REC-BLK   | Receptacle Housing             | Housing                   |
|  | SBSXPRO-PMREC-BLK | Panel Mount Receptacle Housing | Housing                   |

## Step 1 Continued

| Image                                                                               | Part Number | Description                                                                                                 | Minimum Quantity                                                    |
|-------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
|    | B02866P1    | Signal Holder                                                                                               | 100                                                                 |
|    | B02867P1    | Cable Clamp Top                                                                                             | 100                                                                 |
|    | B02868P1    | Cable Clamp Bottom                                                                                          | 100                                                                 |
|    | B02869P1    | Cable Clamp Signal                                                                                          | 100                                                                 |
|  | B02905P1    | Cable Clamp Insert                                                                                          | 100                                                                 |
|  | H1120P62    | #4 to 20 5/8" (15.88 mm) Plastite Head Screws - Cable Clamp                                                 | 200<br>Screws for cable clamp power when #4 AWG wires are used      |
|  | H1120P63    | Screws for cable clamp power #4 to 20 1/2" (12.7 mm) Plastite Equivalent 316 Stainless Steel Pan Head Screw | 600<br>Screws for cable clamp power when #6- #12 AWG wires are used |
|  | H1120P64    | Screws for signal #3 to 24 1/2" (6.35 mm) Plastite Equivalent 316 Stainless Steel Pan Head Screw            | 200<br>Screws for auxiliary clamp insert position                   |

## Step 2: Grommets Sold Separately

To select proper grommet size, you will need to know the outer diameter of jacketed cable for each of the Power and Signal cables. Select NS grommets if not using signal and NP if using fewer than 3 power.

### Power Grommet



Power Grommet  
(P-xxx-xxx Parts)



Plug for No Power  
(NP-PRO Part)

| Part Number                 | Wire Size AWG     | Wire Size mm <sup>2</sup> | Power Wire Diameter Range inches (mm) |
|-----------------------------|-------------------|---------------------------|---------------------------------------|
| <b>Minimum Quantity 300</b> |                   |                           |                                       |
| P-150-180                   | 12 to 10          | 2.5 to 6.0                | 0.15 to 0.18 (3.81 to 4.57)           |
| P-180-210                   | 8                 | 10                        | 0.18 to 0.21 (4.57 to 5.33)           |
| P-210-240                   | 8                 | 10                        | 0.21 to 0.24 (5.33 to 6.10)           |
| P-240-270                   | 8                 | 10                        | 0.24 to 0.27 (6.10 to 6.86)           |
| P-310-340                   | 6                 | 16                        | 0.31 to 0.34 (7.87 to 8.64)           |
| P-340-370                   | 6                 | 16                        | 0.34 to 0.37 (8.64 to 9.40)           |
| NP-PRO                      | Plug for No Power |                           |                                       |

### Signal Grommet



Signal Grommet  
(SJ-xxx-xxx Parts)



Plug for No Signal  
(NS-PRO Part)

| Part Number                 | Wire Size AWG      | Wire Size mm <sup>2</sup> | Signal Wire Diameter Range inches (mm) |
|-----------------------------|--------------------|---------------------------|----------------------------------------|
| <b>Minimum Quantity 100</b> |                    |                           |                                        |
| SJ-160-190                  | 24 to 20           | 0.50 to 0.25              | 0.16 to 0.19 (4.06 to 4.83)            |
| SJ-190-220                  | 24 to 20           | 0.50 to 0.25              | 0.19 to 0.22 (4.83 to 5.59)            |
| SJ-220-250                  | 24 to 20           | 0.50 to 0.25              | 0.22 to 0.25 (5.59 to 6.35)            |
| SJ-250-280                  | 24 to 20           | 0.50 to 0.25              | 0.25 to 0.28 (6.35 to 7.11)            |
| NS-PRO                      | Plug for No Signal |                           |                                        |

**NOTE: Don't see your cable size requirements? Speak to Manufacturer or your local Representative about other options regarding custom grommets.**

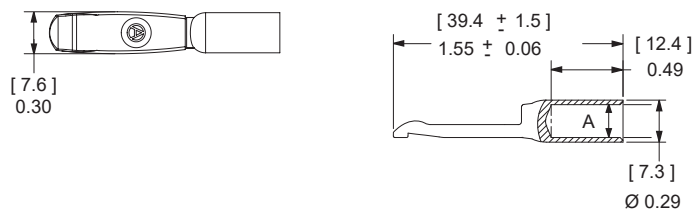
### Step 3: Contacts Sold Separately for Power and Signal

#### Silver Plated Primary Power Wire Contacts

SBS®XPRO housings use three silver plated contacts per housing for the best electrical performance and durability up to 5,000 mating cycles.

|                  |          |                 |                           |          | Diameter<br>- A- |      |
|------------------|----------|-----------------|---------------------------|----------|------------------|------|
| Description      | AWG      | mm <sup>2</sup> | Part Numbers- Loose Piece |          | inches           | mm   |
| Minimum Quantity |          |                 | 1,000                     | 100      |                  |      |
| Standard         | 4        | 25              | 1339G4-BK                 | 1339G4 * | 0.28             | 7.11 |
|                  | 6        | 16              | 1339G2-BK                 | 1339G2 * | 0.22             | 5.60 |
|                  | 8        | 10              | 1339G5-BK                 | 1339G5 * | 0.19             | 4.70 |
|                  | 12 to 10 | 2.5 to 6        | 1339G3-BK                 | 1339G3 * | 0.14             | 3.50 |

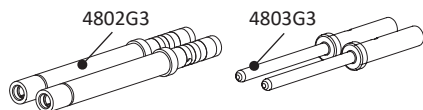
\* Are sold as pairs. 2 contacts ship for every 1 ordered.



#### Pin & Socket Contacts 8 Position Signal Connector

Gold plated contacts are ideal for signal or low power use with durability up to 5,000 mating cycles.

| Description      | AWG      | mm <sup>2</sup> | Part Numbers |        |
|------------------|----------|-----------------|--------------|--------|
| Minimum Quantity |          |                 | 2,000        | 50     |
| Pin Contacts     | 24 to 20 | 0.25 to 0.50    | 4803G3-BK    | 4803G3 |
| Socket Contacts  | 24 to 20 | 0.25 to 0.50    | 4802G3-BK    | 4802G3 |



NOTE: Contacts sold individually, not sold as a set of two.

## SBS® TOOLING INFORMATION <sup>5</sup>

| Wire Size |                 | Power Contacts            |                      |   |        |   |         |                  |    |           |
|-----------|-----------------|---------------------------|----------------------|---|--------|---|---------|------------------|----|-----------|
| AWG       | mm <sup>2</sup> | Power Contact Part Number | Pneumatic Bench Tool | + | Die    | + | Locator | Number of Crimps | OR | Hand Tool |
| 4         | 25              | 1339G4                    | 1387G1               |   | 1388G6 |   | 1389G9  | Single           |    | N/A       |
| 6         | 16              | 1339G2                    |                      |   |        |   |         |                  |    | 1309G4    |
| 8         | 10              | 1339G5                    |                      |   |        |   |         |                  |    |           |
| 12 to 10  | 2.5 to 6        | 1339G3                    |                      |   | 1388G7 |   |         |                  |    |           |

| Wire Size |                 | Signal Contacts |                      |   |     |   |         |                  |    |            |
|-----------|-----------------|-----------------|----------------------|---|-----|---|---------|------------------|----|------------|
| AWG       | mm <sup>2</sup> | Contacts        | Pneumatic Bench Tool | + | Die | + | Locator | Number of Crimps | OR | Hand Tools |
| 24 to 20  | 0.25 to 0.50    | 4803G3          | TP0001*              |   | N/A |   | TL0005  | Single           |    | TM0001*    |
|           |                 | 4802G3          |                      |   |     |   |         |                  |    | PM1000G1   |

### Tools

Signal Holder Extraction Tool: Contact Anderson Power<sup>6</sup>

\* TP0001 and TM0001 tools require locators to properly position contacts.

### Tools



1387G1  
Other die locators  
available per above



TP0001



1309G4



PM1000G1



Contact  
Anderson Power<sup>6</sup>

#### NOTES:

5 - The use of Anderson Power tooling is strongly recommended. The use of alternate tools may adversely affect the performance of our connectors along with UL and CSA recognition.

6- The Signal Housing Extraction Tool must be used in order to remove the signal housing from the main housing should position be inserted incorrectly for mating. See assembly instructions for further information.

**BUILD YOUR PART NUMBER**

**Step 1**

Housings (including signal)

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Cable Clamps

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Screws

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**Step 2**

Grommets

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**Step 3**

Power Contacts

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Signal Contacts

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All Data Subject to Change Without Notice

DS-SBSXPRO REV 1 2025-0080 **Your Best Connection™**

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