

The innovative SB® connectors provide cost-effective reliability, design flexibility and safety for your products' manufacture, installation and maintenance.

APP's 2 pole connector is available with a 50 amp rating, 600 Volts continuous AC or DC operation. There are SB® connectors for many applications and wire sizes, #6 to #16 AWG (13.3 mm to 1.3 mm). Mechanical keys ensure connectors will only mate with connectors of the same color. Different color housings are selected to identify voltages, thus preventing mismatching of the power supply system.

FEATURES

- 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



PRODUCT SPECIFICATIONS

| Connector Model | SB ®50 | Connector Model | SB ®50 |
|---|--------------------------|--|--------------|
| UL Current Rating (Amperes)* | 50* | Life | |
| UL Voltage Ratings (Volts) | 600* | a. No load (Contact/Disconnect Cycles) | To 10,000 |
| Contact Barrel Wire Size (AWG) (mm ²) | #6 to #16 13.3 to 1.3 | b. Under Load (Hot Plug 250 cycles @ 120V) | 50A |
| Maximum Wire Insulation Diameter (inches) (mm) | 0.44 11.18 | Avg. Connection/Disconnect - high detent | 15 lbs. |
| AVG Contact Resistance* (micro-ohms) | 200 | - with lower extraction force | 10 lbs. |
| Insulation Withstanding Test Voltage (Volts AC/DC) | 2200 | Operating Temperature Range °C** | -20° to 105° |
| Contact Retention Force (lbs) | 50 | Flammability Rating of Housing Material | UL94 V-0 |

* UL Rated for 65°C rated wire or cable size
** Contact factory for higher temperature rated connector
SB®, UL and CSA Reference: This equipment is an Underwriters Laboratories Inc® recognized component.
It is also listed by the Canadian Standards Association as certified.

ORDERING INFORMATION

2 Pole Housing & 50 amp Contacts

| Part Number | Housing Color | Wire | |
|-------------|---------------|--------|---------|
| | | AWG | sq. mm |
| 6319 | Gray | #6 | 13.3 |
| 6319G1 | Gray | #10/12 | 5.3/3.3 |
| 6331G1 | Red | #6 | 13.3 |
| 6331G2 | Red | #10/12 | 5.3/3.3 |
| 6331G3 | Black | #6 | 13.3 |
| 6331G4 | Black | #10/12 | 5.3/3.3 |
| 6331G5 | Blue | #6 | 13.3 |
| 6331G6 | Blue | #10/12 | 5.3/3.3 |
| 6331G7 | Yellow | #6 | 13.3 |
| 6331G8 | Yellow | #10/12 | 5.3/3.3 |
| 6331G9 | Green | #6 | 13.3 |
| 6331G10 | Green | #10/12 | 5.3/3.3 |
| 6331G11 | Orange | #6 | 13.3 |
| 6331G12 | Orange | #10/12 | 5.3/3.3 |

Housings Only

| Part Number | Description |
|-------------|-------------|
| 992 | Gray |
| 992G1 | Red |
| 992G2 | Black |
| 992G4 | Blue |
| 992G5 | Yellow |
| 992G6 | Green |
| 992G7 | Orange |

50 amp Contacts

| Part Number | Description | Wire | |
|-------------|-----------------------|--------|---------|
| | | AWG | sq. mm |
| 903G1 | Contact set (2) | #6 | 13.3 |
| 904G1 | Contact set (2) | #10/12 | 5.3/3.3 |
| 5900 | Individual | #6 | 13.3 |
| 1307 | Individual-low detent | #6 | 13.3 |
| 5952 | Individual | #8 | 8.4 |
| 5915 | Individual | #10/12 | 5.3/3.3 |

50 amp contacts continued

| Part Number | Description | Wire | |
|-------------|----------------------------|--------|----------|
| | | AWG | sq. mm |
| 265G1 | Reel-silver plated | #6/8 | 13.3/8.4 |
| 265G2 | Reel-silver plated | #10/12 | 5.3/3.3 |
| 265G3 | Reel-silver plated-low det | #6/8 | 13.3/8.4 |
| 265G4 | Reel-silver plated-low det | #10/12 | 5.3/3.3 |
| 265G5 | Reel-tin plated | #6/8 | 13.3/8.4 |
| 265G6 | Reel-tin plated | #10/12 | 5.3/3.3 |
| 265G7 | Reel-tin plated-low det | #6/8 | 13.3/8.4 |
| 265G8 | Reel-tin plated-low det | #10/12 | 5.3/3.3 |

Accessories

| Part Number | Description |
|--------------|--|
| SB50-HDL-Red | Handle & hardware-red |
| 134G1 | Dust cover-red |
| 990 | Cable clamp & hardware-self attaching-2C |

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ORDERING INFORMATION

accessories continued

| Part Number | Description |
|-------------|--|
| 990G1 | Cable clamp & hardware-screw mounting-2C |
| 5905 | Cable clamp-1 twin conductor with hardware |

Bushings

| Part Number | Description | Wire | |
|-------------|-----------------------|--------------|-----------------|
| | | AWG | sq. mm |
| 5910 | Use with 5900 or 1307 | #6 to #10/12 | 5.3/5.26 & 3.31 |
| 5912 | Use with 5900 or 1307 | #6 to #8 | 5.3/8.37 |
| 5913 | Use with 5900 or 1307 | #6 to #14/16 | 5.3/2.08 & 1.31 |

Tooling

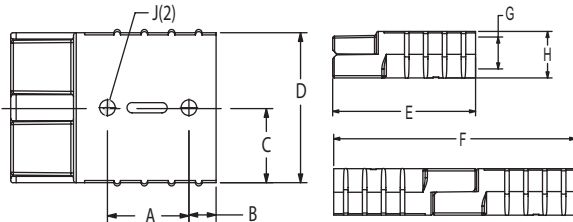
| Part Number | Description |
|-------------|---------------------------------|
| 1309G4 | Hand tool |
| 1387G1 | Pneumatic tool |
| 1388G6 | - die for #6 to #16 AWG |
| 1388G7 | - die for #10 to #12 AWG |
| 1389G6 | - locator for #6 to #16 AWG |
| 1389G7 | - locator for #10 to #12 AWG |
| 260G16 | Applicator only (110V & 220V) |
| 284G1 | Applicator & Press (220V, 50Hz) |
| 250G5 | Press only (110V, 60Hz) |

DIMENSIONS

SB[®]50 Housing

| Series | -A- | | -B- | | -C- | | -D- | | -E- | | -F- | |
|--------------------|------|------|-----|------|------|------|------|------|------|------|------|------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| SB [®] 50 | 19.0 | 0.75 | 6.4 | 0.25 | 18.2 | 0.72 | 36.5 | 1.44 | 47.6 | 1.88 | 80.9 | 3.19 |

| Series | -G- | | -H- | | -J- | |
|--------------------|------|------|------|------|-----|------|
| | mm | in. | mm | in. | mm | in. |
| SB [®] 50 | 11.5 | 0.45 | 15.9 | 0.63 | 3.7 | 0.14 |

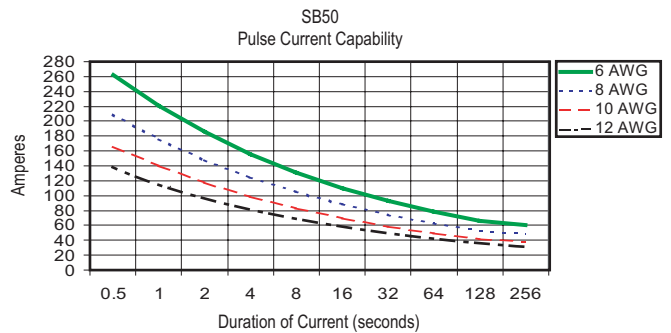
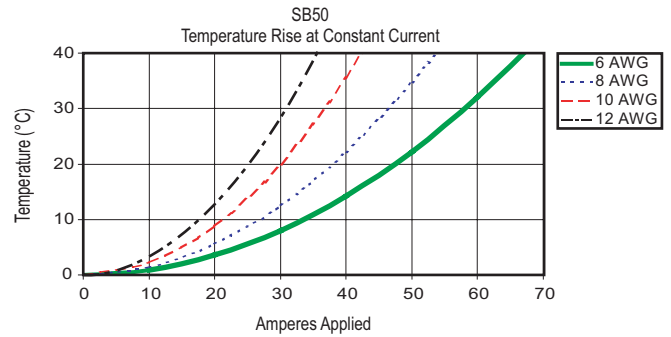


Bushings - (for use with 5900 or 1307)

| Part Number | Reduces From | -A- | | -B- | | -C- | |
|-------------|------------------|-------|-----|------|------|------|------|
| | | mm | in. | mm | in. | mm | in. |
| 5910 | #6 to #10-12 AWG | 11.94 | .47 | 5.41 | .213 | 3.45 | .136 |
| 5912 | #6 to #8 AWG | 11.43 | .45 | 5.41 | .213 | 4.57 | .18 |
| 5913 | #6 to #14-16 AWG | 11.94 | .47 | 5.41 | .213 | 2.36 | .093 |

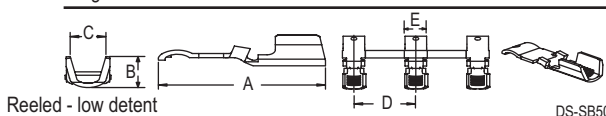
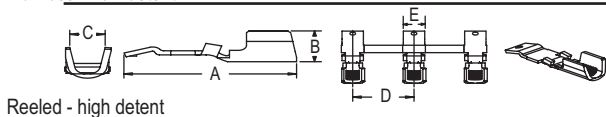
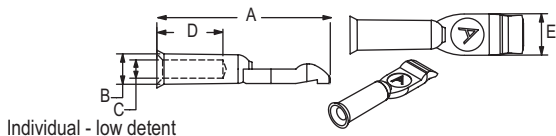
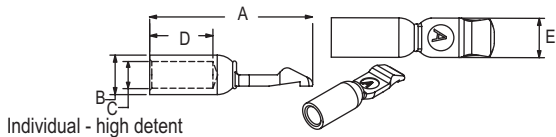


TEMPERATURE RISE CHARTS



SB[®]50 Contacts

| Part Number | -A- | | -B- | | -C- | | -D- | | -E- | |
|-------------|------|------|-----|-----|------|------|------|-----|-----|-----|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| 1307 | 30.1 | 1.19 | 7.1 | .28 | 5.6 | .22 | 11.4 | .45 | 7.1 | .28 |
| 5900 | 30.7 | 1.21 | 7.1 | .28 | 5.6 | .22 | 11.4 | .45 | 7.1 | .28 |
| 5914 | 29.7 | 1.17 | 4.8 | .19 | 3.5 | .14 | 11.4 | .45 | 7.1 | .28 |
| 5915 | 29.5 | 1.16 | 7.1 | .28 | 3.5 | .14 | 11.4 | .45 | 7.1 | .28 |
| 5952 | 29.5 | 1.16 | 7.1 | .28 | 4.8 | .19 | 11.4 | .45 | 7.1 | .28 |
| 904G1 | 28.7 | 1.13 | 7.1 | .28 | 3.6 | .14 | 11.4 | .45 | 7.1 | .28 |
| 265G1 | 6.6 | .26 | 9.1 | .36 | 32.2 | 1.27 | 22.9 | .9 | 7.6 | .30 |
| 265G2 | 4.3 | .17 | 7.4 | .29 | 32.2 | 1.27 | 22.9 | .9 | 7.6 | .30 |
| 265G3 | 6.6 | .26 | 9.1 | .36 | 30.9 | 1.21 | 22.9 | .9 | 7.6 | .30 |
| 265G4 | 4.3 | .17 | 7.4 | .29 | 30.9 | 1.21 | 22.9 | .9 | 7.6 | .30 |
| 265G5 | 6.6 | .26 | 9.1 | .36 | 32.2 | 1.27 | 22.9 | .9 | 7.6 | .30 |
| 265G6 | 4.3 | .17 | 7.4 | .29 | 32.2 | 1.27 | 22.9 | .9 | 7.6 | .30 |
| 265G7 | 6.6 | .26 | 9.1 | .36 | 30.9 | 1.21 | 22.9 | .9 | 7.6 | .30 |
| 265G8 | 4.3 | .17 | 7.4 | .29 | 30.9 | 1.21 | 22.9 | .9 | 7.6 | .30 |



DS-SB50 REV01