

The Anderson Power Products "A" Series Euro Battery Connector (EBC) uses the DIN43589-1 form factor which has been specially configured for North American fast battery charging systems.

Unlike other DIN43589-1 connectors, our "A" Series offers contact and crimp tooling selections developed for both American Wire Gauge and Metric cable. We also offer a broader range of auxiliary wire contacts for communication control applications.

The connector design incorporates an advanced, cost effective contact carrier for ease of assembly and fewer components. All materials are selected to ensure years of reliable service under adverse battery environments.

### Features

- **Impact resistant plastic housing**

PA6 (Nylon) housings provide superior impact resistance to stand up to rough usage

- **Up to four auxiliary contacts**

Can be used for battery monitoring and charger communications. Last mate - first break, auxiliary contact sizes available from 10AWG to 18AWG.

- **Low mating forces**

Connectors can be mated and unmated without the necessity of added hardware

- **Hexagonal voltage key for 24V, 36V, 48V, 72V, 80V, or 96V**

Key prevents mating of different operating voltages



Note: Will not mate with "E" Series Housings

### SPECIFICATIONS

| Electrical                                    |  |                        | Mechanical                                    |                            |
|-----------------------------------------------|--|------------------------|-----------------------------------------------|----------------------------|
| Current Rating (Amperes) *                    |  |                        | Life                                          |                            |
| UL                                            |  | 350                    | a. No Load (mating cycles)                    | >5000                      |
| EN1175-1:1998                                 |  | 320                    | b. Under Load (Hot Plug 5 mating cycles @96V) | 800A                       |
| CSA                                           |  | 270                    |                                               |                            |
| Voltage Rating                                |  |                        | Average Mating / Unmating Force (lbf)         |                            |
| UL / CSA                                      |  | 600                    | (N)                                           | 12                         |
| EN1175-1:1998                                 |  | 150                    |                                               | 53                         |
| Wire Range                                    |  |                        | Degree of Protection                          |                            |
| - Power Contacts - AWG (mm <sup>2</sup> )     |  | #1/0 to #4/0 (50 / 95) | IP23                                          |                            |
| - Auxiliary Contacts - AWG (mm <sup>2</sup> ) |  | #18 to #10 (1.5 / 6)   | Acid Resistance                               |                            |
| Dielectric Withstanding Voltage (AC)          |  |                        | 1.10g / cm <sup>3</sup>                       |                            |
| Average Contact Resistance (micro-ohms)       |  |                        | Contact Retention - minimum (lbf)             |                            |
| Operating Temperature (°C)                    |  |                        | (N)                                           | 100                        |
| (°F)                                          |  |                        |                                               | 445                        |
|                                               |  |                        | Materials                                     |                            |
|                                               |  |                        | Housing                                       | PA6 (Nylon) glass filled   |
|                                               |  |                        | Contacts                                      | Copper alloy, silver plate |
|                                               |  |                        | Hardware                                      | Steel, zinc chromate plate |

\* Current derating curves must be observed as current capacity will vary dependent on wire cross section and ambient temperature. Maximum current carrying capacity is measured at 40°C / 104°F using the maximum wire cross section permissible, crimped to contacts using APP recommended tooling.

### ORDERING INFORMATION

#### Connector Part Number Selection

| Series | Gender                        | Main Contact | Handle | Coding Key          | Auxiliary Contacts                        | Packaging    |
|--------|-------------------------------|--------------|--------|---------------------|-------------------------------------------|--------------|
| A32    | 5                             | 01           | - 1    | 0                   | B                                         | 9            |
| 5      | Socket Nylon                  |              |        |                     |                                           | 9 Individual |
| 00     | None - Order Separately       |              |        |                     | 0 None                                    | 8 Bulk       |
| 01     | #1/0 AWG / 50 mm <sup>2</sup> |              |        |                     | A (2) Lower Auxiliary Contacts (320-23)   |              |
| 02     | #2/0 AWG / 70 mm <sup>2</sup> |              |        |                     | B (2) Upper Auxiliary Contacts (320-25)   |              |
| 03     | #3/0 AWG / 95 mm <sup>2</sup> |              |        |                     | C (2) Lower Auxiliary Contacts & (320-23) |              |
| 04     | #4/0 AWG                      |              |        | 0 Grey, Wet Cell    | (2) Upper Auxiliary Contacts (320-25)     |              |
| 0      | No                            |              |        | 2 Green, Dry Cell   |                                           |              |
| 1      | Black                         |              |        | 3 Yellow, Universal |                                           |              |

#### Accessories

| Part Number | Description                                   |
|-------------|-----------------------------------------------|
| 160-13      | #10 (6mm <sup>2</sup> ) Lower aux contact     |
| 160-15      | #12 (4mm <sup>2</sup> ) Upper aux contact     |
| 16-89       | Handle kit - low profile                      |
| 32-89       | Handle kit - high profile                     |
| A320LP-MK   | Latch plate                                   |
| A320HL-MK   | Handle / lever assembly                       |
| 994G4       | Manual release bracket & handle               |
| 993G4       | Manual release mounting plate for mating half |

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

## ORDERING INFORMATION

### Tooling

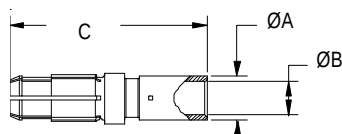
| Part Number | Description                                                              |
|-------------|--------------------------------------------------------------------------|
| 1309G4      | Hand tool for auxiliary contacts #14/18 AWG (2.5 / 2.5 mm <sup>2</sup> ) |
| 1387G3      | Hydraulic tool for power contacts                                        |
| E160-36     | Extraction tool                                                          |

Note: For tooling die information, see tooling chart on website

## DIMENSIONS

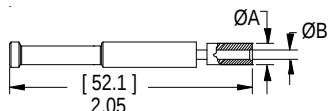
### Socket Contact

| Part Number | - Wire - |                 | - Ø A - |      | - Ø B - |      | - C - |      |
|-------------|----------|-----------------|---------|------|---------|------|-------|------|
|             | AWG      | mm <sup>2</sup> | in.     | mm   | in.     | mm   | in.   | mm   |
| 320-1150    | #1/0     | 50              | 0.57    | 14.5 | 0.43    | 11.0 | 2.58  | 65.5 |
| 320-1170    | #2/0     | 70              | 0.67    | 17.0 | 0.51    | 13.0 | 2.58  | 65.5 |
| 320-1195    | #3/0     | 95              | 0.78    | 19.8 | 0.59    | 15.0 | 2.78  | 70.5 |
| 320-1104    | #4/0     | N/A             | 0.78    | 19.8 | 0.61    | 15.6 | 2.78  | 70.5 |



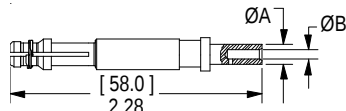
### Upper Auxiliary Contact

| Part Number | - Wire - |                 | - Ø A - |     | - Ø B - |     |
|-------------|----------|-----------------|---------|-----|---------|-----|
|             | AWG      | mm <sup>2</sup> | in.     | mm  | in.     | mm  |
| 160-15      | #12      | 4               | 0.16    | 4.1 | 0.11    | 2.8 |
| 320-25      | #18 / 14 | 1.5 / 2.5       | 0.18    | 4.6 | 0.09    | 2.2 |

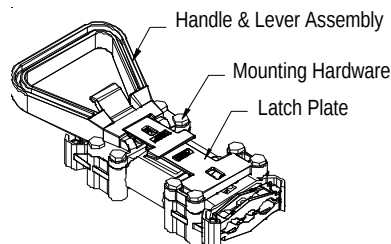


### Lower Auxiliary Contact

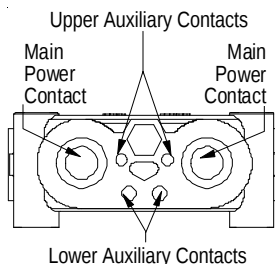
| Part Number | - Wire - |                 | - Ø A - |     | - Ø B - |     |
|-------------|----------|-----------------|---------|-----|---------|-----|
|             | AWG      | mm <sup>2</sup> | in.     | mm  | in.     | mm  |
| 160-13      | #10      | 6               | 0.20    | 5.1 | 0.15    | 3.8 |
| 320-23      | #18 / 14 | 1.5 / 2.5       | 0.18    | 4.6 | 0.09    | 2.2 |



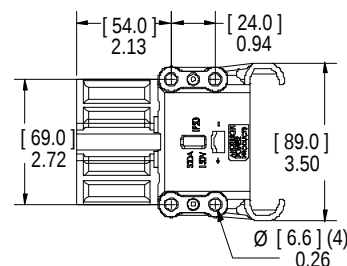
### Handle / Lever Assembly / Latch



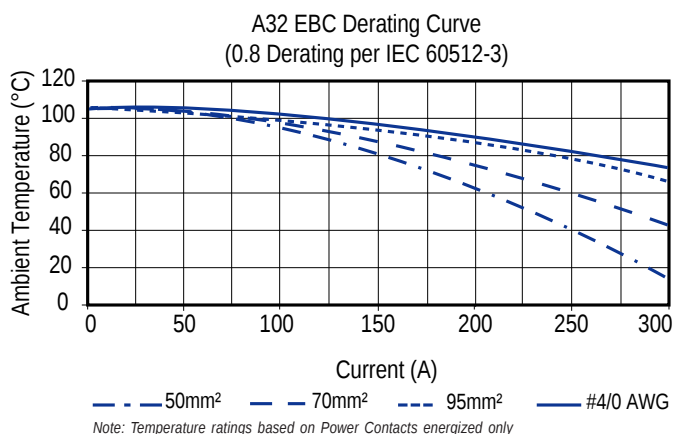
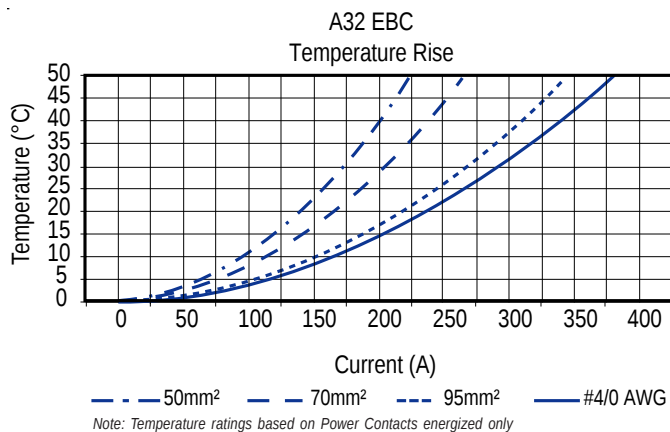
### Housing Front View



### Housing Top View



## TEMPERATURE CHARTS



### Housing Side View

