

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. 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) *   | 190                  | Life  |                            |
| Voltage Rating   | 600                  | a. No Load (mating cycles)                    | >5000                      |
| Wire Range   |                      | b. Under Load (Hot Plug 5 mating cycles @96V) | 400A                       |
| - Power Contacts - AWG (mm <sup>2</sup> )  | #6 to #1/0 (16 / 50) | Average Mating / Unmating Force (lbf)         | 12                         |
| - Auxiliary Contacts - AWG (mm <sup>2</sup> )  | #18 to #10 (1.5 / 6) | (N)   | 53                         |
| Dielectric Withstanding Voltage (AC)   | 2,200                | Degree of Protection                          | IP23                       |
| Average Contact Resistance (micro-ohms)  | 55                   | Acid Resistance                               | 1.10g / cm <sup>3</sup>    |
| Operating Temperature (°C)   | -25° to 105°         | Contact Retention - minimum (lbf)             | 100                        |
| (°F)   | -13° to 221°         | (N)   | 445                        |
| * 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. |                      | <b>Materials</b>                              |                            |
|  |                      | Housing                                       | PA6 (Nylon) glass filled   |
|  |                      | Contacts                                      | Copper alloy, silver plate |
|  |                      | Hardware                                      | Steel, zinc chromate plate |

### ORDERING INFORMATION

#### Connector Part Number Selection

| Series | Gender                        | Main Contact | Handle | Coding Key          | Auxiliary Contacts                        | Packaging    |
|--------|-------------------------------|--------------|--------|---------------------|---|--------------|
| A16    | 5                             | 25           | 1      | 0                   | B   | 9            |
| 5      | Socket                        |              |        |                     |   | 9 Individual |
| 00     | None - Order Separately       |              |        |                     | 0 None                                    | 8 Bulk       |
| 16     | #6 AWG / 16 mm <sup>2</sup>   |              |        |                     | A (2) Lower Auxiliary Contacts (160-13)   |              |
| 25     | #4 AWG / 25 mm <sup>2</sup>   |              |        |                     | B (2) Upper Auxiliary Contacts (160-15)   |              |
| 35     | #2 AWG / 35 mm <sup>2</sup>   |              |        |                     | C (2) Lower Auxiliary Contacts & (160-13) |              |
| 50     | #1/0 AWG / 50 mm <sup>2</sup> |              |        | 0 Grey, Wet Cell    | (2) Upper Auxiliary Contacts (160-15)     |              |
| 0      | No                            |              |        | 2 Green, Dry Cell   |   |              |
| 1      | Black                         |              |        | 3 Yellow, Universal |   |              |

#### Accessories

| Part Number | Description                       |
|-------------|-----------------------------------|
| 320-23      | #18/14(1.5/2.5) Lower aux contact |
| 320-25      | #18/14(1.5/2.5) Upper aux contact |
| 16-89       | Handle kit - low profile          |
| 32-89       | Handle kit - high profile         |
| A320LP-MK   | Latch plate for mating side       |
| A320HL-MK   | Handle with latch & hardware      |

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

## ORDERING INFORMATION

### Tooling

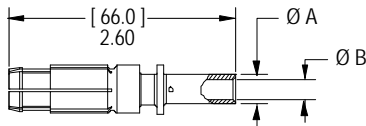
| Part Number | Description   |
|-------------|---|
| 1387G3      | Hydraulic tool for power contacts                                 |
| 1309G4      | Hand tool for aux. contacts #14/18 AWG (1.5/2.5 mm <sup>2</sup> ) |
| E160-36     | Extraction tool   |

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

## DIMENSIONS

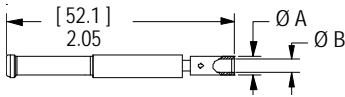
### Socket Contact

| Part Number | - Wire - |                 | - Ø A - |      | - Ø B - |      |
|-------------|----------|-----------------|---------|------|---------|------|
|             | AWG      | mm <sup>2</sup> | in.     | mm   | in.     | mm   |
| 160-1116    | #6       | 16              | 0.33    | 8.4  | 0.24    | 6.0  |
| 160-1125    | #4       | 25              | 0.43    | 11.0 | 0.31    | 8.0  |
| 160-1135    | #2       | 35              | 0.49    | 12.5 | 0.35    | 9.0  |
| 160-1150    | #1/0     | 50              | 0.57    | 14.5 | 0.43    | 11.0 |



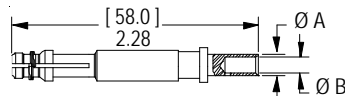
### Upper Auxiliary Contact

| 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 |

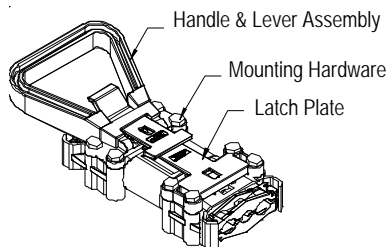


### Lower Auxiliary Contact

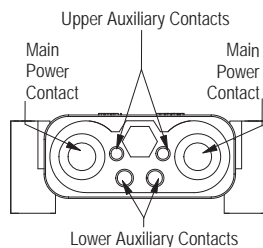
| Part Number | - Wire - |                 | - Ø A - |     | - Ø B - |     |
|-------------|----------|-----------------|---------|-----|---------|-----|
|             | AWG      | mm <sup>2</sup> | in.     | mm  | in.     | mm  |
| 160-13      | #10      | 6               | 0.20    | 5.1 | 0.15    |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



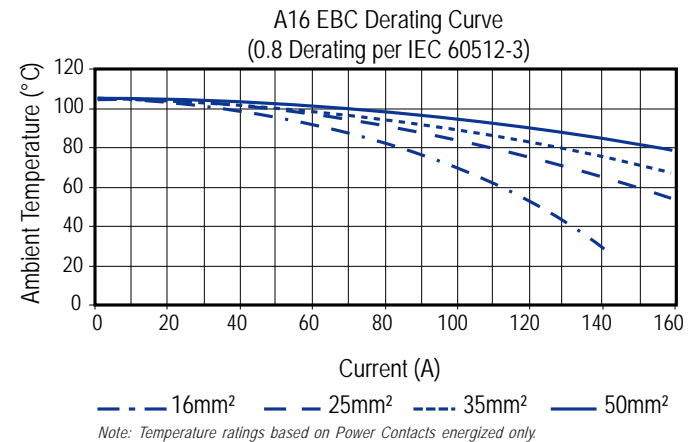
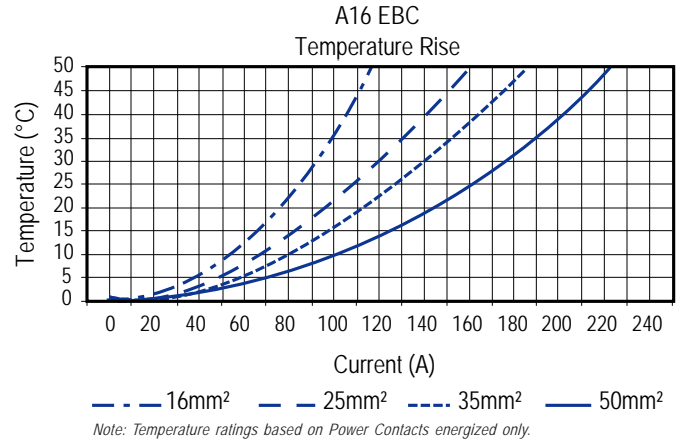
### Handle / Lever Assembly / Latch



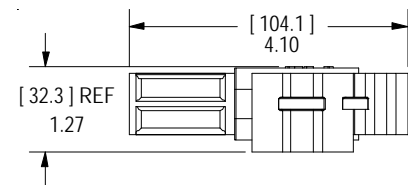
### Housing Front View



## TEMPERATURE CHARTS



### Housing Side View



### Housing Top View

