

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

Current Rating (Amperes) *	140
Voltage Rating	600
Wire Range	
- Power Contacts - AWG (mm ²)	#8 to #2 (10 / 35)
- Auxiliary Contacts - AWG (mm ²)	#18 to #14 (1.5 / 2.5)
Dielectric Withstanding Voltage (AC)	2,200
Average Contact Resistance (micro-ohms)	65
Operating Temperature (°C)	-25° to 105°
(°F)	-13° to 221°

* 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.

Mechanical

Life	
a. No Load (mating cycles)	>5000
b. Under Load (Hot Plug 5 mating cycles @96V)	200A
Mating / Unmating Force (lbf)	12
(N)	53
Degree of Protection	IP23
Acid Resistance	1.10g / cm ³
Contact Retention (lbf)	100
(N)	445

Materials

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
A80	4	25	- 1	0	B	9
4	Plug					9 Individual
00	None - Order Separately				0 None	8 Bulk
10	#8 AWG / 10 mm ²				A (2) Lower Auxiliary Contacts	
16	#6 AWG / 16 mm ²				B (2) Upper Auxiliary Contacts	
25	#4 AWG / 25 mm ²				C (2) Lower Auxiliary Contacts &	
35	#2 AWG / 35 mm ²				(2) Upper Auxiliary Contacts	
0	No			0 Grey, Wet Cell		
1	Black			2 Green, Dry Cell		
2	Red			3 Yellow, Universal		

Accessories

Part Number	Description
80-89	Handle kit

HEADQUARTERS: Anderson Power Products®, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA T:978-422-3600 F:978-422-3700

EUROPE: Anderson Power Products® Ltd., Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington, Cheshire, WA5 7TN United Kingdom T: +44 (0) 1925 428390 F: +44 (0) 1925 428399

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www.andersonpower.com

ORDERING INFORMATION

Tooling

Part

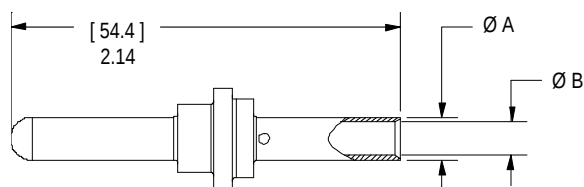
Number	Description
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

DIMENSIONS

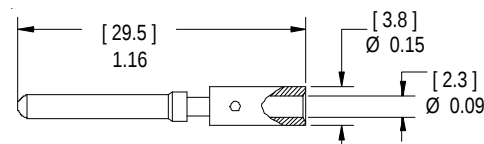
Pin Contact

Part Number	- Wire -		- Ø A -		- Ø B -	
	AWG	mm ²	in.	mm	in.	mm
80-1010	#8	10	0.24	6.1	0.18	4.6
80-1016	#6	16	0.33	8.4	0.24	6.1
80-1025	#4	25	0.43	10.9	0.31	7.9
80-1035	#2	35	0.49	12.4	0.35	8.9



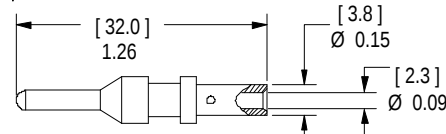
Upper Auxiliary Contact

E80-32 upper auxiliary contact for #18 / 14 AWG or (1.5 / 2.5 mm² wire)

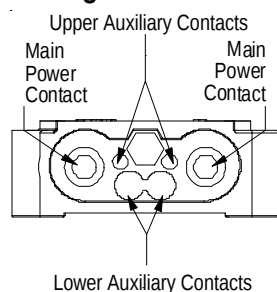


Lower Auxiliary Contact

E80-30 lower auxiliary contact for #18 / 14 AWG or (1.5 / 2.5 mm² wire)

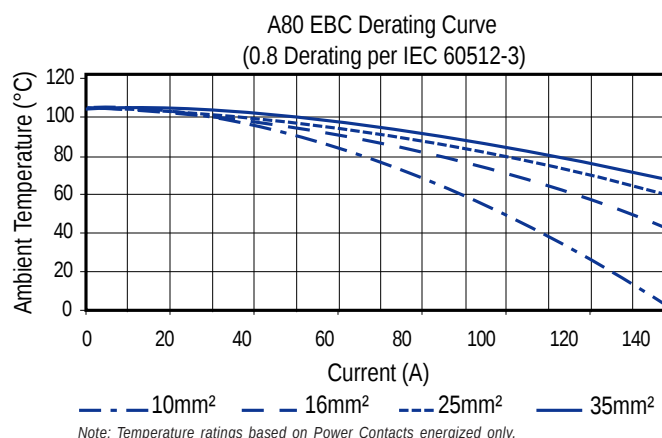
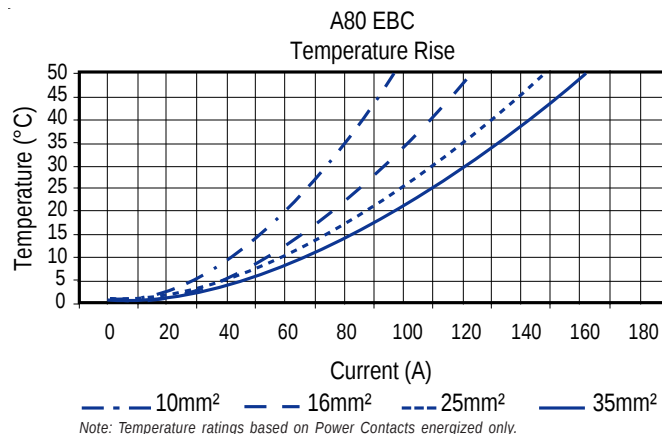


Housing Front View

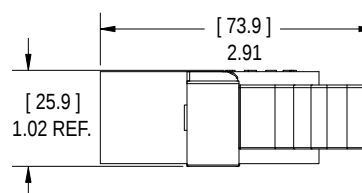


A80 Male DIN 43589-1

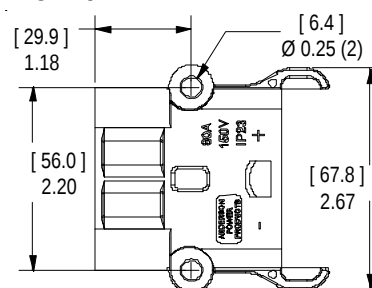
TEMPERATURE CHARTS



Housing Side View



Housing Top View



All Data Subject To Change Without Notice

DS-A80EBCM REV03

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