

Anderson Power Products' family of Euro Battery Connectors (EBC) exceeds all the requirements of DIN 43589-1 and EN 1175-1. The connector design incorporates an innovative, cost effective contact carrier for ease of assembly.

The connectors have a Degree of Protection of IP23 per IEC 60529. The acid resistance and temperature range of the PBT-PC housing exceeds the requirements of EN 1175-1. Contacts are pure copper with silver plate for maximum conductivity.

All materials meet RoHS requirements and are selected to ensure years of reliable service under adverse battery environments.

Features

- Sturdy advanced polymer housings**

PBT-PC alloy housings provides superior resistance to acids and temperature extremes

- DIN 43589-1 voltage keying**

Dry-cell, wet-cell & universal keying plugs coded for 24 / 36 / 48 / 72 / 80 & 96 volts DC

- Mating compatibility with connectors of other manufacturers**

APP "E" series connectors offer dimensional compatibility for air tube and auxiliary contacts over and above the DIN 43589-1 compatibility of housings and main contacts



- Silver plated pure copper contacts**

For lowest voltage drop and superior performance

SPECIFICATIONS

Electrical			Mechanical		
Current Rating (Amperes) *			Life		
UL		160	a. No Load (mating cycles)		>5000
EN1175-1:1998		140	b. Under Load (Hot Plug 5 mating cycles @96V)		200A
CSA		120			
Voltage Rating			Average Mating / Unmating Force (lbf)		12
UL / CSA		600	(N)		53
EN1175-1:1998		150	Degree of Protection		IP23
Wire Range			Acid Resistance		1.38g / cm ³
- Power Contacts - AWG (mm ²)		#8 to #2 (10 / 35)	Contact Retention - minimum (lbf)		100
- Auxiliary Contacts - AWG (mm ²)		#18 to #14 (1.5 / 2.5)	(N)		445
Dielectric Withstanding Voltage (AC)		2,200	Air Tube Rating		2 bar
Average Contact Resistance (micro-ohms)		65			
Operating Temperature (°C)		-25° to 105°			
(°F)		-13° to 221°			
			Materials		
			Housing		PBT/PC blend, 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 & Air Tubes	Packaging
E80	4	25	- 1	0	2	9
4	Plug					9 Individual
00	None - Order Separately				0 None	8 Bulk
10	10 mm ² / #8 AWG				1 (2) Lower Auxiliary Contacts	
16	16 mm ² / #6 AWG				2 (2) Upper Auxiliary Contacts	
25	25 mm ² / #4 AWG				4 (2) Lower Auxiliary Contacts & (2) Upper Auxiliary Contacts	
35	35 mm ² / #2 AWG			0 Grey, Wet Cell	5 Air Tube	
0	No			2 Green, Dry Cel	6 Air Tube & (2) Upper Auxiliary Contacts	
1	Black			3 Yellow, Universal		
2	Red					

Accessories

Part Number	Description
E80-20	Twin air tube
E80-89	Handle kit

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www.andersonpower.com

ORDERING INFORMATION

Tooling

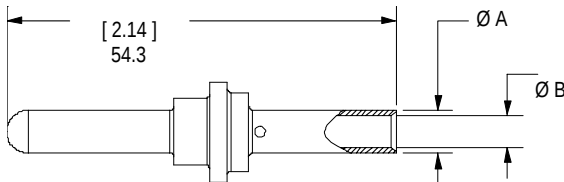
Part Number	Description
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

DIMENSIONS

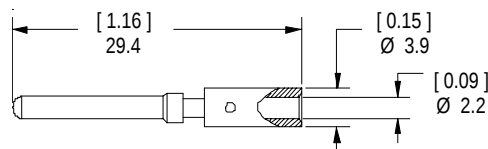
Pin Contact

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



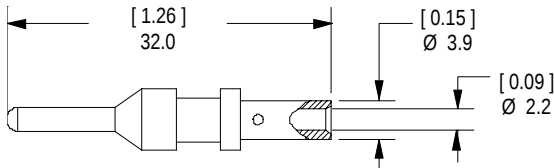
Upper Auxiliary Contact

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

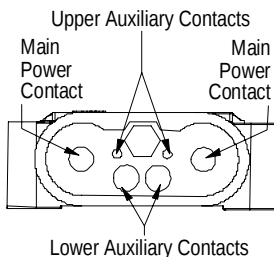


Lower Auxiliary Contact

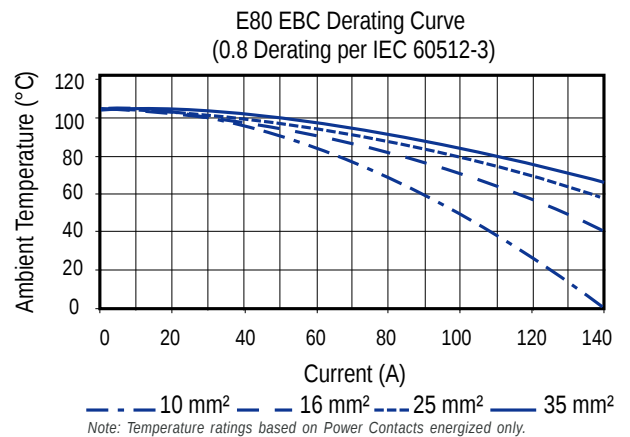
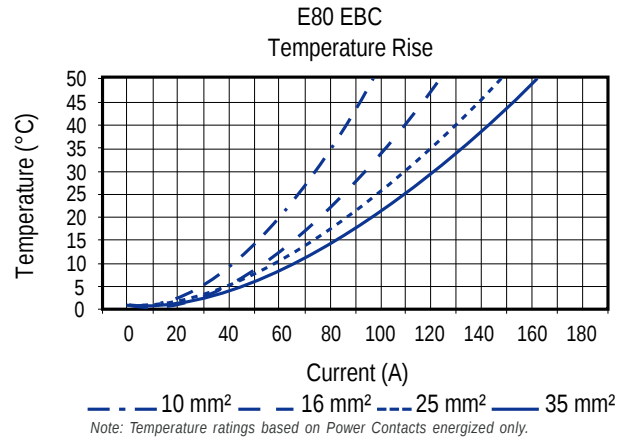
E80-30 lower auxiliary contact for 1.5 mm² / 2.5 mm² (#18 / #14 AWG)



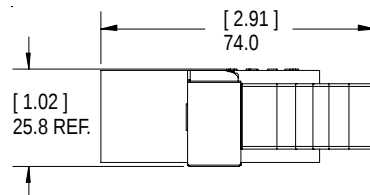
Housing Front View



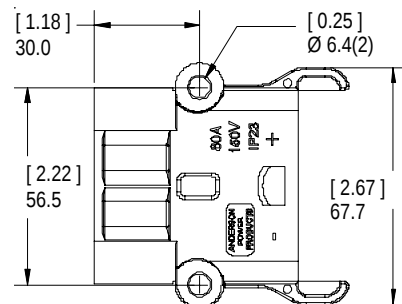
TEMPERATURE CHARTS



Housing Side View



Housing Top View



Mouser Electronics

Authorized Distributor

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[E80-32](#) [E80425-0008](#) [E80425-0009](#)