EBC Connectors

E32 Female DIN 43589-1

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	340	a. No Load (mating cycles)	>5000
EN1175-1:1998	300	b. Under Load (Hot Plug 5 mating cycles @96V)	800A
CSA	260		
Voltage Rating		Average Mating / Unmating Force (lbf)	12
UL / CSA	600	(N)	53
EN1175-1:1998	150	Degree of Protection	IP23
Wire Range		Acid Resistence	1.38g / cm³
- Power Contacts - AWG (mm²)	#1/0 to 4/0 (50 / 95)	Contact Retention - minimum (lbf)	100
- Auxiliary Contacts - AWG (mm²)	#12 to #10 (4 / 6)	(N)	445
Dielectric Withstanding Voltage (AC)	2,200	Air Tube Rating	2 bar
Average Contact Resistance (micro-ohms)	30		
Operating Temperature (°C)	-25° to 75°	**Materials**	
(°F)	-13° to 167°	Housing	PBT/PC blend
		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
E32 **	5	50	-	1	0	2	9
5 Socket							9 Individual
00 None - Order Separately						0 None	8 Bulk
50 50 mm² / #1/0 AWG						1 (2) Lower Auxiliary Contacts	
70 70 mm² / #2/0 AWG						2 (2) Upper Auxiliary Contacts	
95 95 mm² / #3/0 AWG						4 (2) Lower Auxiliary Contacts &	
0 No					0 Grey, Wet Cell	(2) Upper Auxiliary Contacts	
1 Black					2 Green, Dry Cell	5 Air Tube	
					3 Yellow, Universal	6 Air Tube & (2) Upper Auxiliary Contacts	

Accessories

Part Number	Description
E320-21	Twin air tube
E16-89	Handle kit - low profile
E32-89	Handle kit - high profile
A320LP-MK	Latch plate for mating side
A320HL-MK	Handle with latch & hardware
994G4	Manual release bracket & handle
993G4	Manual release mounting plate for mating half

*** A supplemental auxiliary holder will ship with each pair of contacts.*

E32 Female DIN 43589-1

ORDERING INFORMATION

Tooling

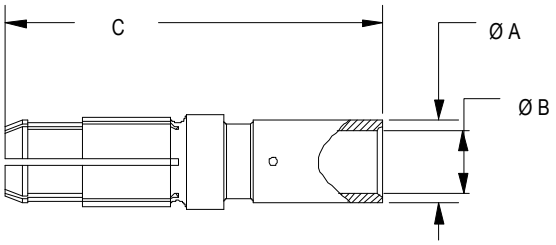
Part Number	Description
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

DIMENSIONS

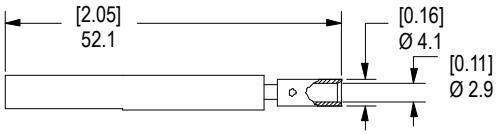
Socket Contact

Part Number	- Wire - mm²	AWG	- ØA - mm	in.	- ØB - mm	in.	- C - mm	in.
320-1150	50	#1/0	14.5	0.57	11.0	0.43	64.5	2.54
320-1170	70	#2/0	17.0	0.67	13.0	0.51	64.5	2.54
320-1195	95	#3/0	19.8	0.78	15.0	0.59	70.5	2.78



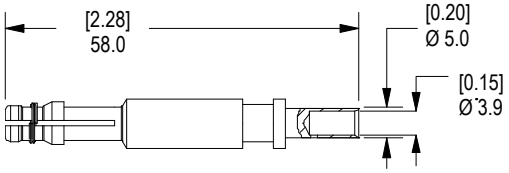
Upper Auxiliary Contact

E320-35 upper auxiliary contact for 4 mm² (#12 AWG)

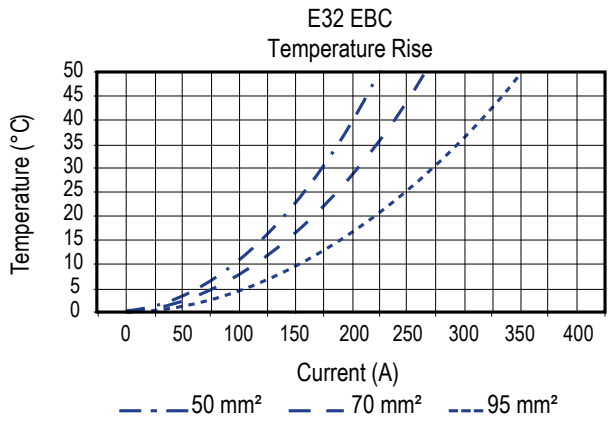


Lower Auxiliary Contact

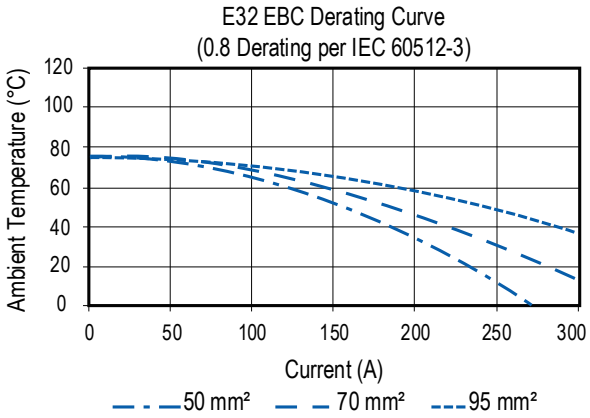
160-13 lower auxiliary contact for 6 mm² (#10 AWG)



TEMPERATURE CHARTS

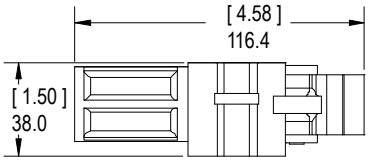


Note: Temperature ratings based on Power Contacts energized only.

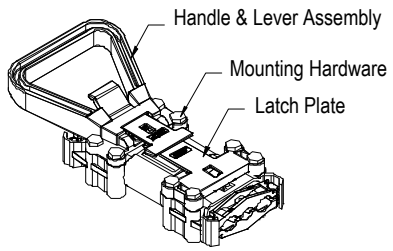


Note: Temperature ratings based on Power Contacts energized only.

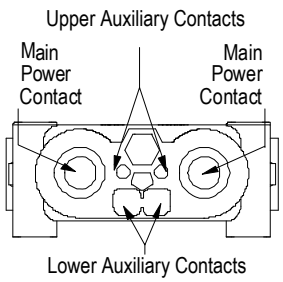
Housing Side View



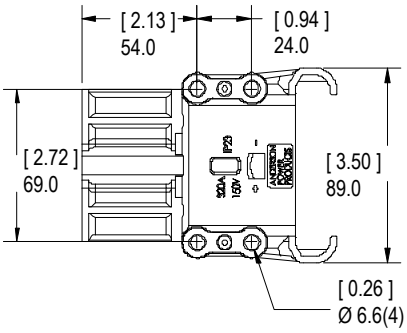
Handle / Lever Assembly / Latch



Housing Front View



Housing Top View



HEADQUARTERS: Anderson Power Products®, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA T:978-422-3600 F:978-422-0128 • **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 520203 • **ASIA / PACIFIC:** IDEAL Anderson Asia Pacific Ltd., Unit 922-928 Topsail Plaza, 11 On Sum Street, Shatin N.T., Hong Kong T:+(852) 2636 0836 F:+(852) 2635 9036 • **CHINA:** IDEAL Anderson Technologies (Shenzhen) Ltd., Block A8 Tantou Western Industrial Park, Songgang Baoan District, Shenzhen, PR. China 518105 T: +(86) 755 2768 2118 F: +(86) 755 2768 2218 • **TAIWAN:** IDEAL Anderson Asia Pacific Ltd., Taiwan Branch, 4F.-2, No.116, Dadun 20th St., Situn District, Taichung City 407, Taiwan (R.O.C.) T: +(886) 4 2310 6451 F:+(886) 4 2310 6460 • **www.andersonpower.com**