“A” Series Connector

A32 Male DIN Style

Anderson Power Products®

An IDEAL Company

The Anderson™ DIN style “A” Series uses the form factor which has been specially configured for North American fast battery charging systems.

Unlike other DIN 43589-1 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 “Euro Battery Connector” 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)	12
UL / CSA	600	(N)	53
EN1175-1:1998	150	Degree of Protection	IP23
Wire Range		Acid Resistence	1.10g / cm^3
- Power Contacts - AWG (mm^2)	#1/0 to #4/0 (50 / 95)	Contact Retention - minimum (lbf)	100
- Auxiliary Contacts - AWG (mm^2)	#18 to #10 (1.5 / 6)	(N)	445
Dielectric Withstanding Voltage (AC)	2,200	**Materials**	
Average Contact Resistance (micro-ohms)	30	Housing	PA6 (Nylon) glass filled
Operating Temperature (°C)	-25° to 105°	Contacts	Copper alloy, silver plate
(°F)	-13° to 221°	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	4	01	-	1	0	B	9
4 Plug							9 Individual
00 None - Order Separately						0 None	8 Bulk
01 #1/0 AWG / 50 mm^2						A (2) Lower Auxiliary Contacts (320-22)	
02 #2/0 AWG / 70 mm^2						B (2) Upper Auxiliary Contacts (320-24)	
03 #3/0 AWG / 95 mm^2						C (2) Lower Auxiliary Contacts & (320-22)	
04 #4/0 AWG					0 Grey, Wet Cell	(2) Upper Auxiliary Contacts (320-24)	
0 No					2 Green, Dry Cell		
1 Black					3 Yellow, Universal		

Accessories

Part Number	Description
160-12	#10 ($6mm^2$) Lower aux contact
160-14	#12 ($4mm^2$) 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
994G4	Manual release bracket & handle
993G4	Manual release mounting plate for mating half

ORDERING INFORMATION

Tooling

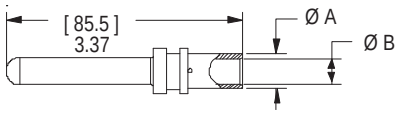
Part Number	Description
1309G4	Hand tool for auxiliary contacts #14/18 AWG (2.5 / 2.5 mm²)
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

DIMENSIONS

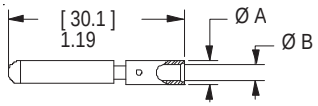
Pin Contact

Part Number	- Wire - AWG	mm²	- Ø A - in.	mm	- Ø B - in.	mm
320-1050	#1/0	50	0.57	14.5	0.43	11.0
320-1070	#2/0	70	0.67	17.0	0.51	13.0
320-1095	#3/0	95	0.78	19.8	0.59	15.0
320-1004	#4/0	N/A	0.78	19.8	0.61	15.6



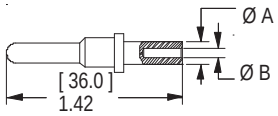
Upper Auxiliary Contact

Part Number	- Wire - AWG	mm²	- Ø A - in.	mm	- Ø B - in.	mm
160-14	#12	4	0.16	4.1	0.11	2.8
320-24	#18 / 14	1.5 / 2.5	0.18	4.6	0.09	2.2

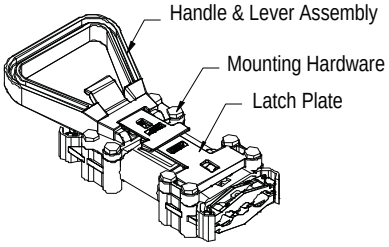


Lower Auxiliary Contact

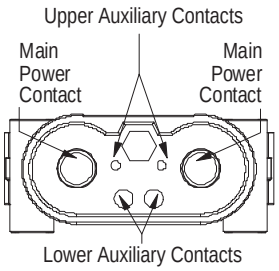
Part Number	- Wire - AWG	mm²	- Ø A - in.	mm	- Ø B - in.	mm
160-12	#10	6	0.20	5.1	0.15	3.8
320-22	#18 / 14	1.5 / 2.5	0.18	4.6	0.09	2.2



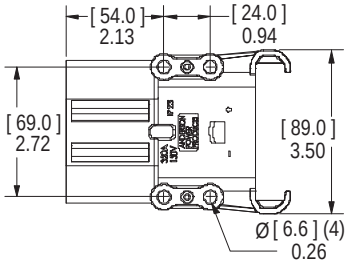
Handle / Lever Assembly / Latch



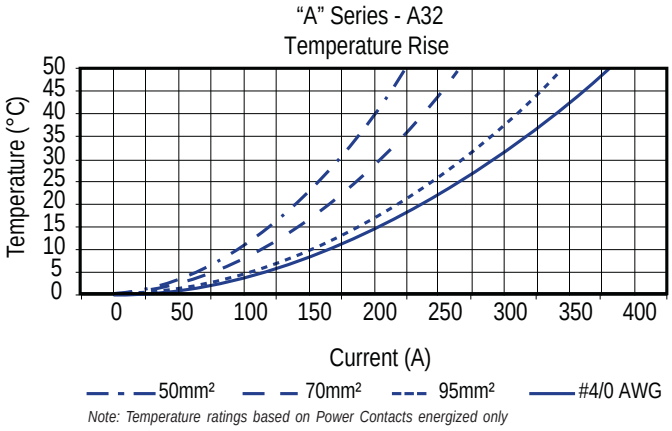
Housing Front View



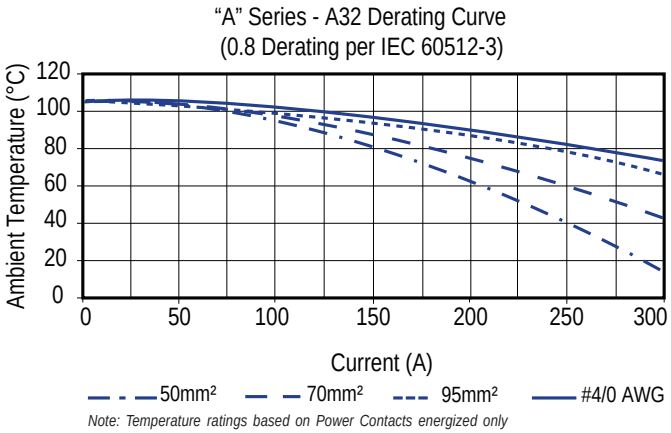
Housing Top View



TEMPERATURE CHARTS

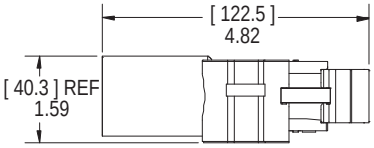


Note: Temperature ratings based on Power Contacts energized only



Note: Temperature ratings based on Power Contacts energized only

Housing Side View



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