

"A" Series Connector

A32 Female DIN Style

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)	A008
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 (mm²)	#1/0 to #4/0 (50 / 95)	Contact Retention - minimum (lbf)	100
- Auxiliary Contacts - AWG (mm²)	#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

		Main				Coding				
Series	Gender	Contact	Н	łandle		Key A		uxiliary Contacts	Packaging	
A32	5	01	-	1		0	В		9	
5 Sock	et Nylon								9 Individual	
00 None	e - Order Sepa	arately					0	None	8 Bulk	
01 #1/0	AWG / 50 mn	n²					A (2) Lower AuxiliaryContacts (320			
02 #2/0	AWG / 70 mn	n²					B (2) Upper Auxiliary Contacts (320-2			
03 #3/0	AWG / 95 mn	n²					C (2) Lower Auxiliary Contacts		ts & (320-23)	
04 #4/0	AWG				0	Grey, Wet Cell		(2) Upper Auxiliary Conta	icts (320-25)	
0 No					2	Green, Dry Cell				
1 Black			3	Yellow, Universal						

Accessories

Part	
Number	Description
160-13	#10 (6mm²) Lower aux contact
160-15	#12 (4mm²) Upper aux contact
16-89	Handle kit - low profile
32-89	Handle kit - high profile
A320LP-MK	Latch plate
A320HL-MK	Handle / lever assembly
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

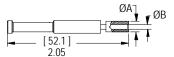
DIMENSIONS

Socket Contact

Part	- Wire -		- !	- Ø A -		- Ø B -		: -
Number	AWG	mm²	in.	mm	in.	mm	in.	mm
320-1150	#1/0	50	0.57	14.5	0.43	11.0	2.54	64.5
320-1170	#2/0	70	0.67	17.0	0.51	13.0	2.54	64.5
320-1195	#3/0	95	0.78	19.8	0.59	15.0	2.78	70.5
320-1104	#4/0	N/A	0.78	19.8	0.61	15.6	2.78	70.5
С —		-	ØA	ØВ				
	·	1110		00				

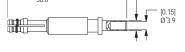
Upper Auxiliary Contact

Part	- Wire) -	- Ø 1	A -	- Ø B -		
Number	AWG	mm²	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	

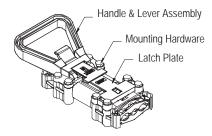


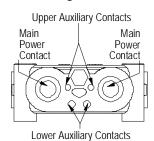
Lower Auxiliary Contact

Part	- Wire -		- Ø	A -	- Ø B -		
Number	AWG	mm²	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	
[2.28]		[0.20] Ø 5.0					

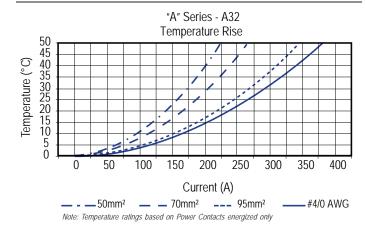


Handle / Lever Assembly / Latch Housing Front View



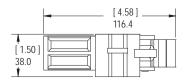


TEMPERATURE CHARTS

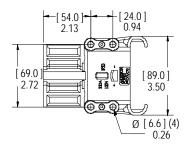


"A" Series - A32 Derating Curve (0.8 Derating per IEC 60512-3) 120 Ambient Temperature (°C) 100 80 60 40 20 0 50 100 150 200 250 300 Current (A) _ _ _ 50mm² — 70mm² --- #4/0 AWG Note: Temperature ratings based on Power Contacts energized only

Housing Side View



Housing Top View







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