

# "A" Series Connector

## A32 Female DIN Style

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	Average Mating / Unmating Force (lbf)	12
Voltage Rating		(N)	53
UL / CSA	600	Degree of Protection	IP23
EN1175-1:1998	150	Acid Resistance	1.10g / cm <sup>3</sup>
Wire Range		Contact Retention - minimum (lbf)	100
- Power Contacts - AWG (mm <sup>2</sup> )	#1/0 to #4/0 (50 / 95)	(N)	445
- Auxiliary Contacts - AWG (mm <sup>2</sup> )	#18 to #10 (1.5 / 6)	<b>Materials</b>	
Dielectric Withstanding Voltage (AC)	2,200	Housing	PA6 (Nylon) glass filled
Average Contact Resistance (micro-ohms)	30	Contacts	Copper alloy, silver plate
Operating Temperature (°C)	-25° to 105°	Hardware	Steel, zinc chromate plate
(°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.

## ORDERING INFORMATION

### Connector Part Number Selection

Series	Gender	Main Contact	Handle	Coding Key	Auxiliary Contacts	Packaging
A32	5	01	-	1	0	B
5	Socket Nylon					9 Individual
00	None - Order Separately				0 None	8 Bulk
01	#1/0 AWG / 50 mm <sup>2</sup>				A (2) Lower Auxiliary Contacts (320-23)	
02	#2/0 AWG / 70 mm <sup>2</sup>				B (2) Upper Auxiliary Contacts (320-25)	
03	#3/0 AWG / 95 mm <sup>2</sup>				C (2) Lower Auxiliary Contacts & (320-23)	
04	#4/0 AWG				(2) Upper Auxiliary Contacts (320-25)	
0	No			0 Grey, Wet Cell		
1	Black			2 Green, Dry Cell		
				3 Yellow, Universal		

### Accessories

Part Number	Description
160-13	#10 (6mm <sup>2</sup> ) Lower aux contact
160-15	#12 (4mm <sup>2</sup> ) 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

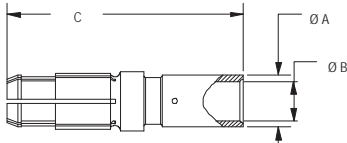
Part Number	Description
1309G4	Hand tool for auxiliary contacts #14/18 AWG (2.5 / 2.5 mm <sup>2</sup> )
1387G3	Hydraulic tool for power contacts
E160-36	Extraction tool

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

## DIMENSIONS

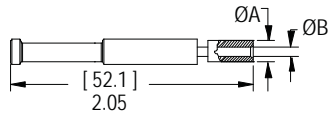
### Socket Contact

Part Number	- Wire -		- Ø A -		- Ø B -		- C -	
	AWG	mm <sup>2</sup>	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



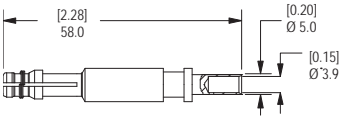
### Upper Auxiliary Contact

Part Number	- Wire -		- Ø A -		- Ø B -	
	AWG	mm <sup>2</sup>	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

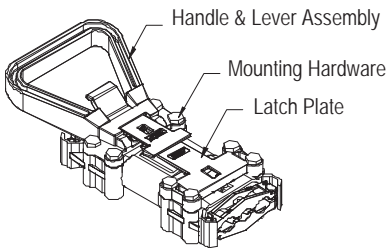


### Lower Auxiliary Contact

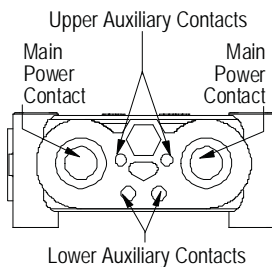
Part Number	- Wire -		- Ø A -		- Ø B -	
	AWG	mm <sup>2</sup>	in.	mm	in.	mm
160-13	#10	6	0.20	5.1	0.15	3.8
320-23	#18 / 14	1.5 / 2.5	0.18	4.6	0.09	2.2



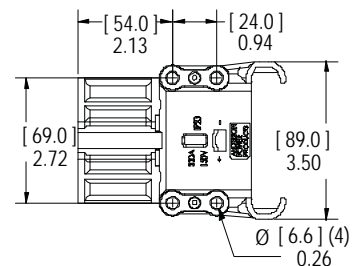
### Handle / Lever Assembly / Latch



### Housing Front View

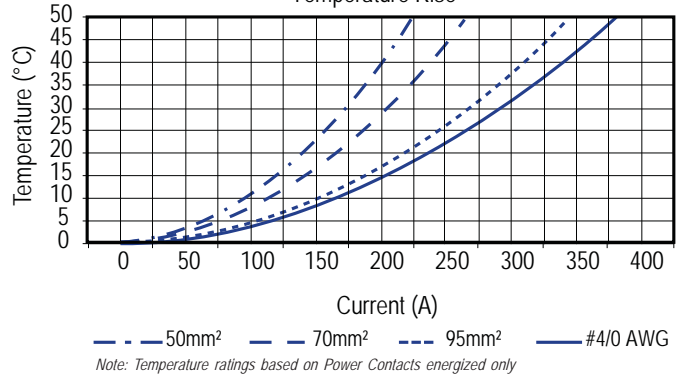


### Housing Top View

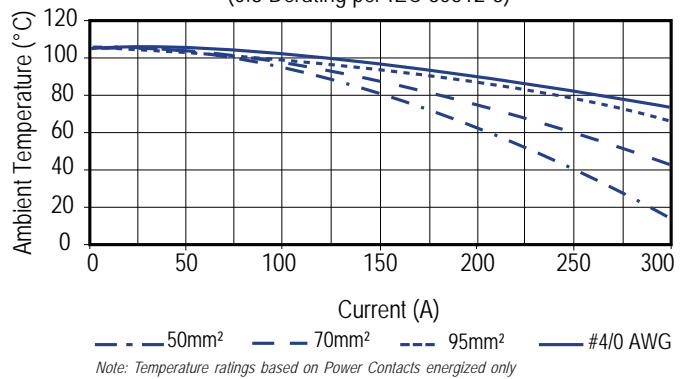


# TEMPERATURE CHARTS

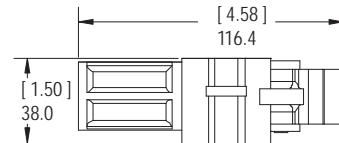
"A" Series - A32  
Temperature Rise



"A" Series - A32 Derating Curve  
(0.8 Derating per IEC 60512-3)



### Housing Side View



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