



#### **FEATURES**

#### Mechanical keyed housings

Prevents accidental mating of components operating at different voltage levels

#### Auxiliary contacts

Provides ability to incorporate a secondary sensor control circuit

## Single-piece housing and unitized construction

Provides industrial quality and durability

#### Optional air supply system

Supplies air to battery during charging

#### Genderless design

Makes assembly quick and easy and reduces number of parts stocked

## Optional mechanical release

Aids mating and unmating for high cycle battery charging

#### UL94 V-0 housing material

Provides security in knowledge that the connector chosen meets strict UL flammability ratings



## PRODUCT RANGE

UL Current Rating (Amperes)*	175 to 350*	
UL Voltage Ratings (Volts)	600*	
Contact Barrel Wire Size (AWG)	1/0 to 300 mcm	
(mm²)	53.5 to 152	
Maximum Wire Insulation Diameter (inches)	0.75 to 1.10	
(mm)	19.1 to 27.9	
AVG Contact Resistance* (micro-ohms)	100 to 50	
Insulation Withstanding	2200	
Test Voltage (Volts AC/DC)		
Contact Retention Force (lbf)	300 to 500	
Life		
a. No load (Contact/Disconnect Cycles)	To 10,000	
b. Under Load (Hot Plug250 cycles @ 120V)	75A to 100A*	
Avg. Connection/Disconnect (lbf)	25 to 30	
Operating Temperature Range °C**	-20° to 105°	
Flammability Rating of Housing Material	UL94 V-0	



#### \* UL Rated for 65°C largest wire or cable size

## Recommended Voltage Key Color Code

12V 18V 36V 48V 120V 144V Voltage 24V 72V 80V 96V Color Blue Black White Yellow Orange Red Gray Green Brown Purple

## PRODUCT INFORMATION

Invented by Anderson Power Products®, the innovative SBX® connectors provide cost-effective reliability, design flexibility and safety for your products' manufacture, installation and maintenance. APP's 2 pole connectors are available for 175 and 350 amp ratings for use to 600 Volts continuous AC or DC operation. There are SBX® connectors for many applications and wire sizes, 1/0 (53.5mm²) to 300 mcm (152mm²). Mechanical keys ensure connectors will only mate with connectors of the same color. Different color housings are selected to identify voltages, thus preventing mismatching of the power supply system.

The housings are interchangeable, genderless interconnects. Insert contacts into housings and plug together for a clever, simple and low-cost solution to power interconnection.

Markets: UPS Systems, Telecommunications, Forklift Trucks, Wheelchairs, EV, Chargers, Power Electronics & Much More.



**C TUS** File No. E26226

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<sup>\*\*</sup> Contact factory for higher temperature rated connectors



**SBX**<sup>®</sup>175 Connector

The innovative SBX® connectors provide cost-effective reliability, design flexibility and safety for your products' manufacture, installation and maintenance.

APP's 2 pole connector is available with a 175 amp rating, 600 Volts continuous AC or DC operation. There are SBX® connectors for many applications and wire sizes, 1/0 or 35 mm. Mechanical keys ensure connectors will only mate with connectors of the same color. Different color housings are selected to identify voltages, thus preventing mismatching of the power supply system.

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# Mechanical keyed housings

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# Optional mechanical release

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# PRODUCT SPECIFICATIONS

Connector Model	SBX ®175	Connector Model	SBX ®175
UL Current Rating (Amperes)*	175*	Life	<b>-</b> 40.000
UL Voltage Ratings (Volts)	600*	a. No load (Contact/Disconnect Cycles) b. Under Load (Hot Plug 250 cycles @ 120V)	To 10,000 75A
Contact Barrel Wire Size	1/0 to 35 mm	Avg. Connection/Disconnect (lbf)	25
Maximum Wire Insulation Diameter (inches) (mm)	0.75 19.1	Operating Temperature Range °C**	-20° to 105° -4° to 221°
Maximum Wire Insulation Diameter		Flammability Rating of Housing Material	UL94 V-0
AVG Contact Resistance* (micro-ohms)	100		
Insulation Withstanding Test Voltage (Volts AC/DC)	2200	ROHS V APP	
Contact Retention Force (lbf)	300	* UL Rated for 65°C largest wire or cable size  ** Contact factory for higher temperature rated connector	

#### ORDERING INFORMATION

# 2 Pole Housing, 175 amp Contacts, & Auxiliary Contacts

Part	Housing	Wire	
Number	Color	AWG	sq. mm
6370G1	Gray	1/0	53.5
6371G1	Blue	1/0	53.5
6372G1	Orange	1/0	53.5
6373G1	Yellow	1/0	53.5
6378G1	Red	1/0	53.5
6387G1	Green	1/0	53.5
6378G2	Red	35	-
6387G2	Green	35	-
6370G2	Gray	35	-
6371G2	Blue	35	-
6372G2	Orange	35	-
6373G2	Yellow	35	-

# 2 Pole Housing & Contacts

Part	Housing	W	ire	
Number	Color	AWG	sq. mm	
6374G1	Gray	1/0	53.5	
6375G1	Blue	1/0	53.5	
6376G1	Orange	1/0	53.5	
6377G1	Yellow	1/0	53.5	
6379G1	Red	1/0	53.5	
6391G1	Green	1/0	53.5	
6374G2	Gray	35	-	
6375G2	Blue	35	-	
6376G2	Orange	35	-	
6377G2	Yellow	35	-	
6379G2	Red	35	-	
6391G2	Green	35	-	

#### **Housings Only**

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Number	Color
6380G1	Gray
6381G1	Blue
6382G1	Orange
6383G1	Yellow
6385G1	Red
6390G1	Green

#### **Contacts**

Part		Wire		
Number	Description	AWG	sq. mm	
6384G1	Contact set (2)	1/0	53.5	
6384G2	Contact set (2)	N/A	35	

Note: For additional colors please contact customer service



# SBX®175 Connector

# ORDERING INFORMATION

#### **Accessories**

Part	
Number	Description
6344	Auxiliary contact kit
6367G1	Pin kit #16/12 (1.31/3.31mm)-for battery
6337G1	Charger key
6366G2	Charger key & socket
995G1	Handle with hardware"A" frame
993G2	Manual release-battery bracket with hardware
994G2	Manual release-charger/truck bracket with
	hardware
945G2	Cable clamps-use alone with manual release
	or "A" frame handle

## **Bushings**

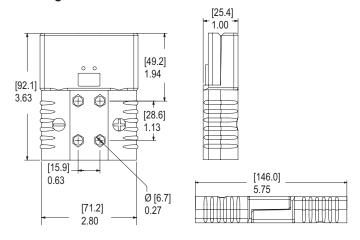
Part		Wire	
Number	Description	AWG	sq. mm
5687	For use with 6384G1	1/0 to #1	53.5 to 42.4
5690	For use with 6384G1	1/0 to #2	53.5 to 33.6
5693	For use with 6384G1	1/0 to #4	53.5 to 21.2
5663	For use with 6384G1	1/0 to #6	53.5 to 13.3
5648	For use with 6384G1	1/0 to #10	53.5 to 5.3
5920	For use with 6384G2	N/A	35mm to 16mm

#### **Tooling**

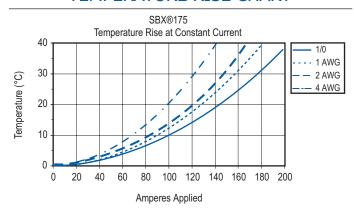
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Part	
Number	Description
969P1	Extraction tool-insulatd handle
111038G2	Contact insertion/extraction tool for auxiliary contact kit
1368	Hand tool for 1/0 to 35mm (53.5/35)
1387G1	Pneumatic tool
1388G3	- die for 1/0 to #10 (53.5/5.26)
1389G3	- locator for 1/0 to #10 (53.5/5.26)
1387G2	- Pneumatic tool
1303G4	- die for #4 (21.1)
1304G4	- locator for #4 (21.1)

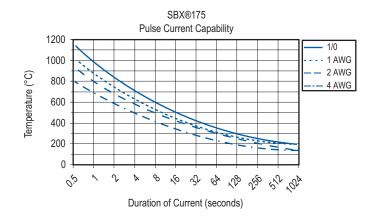
# **DIMENSIONS**

## Housing



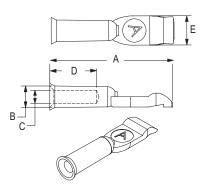
# TEMPERATURE RISE CHART





#### **Contacts**

	-A-	-B-	-C-	-D-	-E-
	mm in.				
6384G1	59.2 2.33	13.1 0.52	11.1 0.44	20.7 0.82	12.7 0.50
6384G2	59.2 2.33	13.1 0.52	9.5 0.38	20.7 0.82	12.7 0.50







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