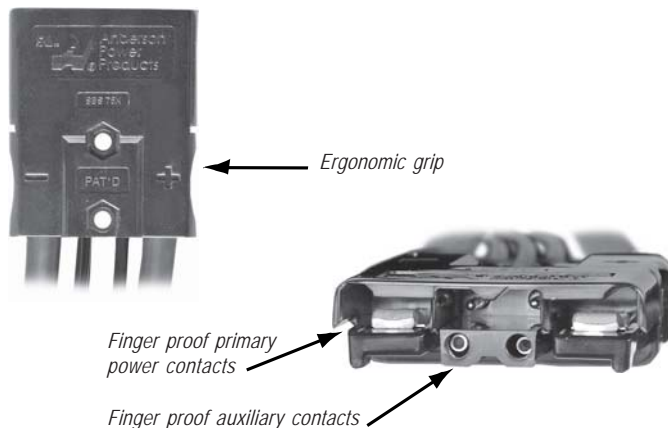


The patented SBS75x connector is designed to provide both high power and auxiliary connections in a single compact housing. The connector provides two power contacts rated up to *110 amps and up to 4 auxiliary contacts rated up to *20 amps. The SBS75x is recommended for use with hazardous DC voltages in systems operating from 50 to 600 volts and meets UL 1977 section 10.2 finger proof requirements. The male auxiliary contacts are available in four lengths when sequencing is required and provide a make last / break first connection in relation to the power contacts. The slim, ergonomic housing design is contoured to fit the operator's grip, allowing for greater ease during connection and disconnection. **The SBS75x power and auxiliary contacts are UL rated for circuit interruption (hot plugging) under load making them a perfect solution for battery applications. The hermaphroditic housing is molded from UL94 V-0 rated flame resistant polycarbonate and combined with the contacts will exceed 10,000 mating cycles.

* Please reference Temperature Charts for correct amperage rating based on ambient temperatures and wire sizes ** See Product Specifications below



Features

• Finger proof design

Minimizes potential contact with live circuits per UL 1977, section 10.2

• Ergonomic design

Eases mating and unmating of connectors

• Power and auxiliary contacts

- Provides both power and signal in a single connector

- Auxiliary contacts provide make last / break first signal connections

- Male auxiliary contacts available in 4 lengths, for when sequencing is required

- UL rated for circuit interruption

PRODUCT SPECIFICATIONS

Connector Specifications

Electrical

Voltage Rating (AC/DC)	600*
Dielectric Withstanding Voltage (AC)	3,300
Operating Temperature (°C) **	-20° to 105°
(°F)	-4° to 221°
Flammability Rating of	
Housing Material	UL94 V-0

Mechanical

Life	
a. Mating Cycle (no load)	10,000
b. Under Load (Hot Plug 250 mating cycles @ 120V)	
- Primary	50A
- Secondary	5A
Average Connect / Disconnect (lbf)*	16
(N)	70

Materials

Housing Material	Polycarbonate
------------------	---------------

Primary Power Contacts

Electrical

Current Rating - Amperes (UL)***	105	20A
(CSA/TUV)***	75	15A
AVG Contact Resistance (micro-ohms)*	200	300
Contact Wire Range (AWG)	#6 to #12	#24 to #12 ****
(mm ²)	16 to 4.0	0.25 to 4.0 ****
Maximum Wire Insulation Diameter (in)	0.44	0.14
(mm)	11.2	3.6

Mechanical

Average Contact Retention Force (lbf)	50	15
(N)	222	67

Contacts - Power & Auxiliary

Materials

Power Contact	Copper alloy, silver plate
Auxiliary Pin	Copper alloy, 10 μ inch Au over 50 Ni
Auxiliary Socket	BeCu, 30 μ inch Au over Ni
Auxiliary Socket Body	Copper alloy, 200 μ inch Sn Bright over Ni
Auxiliary Retention Clip	Stainless steel

* Based on fully loaded connector (2 primary, 4 secondary contacts) ** Contact factory for higher temperature rated connector
 *** Ratings based on largest wire or cable **** Stranding, IEC class 5 or lower

UL US File No. E26226



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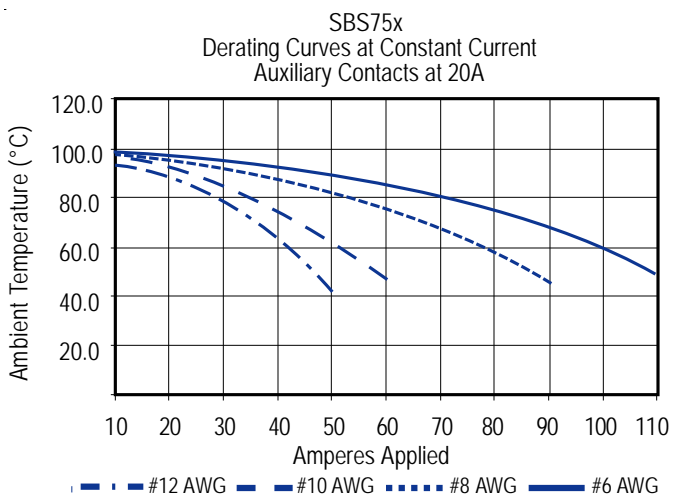
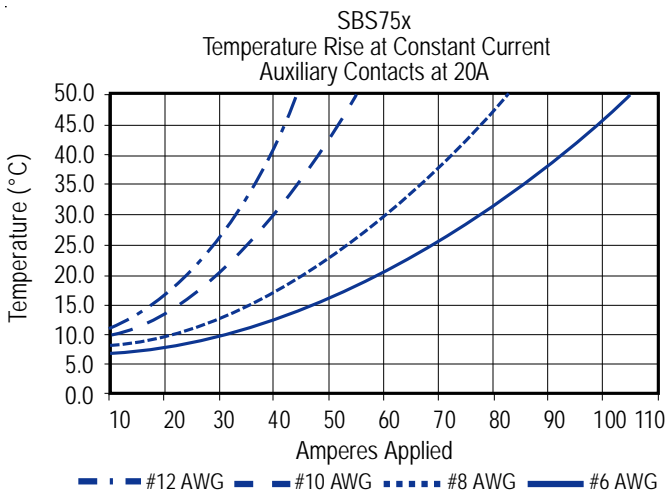
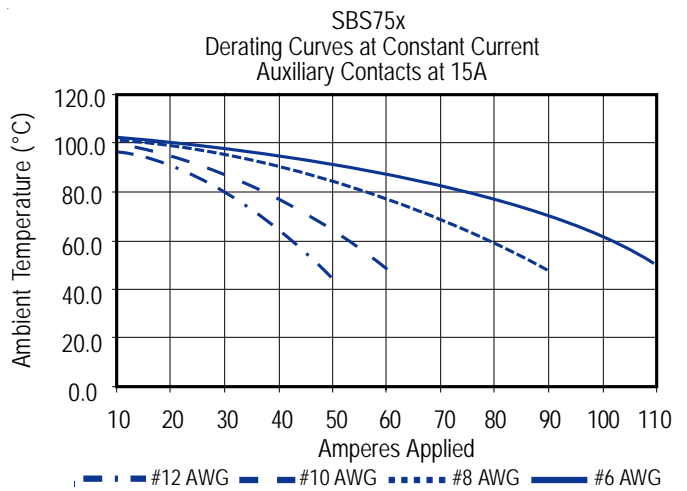
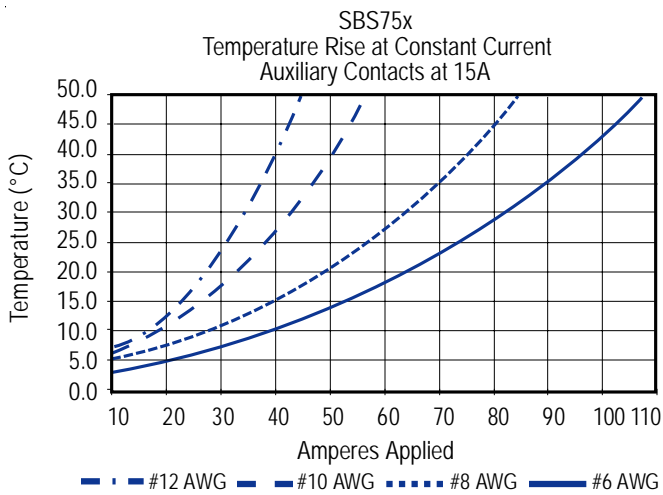
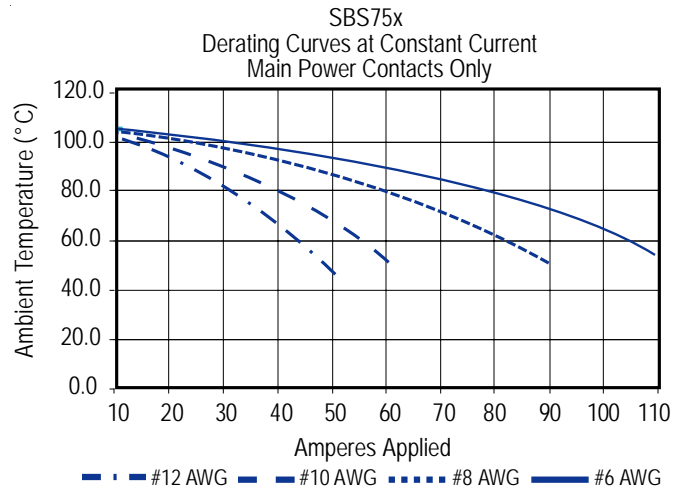
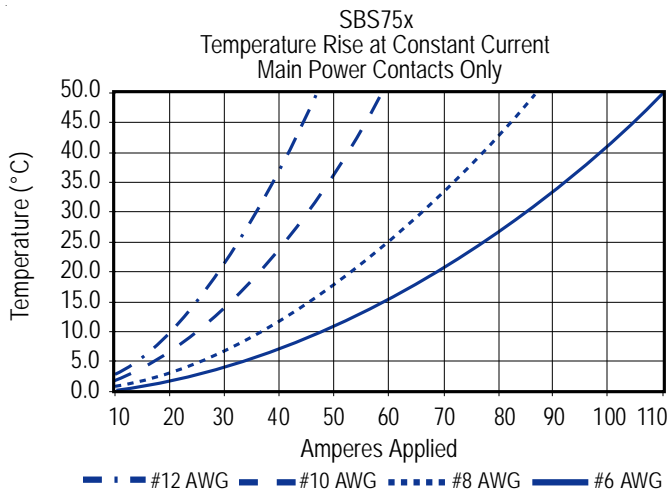
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TEMPERATURE CHARTS



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ORDERING INFORMATION

Housing Only

Part Number	Description
SBS75xBLK	Black housing

Primary Power Contacts

Part Number	- Wire -	
	AWG	mm ²
Contact set (2)-low detent		
1339G2	#6	16
1339G3	#10 / 12	4 / 6
1339G5	#8	10

Auxiliary Socket Contacts

Part Number	- Wire -	
	AWG	mm ²
PM16S2024S32	#24 / 20	0.50 / 0.75
PM16S1620S32	#20 / 16	0.50 / 1.5
PM16S1416S32	#16 / 14	1.5 / 2.5
PM16S12S32	#12	4.0

Auxiliary Pin Contacts

Part Number	- Wire -	
	AWG	mm ² *
Standard Length 7.7mm		
PM16P2024S30	#24 / 20	0.50 / 0.75
PM16P1620S30	#20 / 16	0.50 / 1.5
PM16P1416S30	#16 / 14	1.5 / 2.5
PM16P12S30	#12	2.5 / 4.0

Pre-Mate 9.3mm		
PM16P2024A30	#24 / 20	0.50 / 0.75
PM16P1620A30	#20 / 16	0.50 / 1.5
PM16P1416A30	#16 / 14	1.5 / 2.5
PM16P12A30	#12	2.5 / 4.0

Pre-Mate 8.5mm		
PM16P2024B30	#24 / 20	0.50 / 0.75
PM16P1620B30	#20 / 16	0.50 / 1.5
PM16P1416B30	#16 / 14	1.5 / 2.5
PM16P12B30	#12	2.5 / 4.0

Pre-Mate 6.6mm		
PM16P2024C30	#24 / 20	0.50 / 0.75
PM16P1620C30	#20 / 16	0.50 / 1.5
PM16P1416C30	#16 / 14	1.5 / 2.5
PM16P12C30	#12	2.5 / 4.0

* Stranding, IEC class 5 or lower

Bushing

Part Number	- Wire -	
	AWG	mm ²
Use with Contact 1339G2		
5912	#6 to #8	16 to 10
5910	#6 to #10/12	16 to 4 / 6
5913	#6 to #14/16	16 to 2.5 / 1.5

Accessories

Part Number	Description
SBS50-HDL-Red	Handle & hardware-red

Tooling for Contacts

Part Number	Mil-Standard	Description	- Wire -	
			AWG	mm ²
Power Contacts				
1387G1	N/A	Pneumatic tool	#6 / #16	16 / 1.5
1388G6	N/A	Die	#6 / #16	16 / 1.5
1388G7	N/A	Die	#10 / #12	4 / 6
1389G9	N/A	Locator	#6 / #12	16 / 6
1309G4	N/A	Hand tool	#6 * / #12	16 / 6
Auxiliary Contacts				
TM0001	M22520/1-01	AF8 hand tool	#24 / #12	0.2 / 4.0
TP0001	N/A	WA27F pneumatic crimp tool	#24 / #12	0.2 / 4.0
TL0001**	N/A	Turret & locator for TM0001 & TP0001	#24 / #12	0.2 / 4.0
TL0002***	N/A	Turret & locator for TM0001 & TP0001	#24 / #12	0.2 / 4.0
TL0004	M22520/1-03	Turret & locator for TM0001 & TP0001	#24 / #12	0.2 / 4.0
PM1000G1	N/A	Four Indent Hand Tool	#24 / #12	0.2 / 4.0
PM1001G1	N/A	Semi automatic loose piece crimp machine	#24 / #12	0.2 / 4.0
PM1002G1	N/A	Contact insertion tool		
PM1003G1	N/A	Contact extraction tool		

* Useable with #6 (16 mm²) up to 60 amps

** Turret head & locator for pin contacts only

*** Turret head & locator for socket contacts only

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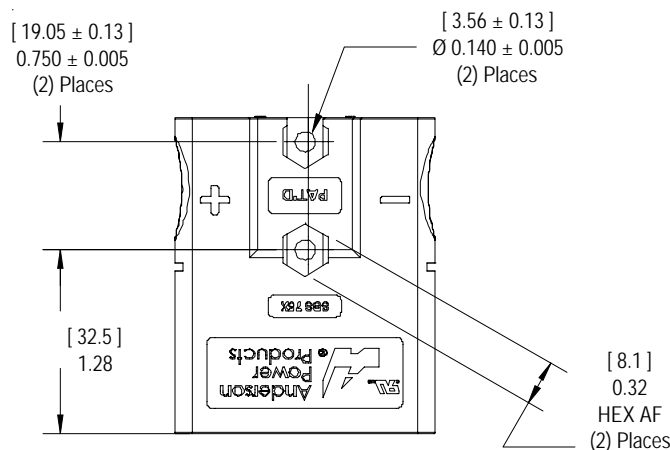
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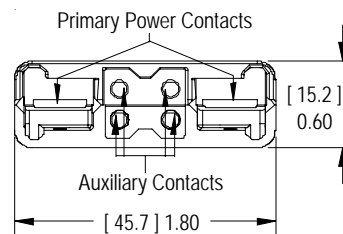
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DIMENSIONS - in.(mm)

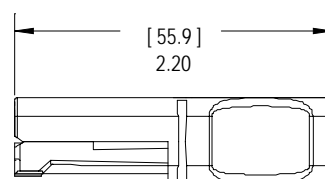
Housing - Top View



Housing - Front View



Housing - Side View



Contacts

Part Number	Wire AWG	- Ø B -		- Ø C -		- L1 -		- L -	
		in.	mm	in.	mm	in.	mm	in.	mm
Primary Power Contacts - (see figure 1)									
1339G2	#6	N/A	N/A	0.22	5.6	N/A	N/A	N/A	N/A
1339G3	#10 / 12	N/A	N/A	0.14	3.6	N/A	N/A	N/A	N/A
1339G5	#8	N/A	N/A	0.19	4.8	N/A	N/A	N/A	N/A

Auxiliary Pin Contacts - (see figure 2)									
PM16P2024S30	#20/24	0.04	1.1	0.08	2.0	0.30	7.7	0.77	19.6
PM16P1620S30	#16/20	0.07	1.7	0.11	2.8	0.30	7.7	0.77	19.6
PM16P1416S30	#14/16	0.08	2.1	0.11	2.8	0.30	7.7	0.77	19.6
PM16P12S30	#12	0.10	2.6	0.12	3.1	0.30	7.7	0.77	19.6
PM16P2024A30	#20/24	0.04	1.1	0.08	2.0	0.37	9.3	0.83	21.2
PM16P1620A30	#16/20	0.07	1.7	0.11	2.8	0.37	9.3	0.83	21.2
PM16P1416A30	#14/16	0.08	2.1	0.11	2.8	0.37	9.3	0.83	21.2
PM16P12A30	#12	0.10	2.6	0.12	3.1	0.37	9.3	0.83	21.2
PM16P2024B30	#20/24	0.04	1.1	0.08	2.0	0.33	8.5	0.80	20.4
PM16P1620B30	#16/20	0.07	1.7	0.11	2.8	0.33	8.5	0.80	20.4
PM16P1416B30	#14/16	0.08	2.1	0.11	2.8	0.33	8.5	0.80	20.4
PM16P12B30	#12	0.10	2.6	0.12	3.1	0.33	8.5	0.80	20.4
PM16P2024C30	#20/24	0.04	1.1	0.08	2.0	0.25	6.4	0.72	18.3
PM16P1620C30	#16/20	0.07	1.7	0.11	2.8	0.25	6.4	0.72	18.3
PM16P1416C30	#14/16	0.08	2.1	0.11	2.8	0.25	6.4	0.72	18.3
PM16P12C30	#12	0.10	2.6	0.12	3.1	0.25	6.4	0.72	18.3

Auxiliary Socket Contacts - (see figure 3)									
PM16S2024S32	#20/24	1.1	0.04	2.0	0.08	N/A	N/A	N/A	N/A
PM16S1620S32	#16/20	1.7	0.07	2.8	0.11	N/A	N/A	N/A	N/A
PM16S1416S32	#14/16	2.1	0.08	2.8	0.11	N/A	N/A	N/A	N/A
PM16S12S32	#12	2.6	0.10	3.1	0.12	N/A	N/A	N/A	N/A

