

## IBS Advanced Round Insulated Braided Conductor, Halogen Free – IBSADV185-530 (534522)



IBS Advanced Round Insulated Braided Conductor, Halogen Free are the ideal ready-to-install flexible wire replacement solution. Round IBS Advanced connect to the terminals of an electrical device without the need for additional accessories, such as angular connectors, spreaders, ring terminal connectors or extenders. Round IBS Advanced are available in cross sections of 120, 185 and 240 mm<sup>2</sup> [236.82, 365.10, and 473.65 kcmil], lengths from 330 to 1,030 mm (9.06" to 40.55"), and amperages ranging from 420 to 630 A.

Manufactured in an ISO 9001 certified automated facility, round IBS Advanced is formed by weaving high-quality electrolytic copper wire to form a durable low voltage connector with maximum flexibility that allows for more compact power connections to electrical devices. The round IBS Advanced allows users to reduce the total size and weight of the installation, improving both design flexibility and assembly aesthetics.

The round IBS Advanced features pre-punched palms that are ready to connect out of the box. There are no lugs to purchase or install, making connections simpler and faster and eliminating faulty connections due to vibration or fatigue.

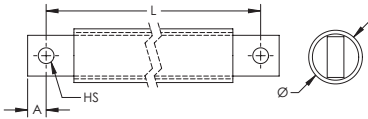
The advanced technology insulation is a high-resistance low smoke, halogen-free and flame retardant thermoplastic.

Round IBS Advanced does not generate corrosive gases and produces a relatively low smoke opacity in accordance with IEC 61034-2 and UL 2885. The low smoke characteristic improves the visibility conditions for people to be able to easily locate the emergency exit and also allows rescue workers to better assess an emergency situation. Round IBS Advanced means greater safety for individuals, less damage for your electrical equipment and less environmental impact.

The halogen-free feature enables a reduction in the quantity of toxic smoke. Round IBS Advanced does not contain any halogens, according to IEC 60754-1 and UL 2885, minimizing toxicity and making it the ideal product for use in enclosed spaces such as data centers, rail, and public facilities such as hospitals and schools. This also facilitates the use of round IBS Advanced in specific applications such as submarines, switchboards and other enclosed environments that require a low emissions solution.

In addition to the above features, round IBS Advanced is also compliant with the UL 94-V0 testing standard and Glow wire test 960 °C. The flame retardant portion of the test illustrates the self-extinguish feature. This superior feature of round IBS Advanced is also shown by the Limiting Oxygen Index (LOI) at 30%. In case of fire, round IBS Advanced generates a limited quantity of smoke that is less damaging to your electrical equipment.

- Resistant to vibration, improving reliability and performance
- Insulated by high-resistance, halogen free, flame retardant and low smoke material
- Tinned copper provides superior corrosion resistance
- Improves assembly flexibility and aesthetics
- Quick and easy installation
- No additional cutting, stripping, crimping and punching needed
- Conforms to NF EN 45545 obtaining an HL2 classification for chapters R22 and R23
- Small wire diameter provides maximum flexibility
- Dramatically smaller and more flexible than comparable cable based on ampacity
- Better power density than cable with lower skin effect ratio
- Reduces total installation cost
- RoHS compliant



Part Number	IBSADV185-530
Article Number	534522
Typical Application Current Rating	500 A
Material	Copper Thermoplastic Elastomer
Finish	Tinned
Dielectric Strength	20 kV/mm
Flammability Rating	UL® 94V-0
Halogen Free Rating	UL® 2885 IEC® 60754-1 IEC® 62821-1
Low Smoke Rating	IEC® 61034-2 ISO 5659-2 UL® 2885
UV Resistance Rating	UL® 854 UL® 2556
Insulation Elongation	500 %
Insulation Thickness	0.07"
Max Working Voltage, IEC/UL 758	1,000 VAC 1,500 VDC
Max Working Voltage, UL 67	600 VAC/DC
Working Temperature	-58 to 239 °F
Wire Diameter	0.006"
Certification Details	UL® 67 UL® 758
Complies With	IEC® 60439.1 IEC® 60695-2-11 (Glow Wire Test 960 °C) IEC® 61439.1 IEC® 61439.1 Class II
Cross Section	365.1 kcmil
Conductor Width	0.94"
Conductor Thickness	0.59"
Length (L)	20.87"
A	0.47"
Diameter (Ø)	1.22"

Part Number	IBSADV185-530
Hole Size (HS)	0.41"
Certifications	ABS INSULATED BRAIDS Bureau Veritas 41939 BV CE CSA 70173298 CSA 90005 cURus DNV GL IBS/IBSB Advanced, TAE00003B8 EN 45545-2 IBS/IBSB Advanced IEC 60695-2-12 CC11418_FADV IEC 61439-1 Class II IBSB_ADV IEC 61439-1 IBSB_ADV ISO 5659-2 CC11518_FADV RoHS UL UL (IEC) AVL2.E316390
Standard Packaging Quantity	2 pc
UPC	78285696148
EAN-13	0782856961482

Maximum Ampacity Ratings								
Cross Section (mm <sup>2</sup> /kcmil)	$\Delta T$ 30° C (A)	$\Delta T$ 40° C (A)	$\Delta T$ 45° C (A)	$\Delta T$ 50° C (A)	$\Delta T$ 55° C (A)	$\Delta T$ 60° C (A)	$\Delta T$ 70° C (A)	2 Bar Current Coefficient
120/236.82	325	376	398	420	441	460	497	1.6
185/365.10	407	470	499	526	552	576	622	1.6
240/473.65	488	563	598	630	661	690	745	1.6

$\Delta T$  = Temperature of conductors – Internal temperature of panel.

This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

Distance between supports must not exceed 630 mm (17.8") according to IEC 61439-1.

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