

## FIBERGLASS CONDUCTIVE ROVING

### I. DESCRIPTION

Fiberglass conductive roving is composed of multiple ends of continuous filament yarn, which have been treated with a coating, which imparts electrical conductivity. The roving is provided with an overwrap of uncoated, twisted continuous filament yarn to maintain the integrity of the roving bundle. This over wrap is available in a single over wrap (B4, B5, B10, B13) and a double over wrap format (BX10, CX19).

### II. USE

These products are used as a core material in the automotive ignition wire and other electrical conductive applications.

### III. AVAILABLE PRODUCTS, PACKAGES AND PHYSICALS

Type	Description	Package	Break Strength (1)	Electrical Resistance (2)		
			Min Ind. Reel	Min	Nom	Max
B-4	Resistance of 2800 ohms/ft	9028	150 lbs 68 kg	1800 Ω/ft 5905 Ω/m	2800 Ω/ft 9186 Ω/m	3800 Ω/ft 12470 Ω/m
B-5	Resistance of 4000 ohms/ft	9028	150 lbs 68 kg	3000 Ω/ft 9843 Ω/m	4000 Ω/ft 13120 Ω/m	5000 Ω/ft 16400 Ω/m
B-10	Resistance of 1750 ohms/ft	9028	150 lbs 68 kg	750 Ω/ft 2460 Ω/m	1750 Ω/ft 5741 Ω/m	2750 Ω/ft 9022 Ω/m
B-13	Resistance of 3500 ohms/ft	9028	150 lbs 68 kg	2500 Ω/ft 8202 Ω/m	3500 Ω/ft 11480 Ω/m	4500 Ω/ft 14760 Ω/m
BX-10**	Resistance of 1750 ohms/ft	9028	150 lbs 68 kg	1000 Ω/ft 3280 Ω/m	1750 Ω/ft 5741 Ω/m	3000 Ω/ft 9842 Ω/m
CX-19**	Resistance of 2800 ohms/ft	9028	150 lbs 68 kg	1800 Ω/ft 5905 Ω/m	2800 Ω/ft 9186 Ω/m	3800 Ω/ft 12470 Ω/m

(1) tested at 20 inch per minute rate, 10 in gauge length (fast test)

(2) test methods available upon request

\*\* This product has a double overwrap contact SHC for detail

Superior Huntingdon Composites test Methods available upon request

A minimum of 15 spools of the 18 spool shipment will be supplied by “full” reels (30,000 to 50,000 feet), with a maximum of 3 spools supplied by “partial” reels (12,500 to 29,999 feet). The tolerance for the number of feet/reel (as stated on the reel identification label) will be plus or minus one percent (1%).

**IV. WORKMANSHIP AND VISUAL DEFECTS**

The following visual defects are cause for rejection of that reel:

Uncoated Section	Packages containing void spaces or bare sections.
Damaged Roving	Packages having damaged sections of roving.
Foreign Matter, Oil or Grease	Packages containing foreign matter, oil or grease.
Loose Ends or Loops	Packages containing loose ends or loops in excess of 1/16 inch that adversely affect the smoothness of the coated conductive roving.
Lumps or Bumps	Lumps or bumps caused by foreign matter or fuzz balls.
Knots, Splices or Wrap-ins	No splices, wrap-ins or knots in the roving are permitted during the coating and roving operation.
	Before coating, the replacement of individual uncoated ends is permitted by wrapping the end around adjacent uncoated ends.
Wound Tension	The roving shall be wound with even tension and in such a manner as to permit the free removal in the customer's operation.
Ringers (Loose individual ends wrapped around reel)	Packages containing ringers are rejectable if this condition interferes with the smooth removal of the roving.
Trapped Ends or Uneven Winding	Packages containing trapped ends or uneven winding are rejectable if this condition interferes with the smooth removal of the roving.
Flaked Roving (Peeling)	Packages containing roving that is flaking are rejectable if this condition affects the required resistance.
Missing Over wrap	Conductive roving in the absence of a specified over wrap strand(s)

**V. SPECIAL PRECAUTIONARY NOTE**

Excessive handling of this product before overbraiding can seriously affect resistance qualities. Superior Huntingdon Composites accepts no responsibility for material that shows evidence of physical abuse of the roving before overbraiding in the customer's operation. Superior Huntingdon Composites recommends handling by the core rather than the flange.

**VI. PACKAGING AND IDENTIFICATION**

A Package	9028	
Type	Double Flange Steel Reel	
	Manufactured Specs	
Diameter of Flanges	16" ± 1/16"	406.5 ± 2 mm
O.D. of Barrel	6 5/8" ± 1/16"	168 ± 1.5 mm
Centerhole	1 9/16" ± 1/16"	39 ± .3 mm
Overall Length of Reel	10 1/2" ± 1/8"	257 ± 3 mm
Traverse	9 1/2" ± 1/8"	242 ± 2 mm
Wind	Parallel	

This specification is subject to change without notice.

B	Sleeves and Caps	Manufactured Spec		Quantity
		Sleeve	16 1/8" x 16 1/8" x 31 1/16"	
	Caps	48 1/4" x 32 3/4" x 10 1/4"	1226 x 832 x 260 mm	2

C	Pallet	Manufactured Spec	
		Size	49" x 33"
	No. Packages/Layer	6	
	No. Packages/Pallet	18	
	Avg. Net Wgt./Plt <i>(provided for information only)</i>	1600#	726 kg

**Wrapping and Identification:**

- Each reel will be wrapped between the flanges with a sheet of single faced corrugated cardboard and sealed with gummed tape.
- Each reel shall be adequately identified by a label on one flange.
- Each pallet shall carry the following information:
  - ⇒ Product Code
  - ⇒ Product Description
  - ⇒ Length (MLF) for entire pallet
  - ⇒ Gross weight for entire pallet
  - ⇒ Reel No.

**VII. STORAGE LIFE**

Material may be stored up to three years when kept in a cool, dry place (under 80°F / 27°C). The measured resistance will change if the material is subjected to high relative humidity (70% and above). If the product is tested again after environmental chamber storage the resistance will return to correct values.