

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: GRP110NF
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Issue: 6
Issue Date: 2/21/2013
Effective Date: 3/8/2013

A. Construction

- | | |
|--------------------|------------------------------------|
| 1) Tubing Type | Expandable Sleeving |
| 2) Tubing Material | Braided Polyethelene Terephthalate |
| 3) Color(s) | BLACK OR NATURAL |

Part Number	Minimum Supplied ID (In)	Maximum Expanded ID (In)	Nominal Wall Thickness +/- 0.005 (In)	Number of Carriers	Number of Yarns	Total Number of Monofilaments
GRP-110NF18	0.125	0.250	0.024	32	3	96
GRP-110NF14	0.156	0.438	0.024	40	3	120
GRP-110NF12	0.250	0.750	0.024	64	3	192
GRP-110NF34	0.625	1.000	0.024	80	3	240
GRP-110NF114	1.000	1.500	0.024	120	3	360
GRP-110NF112	1.250	2.000	0.024	120	4	480

B. Applicable Specifications

- | | |
|----------------------|---------|
| 1) UL | UZKX2 |
| 2) CSA International | 5836 01 |

C. Environmental Compliance

- 1) RoHS Directive (2011/65/EU), EU Directive 2015/863/EU (RoHS3):
All materials used in the manufacture of this part meet the requirements of European Directive 2011/65/EU and the amending Directive 2015/863/EU of 4 June 2015 regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.
- 2) REACH Regulation (EC 1907/2006):
This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item. For up-to-date information, please see Alpha's REACH SVHC Declaration.
- 3) California Proposition 65:
Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.

D. Physical & Mechanical Properties

- | | | |
|----------------------|---------------|-----------|
| 1) Temperature Range | -75 to 125°C | |
| 2) Tensile Strength | 85000psi, Min | ASTM D638 |

E. Electrical Properties

F. Chemical Properties

- | | | |
|-------------------------|--------------|---------------|
| 1) Water Absorption | 0.08%, Max | ASTM D570 |
| 2) Corrosion(0°C,16hrs) | no corrosion | AMS-DTL-23053 |
| 3) Fungus Resistance | Pass | AMS-DTL-23053 |
| 4) Halogen Free | Yes | |
| 5) Lead Free | Yes | |

G. Other

- 1) Packaging
 - a) GRP-110NF18

500 FT	CR6-6.5:	6 x 6.5 x 3.25	Max. 5 pieces/Min length 20 FT.
100 FT	CR3-15:	3 x 5.625 x 3.25	Max. 2 pieces/Min length 20 FT.
 - b) GRP-110NF14

500 FT	CR6-6.5:	6 x 6.5 x 3.25	Max. 5 pieces/Min length 20 FT.
100 FT	CR3-15:	3 x 5.625 x 3.25	Max. 2 pieces/Min length 20 FT.
 - c) GRP-110NF12

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500 FT	CR6-10.5:	6 x 10.5 x 3.25	Max. 5 pieces/Min length 20 FT.
100 FT	CR3-15:	3 x 5.625 x 3.25	Max. 2 pieces/Min length 20 FT.
d) GRP-110NF34			
500 FT	CR6-10.5:	6 x 10.5 x 3.25	Max. 5 pieces/Min length 20 FT.
100 FT	CR3-15:	3 x 5.625 x 3.25	Max. 2 pieces/Min length 20 FT.
e) GRP-110NF114			
250 FT	CR3.75-10.5:	3.75 x 10.5 x 3.25	Max. 4 pieces/Min length 20 FT.
50 FT	CR3-15:	3 x 5.625 x 3.25	Continuous length
f) GRP-110NF112			
250 FT	CR6-10.5:	6 x 10.5 x 3.25	Max. 4 pieces/Min length 20 FT.
50 FT	CR3-15:	3 x 5.625 x 3.25	Continuous length

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