



Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207  
Tel: 1-800-52 ALPHA (25742), Web: [www.alphawire.com](http://www.alphawire.com)

# Customer Specification

## PART NO. 5110/70C

Construction

		Diameters (In)
1) Component 1	70 X 1 COND	
a) Conductor	22 (7/30) AWG TC	0.030
b) Insulation	0.010" Wall, Nom. PVC, Semi Rigid	0.050
(1) Color Code	Alpha Wire Color Code E	

Cond	Color	Cond	Color	Cond	Color
1	BLACK	25	WHITE/BLACK/BLUE	49	WHITE/YELLOW/SLATE
2	BROWN	26	WHITE/BLACK/VIOLET	50	WHITE/GREEN/BLUE
3	RED	27	WHITE/BLACK/SLATE	51	WHITE/GREEN/VIOLET
4	ORANGE	28	WHITE/BROWN/RED	52	WHITE/GREEN/SLATE
5	YELLOW	29	WHITE/BROWN/ORANGE	53	WHITE/BLUE/VIOLET
6	GREEN	30	WHITE/BROWN/YELLOW	54	WHITE/BLUE/SLATE
7	BLUE	31	WHITE/BROWN/GREEN	55	WHITE/VIOLET/SLATE
8	VIOLET	32	WHITE/BROWN/BLUE	56	WHITE/BLACK/BROWN/RED
9	SLATE	33	WHITE/BROWN/VIOLET	57	WHITE/BLACK/BROWN/ORANGE
10	WHITE	34	WHITE/BROWN/SLATE	58	WHITE/BLACK/BROWN/YELLOW
11	WHITE/BLACK	35	WHITE/RED/ORANGE	59	WHITE/BLACK/BROWN/GREEN
12	WHITE/BROWN	36	WHITE/RED/YELLOW	60	WHITE/BLACK/BROWN/BLUE
13	WHITE/RED	37	WHITE/RED/GREEN	61	WHITE/BLACK/BROWN/VIOLET
14	WHITE/ORANGE	38	WHITE/RED/BLUE	62	WHITE/BLACK/BROWN/SLATE
15	WHITE/YELLOW	39	WHITE/RED/VIOLET	63	WHITE/BLACK/RED/YELLOW
16	WHITE/GREEN	40	WHITE/RED/SLATE	64	WHITE/BLACK/RED/GREEN
17	WHITE/BLUE	41	WHITE/ORANGE/YELLOW	65	WHITE/BLACK/RED/BLUE
18	WHITE/VIOLET	42	WHITE/ORANGE/GREEN	66	WHITE/BLACK/RED/VIOLET
19	WHITE/SLATE	43	WHITE/ORANGE/BLUE	67	WHITE/BLACK/RED/SLATE
20	WHITE/BLACK/BROWN	44	WHITE/ORANGE/VIOLET	68	WHITE/BLACK/ORANGE/YELLOW
21	WHITE/BLACK/RED	45	WHITE/ORANGE/SLATE	69	WHITE/BLACK/ORANGE/GREEN
22	WHITE/BLACK/ORANGE	46	WHITE/YELLOW/GREEN	70	WHITE/BLACK/ORANGE/BLUE
23	WHITE/BLACK/YELLOW	47	WHITE/YELLOW/BLUE		
24	WHITE/BLACK/GREEN	48	WHITE/YELLOW/VIOLET		
2) Cable Assembly		70 Components Cabled			

a) Twists:	2.1 Twists/foot (min)	
b) Core Wrap	Nonwoven Polyester Tape, 25% Overlap, Min.	
3) Shield:	A/P/A Tape, 25% Overlap, Min.	
a) Drain Wire	22 (7/30) AWG TC	
b) Braid	TC, 70% Coverage, Min.	
4) Jacket	0.053" Wall, Nom., PVC	0.630 (0.662 Max.)
a) Color(s)	Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White	
b) Ripcord	1 End 810 Denier Nylon	
c) Print	ALPHA WIRE-* P/N 5110/70C 70C 22 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C OR AWM 2464 VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4 CE ROHS (SEQ FOOTAGE) * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	

## Applicable Specifications

1) UL		
a) Component 1	AWM/STYLE 10002	105°C / 300 V <sub>RMS</sub>
b) Overall	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	CM	105°C
	VW-1	
2) CSA International	CMG	105°C
	FT4	
3) CE:	LVD 73/23/EEC Amendment 93/68/EEC	

## Environmental

1) EU Directive 2002/95/EC(RoHS):	
	All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture.
2) REACH Regulation (EC 1907/2006):	
	This product does not contain any of the substances listed on the 13 January 2010 European Union's REACH Substance of Very High Concern (SVHC) candidate list in excess of 0.1% mass of the item.
3) California Proposition 65:	
	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-30 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	399 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	36 pf/ft @ 1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	65 pf/ft @ 1 kHz, Nominal
4) Inductance	0.18 µH/ft, Nominal
5) Conductor DCR	16.7 /1000ft @20°C, Nominal
6) OA Shield DCR	1.86 /1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 500 FT	24 x 14 x 12 Continuous length
c) 100 FT	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:5110/70C

5110/70C , RoHS-Compliant Commencing With8/1/2005Production

*This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.***

<b>Substance</b>	<b>Maximum Control Value</b>
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB)	0.1% by weight (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE) Including Deca-BDE	0.1% by weight (1000 ppm)

*The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.*

Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA

1/21/2011