



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. 5110/60C

Construction

		Diameters (In)
1) Component 1	60 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	21	WHITE/BLACK/RED	41	WHITE/ORANGE/YELLOW
2	BROWN	22	WHITE/BLACK/ORANGE	42	WHITE/ORANGE/GREEN
3	RED	23	WHITE/BLACK/YELLOW	43	WHITE/ORANGE/BLUE
4	ORANGE	24	WHITE/BLACK/GREEN	44	WHITE/ORANGE/VIOLET
5	YELLOW	25	WHITE/BLACK/BLUE	45	WHITE/ORANGE/SLATE
6	GREEN	26	WHITE/BLACK/VIOLET	46	WHITE/YELLOW/GREEN
7	BLUE	27	WHITE/BLACK/SLATE	47	WHITE/YELLOW/BLUE
8	VIOLET	28	WHITE/BROWN/RED	48	WHITE/YELLOW/VIOLET
9	SLATE	29	WHITE/BROWN/ORANGE	49	WHITE/YELLOW/SLATE
10	WHITE	30	WHITE/BROWN/YELLOW	50	WHITE/GREEN/BLUE
11	WHITE/BLACK	31	WHITE/BROWN/GREEN	51	WHITE/GREEN/VIOLET
12	WHITE/BROWN	32	WHITE/BROWN/BLUE	52	WHITE/GREEN/SLATE
13	WHITE/RED	33	WHITE/BROWN/VIOLET	53	WHITE/BLUE/VIOLET
14	WHITE/ORANGE	34	WHITE/BROWN/SLATE	54	WHITE/BLUE/SLATE
15	WHITE/YELLOW	35	WHITE/RED/ORANGE	55	WHITE/VIOLET/SLATE
16	WHITE/GREEN	36	WHITE/RED/YELLOW	56	WHITE/BLACK/BROWN/RED
17	WHITE/BLUE	37	WHITE/RED/GREEN	57	WHITE/BLACK/BROWN/ORANGE

18	WHITE/VIOLET	38	WHITE/RED/BLUE	58	WHITE/BLACK/BROWN/YELLOW
19	WHITE/SLATE	39	WHITE/RED/VIOLET	59	WHITE/BLACK/BROWN/GREEN
20	WHITE/BLACK/BROWN	40	WHITE/RED/SLATE	60	WHITE/BLACK/BROWN/BLUE
2) Cable Assembly		60 Components Cabled			
a) Twists:		2.3 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		0.588 (0.618 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 5110/60C 60C 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 [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

## 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:	EU Low Voltage Directive 2006/95/EC	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. 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:	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	344 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 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	1.85 Ω/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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## EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5110/60C

5110/60C , RoHS-Compliant Commencing With 8/1/2005 Production

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive, 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 this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item.** It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2006.

### Substance

### Maximum Control Value

Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.01% 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:

A handwritten signature in black ink, appearing to read 'Dave Watson'.

Dave Watson, Director of Engineering & QA

4/23/2013