



# Customer Specification PART NO. 5110/80C

Construction

		Diameters (In)
1) Component 1	80 X 1 COND	
a) Conductor	22 (7/30) AWG TC	0.030
b) Insulation (1) Color Code	0.010" Wall, Nom. PVC, Semi Rigid  Alpha Wire Color Code E	0.050
(1) Color Code	Alpha Wile Color Code L	

Cand	Celan	Cond	Color	Cond	Color
Cond	Color	Cond	Color	Cond	Color
1	BLACK	28	WHITE/BROWN/RED	55	WHITE/VIOLET/SLAT
2	BROWN	29	WHITE/BROWN/ORA NGE	56	WHITE/BLACK/BROW N/RED
3	RED	30	WHITE/BROWN/YELL OW	57	WHITE/BLACK/BROW N/ORANGE
4	ORANGE	31	WHITE/BROWN/GRE EN	58	WHITE/BLACK/BROW N/YELLOW
5	YELLOW	32	WHITE/BROWN/BLUE	59	WHITE/BLACK/BROW N/GREEN
6	GREEN	33	WHITE/BROWN/VIOL ET	60	WHITE/BLACK/BROW N/BLUE
7	BLUE	34	WHITE/BROWN/SLAT	61	WHITE/BLACK/BROW N/VIOLET
8	VIOLET	35	WHITE/RED/ORANGE	62	WHITE/BLACK/BROW N/SLATE
9	SLATE	36	WHITE/RED/YELLOW	63	WHITE/BLACK/RED/Y
10	WHITE	37	WHITE/RED/GREEN	64	WHITE/BLACK/RED/G REEN
11	WHITE/BLACK	38	WHITE/RED/BLUE	65	WHITE/BLACK/RED/B LUE
12	WHITE/BROWN	39	WHITE/RED/VIOLET	66	WHITE/BLACK/RED/V
13	WHITE/RED	40	WHITE/RED/SLATE	67	WHITE/BLACK/RED/S LATE
14	WHITE/ORANGE	41	WHITE/ORANGE/YEL LOW	68	WHITE/BLACK/ORAN GE/YELLOW
15	WHITE/YELLOW	42	WHITE/ORANGE/GR EEN	69	WHITE/BLACK/ORAN GE/GREEN
16	WHITE/GREEN	43	WHITE/ORANGE/BLU E	70	WHITE/BLACK/ORAN GE/BLUE
17	WHITE/BLUE	44	WHITE/ORANGE/VIO	71	WHITE/BLACK/ORAN GE/VIOLET

21	WHITE/VIOLET  WHITE/SLATE  WHITE/BLACK/BROW N  WHITE/BLACK/RED	45 46 47 48	WHITE/ORANGE/SLA TE WHITE/YELLOW/GRE EN WHITE/YELLOW/BLU E		WHITE/BLACK/ORAN GE/SLATE WHITE/BLACK/YELL OW/GREEN WHITE/BLACK/YELL
20 21 22	WHITE/BLACK/BROW N	47	EN WHITE/YELLOW/BLU		OW/GREEN
21	N			74	WHITE/BLACK/VELL
22	WHITE/BLACK/RED	48			OW/BLUE
III			WHITE/YELLOW/VIOL ET	75	WHITE/BLACK/YELL OW/VIOLET
/II /	WHITE/BLACK/ORAN GE	49	WHITE/YELLOW/SLA TE	76	WHITE/BLACK/YELL OW/SLATE
	WHITE/BLACK/YELL OW	50	WHITE/GREEN/BLUE	77	WHITE/BLACK/GREE N/BLUE
	WHITE/BLACK/GREE N	51	WHITE/GREEN/VIOL ET	78	WHITE/BLACK/GREE N/VIOLET
25	WHITE/BLACK/BLUE	52	WHITE/GREEN/SLAT E	79	WHITE/BLACK/GREE N/SLATE
26	WHITE/BLACK/VIOLE T	53	WHITE/BLUE/VIOLET	80	WHITE/BLACK/BLUE/ VIOLET
27	WHITE/BLACK/SLATE	54 WHITE/BLUE/SLATE			
2) Cable Assembly		80 Components Cableo	d		
a) Twists:		1.9 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		0.665 (0.698 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 5110/80C 80C 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>
	СМ	105°C
	VW-1	
2) CSA International	СМС	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	459 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	16.6 Ω/1000ft @20°C, Nominal		
6) OA Shield DCR	1.2 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)	
	[Spool dimensions may vary slightly]

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#### **EU/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 5110/80C

5110/80C, 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)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA

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