

## Customer Specification

**PART NO. 5480/50C**

## Construction

				Diameters (In)	
1) Component 1		50 X 1 PAIR			
a) Conductor		24 (7/32) AWG Tinned Copper		0.024	
b) Insulation		0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color Code		Alpha Wire Color Code C			
Pair	Color	Pair	Color	Pair	Color
1	BLUE-WHITE	18	BROWN/WHITE-WHITE	35	GREEN/WHITE-RED
2	ORANGE-WHITE	19	BROWN/SLATE-WHITE	36	GREEN/BROWN-RED
3	GREEN-WHITE	20	SLATE/WHITE-WHITE	37	GREEN/SLATE-RED
4	BROWN-WHITE	21	BLUE-RED	38	BROWN/WHITE-RED
5	SLATE-WHITE	22	ORANGE-RED	39	BROWN/SLATE-RED
6	BLUE/WHITE-WHITE	23	GREEN-RED	40	SLATE/WHITE-RED
7	BLUE/ORANGE-WHITE	24	BROWN-RED	41	BLUE-BLACK
8	BLUE/GREEN-WHITE	25	SLATE-RED	42	ORANGE-BLACK
9	BLUE/BROWN-WHITE	26	BLUE/WHITE-RED	43	GREEN-BLACK
10	BLUE/SLATE-WHITE	27	BLUE/ORANGE-RED	44	BROWN-BLACK
11	ORANGE/WHITE-WHITE	28	BLUE/GREEN-RED	45	SLATE-BLACK
12	ORANGE/GREEN-WHITE	29	BLUE/BROWN-RED	46	BLUE/WHITE-BLACK
13	ORANGE/BROWN-WHITE	30	BLUE/SLATE-RED	47	BLUE/ORANGE-BLACK
14	ORANGE/SLATE-WHITE	31	ORANGE/WHITE-RED	48	BLUE/GREEN-BLACK
15	GREEN/WHITE-WHITE	32	ORANGE/GREEN-RED	49	BLUE/BROWN-BLACK
16	GREEN/BROWN-WHITE	33	ORANGE/BROWN-RED	50	BLUE/SLATE-BLACK
17	GREEN/SLATE-WHITE	34	ORANGE/SLATE-RED		
c) Pair		2/Cond Cabled Together			
(1) Twists:		9.6 Twists/foot (min)			
2) Cable Assembly		50 Components Cabled			
a) Twists:		1.4 Twists/foot (min)			
b) Orientation:		Components to be arranged from INSIDE LAYER to OUTSIDE LAYER			
3) Shield:		Alum/Mylar Tape, 20% Overlap, Min.			
a) Foil Direction		Foil Facing In			
b) Drain Wire		24 (7/32) AWG Tinned Copper			
4) Jacket		0.053" Wall, Nom.,PVC		0.699 (0.739 Max.)	
a) Color(s)		SLATE			
b) Print		ALPHA WIRE-* P/N 5480/50C 50PR 24 AWG SHIELDED 75C (UL) TYPE CM OR AWM 2464 OR C(UL) 60C TYPE CMG FT4 CE ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

## Applicable Specifications

1) UL	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	CM	75°C
2) CSA International	C(UL) TYPE CMG	60°C
	FT4	
3) CE:	EU Low Voltage Directive 2014/35/EU	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No Exemptions are required for RoHS Compliance on this item.
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.
3) California Proposition 65:	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	355 Lbs, Maximum
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	300 V <sub>RMS</sub>
2) Mutual Capacitance	22.5 pF/ft @1 kHz, Nominal
3) Ground Capacitance	40 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	83 Ω
5) Inductance	0.19 μH/ft, Nominal
6) Conductor DCR	26 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	10.2 Ω/1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	36 x 14 x 12 Continuous length
b) 500 FT	30 x 14 x 12 Continuous length
c) 100 FT	18 x 9 x 8 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

[www.alphawire.com](http://www.alphawire.com)

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# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5480/50C

5480/50C, RoHS-Compliant Commencing With 8/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product also complies with UK - RoHS. The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item.** 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 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

## Substance

Lead  
Mercury  
Cadmium  
Hexavalent Chromium  
Polybrominated Biphenyls (PBB)  
Polybrominated Diphenyl Ethers (PBDE) ,  
Including Deca-BDE  
Bis(2-ethylhexyl) phthalate (DEHP)  
Butyl benzyl phthalate (BBP)  
Dibutyl phthalate (DBP)  
Diisobutyl phthalate (DIBP)

## Maximum Control Value

0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
0.01% by weight (100 ppm)  
0.1% by weight (1000 ppm )  
0.1% by weight (1000 ppm)  
  
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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 5/8/2024

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