



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. 5480/50C

Construction

				Diameters (In)	
1) Component 1		50 X 1 PAIR			
a) Conductor		24 (7/32) AWG TC			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)			
3) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing In			
b) Drain Wire		24 (7/32) AWG TC			
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 ROHS * = Factory Code			
[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]					

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 ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]
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## 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	

## 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) 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	-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	23.1 pf/ft @ 1 kHz, Nominal
3) Ground Capacitance	42 pf/ft @ 1 kHz, Nominal
4) Characteristic Impedance	82
5) Inductance	0.19 µH/ft, Nominal
6) Conductor DCR	26 /1000ft @ 20°C, Nominal
7) OA Shield DCR	10.2 /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	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

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## 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

*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.***

Substance	Maximum Control Value
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)	0.1% by weight (1000 ppm)
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

1/21/2011