



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

Customer Specification

PART NO. 5100/70C

Construction

		Diameters (In)
1) Component 1	70 X 1 COND	
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 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/GR EEN	66	WHITE/BLACK/RED/V IOLET
19	WHITE/SLATE	43	WHITE/ORANGE/BLU E	67	WHITE/BLACK/RED/S LATE
20	WHITE/BLACK/BROW N	44	WHITE/ORANGE/VIO LET	68	WHITE/BLACK/ORAN GE/YELLOW
21	WHITE/BLACK/RED	45	WHITE/ORANGE/SLA TE	69	WHITE/BLACK/ORAN GE/GREEN
22	WHITE/BLACK/ORAN GE	46	WHITE/YELLOW/GRE EN	70	WHITE/BLACK/ORAN GE/BLUE
23	WHITE/BLACK/YELL OW	47	WHITE/YELLOW/BLU E		
24	WHITE/BLACK/GREE N	48	WHITE/YELLOW/VIO LET		
2) Cable Assembly		70 Components Cabled			
a) Twists:		2.4 Twists/foot (min)			
b) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, 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		0.032" Wall, Nom.,PVC		0.505 (0.534 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 5100/70C 70C 24 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 _{RMS}
b) Overall	AWM/STYLE 2464	80°C / 300 V _{RMS}
	CM	105°C
	VW-1	
2) CSA International	CMG	105°C
	FT4	
3) CE:	EU Low Voltage Directive 2006/95/EC	

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 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	250 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Capacitance	32 pf/ft @ 1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	58 pf/ft @ 1 kHz, Nominal
4) Inductance	0.19 µH/ft, Nominal
5) Conductor DCR	26 /1000ft @20°C, Nominal
6) OA Shield DCR	11.6 /1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	24 x 14 x 12 Continuous length
b) 500 FT	20 x 11 x 8 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: 5100/70C

5100/70C , RoHS-Compliant Commencing With 8/1/2005 Production

This document certifies that the Alpha part number cited above are manufactured in accordance with Directive 2011/65/EC 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 these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance 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

12/17/2012