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

Request a Sample

Customer Specification

PART NO. 5100/70C

Construction

		Diameters (In)
1) Component 1	70 X 1 COND	
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 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/GREEN	66	WHITE/BLACK/RED/VIOLET
19	WHITE/SLATE	43	WHITE/ORANGE/BLUE	67	WHITE/BLACK/RED/SLATE
20	WHITE/BLACK/BROWN	44	WHITE/ORANGE/VIOLET	68	WHITE/BLACK/ORANGE/YELLOW
21	WHITE/BLACK/RED	45	WHITE/ORANGE/SLATE	69	WHITE/BLACK/ORANGE/GREEN
22	WHITE/BLACK/ORANGE	46	WHITE/YELLOW/GREEN	70	WHITE/BLACK/ORANGE/BLUE
23	WHITE/BLACK/YELLOW	47	WHITE/YELLOW/BLUE		
24	WHITE/BLACK/GREEN	48	WHITE/YELLOW/VIOLET		

2) Cable Assembly	70 Components Cabled	
a) Twists:	2.4 Twists/foot (min)	
b) Orientation:	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) 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 Tinned Copper	
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 80C 300V OR AWM 21894 105C 300V SUN RES 60C OIL 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_{RMS}
b) Overall	AWM/STYLE 21894	105°C / 300 V_{RMS}
	SUN RES	
	60C OIL	
	AWM/STYLE 2464	80°C / 300 V_{RMS}
	CM	105°C
	VW-1	
2) CSA International	CMG	105°C
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) CE:	EU Low Voltage Directive 2014/35/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 2011and the amending Directive 2015/863/EU of 4 June 2015 . 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:	Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-35 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 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	11.6 Ω/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)	
	[Spool dimensions may vary slightly]

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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

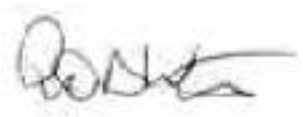
Note: all colors and put-ups

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 (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) 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.

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)
Bis(2-ethylhexyl) phthalate (DEHP)	0.1% by weight (1000 ppm)
Butyl benzyl phthalate (BBP)	0.1% by weight (1000 ppm)
Dibutyl phthalate (DBP)	0.1% by weight (1000 ppm)
Diisobutyl phthalate (DIBP)	0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire:



Dave Watson, Director of Engineering & QA 5/19/2017

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