

# **Customer Specification**

## PART NO. 5100/60C

### Construction



						Diameters (In)
1) Component 1			60 X 1 COND			
a) Conductor			24 (7/3	2) 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	Cor	nd	Color	Cond	l Color
1	BLACK	21		WHITE/BLACK/RED	41	WHITE/ORANGE/YELLOW
2	BROWN	22		WHITE/BLACK/ORANGE	42	WHITE/ORANGE/GREEN
3	RED	23		WHITE/BLACK/YELLOW	43	WHITE/ORANGE/BLUE
4	ORANGE	24		WHITE/BLACK/GREEN	44	WHITE/ORANGE/VIOLET
5	YELLOW	25		WHITE/BLACK/BLUE	45	WHITE/ORANGE/SLATE
6	GREEN	26		WHITE/BLACK/VIOLET	46	WHITE/YELLOW/GREEN
7	BLUE	27		WHITE/BLACK/SLATE	47	WHITE/YELLOW/BLUE
8	VIOLET	28		WHITE/BROWN/RED	48	WHITE/YELLOW/VIOLET
9	SLATE	29		WHITE/BROWN/ORANGE	49	WHITE/YELLOW/SLATE
10	WHITE	30		WHITE/BROWN/YELLOW	50	WHITE/GREEN/BLUE
11	WHITE/BLACK	31		WHITE/BROWN/GREEN	51	WHITE/GREEN/VIOLET
12	WHITE/BROWN	32		WHITE/BROWN/BLUE	52	WHITE/GREEN/SLATE
13	WHITE/RED	33		WHITE/BROWN/VIOLET	53	WHITE/BLUE/VIOLET
14	WHITE/ORANGE	34		WHITE/BROWN/SLATE	54	WHITE/BLUE/SLATE
15	WHITE/YELLOW	35		WHITE/RED/ORANGE	55	WHITE/VIOLET/SLATE
16	WHITE/GREEN	36		WHITE/RED/YELLOW	56	WHITE/BLACK/BROWN/RED
17	WHITE/BLUE	37		WHITE/RED/GREEN	57	WHITE/BLACK/BROWN/ORANGE
18	WHITE/VIOLET	38		WHITE/RED/BLUE	58	WHITE/BLACK/BROWN/YELLOW
19	WHITE/SLATE	39		WHITE/RED/VIOLET	59	WHITE/BLACK/BROWN/GREEN
20	WHITE/BLACK/BROWN	40		WHITE/RED/SLATE	60	WHITE/BLACK/BROWN/BLUE
2) Cable	Assembly		60 Con	ponents Cabled		
a) Twists:			2.1 Twists/foot (min)			
b) Orientation:			Components to be arranged from INSIDE LAYER to OUTSIDE LAYER			
c) (ore Wrap			Nonwoven Polyester Tape, 20% Overlap, Min.			
3) Shield	:		Alum/Mylar Tape, 20% Overlap, Min.			
a) Foil Di	rection		Foil Facing In			
b) Drain Wire			24 (7/32) AWG Tinned Copper			
4) Jacket			0.032" Wall, Nom.,PVC			0.468 (0.495 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 5100/60C 60C 24 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C SUN RES OR AWM 2464 80C 300V OR AWM 2517 105C 300V VW-1 LLXXXXXX CSA 105C TYPE CMG FT4 CE ROHS OIL RESISTANT (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 2517	105°C / 300 V <sub>RMS</sub>	
	SUN RES		
	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>	
	СМ	105°C	
	VW-1		
2) CSA International	CMG	105°C	
	FT4		
3) IEC	EN 60332-1 Flame Behavior		
	EN 60332-2 Flame Behavior		
4) Other	Oil Resistant		
5) 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.				
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	-35 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	215 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Capacitance	31 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Ground Capacitance	56 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	18 x 14.25 x 8 Continuous length			
c) 100 FT	12 x 5.94 x 5 Continuous length			
d) Bulk(Made-to-order)				
	[Spool dimensions may vary slightly]			
Notes:				
a) Oil Resistant Jacket (7d @ 60C).				

#### www.alphawire.com

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#### Tel: 1-800-52 ALPHA (25742)

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

To Whom It May Concern:

Alpha Wire Part Number: 5100/60C

5100/60C, 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 2 per GB/T 26572-2011.

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 4/18/2024

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