

## **Customer Specification**

**PART NO. 5199/60C**

### **Construction**

						Diameters (In)	
1) Component 1						60 X 1 COND	
a) Conductor						22 (7/30) AWG Tinned Copper	0.030
b) Insulation						0.010" Wall, Nom. PVC, Semi Rigid	0.050
(1) Color Code						Alpha Wire Color Code E	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	21	WHITE/BL	41	WHITE/OR		
2	BROWN	22	WHITE/BL	42	WHITE/OR		
3	RED	23	WHITE/BL	43	WHITE/OR		
4	ORANGE	24	WHITE/BL	44	WHITE/OR		
5	YELLOW	25	WHITE/BL	45	WHITE/OR		
6	GREEN	26	WHITE/BL	46	WHITE/YEL		
7	BLUE	27	WHITE/BL	47	WHITE/YEL		
8	VIOLET	28	WHITE/BR	48	WHITE/YEL		
9	SLATE	29	WHITE/BR	49	WHITE/YEL		
10	WHITE	30	WHITE/BR	50	WHITE/GRI		
11	WHITE/BL	31	WHITE/BR	51	WHITE/GRI		
12	WHITE/BR	32	WHITE/BR	52	WHITE/GRI		
13	WHITE/RE	33	WHITE/BR	53	WHITE/BLL		
14	WHITE/OR	34	WHITE/BR	54	WHITE/BLL		
15	WHITE/YE	35	WHITE/RE	55	WHITE/VIC		
16	WHITE/GR	36	WHITE/RE	56	WHITE/BLA		
17	WHITE/BLI	37	WHITE/RE	57	WHITE/BLA		
18	WHITE/VIC	38	WHITE/RE	58	WHITE/BLA		
19	WHITE/SL	39	WHITE/RE	59	WHITE/BLA		
20	WHITE/BL	40	WHITE/RE	60	WHITE/BLA		
2) Cable Assembly						60 Components Cabled	
a) Twists:						1.8 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Nonwoven Polyester Tape, 20% Overlap, Min.	
3) Shield:						Alum/Mylar Tape, 20% Overlap, Min.	
a) Foil Direction						Foil Facing In	
b) Drain Wire						22 (7/30) AWG Tinned Copper	
4) Jacket						0.032" Wall, Nom.,PVC	0.522 (0.549 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 5199/60C 60C 22 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 <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 <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>
	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) 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.
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

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<b>Physical &amp; Mechanical Properties</b>	
1) Temperature Range	-35 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	335 Lbs, Maximum
4) Sunlight Resistance	Yes
<b>Electrical Properties</b>	
(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	35 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	63 pF/ft @1 kHz, Nominal
4) Inductance	0.18 μH/ft, Nominal
5) Conductor DCR	16.5 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	9.2 Ω/1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 500 FT	18 x 14.25 x 8 Continuous length
c) 100 FT	18 x 9 x 8 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) Oil Resistant Jacket (7d @ 60C).	

[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: 5199/60C

5199/60C, 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 "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

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 7/16/2024

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