



Customer Specification

PART NO. 5199/50C

Construction				

						Diameter	s (ln)
1) Component 1			50 X 1 COND				
a) Conductor			22 (7/3	0) AWG Tinned Copper		0.030	
b) Insulation			0.010" \	Wall, Nom. PVC, Semi Rigid		0.050	
(1) Color C	ode		Alpha Wire Color Code E				
Cond	Color	Cond	Color		nd	Color	
1	BLACK	18		WHITE/VIOLET	35		WHITE/RED/ORANGE
2	BROWN	19		WHITE/SLATE	36		WHITE/RED/YELLOW
3	RED	20		WHITE/BLACK/BROWN	37		WHITE/RED/GREEN
4	ORANGE	21		WHITE/BLACK/RED	38		WHITE/RED/BLUE
5	YELLOW	22		WHITE/BLACK/ORANGE	39		WHITE/RED/VIOLET
6	GREEN	23		WHITE/BLACK/YELLOW	40		WHITE/RED/SLATE
7	BLUE	24		WHITE/BLACK/GREEN	41		WHITE/ORANGE/YELLOW
8	VIOLET	25		WHITE/BLACK/BLUE	42		WHITE/ORANGE/GREEN
9	SLATE	26		WHITE/BLACK/VIOLET	43		WHITE/ORANGE/BLUE
10	WHITE	27		WHITE/BLACK/SLATE	44		WHITE/ORANGE/VIOLET
11	WHITE/BLACK	28		WHITE/BROWN/RED	45		WHITE/ORANGE/SLATE
12	WHITE/BROWN	29		WHITE/BROWN/ORANGE	46		WHITE/YELLOW/GREEN
13	WHITE/RED	30		WHITE/BROWN/YELLOW	47		WHITE/YELLOW/BLUE
14	WHITE/ORANGE	HITE/ORANGE 31		WHITE/BROWN/GREEN	48		WHITE/YELLOW/VIOLET
15	WHITE/YELLOW	32		WHITE/BROWN/BLUE	49		WHITE/YELLOW/SLATE
16	WHITE/GREEN	33		WHITE/BROWN/VIOLET	50		WHITE/GREEN/BLUE
17	WHITE/BLUE	34		WHITE/BROWN/SLATE			
2) Cable Assembly			50 Components Cabled				
a) Twists:			2.0 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 Dire	ection		Foil Facing In				
b) Drain Wire			22 (7/30) AWG Tinned Copper				
4) Jacket			0.032" Wall, Nom.,PVC			0.482 (0.507 Max.)	
a) Color(s)			Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White			e, White	
b) Ripcord			1 End 810 Denier Nylon				
c) Print			ALPHA WIRE-* P/N 5199/50C 50C 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 [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 2517	105°C / 300 V _{RMS}	
	SUN RES		
	AWM/STYLE 2464	80°C / 300 V _{RMS}	
	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 Exemption 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.			
	information.			

Properties

Physical & Mechanical Properties			
1) Temperature Range	-35 to 105°C		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	280 Lbs, Maximum		
4) Sunlight Resistance	Yes		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	300 V _{RMS}		
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

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	18 x 9 x 8 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

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5199/50C

5199/50C, 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	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 5/7/2024

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