

# Customer Specification

## PART NO. 5354C

### Construction

		Diameters (In)			
1) Component 1		19 X 1 PAIR			
a) Conductor		20 (7/28) AWG Tinned Copper		0.038	
b) Insulation		0.010" Wall, Nom. PVC, Semi Rigid		0.058	
(1) Color Code		Alpha Wire Color Code B			
Pair	Color	Pair	Color	Pair	Color
1	WHITE-BLACK	8	WHITE-VIOLET	15	BLACK-BLUE
2	WHITE-BROWN	9	WHITE-SLATE	16	BLACK-VIOLET
3	WHITE-RED	10	BLACK-BROWN	17	BLACK-SLATE
4	WHITE-ORANGE	11	BLACK-RED	18	BROWN-RED
5	WHITE-YELLOW	12	BLACK-ORANGE	19	BROWN-ORANGE
6	WHITE-GREEN	13	BLACK-YELLOW		
7	WHITE-BLUE	14	BLACK-GREEN		
c) Pair		2/Cond Cabled Together			
(1) Twists:		8.0 Twists/foot (min)			
2) Cable Assembly		19 Components Cabled			
a) Twists:		1.7 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:		A/P/A Tape, 20% Overlap, Min.			
a) Drain Wire		20 (7/28) AWG Tinned Copper			
b) Braid		Tinned Copper, 70% Coverage, Nom.			
4) Jacket		0.063" Wall, Nom., PVC		0.634 (0.663 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 5354C 19PR 20 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C OR AWM 2343 80C 300V OR AWM 21895 105C 300V SUN RES 60C OIL 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 <sub>RMS</sub>
b) Overall	AWM/STYLE 21895	105°C / 300 V <sub>RMS</sub>
	SUN RES	
	60C OIL	
	AWM/STYLE 2343	80°C
	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/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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### Physical & Mechanical Properties

1) Temperature Range	-35 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	350 Lbs, Maximum
4) Sunlight Resistance	Yes

### Electrical Properties

(For Engineering purposes only)

1) Voltage Rating	300 V <sub>RMS</sub>
2) Mutual Capacitance	26 pF/ft @1 kHz, Nominal
3) Ground Capacitance	47 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	72 Ω
5) Inductance	0.17 μH/ft, Nominal
6) Conductor DCR	10.4 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	1.78 Ω/1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 500 FT	24 x 14 x 12 Continuous length
c) 100 FT	18 x 9 x 8 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

[www.alphawire.com](http://www.alphawire.com)

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

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: 5354C

5354C, 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 5/6/2024

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374  
Tel: 1-908-925-8000