

# Customer Specification PART NO. 5299/19C

#### Construction

Construct				<u> </u>		
				Diameters (In	1)	
1) Component 1			19 X 1 PAIR			
a) Conductor		20 (7/28) AWG TC		0.038	0.038	
b) Insulation		0.016" Wall, Nom. PVC		0.070	0.070	
(1) Color Code		Alpha Wire Color Code A				
Pair	Color	Pair	Color	Pair	Color	
1	BLACK-RED	8	RED-GREEN	15	GREEN-WHITE	
2	BLACK-WHITE	9	RED-WHITE	16	GREEN-BROWN	
3	BLACK-GREEN	10	RED-BLUE	17	GREEN-ORANGE	
4	BLACK-BLUE	11	RED-YELLOW	18	GREEN-YELLOW	
5	BLACK-BROWN	12	RED-BROWN	19	WHITE-BLUE	
6	BLACK-YELLOW	13	RED-ORANGE			
7	BLACK-ORANGE	14	GREEN-BLUE			
c) Pair		2/Cond Cabled Together				
(1) Twists:		6.0 Twists/foot (min)				
2) Cable Assembly		19 Components Cabled				
a) Twists:		1.8 Twists/foot (min)				
b) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.		in.		
3) Shield:		A/P/A Tape, 25% Overlap, Min.				
a) Drain Wire		20 (7/28) AWG TC				
b) Braid		TC,70% Coverage, Min.				
4) Jacket		0.053" Wall, Nom.,PVC		0.719 (0.749 N	Max.)	
a) Color(s)		Slate, Black, Yellow, Orange, Blue, Green, Red,		Red, Sand Beige, W	Vhite	
b) Ripcord		1 End 810 Denier Nylon				
c) Print		ALPHA WIRE-* P/N 5299/19C 19PR 20 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C OR AWM 2464 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 1569	105°C / 300 V <sub>RMS</sub>
b) Overall	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	СМ	105°C
	VW-1	
2) CSA International	смб	105°C
	FT4	
3) CE:	LVD 73/23/EEC Amendment 93/68/EEC	

## Environmental

1) EU Directive 2002/95/EC(RoHS):				
	All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture.			
2) REACH Regulation (EC 1907/2006):				
	This product does not contain any of the substances listed on the 13 January 2010 European Union's REACH Substance of Very High Concern (SVHC) candidate list in excess of 0.1% mass of the item.			
3) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.			

## **Properties**

Physical &Mechanical Properties				
1) Temperature Range	-30 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	355 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Mutual Capacitance	32 pf/ft @1 kHz, Nominal			
3) Ground Capacitance	58 pf/ft @1 kHz, Nominal			
4) Characteristic Impedance	70			
5) Inductance	0.19 μH/ft, Nominal			
6) Conductor DCR	10.4 /1000ft @20°C, Nominal			
7) OA Shield DCR	1.22 /1000ft @20°C, Nominal			

#### Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	36 x 14 x 12 Continuous length
b) 500 FT	30 x 14 x 12 Continuous length
c) 100 FT	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

www.alphawire.com

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#### RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:5299/19C

5299/19C, RoHS-Compliant Commencing With8/1/2005Production

This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.** 

Substance	<b>Maximum Control Value</b>
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB) Polybrominated Diphenyl Ethers (PBDE)	0.1% by weight (1000 ppm)
Including Deca-BDE	0.1% by weight (1000 ppm)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering &QA