

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

Request a Sample

# Customer Specification PART NO. 5299C

#### Construction

				Diameters (In)		
1) Component 1		9 X 1 PAIR	9 X 1 PAIR			
a) Conductor		20 (7/28) AWG Tinned	20 (7/28) AWG Tinned Copper		0.038	
b) Insulation		0.016" Wall, Nom. PV	0.016" Wall, Nom. PVC		0.070	
(1) Color Code		Alpha Wire Color Cod	Alpha Wire Color Code A			
Pair	Color	Pair	Color	Pair	Color	
1	BLACK-RED	4	BLACK-BLUE	7	BLACK-ORANGE	
2	BLACK-WHITE	5	BLACK-BROWN	8	RED-GREEN	
3	BLACK-GREEN	6	BLACK-YELLOW	9	RED-WHITE	
c) Pair		2/Cond Cabled Toget	2/Cond Cabled Together			
(1) Twists: 6.0 Tw		6.0 Twists/foot (min)	6.0 Twists/foot (min)			
2) Cable Assembly		9 Components Cabled				
a) Twists:		2.4 Twists/foot (min)				
b) Orientation:		Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield:		A/P/A Tape, 25% Overlap, Min.				
a) Drain Wire 20 (7/28) AWG Tinned Cop		d Copper				
b) Braid Tinned Copper,70% Coverage, Min.		Coverage, Min.				
4) Jacket		0.032" Wall, Nom.,PVC		0.515 (0.536 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 5299C 9PR 20 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C OR AWM 2464 80C 300V OR AWM 21894 105C 300V SUN RES 60C OIL VW-1 OR C(UL) TYPE CMG 105C 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 21894	105°C / 300 V <sub>RMS</sub>	
	SUN RES		
	60C OIL		
	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>	
	СМ	105°C	
	VW-1		
2) CSA International	C(UL) TYPE CMG	105°C	
	FT4		
3) IEC	EN 60332-1 Flame Behavior		
	EN 60332-2 Flame Behavior		
4) CE:	EU Low Voltage Directive 2014/35/EC	EU Low Voltage Directive 2014/35/EC	

#### 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. Consult Alpha Wire's web site for RoHS C of C.			
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. For up-to-date information, please see Alpha's REACH SVHC Declaration.			
3) California Proposition 65:	Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.			

### Properties

Physical & Mechanical Properties			
1) Temperature Range	-30 to 105°C		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	175 Lbs, Maximum		
4) Sunlight Resistance	Yes		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	<sup>300 V</sup> RMS		
2) Mutual Capacitance	29 pF/ft @1 kHz, Nominal		
3) Ground Capacitance	52 pF/ft @1 kHz, Nominal		
4) Characteristic Impedance	74 Ω		
5) Inductance	0.19 μH/ft, Nominal		
6) Conductor DCR	10.4 Ω/1000ft @20°C, Nominal		
7) OA Shield DCR	1.66 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	20 x 11 x 8 Continuous length	
c) 100 FT	16 x 11 x 8 Continuous length	
d) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	

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

To Whom It May Concern:

Alpha Wire Part Number: 5299C

5299C, RoHS-Compliant Commencing With 8/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above 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) 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.

Maximum Control Value
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm )
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 9/10/2019