

# Customer Specification PART NO. 5420/9

#### Construction

				Diameters (In)		
1) Component 1		9 X 1 COND	9 X 1 COND			
a) Conductor		20 (10/30) AWG	20 (10/30) AWG TC		0.037	
b) Insulation		0.0325" Wall, No	0.0325" Wall, Nom. PVC		0.102	
(1) Color Code		Alpha Wire Colo	Alpha Wire Color Code E			
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	4	ORANGE	7	BLUE	
2	BROWN	5	YELLOW	8	VIOLET	
3	RED	6	GREEN	9	SLATE	
2) Cable Assembly		9 Components 0	9 Components Cabled			
a) Twists:		2.7 Twists/foot (	2.7 Twists/foot (min)			
b) Core Wrap		Nonwoven Polye	Nonwoven Polyester Tape, 25% Overlap, Min.			
3) Shield:		Alum/Mylar Tape	Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing In	Foil Facing In			
b) Drain Wire		20 (7/28) AWG	20 (7/28) AWG TC			
4) Jacket		0.063" Wall, Nor	0.063" Wall, Nom.,PVC		0.507 (0.533 Max.)	
a) Color(s)		Slate, Black, Yel	Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White			
b) Ripcord		1 End 810 Denie	1 End 810 Denier Nylon			
c) Print		XTRAGUARD(R) LLXXXXXX CSA VOLTS FT4 CE I * = Factory Code	ALPHA WIRE-* P/N 5420/9 9C 20 AWG XTRAGUARD(R) 1 (UL) MTW 600V OR AWM 2501 VW-1 LLXXXXXX CSA AWM I/II A/B 105C 600 VOLTS 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 1015	105°C / 600 V <sub>RMS</sub>	
	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>	
b) Overall	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>	
	AWM/STYLE 2501	105°C / 600 V <sub>RMS</sub>	
	VW-1		
2) CSA International			
a) Component 1	TEW	105°C / 600 V <sub>RMS</sub>	
b) Overall	AWM I/II A/B	105°C / 600 V <sub>RMS</sub>	
	FT4		
3) CE:	EU Low Voltage Directive 2006/95	EU Low Voltage Directive 2006/95/EC	

#### Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):				
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. 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:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.			

#### **Properties**

1) Temperature Range	-30 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	79 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	31 pf/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	56 pf/ft @1 kHz, Nominal
4) Inductance	0.24 μH/ft, Nominal
5) Conductor DCR	11.6 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	6.9 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: 5420/9

5420/9, RoHS-Compliant Commencing With 8/1/2005 Production

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, 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 this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item**. It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. 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 11364-2006.

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)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA

4/24/2013