

Customer Specification

PART NO. 5420/9

Construction

						Diameters	(ln)	
1) Component 1 9 X 1 CC		9 X 1 COND	1 COND					
· · · · · · · · · · · · · · · · · · ·		20 (10/30) AWG	20 (10/30) AWG Tinned Copper				0.037	
b) Insulation 0.032		0.0325" Wall, No	om. PVC			0.102		
(1) Color Code A		Alpha Wire Colo	Alpha Wire Color Code E					
Cond	Color		Cond	Color	Cond		Color	
1	BLACK	<	4	ORANGE	7		BLUE	
2	BROW	/N	5	YELLOW	8		VIOLET	
3	RED		6	GREEN	9		SLATE	
2) Cable Assembly		9 Components (Cabled					
a) Twists: 2.2 Twists/fo		2.2 Twists/foot (ot (min)					
b) Orientation: Con		Components to	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER					
c) Core Wrap		Nonwoven Polyester Tape, 20% Overlap, Min.						
3) Shield: Alu		Alum/Mylar Tape, 20% Overlap, Min.						
a) Foil Direction Fo		Foil Facing In						
b) Drain Wire		20 (7/28) AWG Tinned Copper						
4) Jacket		0.063" Wall, Nom.,PVC				0.507 (0.533 Max.)		
a) Color(s) Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White								
b) Ripcord 1 End 810 Deni		er Nylon						
c) Print XTRAGUARD(600V OR AWN VW-1 OR CRU FT4 CE ROHS		XTRAGUARD(R) 600V OR AWM 2						

Applicable Specifications

1) UL			
a) Component 1	AWM/STYLE 1015	105°C / 600 V _{RMS}	
	MTW	90°C Dry / 60°C Wet / 600 V _{RMS}	
b) Overall	MTW	90°C Dry / 60°C Wet / 600 V _{RMS}	
	AWM/STYLE 21896	105°C / 600 V _{RMS}	
	SUN RES		
	60C OIL		
	AWM/STYLE 2501	105°C / 600 V _{RMS}	
	VW-1		
2) CSA International			
a) Component 1	TEW	105°C / 600 V _{RMS}	
b) Overall	C(RU) AWM I/II A/B	105°C / 600 V _{RMS}	
	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/E	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 190	17/2006):
	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

Physical & Mechanical 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 _{RMS}		
2) Capacitance	28 pF/ft @1 kHz, Nominal Conductor to Conductor		
3) Ground Capacitance	50 pF/ft @1 kHz, Nominal		
4) Inductance	0.24 μH/ft, Nominal		
5) Conductor DCR	11.5 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	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]	

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EU/UK/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

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 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)

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 5/5/2024

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