

# Customer Specification

## PART NO. 5442

### Construction

						Diameters (In)		
1) Component 1						2 X 1 COND		
a) Conductor						14 (41/30) AWG Tinned Copper		0.073
b) Insulation						0.032" Wall, Nom. PVC		0.137
(1) Color Code						Alpha Wire Color Code E		
Cond	Color	Cond	Color	Cond	Color			
1	BLACK	2	BROWN					
2) Cable Assembly						2 Components Cabled		
a) Twists:						3.0 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) Jacket						0.063" Wall, Nom.,PVC		0.404 (0.422 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 5442 2C 14 AWG XTRAGUARD(R) 1 (UL) MTW 600V OR AWM 2501 105C 600V OR AWM 20811 105C 600V VW-1 OR CRU AWM I/II A/B 105C 600V FT4 CE ROHS SUNLIGHT RESISTANT OIL RESISTANT (SEQ FOOTAGE) * = Factory Code		

### Applicable Specifications

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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 20811	105°C / 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	C(RU) AWM I/II A/B	105°C / 600 V <sub>RMS</sub>
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) Other	Sunlight Resistant	
	Oil Resistant	
5) 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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<b>Physical &amp; Mechanical Properties</b>	
1) Temperature Range	-30 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	64 Lbs, Maximum
4) Sunlight Resistance	Yes
<b>Electrical Properties</b>	
(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	28 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Characteristic Impedance	76 Ω
4) Inductance	0.19 μH/ft, Nominal
5) Conductor DCR	2.8 Ω/1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	20 x 11 x 8 Continuous length
b) 500 FT	18 x 9 x 8 Continuous length
c) 100 FT	12 x 5.94 x 5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) Sunlight Resistant Jacket (720hr test).	
b) Oil Resistant Jacket (7d @ 60C).	

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

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5442

5442, RoHS-Compliant Commencing With 01/08/2005 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 Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies that the listed part number is in compliance with 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 restrictions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

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 this document. This document is intended to provide guidance 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 for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Alpha Wire is an Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 31/03/2025

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