

## Customer Specification

**PART NO. 25120/50**

## Construction

				Diameters (In)	
1) Component 1		50 X 1 COND			
a) Conductor		24 (7/32) AWG Tinned Copper		0.024	
b) Insulation		0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color Code		Alpha Wire Color Code E			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	18	WHITE/VIOLET	35	WHITE/RED/ORANGE
2	BROWN	19	WHITE/SLATE	36	WHITE/RED/YELLOW
3	RED	20	WHITE/BLACK/BROWN	37	WHITE/RED/GREEN
4	ORANGE	21	WHITE/BLACK/RED	38	WHITE/RED/BLUE
5	YELLOW	22	WHITE/BLACK/ORANGE	39	WHITE/RED/VIOLET
6	GREEN	23	WHITE/BLACK/YELLOW	40	WHITE/RED/SLATE
7	BLUE	24	WHITE/BLACK/GREEN	41	WHITE/ORANGE/YELLOW
8	VIOLET	25	WHITE/BLACK/BLUE	42	WHITE/ORANGE/GREEN
9	SLATE	26	WHITE/BLACK/VIOLET	43	WHITE/ORANGE/BLUE
10	WHITE	27	WHITE/BLACK/SLATE	44	WHITE/ORANGE/VIOLET
11	WHITE/BLACK	28	WHITE/BROWN/RED	45	WHITE/ORANGE/SLATE
12	WHITE/BROWN	29	WHITE/BROWN/ORANGE	46	WHITE/YELLOW/GREEN
13	WHITE/RED	30	WHITE/BROWN/YELLOW	47	WHITE/YELLOW/BLUE
14	WHITE/ORANGE	31	WHITE/BROWN/GREEN	48	WHITE/YELLOW/VIOLET
15	WHITE/YELLOW	32	WHITE/BROWN/BLUE	49	WHITE/YELLOW/SLATE
16	WHITE/GREEN	33	WHITE/BROWN/VIOLET	50	WHITE/GREEN/BLUE
17	WHITE/BLUE	34	WHITE/BROWN/SLATE		
2) Cable Assembly		50 Components Cabled			
a) Twists:		2.3 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) Shield:		A/P/A Tape, 20% Overlap, Min.			
a) Drain Wire		24 (7/32) AWG Tinned Copper			
b) Braid		Tinned Copper,70% Coverage, Nom.			
4) Jacket		0.032" Wall, Nom.,Polyurethane (TPU)		0.457 (0.482 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 25120/50 XTRAGUARD(R) 2 RU AWM 20668 VW-1 OR CRU AWM I/II A/B 90C 300 VOLTS FT1 CE ROHS (SEQ FOOTAGE) * = Factory Code			

Applicable Specifications

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1) UL		
a) Component 1	AWM/STYLE 10002	105°C / 300 V <sub>RMS</sub>
b) Overall	AWM/STYLE 20668	90°C / 300 V <sub>RMS</sub>
	VW-1	
2) CSA International	AWM I/II A/B	90°C / 300 V <sub>RMS</sub>
	FT1	
3) 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) 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 90°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	186 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	300 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	0.19 µH/ft, Nominal
5) Conductor DCR	26 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	2.7 Ω/1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	

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

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# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 25120/50

25120/50, 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 "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

## Substance

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)

## Maximum Control Value

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 5/2/2024

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