

## **Customer Specification**

#### **PART NO. 78424**

#### **Construction**

						Diameters (In)	
1) Component 1						20 X 1 COND	
a) Cond	ductor					22 (19/34) AWG Tinned Copper	0.032
b) Insu	lation					0.007" Wall, Nom. Modified Polyphenylene Ether-PE	0.046
(1) Colo	or Code					Alpha Wire Color Code E	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	8	VIOLET	15	WHITE/YELI		
2	BROWN	9	SLATE	16	WHITE/GRE		
3	RED	10	WHITE	17	WHITE/BLUE		
4	ORANGE	11	WHITE/BLA	18	WHITE/VIO		
5	YELLOW	12	WHITE/BR(	19	WHITE/SLA		
6	GREEN	13	WHITE/RED	20	WHITE/BLA		
7	BLUE	14	WHITE/OR				
2) Cabl	e Assembly	/				20 Components Cabled	
a) Twis	ts:					3.4 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) Shie	ld:					A/P/A Tape, 25% Overlap, Min.	
a) Drain Wire						22 (7/30) AWG Tinned Copper	
b) Braid						Tinned Copper,70% Coverage, Min.	
4) Jacket						0.015" Wall, Nom.,Modified Polyphenylene Ether-PE	0.306 (0.322 Max.
a) Color(s)						SLATE	
b) Ripcord						1 End 810 Denier Nylon	
c) Jacket Separator						Nonwoven Polyester Tape, 25% Overlap, Min.	
d) Print						ALPHA WIRE-* P/N 78424 20C 22 AWG ECOCABLE(R) MINI RU AWM 21460 80C 300V VW-1 C(RU) AWM I A/B FT1 80C 300V CE ROHS (SEQ FOOTAGE) * = Factory Code	

## **Applicable Specifications**

AWM/STYLE 21460	80°C / 300 V <sub>RMS</sub>
VW-1	
C(RU) AWM I A/B FT1	80°C / 300 V <sub>RMS</sub>
Halogen-Free	
NFPA 79 - 2015 Compliant	
EU Low Voltage Directive 2014/35/EU	
	VW-1 C(RU) AWM I A/B FT1 Halogen-Free NFPA 79 - 2015 Compliant

## **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.

# **Properties**

Physical & Mechanical Properties			
1) Temperature Range	-40 to 80°C		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	129 Lbs, Maximum		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	300 V <sub>RMS</sub>		
2) Capacitance	34 pF/ft @1 kHz, Nominal Conductor to Conductor		
3) Ground Capacitance	61 pF/ft @1 kHz, Nominal		
4) Inductance	0.16 μH/ft, Nominal		
5) Conductor DCR	15.3 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) 1000 FT	18 x 9 x 8 Continuous length	
b) 100 FT	10.5 x 5 x 3.5 Continuous length	
c) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.



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

To Whom It May Concern:

Alpha Wire Part Number: 78424

78424, RoHS-Compliant Commencing With 7/22/2014 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	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

11/29/2024

Alpha Wire

2200 US Highway 27 South

Richmond, IN 47374

Tel: 1-908-925-8000