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Customer Specification

PART NO. 78413

Construction

		Diameters (In)			
1) Component 1		20 X 1 COND			
a) Conductor		24 (19/36) AWG Tinned Copper		0.025	
b) Insulation		0.007" Wall, Nom. Modified Polyphenylene Ether-PE		0.039	
(1) Color Code		Alpha Wire Color Code E			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	8	VIOLET	15	WHITE/YELLOW
2	BROWN	9	SLATE	16	WHITE/GREEN
3	RED	10	WHITE	17	WHITE/BLUE
4	ORANGE	11	WHITE/BLACK	18	WHITE/VIOLET
5	YELLOW	12	WHITE/BROWN	19	WHITE/SLATE
6	GREEN	13	WHITE/RED	20	WHITE/BLACK/BROWN
7	BLUE	14	WHITE/ORANGE		
2) Cable Assembly		20 Components Cabled			
a) Twists:		4.0 Twists/foot (min)			
b) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.			
3) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing In			
b) Drain Wire		24 (7/32) AWG Tinned Copper			
4) Jacket		0.015" Wall, Nom., Modified Polyphenylene Ether-PE		0.242 (0.257 Max.)	
a) Color(s)		SLATE			
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N 78413 20C 24 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

1) UL	AWM/STYLE 21460	80°C / 300 V _{RMS}
	VW-1	
2) CSA International	C(RU) AWM I A/B FT1	80°C / 300 V _{RMS}
3) Other	Halogen-Free	
4) CE:	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.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-40 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	78 Lbs, Maximum
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Capacitance	30 pf/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	54 pf/ft @1 kHz, Nominal
4) Inductance	0.17 µH/ft, Nominal
5) Conductor DCR	24.3 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	15.9 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 12 x 3.5 Continuous length
b) 100 FT	12 x 4.5 x 3.5 Continuous length
c) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 78413

78413 , RoHS-Compliant Commencing With 7/22/2014 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 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) 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.

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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA

2/9/2017

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