

# **Customer Specification**

#### **PART NO. 78166**

#### **Construction**

						Diameters (In)
1) Compone	nt 1	6 X 1 PAIR				
		26 (19/38) A	WG Tinned	Copper		0.020
b) Insulation 0.007"		0.007" Wall,	all, Nom. Modified Polyphenylene Ether-PE			0.034
(1) Color Co	de	Alpha Wire	Color Code I	3		
Pair	Color		Pair	Color	Pair	Color
1	WHITE-BLAC	K	3	WHITE-RED	5	WHITE-YELLOW
2	WHITE-BROV	VN	4	WHITE-ORANGE	6	WHITE-GREEN
c) Pair		2/Cond Cab	led Togethe	r		
(1) Twists:		12.0 Twists/				
2) Cable Assembly 6 Compone		6 Compone	ents Cabled			
a) Twists: 4.8 Twists/1		4.8 Twists/fo	oot (min)			
b) Orientation: Comp		Component	components to be arranged from INSIDE LAYER to OUTSIDE LAYER			
c) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield: Alum/		Alum/Mylar	Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing In				
b) Drain Wire 26 (		26 (7/34) AV	26 (7/34) AWG Tinned Copper			
4) Jacket		0.015" Wall, Nom.,Modified Polyphenylene Ether-PE				0.206 (0.220 Max.)
a) Color(s) SLATE		SLATE				
b) Ripcord 1 End 8		1 End 810 D	d 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N 78166 6PR 26 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 <sub>RMS</sub>	
	VW-1		
2) CSA International	C(RU) AWM I A/B FT1	80°C / 300 V <sub>RMS</sub>	
3) Other	Halogen-Free		
	NFPA 79 - 2015 Compliant		
4) CE:	EU Low Voltage Directive 2014/35/EU		

### **Environmental**

1) CE: EU Directive	e 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 Regulat	tion (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	31 Lbs, Maximum		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	300 V <sub>RMS</sub>		
2) Mutual Capacitance	18.6 pF/ft @1 kHz, Nominal		
3) Ground Capacitance	33 pF/ft @1 kHz, Nominal		
4) Characteristic Impedance	88 Ω		
5) Inductance	0.18 μH/ft, Nominal		
6) Conductor DCR	38 Ω/1000ft @20°C, Nominal		
7) OA Shield DCR	20.8 Ω/1000ft @20°C, Nominal	20.8 Ω/1000ft @20°C, Nominal	

#### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	12 x 10.5 x 5 Continuous length	
b) 100 FT	6.5 x 4 x 2.5 Continuous length	
c) 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: 78166

78166, 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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 5/6/2024

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