

Request a Sample

# Customer Specification PART NO. 78172

#### Construction

				Diameters (In)		
1) Component 1		2 X 1 PAIR	2 X 1 PAIR			
a) Conductor		24 (19/36) AWG Ti	24 (19/36) AWG Tinned Copper		0.025	
b) Insulation		0.007" Wall, Nom. Ether-PE	0.007" Wall, Nom. Modified Polyphenylene Ether-PE		0.039	
(1) Color Code		Alpha Wire Color C	Alpha Wire Color Code B			
Pair	Color	Pair	Color	Pair	Color	
1	WHITE-BLACK	2	WHITE-BROWN			
c) Pair		2/Cond Cabled Tog	2/Cond Cabled Together			
(1) Twists:		12.0 Twists/foot (m	12.0 Twists/foot (min)			
2) Cable Assembly		2 Components Cab	2 Components Cabled			
a) Twists:		6.9 Twists/foot (mir	6.9 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) Shield:		Alum/Mylar Tape, 2	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		0.166 (0.176 Max.)		
a) Color(s)		SLATE	SLATE			
b) Ripcord		1 End 810 Denier N	1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N 78172 2PR 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**

Applicable opcomedicate				
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/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 2011and the amending Directive 2015/863/EU of 4 June 2015. 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	18.4 Lbs, Maximum		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	300 V <sub>RMS</sub>		
2) Mutual Capacitance	27 pF/ft @1 kHz, Nominal		
3) Ground Capacitance	49 pF/ft @1 kHz, Nominal		
4) Characteristic Impedance	57 Ω		
5) Inductance	0.17 μH/ft, Nominal		
6) Conductor DCR	24.5 Ω/1000ft @20°C, Nominal		
7) OA Shield DCR	15.9 Ω/1000ft @20°C, Nominal		

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 6 x 3.5 Continuous length
b) 100 FT	6.5 x 2 x 1.9 Continuous length
c) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

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

To Whom It May Concern:
Alpha Wire Part Number: 78172

78172, 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.

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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

Alpha Wire

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