

## Customer Specification

### PART NO. 74006

### Construction

						Diameter ("in")	
1) Component 1						4 x 1 PAIR	
a) Conductor						26 (19/38) AWG Bare Copper	0.020
b) Insulation						0.010" Wall, Nom. Polypropylene (PP)	0.040
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	WHITE/BLUE - BLUE	3	WHITE/GREEN - GREEN				
2	WHITE/ORANGE - ORANGE	4	WHITE/BROWN - BROWN				
c) Pair						2/Cond Cabled Together	
(1) Twists						Staggered Lays	
2) Cable Assembly						4 Components Cabled	
a) Twists						5.3 Twists/ft. min.	
3) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
a) Foil Direction						Foil Facing Out	
b) Braid						Tinned Copper, 80% Coverage (min.)	
4) Jacket						0.031" Wall, Nom., TPU (ZH)	0.252 (0.266 max.)
a) Color(s)						BLACK	
b) Jacket Separator						Nonwoven Polyester Tape, 25% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N 74006 4PR 26 AWG INDUSTRIAL ETHERNET SHIELDED ANSI/TIA-568-C.2 CAT5E VERIFIED CE ROHS (SEQ FOOTAGE) * = Factory Code	

### Applicable Specifications

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1) CSA International	FT2	
2) IEC	EN 60811-2-1 Oil Resistance	
	EN 60754-1 Acid Gas Generation	
3) Other	ANSI/TIA-568-C.2 Category 5e	
	ISO/IEC 11801 Category 5e Patch Cable	
	EN 50173-1	
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 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No exemptions are required for RoHS Compliance on this item. Refer to the <a href="#">RoHS Certificate of Compliance</a> for more detail.
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 <a href="#">REACH SVHC Declaration</a> .

## Properties

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Physical & Mechanical Properties																																									
1) Temperature Range	-40 to 80°C(static), -5 to 50°C (dynamic)																																								
2) Bend Radius	5X Cable Diameter (static), 10X Cable Diameter (dynamic)																																								
3) Pull Tension	18 lbs. max.																																								
4) Continuous Flex	2 million cycles																																								
5) Torsional Flex	1 million cycles																																								
Electrical Properties																																									
	<i>Engineering purposes only</i>																																								
1) Max. operating voltage UL	300 V <sub>RMS</sub>																																								
2) Dielectric strength cond. – cond. (2 sec.)	2.5kVdc																																								
3) D.C. resistance conductor	< 140 ω/km																																								
4) Resistance unbalance	< 2%																																								
5) D.C. insulation resistance	> 5000 Mω.km																																								
6) Mutual capacitance	< 56 nF/km																																								
7) Capacitance unbalance	< 1600 pF/km																																								
8) Velocity of propagation @ 4 - 100MHz	≥ 60%																																								
9) Skew @ 1 - 100 MHz	≤ 40 ns/100m																																								
10) Propagation delay @ 1 - 100 MHz	≤ 534 + 36/√f ns/100m																																								
11) Mean characteristic impedance (Zcm) @ 100 MHz	100 ± 15 ω																																								
12) Input impedance 4 - 100MHz	100 ± 15 ω																																								
<table border="1"> <thead> <tr> <th>Frequency(MHz)</th> <th>Max. Attenuation(dB/100m)</th> <th>Min. NEXT(dB)</th> <th>Min. PS-NEXT(dB)</th> <th>Min. ELFEXT(dB/100m)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3.2</td> <td>65</td> <td>62</td> <td>64</td> </tr> <tr> <td>4</td> <td>6.2</td> <td>56</td> <td>53</td> <td>52</td> </tr> <tr> <td>10</td> <td>9.5</td> <td>50</td> <td>47</td> <td>44</td> </tr> <tr> <td>16</td> <td>12.1</td> <td>47</td> <td>44</td> <td>40</td> </tr> <tr> <td>31.25</td> <td>17.9</td> <td>43</td> <td>40</td> <td>34</td> </tr> <tr> <td>62.5</td> <td>24.8</td> <td>38</td> <td>35</td> <td>28</td> </tr> <tr> <td>100</td> <td>32.0</td> <td>35</td> <td>32</td> <td>24</td> </tr> </tbody> </table>		Frequency(MHz)	Max. Attenuation(dB/100m)	Min. NEXT(dB)	Min. PS-NEXT(dB)	Min. ELFEXT(dB/100m)	1	3.2	65	62	64	4	6.2	56	53	52	10	9.5	50	47	44	16	12.1	47	44	40	31.25	17.9	43	40	34	62.5	24.8	38	35	28	100	32.0	35	32	24
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## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 500 FT	12 x 6 x 3.5 Continuous Length
	<i>Spool dimensions may vary slightly.</i>

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

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 74006

74006, RoHS-Compliant Commencing With 30/09/2013 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 Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies compliance with 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 restrictions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

## Substance

Lead  
Mercury  
Cadmium  
Hexavalent Chromium  
Polybrominated Biphenyls (PBB)  
Polybrominated Diphenyl Ethers (PBDE),  
Including Deca-BDE  
Bis(2-ethylhexyl) phthalate (DEHP)  
Butyl benzyl phthalate (BBP)  
Dibutyl phthalate (DBP)  
Diisobutyl phthalate (DIBP)

## Maximum Control Value

0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
0.01% by weight (100 ppm)  
0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
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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 issuance. This document is intended to provide guidance 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 for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Alpha Wire is an Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 31/03/2025

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