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# Customer Specification

## PART NO. 74007

### Construction

		Diameters (In)			
1) Component 1		1 X 4 COND			
a) Conductor		22 (19/34) AWG Tinned Copper		0.032	
b) Insulation		0.015" Wall, Nom. Polyolefin		0.062	
(1) Color(s)					
Cond	Color	Cond	Color	Cond	Color
1	WHITE	3	YELLOW		
2	BLUE	4	ORANGE		
c) Cabling		4 COND Cabled			
(1) Twists:		6.0 Twists/foot (min)			
d) Jacket		0.009" Wall, Nom., LSZH		0.169	
(1) Color(s)		WHITE			
2) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing Out			
b) Braid		Tinned Copper, 80% Coverage, Min.			
3) Jacket		0.035" Wall, Nom., TPU (ZH)		0.264 (0.279 Max.)	
a) Color(s)		BLACK			
b) Print		ALPHA WIRE-* P/N 74007 4C 22 AWG INDUSTRIAL ETHERNET PROFINET TYPE C SHIELDED CAT5E CE ROHS (SEQ FOOTAGE) * = Factory Code			

### Applicable Specifications

1) IEC	EN 60811-2-1 Oil Resistance	
	EN 60228 Conductors, Class 5	
	EN 60332-1 Flame Behavior	
	EN 60332-3 Flame Behavior	
	EN 60754-1 Acid Gas Generation	
	EN 60754-2 Acid Gas Generation	
	EN 61034-2 Smoke Emission	
2) Other	ISO/IEC 11801 Category 5e Patch Cable	
3) 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. 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 90°C																																
2) Bend Radius	5X Cable Diameter(static), 10X Cable Diameter(dynamic)																																
3) Pull Tension	27 Lbs, Maximum																																
Electrical Properties (For Engineering purposes only)																																	
1) Max. operating voltage UL	300 V <sub>RMS</sub>																																
2) Test voltage wire-wire/wire-screen	2.5kVdc																																
3) Maximum conductor DC-resistance @ 20°C	57.1 Ω/km																																
4) Transfer impedance @ 10MHz	< 10 mOhm/m																																
5) Nom. velocity of propagation	66 %																																
6) Delay	< 5.3 ns/m																																
7) Impedance @ 1 – 100 MHz	100 +/- 15 Ω																																
8) ISO/IEC 11801 ed. 2.0, Cat.5 as a minimum.																																	
	<table border="1"> <thead> <tr> <th>Frequency(MHz)</th> <th>Max. Attenuation(dB/100m)</th> <th>Min. NEXT(dB)</th> <th>Min. FEXT(dB/100m)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.1</td> <td>65.3</td> <td>64</td> </tr> <tr> <td>4</td> <td>4.1</td> <td>56.3</td> <td>52</td> </tr> <tr> <td>10</td> <td>6.5</td> <td>50</td> <td>43.8</td> </tr> <tr> <td>16</td> <td>8.3</td> <td>47</td> <td>40</td> </tr> <tr> <td>31.25</td> <td>11.7</td> <td>42.9</td> <td>33.9</td> </tr> <tr> <td>62.5</td> <td>17.0</td> <td>38.4</td> <td>28</td> </tr> <tr> <td>100</td> <td>22.0</td> <td>35.3</td> <td>24</td> </tr> </tbody> </table>	Frequency(MHz)	Max. Attenuation(dB/100m)	Min. NEXT(dB)	Min. FEXT(dB/100m)	1	2.1	65.3	64	4	4.1	56.3	52	10	6.5	50	43.8	16	8.3	47	40	31.25	11.7	42.9	33.9	62.5	17.0	38.4	28	100	22.0	35.3	24
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## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 500 FT	12 x 6 x 3.5 Continuous length
	<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: 74007

74007 , RoHS-Compliant Commencing With 9/30/2013 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 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

8/18/2018

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