

Customer Specification

PART NO. 74007

Construction

						Diameter ("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/ft. 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

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. max.																																	
Electrical Properties			Engineering purposes only																																	
1) Max. operating voltage UL			300 V _{RMS}																																	
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><tr><th>Frequency(MHz)</th><th>Max. Attenuation(dB/100m)</th><th>Min. NEXT(dB)</th><th>Min. FEXT(dB/100m)</th></tr><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></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

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>

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EU/UK/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, 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

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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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 11/4/2025

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