

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

--

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. Refer to the RoHS Certificate of Compliance 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 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. max.																																
Electrical Properties																																	
<i>Engineering purposes only</i>																																	
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 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
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																														

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

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

ALPHA WIRE - CONFIDENTIAL AND PROPRIETARY Notice to persons receiving this document and/or technical information. This document is confidential and is the exclusive property of ALPHA WIRE, and is merely on loan and subject to recall by ALPHA WIRE at any time. By taking possession of this document, the recipient acknowledges and agrees that this document cannot be used in any manner adverse to the interests of ALPHA WIRE, and that no portion of this document may be copied or otherwise reproduced without the prior written consent of ALPHA WIRE. In the case of conflicting contractual provisions, this notice shall govern the status of this document. ©2024 ALPHA WIRE - all rights reserved.



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)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)

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 its release. The information provided is designed only as a general guide 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 not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 7/28/2024

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-908-925-8000