

Customer Specification

PART NO. 76031

Construction

						Diameters (In)	
1) Component 1						4 X 1 PAIR	
a) Conductor						24 (7/32) AWG Tinned Copper	0.024
b) Insulation						0.011" Wall, Nom. Polyethylene, High Density	0.046
(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:						18 Twists/foot (approx.)	
2) Cable Assembly						4 Components Cabled	
a) Twists:						2.0 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Foam Polypropylene Tape, 25% Overlap, Min.	
3) Shield:						Alum/Mylar Tape, 25% Overlap, Min.	
a) Foil Direction						Foil Facing Out	
b) Braid						Tinned Copper, 75% Coverage, Min.	
4) Jacket						0.035" Wall, Nom., TPE	0.300+/- 0.015
a) Color(s)						TEAL	
b) Print						ALPHA WIRE-A3 P/N 76031 HIGH FLEX CAT5E SF/UTP 4P 24AWG E163860 C(UL)US CMX-OUTDOOR - CMR 75C SUN RES OR AWM 2463 80C 600V OIL RES II CE ROHS (SEQ FOOTAGE) [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]	

Applicable Specifications

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Physical & Mechanical Properties																																					
1) Temperature Range			-40 to 80°C																																		
2) Bend Radius			4X Cable Diameter(static), 14X Cable Diameter(dynamic)																																		
3) Pull Tension			32 Lbs, Maximum																																		
4) Sunlight Resistance			Yes																																		
5) Cable Weight			46 Lbs/1000Ft																																		
Electrical Properties			(For Engineering purposes only)																																		
1) Voltage Rating			600 V _{RMS}																																		
2) Characteristic Impedance			100 ω +/- 15																																		
3) Capacitance Unbalance			330 pf/100m @1 kHz, Maximum																																		
4) Velocity of Propagation			66 %																																		
5) Conductor DCR			14 ω/100m @20°C, Maximum																																		
6) DCR Unbalance			5 % Maximum																																		
7) Skew			45 ns/100m Maximum																																		
<table><tr><th>Frequency [MHz]</th><th>Max. Insertion Loss [dB]</th><th>Min. NEXT [dB]</th></tr><tr><td>1</td><td>2.4</td><td>65.3</td></tr><tr><td>4</td><td>4.9</td><td>56.3</td></tr><tr><td>8</td><td>6.9</td><td>51.8</td></tr><tr><td>10</td><td>7.8</td><td>50.3</td></tr><tr><td>16</td><td>9.9</td><td>47.2</td></tr><tr><td>20</td><td>11.1</td><td>45.8</td></tr><tr><td>25</td><td>12.5</td><td>44.3</td></tr><tr><td>31.25</td><td>14.1</td><td>42.9</td></tr><tr><td>62.5</td><td>20.4</td><td>38.4</td></tr><tr><td>100</td><td>26.4</td><td>35.3</td></tr></table>			Frequency [MHz]	Max. Insertion Loss [dB]	Min. NEXT [dB]	1	2.4	65.3	4	4.9	56.3	8	6.9	51.8	10	7.8	50.3	16	9.9	47.2	20	11.1	45.8	25	12.5	44.3	31.25	14.1	42.9	62.5	20.4	38.4	100	26.4	35.3	Mir	
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Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	16 x 11 x 8 Continuous length
b) 100 FT	12 x 4.5 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: 76031

76031, RoHS-Compliant Commencing With 1/1/0001 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	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)

Maximum Control Value

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 8/30/2025

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