

Customer Specification

PART NO. 74003

Construction

| | | | | | | Diameter ("in") | |
|----------------|-------------------|------|--------------------------|--------------------------------------|---|-------------------------------------|--|
| 1) Component 1 | | | | 2 x 1 PAIR | | | |
| a) Conductor | | | | 26 (7/34) AWG Bare Copper | 0.019 | | |
| b) Insulation | | | | | 0.010" Wall, Nom. Polypropylene (PP) | 0.039 | |
| (1) Color(s) | | | | | | | |
| Pair | Color | Pair | Color | Pair | Color | | |
| 1 | WHITE/BLUE - BLUE | 2 | WHITE/ORANGE - ORANGE | | | | |
| c) Pa | ir | | | | | 2/Cond Cabled Together | |
| (1) T | wists | | | | | Staggered Lays | |
| 2) Ca | able Assembly | | | | | 2 Components Cabled | |
| a) Tv | vists | | | | | 6.9 Twists/ft. (min.) | |
| c) Core Wrap | | | | Clear Mylar Tape, 25% Overlap (min.) | | | |
| 3) Sh | nield | | | | | Alum/Mylar Tape, 25% Overlap (min.) | |
| a) Fo | oil Direction | | | | | Foil Facing Out | |
| b) Braid | | | | | Tinned Copper,80% Coverage (min.) | | |
| 4) Jacket | | | | | 0.031" Wall, Nom., PVC | 0.236 (0.249 max.) | |
| a) Color(s) | | | | BLACK | | | |
| b) Ripcord | | | | | | 1 End 810 Denier Nylon | |
| c) Print | | | | | ALPHA WIRE-* P/N 74003 2PR 26 AWG INDUSTRIAL ETHERNET SHIELDED ANSI/TIA-568-C.2 CAT5E VERIFIED CE ROHS (SEQ FOOTAGE) * = Factory Code | | |

Applicable Specifications

| 1) IEC | EN 60811-2-1 Oil Resistance | |
|----------|---------------------------------------|--|
| | EN 60332-1 Flame Behavior | |
| 2) Other | ISO/IEC 11801 Category 5e Patch Cable | |
| | ISO/IEC 24702 | |
| | EN 50173-1 | |
| | ANSI/TIA-568-C.2 Category 5e | |
| 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 2011and 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 <u>REACH SVHC Declaration</u> . |

| Properties | | | |
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| | Physical & Mecha | nical Prop | erties | | | |
|----------------------|------------------------------|------------------|-------------------------|----------------|---|--|
| 1) Temperature Range | | | | | -40 to 80°C | |
| 2) Bend Radius | | | | | 5X Cable Diameter (static), 10X Cable Diameter (dynamic | |
| 3) Pull Tension | | | | | 9 lbs. max. | |
| | Electrical P | roperties | | | Engineering purposes only | |
| 1) Max. operating | g voltage UL | | | | 300 V _{RMS} | |
| 2) Dielectric strer | ngth cond. – cond. (2 sec | c.) | | | 2.5kVdc | |
| 3) D.C. resistance | conductor | | | | < 140 ω/km | |
| 4) Resistance unb | palance | | | | < 2% | |
| 5) D.C. insulation | resistance | | | | > 5000 Mω.km | |
| 6) Mutual capacit | tance | | | | < 56 nF/km | |
| 7) Capacitance ui | nbalance | | | | < 1600 pF/km | |
| 8) Velocity of pro | pagation @ 4 – 100 MH | lz | | | ≥ 60% | |
| 9) Skew @ 1 – 10 | 0 MHz | | | | ≤ 40 ns/100m | |
| 10) Propagation | delay @ 1 – 100 MHz | | | | ≤ 534 + 36/√f ns/100m | |
| 11) Mean charact | teristic impedance (Zcm) |) @ 100 MI | Hz | | 100 ± 15 ω | |
| 12) Input impeda | nce 1-100MHz | | | | 100 ± 15 ω | |
| Frequency(MHz) | Max. Attenuation(dB/100m) | Min. NEXT(dB) | Min. ELFEXT(dB/100m) | Min. RL(dB) | | |
| 0.772 | - | 67 | - | 19.4 | | |
| 1 | 3.2 | 65.3 | 63.8 | 20 | | |
| 4 | 6.0 | 56.3 | 51.8 | 23 | | |
| 10 | 9.5 | 50.3 | 43.8 | 25 | | |
| 16 | 12.1 | 47.2 | 39.7 | 25 | | |
| 20 | 13.6 | 45.8 | 37.8 | 25 | | |
| 25 | 15.3 | 44.3 | 35.8 | 24.3 | | |
| 31.25 | 17.1 | 42.9 | 33.9 | 23.6 | | |
| 62.5 | 24.8 | 38.3 | 27.9 | 21.5 | | |
| 100 | 32 | 35.3 | 23.8 | 20.1 | | |

Other

| Packaging | Flange x Traverse x Barrel (inches) | |
|-----------|-------------------------------------|--|
| a) 500 FT | 12 x 6 x 3.5 Continuous Length | |
| | Spool dimensions may vary slightly. | |
| | | |

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 74003

74003, 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 | 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 3/31/2025

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