

ALPHA WIRE

CUSTOMER PRODUCT SPECIFICATION

Part Number: 76022
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Issue: 4
Issue Date: 1/16/2013
Effective Date: 1/25/2013

A. Construction

Diameters (In)

- 1) Component 1 4 X 1 PAIR
 - a) Conductor 24 (7/32) AWG BC
 - b) Insulation 0.014" Wall, Nom. Polypropylene (PP)
- (1) Color(s)

0.024
 0.051

Pair	Color	Pair	Color	Pair	Color
1	BLU - WHT/BLU	2	ORG - WHT/ORG	3	GRN - WHT/GRN
4	BRN - WHT/BRN				

- c) Pair 2/Cond Cabled Together
 - (1) Lay Length: Various Lay
- 2) Cable Assembly 4 Components Bunch Cabled
 - a) Twists: 3.0 Twists/foot
 - b) Core Wrap: Clear Mylar Tape, 25% Overlap, Min.
- 3) Shield: A/P/A Tape, 25% Overlap, Min.
 - a) Drain Wire 26 (SOLID) AWG TC
 - b) Braid TC, 70% Coverage, Min.
- 4) Jacket 0.035 Wall, Nom. TPE 0.325 Avg. (0.345 Max.)
 - a) Color(s) BLACK
 - b) Ripcord Nylon
 - c) Print ALPHA WIRE-* P/N 76022 4PR 24 AWG
 XTRA-GUARD(R) INDUSTRIAL ETHERNET (UL) C(UL) TYPE
 CMR 75C FT4 ANSI/TIA-568-C.2 CAT5E VERIFIED
 ROHS CE (SEQUENTIAL FOOTAGE MARKING)
 * = Factory Code

B. Applicable Specifications

- 1) UL CMR 75°C
 FT4
- 2) CSA International C(UL) TYPE CMR 75°C
 FT4
- 3) CE: EU Low Voltage Directive 2006/95/EC

C. Environmental Compliance

- 1) CE: EU Directive 2011/65/EU(RoHS2):
 All materials used in the manufacture and packaging of this part must meet the requirements of European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment.

D. Physical & Mechanical Properties

- 1) Temperature Range -50 to 105°C
- 2) Bend Radius 8X Cable Diameter
- 3) Pull Tension 37.0 Lbs, Maximum
- 4) Sunlight Resistance Yes

E. Electrical Properties

- (For Engineering purposes only)
- 1) Voltage Rating 300 V_{RMS}
 - 2) Characteristic Impedance 100 Ω +/- 15
 - 3) Mutual Capacitance 5.6 nF/100m Max
 - 4) Velocity of Propagation 70 % Nom.
 - 5) Conductor DCR 9.38 Ω/100m Max
 - 6) Skew 45 ns/100m Max
 - 7) Pair to Ground Unbalance 330 pF/100m Max
 - 8) DC Unbalance of a Pair 5% Max

This specification outlines the requirements for the product(s) described herein. Deviations from this specification are not permitted without the written authorization of the Alpha Wire Engineering Department. All finished products will be inspected to the specification and noncompliance or unauthorized deviations will be cause for rejection and return of product.

If vendor certifying agency requirements are in conflict with this document, **it is incumbent upon the vendor to notify the Alpha Wire Engineering Department** and mark up differences on this document and submit them for **review and approval prior to any production**. Be advised that **product legend information and product legend information and product label information must be in concert**; both are the responsibility of the vendor.

It is the **responsibility of the vendor** to insure that this product meets the requirements of subservient certifying agency documents even though they are not directly noted herein.

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- 9) Insertion Loss
- 2.4 (Max dB/100m) @ 1 MHz
 - 4.9 (Max dB/100m) @ 4 MHz
 - 6.9 (Max dB/100m) @ 8 MHz
 - 7.8 (Max dB/100m) @ 10 MHz
 - 9.9 (Max dB/100m) @ 16 MHz
 - 11.1 (Max dB/100m) @ 20 MHz
 - 12.5 (Max dB/100m) @ 25 MHz
 - 14.1 (Max dB/100m) @ 31.25 MHz
 - 20.4 (Max dB/100m) @ 62.5 MHz
 - 26.4 (Max dB/100m) @ 100 MHz

F. Other

- 1) Packaging
- a) 1000 FT
 - b) 500 FT
- Flange x Traverse x Barrel (inches)
- 18 x 10.5 x 8 Continuous length
 - 15.25 x 9 x 8 Continuous length
- [Spool dimensions may vary slightly]*

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