

Customer Specification

PART NO. 74002

Construction

				Diameters (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) Pair		2/Cond Cabled Together			
(1) Twists:		Staggered Lays			
2) Cable Assembly		2 Components Cabled			
a) Twists:		6.9 Twists/foot (min)			
c) Core Wrap		Clear Mylar Tape, 25% Overlap, Min.			
3) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing Out			
b) Braid		Tinned Copper,80% Coverage, Min.			
4) Jacket		0.031" Wall, Nom., TPU (ZH)		0.236 (0.249 Max.)	
a) Color(s)		BLACK			
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N 74002 2PR 26 AWG INDUSTRIAL ETHERNET SHIELDED ANSI/TIA-568-C.2 CAT5E VERIFIED CE ROHS (SEQ FOOTAGE) * = Factory Code			

Applicable Specifications

Physical & Mechanical Properties

1) Temperature Range	-40 to 80°C
2) Bend Radius	5X Cable Diameter(static), 10X Cable Diameter(dynamic)
3) Pull Tension	9 Lbs, Maximum

Electrical Properties

(For Engineering purposes only)

1) Max. operating voltage UL	300 V _{RMS}
2) Dielectric strength cond. – cond. (2 sec.)	2.5kVdc
3) D.C. resistance conductor	< 140 Ω/km
4) Resistance unbalance	< 2%
5) D.C. insulation resistance	> 5000 MΩ.km
6) Mutual capacitance	< 56 nF/km
7) Capacitance unbalance	< 1600 pF/km
8) Velocity of propagation @ 4 – 100 MHz	≥ 60%
9) Skew @ 1 – 100 MHz	≤ 40 ns/100m
10) Propagation delay @ 1 – 100 MHz	≤ 534 + 36/√f ns/100m
11) Mean characteristic impedance (Zcm) @ 100 MHz	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]

www.alphawire.com

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 74002

74002, 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 4/26/2024

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