2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-800-52 ALPHA
Web: www.alphawire.com

Customer Specification

PART NO. 74002

Construction

	Diameter ("in")	
1) Component 1	2 Xx1 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/ft. (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

1) UL	AWM/STYLE 20549	80°C / 300 V_{RMS}
2) CSA International	FT2	
3) IEC	EN 60811-2-1 Oil Resistance	
	EN 60754-2 Acid Gas Generation	
4) Other	ISO/IEC 11801 Category 5e Patch Cable	
	ISO/IEC 24702	
	EN 50173-1	
	ANSI/TIA-568-C.2 Category 5e	
5) 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 REACH SVHC Declaration.

Properties

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. max.

Electrical Properties	*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

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.

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	**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)

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 9/30/2025

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