

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

# Customer Specification PART NO. 75031

### Construction

				Diameters (In)	
1) Component 1		2 X 1 PAIR			
a) Conductor		24 (7/32) AWG Tinned Copper		0.024	
b) Insulation		0.012" Wall, Nom. Polyethylene, High Density		0.048	
(1) Color(s)					
Pair	Color	Pair	Color	Pair	Color
1	WHITE/ORANGE - ORANGE	2	WHITE/GREEN - GREEN		
c) Pair		2/Cond Cabled Together			
(1) Twists:		16.0 Twists/foot (approx.)			
2) Cable Assembly		2 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		0.032" Wall, Nom.,TPE		0.260+/- 0.021	
a) Color(s)		TEAL			
b) Print		ALPHA WIRE-A3 P/N 75031 HIGH FLEX CAT5E SF/UTP 2P 24AWG E163860 C(UL)US CMX-OUTDOOR - CM 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.]			SUN RES

# **Applicable Specifications**

1) UL	СМ	75°C	
	CMX-Outdoor	75°C	
	SUN RES		
	AWM/STYLE 2463	80°C / 600 V <sub>RMS</sub>	
2) Other	ISO/IEC 11801 Category 5		
	ANSI/TIA-568.2-D Category 5e		
	OIL RES II		
	ODVA EtherNet/IP (TM) Compliant Category 5e		
3) CE:	EU Low Voltage Directive 2014/35/EU		

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):				
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No Exemptions are required for RoHS Compliance on this item.			
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.			

# Properties

Physical & Mechanical Properties	
1) Temperature Range	-40 to 80°C
2) Bend Radius	8X Cable Diameter(static), 16X Cable Diameter(dynamic)
3) Pull Tension	17 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Cable Weight	34 Lbs/1000Ft
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600 V <sub>RMS</sub>

2) Characteristic Impedance	100 Ω +/- 15	
3) Capacitance Unbalance	330 pf/100m @1 kHz, Maximum	
4) Velocity of Propagation	68 %	
5) Conductor DCR	14 Ω/100m @20°C, Maximum	
6) DCR Unbalance	5 % Maximum	
7) Skew	45 ns/100m Maximum	

Loss [dB]	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF [dB]	Min. PSACRF [dB]	Min. Return Loss [dB]
2.4	65.3	62.3	63.8	60.8	20.0
4.9	56.3	53.3	51.8	48.8	23.0
6.9	51.8	48.8	45.7	42.7	24.5
7.8	50.3	47.3	43.8	40.8	25.0
9.9	47.2	44.2	39.7	36.7	25.0
11.1	45.8	42.8	37.8	34.8	25.0
12.5	44.3	41.3	35.8	32.8	24.2
14.1	42.9	39.9	33.9	30.9	23.3
20.4	38.4	35.4	27.9	24.9	20.7
26.4	35.3	32.3	23.8	20.8	19.0
	[dB] 2.4 4.9 6.9 7.8 9.9 11.1 12.5 14.1 20.4	[dB][dB]2.465.34.956.36.951.87.850.39.947.211.145.812.544.314.142.920.438.4	[dB][dB][dB]2.465.362.34.956.353.36.951.848.87.850.347.39.947.244.211.145.842.812.544.341.314.142.939.920.438.435.4	[dB][dB][dB][dB]2.465.362.363.84.956.353.351.86.951.848.845.77.850.347.343.89.947.244.239.711.145.842.837.812.544.341.335.814.142.939.933.920.438.435.427.9	[dB][dB][dB][dB][dB]2.465.362.363.860.84.956.353.351.848.86.951.848.845.742.77.850.347.343.840.89.947.244.239.736.711.145.842.837.834.812.544.341.335.832.814.142.939.933.930.920.438.435.427.924.9

#### 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
	[Spool dimensions may vary slightly]

#### www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207

Tel: 1-800-52 ALPHA (25742)

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

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/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 75031

75031, RoHS-Compliant Commencing With 1/1/0001 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above 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 XYZ) 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.

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 & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 7/14/2020