

## Customer Specification

### PART NO. M38940

### Construction

						Diameters (In)	
1) Component 1						40 X 1 COND	
a) Conductor						24 (7/32) AWG Tinned Copper	0.024
b) Insulation						0.010" Wall, Nom. PVC, Semi Rigid	0.044
(1) Color Code						Alpha Wire Color Code E	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	15	WHITE/YEL	29	WHITE/BROWN		
2	BROWN	16	WHITE/GRN	30	WHITE/BROWN		
3	RED	17	WHITE/BLU	31	WHITE/BROWN		
4	ORANGE	18	WHITE/VIO	32	WHITE/BROWN		
5	YELLOW	19	WHITE/SLT	33	WHITE/BROWN		
6	GREEN	20	WHITE/BLU	34	WHITE/BROWN		
7	BLUE	21	WHITE/BLU	35	WHITE/RED		
8	VIOLET	22	WHITE/BLU	36	WHITE/RED		
9	SLATE	23	WHITE/BLU	37	WHITE/RED		
10	WHITE	24	WHITE/BLU	38	WHITE/RED		
11	WHITE/BLU	25	WHITE/BLU	39	WHITE/RED		
12	WHITE/BRN	26	WHITE/BLU	40	WHITE/RED		
13	WHITE/RED	27	WHITE/BLU				
14	WHITE/ORN	28	WHITE/BRN				
2) Cable Assembly						40 Components Cabled	
a) Twists:						2.5 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Clear Mylar Tape, 25% Overlap, Min.	
3) Jacket						0.032" Wall, Nom.,PVC	0.389 (0.412 Max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N M38940 40C 24 AWG EXXXXXXX 75C CMG(UL) C(UL) OR AWM STYLE 2464 CE ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]	

## Applicable Specifications

1) UL	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	CMG	75°C
2) CSA International	C(UL) TYPE CMG	75°C
	FT4	
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.
3) California Proposition 65:	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	141 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	21.2 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.19 µH/ft, Nominal
4) Conductor DCR	26 Ω/1000ft @20°C, Nominal

## Other

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Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 14.25 x 8 Continuous length
b) 500 FT	18 x 9 x 8 Continuous length
c) 100 FT	12 x 5.94 x 5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

[www.alphawire.com](http://www.alphawire.com)

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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.

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## EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M38940

M38940, RoHS-Compliant Commencing With 01/07/2005 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 Union (2011/65/EU), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitions and **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control"

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 issuance. This document is intended to provide guidance 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 provide a warranty or any other representation. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

A handwritten signature in blue ink, appearing to read 'QBW', with a long horizontal line extending to the right.

Dave Watson, Director of Engineering & QA 15/09/2025

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