

## **Customer Specification**

#### **PART NO. M38950**

#### Construction

						Diameters (In)	
1) Component 1			50 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	Co	ond Color	
1	BLACK	18		WHITE/VIOLET	35	WHITE/RED/ORANGE	
2	BROWN	19		WHITE/SLATE	36	WHITE/RED/YELLOW	
3	RED	20		WHITE/BLACK/BROWN	37	WHITE/RED/GREEN	
4	ORANGE	21		WHITE/BLACK/RED	38	WHITE/RED/BLUE	
5	YELLOW	22		WHITE/BLACK/ORANGE	39	WHITE/RED/VIOLET	
6	GREEN	23		WHITE/BLACK/YELLOW	40	WHITE/RED/SLATE	
7	BLUE	24		WHITE/BLACK/GREEN	41	WHITE/ORANGE/YELLOW	
8	VIOLET	25		WHITE/BLACK/BLUE	42	WHITE/ORANGE/GREEN	
9	SLATE	26		WHITE/BLACK/VIOLET	43	WHITE/ORANGE/BLUE	
10	WHITE	27		WHITE/BLACK/SLATE	44	WHITE/ORANGE/VIOLET	
11	WHITE/BLACK	28		WHITE/BROWN/RED	45	WHITE/ORANGE/SLATE	
12	WHITE/BROWN	29		WHITE/BROWN/ORANGE	46	WHITE/YELLOW/GREEN	
13	WHITE/RED	30		WHITE/BROWN/YELLOW	47	WHITE/YELLOW/BLUE	
14	WHITE/ORANGE	31		WHITE/BROWN/GREEN	48	WHITE/YELLOW/VIOLET	
15	WHITE/YELLOW	32		WHITE/BROWN/BLUE	49	WHITE/YELLOW/SLATE	
16	WHITE/GREEN	33		WHITE/BROWN/VIOLET	50	WHITE/GREEN/BLUE	
17	WHITE/BLUE	34		WHITE/BROWN/SLATE			
2) Cable Assembly			50 Components Cabled				
a) Twists:			2.3 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			0.426 (0.451 Max.)	
a) Color(s)			SLATE				
b) Print			ALPHA WIRE-* P/N M38950 50C 24 AWG EXXXXXX 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 2011/65/8	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	176 Lbs, Maximum		
<b>Electrical Properties</b>	(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

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	24 x 14 x 12 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)		
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

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# **EU/UK/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: M38950

M38950, RoHS-Compliant Commencing With 7/1/2005 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 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 5/2/2024

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