

# Customer Specification

## PART NO. M4638

### Construction

						Diameters (In)	
1) Component 1						8 X 1 COND	
a) Conductor						22 (7/30) AWG Tinned Copper	0.030
b) Insulation						0.010" Wall, Nom. PVC, Semi Rigid	0.050
(1) Color Code						Alpha Wire Color Code E	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	4	ORANGE	7	BLUE		
2	BROWN	5	YELLOW	8	VIOLET		
3	RED	6	GREEN				
2) Cable Assembly						8 Components Cabled	
a) Twists:						5.3 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) Shield:						Alum/Mylar Tape, 25% Overlap, Min.	
a) Foil Direction						Foil Facing In	
b) Drain Wire						22 (7/30) AWG Tinned Copper	
4) Jacket						0.032" Wall, Nom.,PVC	0.237 (0.250 Max.)
a) Color(s)						Slate, Black	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N M4638 8C 22 AWG EXXXXXX SHIELDED 75C CMG (UL) C(UL) OR AWM 2464 CE ROHS * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	

### Applicable Specifications

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1) UL	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	CMG	75°C
2) CSA International	FT4	
	C(UL) TYPE CMG	75°C
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

<b>Physical &amp; Mechanical Properties</b>	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	49 Lbs, Maximum
<b>Electrical Properties</b>	
(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	35 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	63 pF/ft @1 kHz, Nominal
4) Inductance	0.18 μH/ft, Nominal
5) Conductor DCR	16.4 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	11.8 Ω/1000ft @20°C, Nominal

## Other

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<b>Packaging</b>	<b>Flange x Traverse x Barrel (inches)</b>
a) 1000 FT	13.5 x 10 x 4 Continuous length
b) 500 FT	12 x 5.94 x 5 Continuous length
c) 100 FT	10.5 x 5 x 3.5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) Certain color and put-up combination are for Special order only. Minimum order quantity may apply.	

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

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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2200 US Highway 27 South  
 Richmond, IN 47374  
 Tel: 1-800-52 ALPHA  
 Web: [www.alphawire.com](http://www.alphawire.com)

# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M4638

M4638, RoHS-Compliant Commencing With 11/1/2004 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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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 6/7/2026

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