

## **Customer Specification**

#### **PART NO. M4706**

#### **Construction**

						Diameters (In)	
1) Component 1						30 X 1 COND	
a) Conductor						18 (16/30) AWG Tinned Copper	0.047
b) Insulation						0.016" Wall, Nom. PVC	0.079
(1) Col	or Code					Alpha Wire Color Code D	J
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	11	PINK	21	WHITE/BR(		
2	RED	12	TAN	22	WHITE/OR		
3	WHITE	13	RED/GREEN	23	WHITE/SLA		
4	GREEN	14	RED/YELLC	24	WHITE/VIO		
5	ORANGE	15	RED/BLACk	25	WHITE/BLA		
6	BLUE	16	WHITE/BLA	26	WHITE/BLA		
7	BROWN	17	WHITE/REC	27	WHITE/BLA		
8	YELLOW	18	WHITE/GRI	28	WHITE/BLA		
9	VIOLET	19	WHITE/YEL	29	WHITE/BLA		
10	SLATE	20	WHITE/BLL	30	WHITE/BLA		
2) Cabl	e Assembly	/				30 Components Cabled	
a) Twis	ts:					1.6 Twists/foot (min)	
b) Orientation:					Components to be arranged from INSIDE LAYER to OUTSIDE LAYER		
c) Core Wrap					Clear Mylar Tape, 20% Overlap, Min.		
3) Shie	ld:					Alum/Mylar Tape, 20% Overlap, Min.	
a) Foil	Direction					Foil Facing In	
b) Drai	n Wire					18 (16/30) AWG Tinned Copper	
4) Jack	et					0.053" Wall, Nom.,PVC	0.620 (0.645 Max.)
a) Color(s)						SLATE	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N M4706 30C 18 AWG EXXXXXX SHIELDED 75C CMG (UL) C(UL) OR AWM 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	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**

Physical & Mechanical Properties		
1) Temperature Range	-20 to 80°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	390 Lbs, Maximum	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>	
2) Capacitance	52 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	94 pF/ft @1 kHz, Nominal	
4) Inductance	0.18 μH/ft, Nominal	
5) Conductor DCR	7.1 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	5 Ω/1000ft @20°C, Nominal	

## Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	30 x 14 x 12 Continuous length	
b) 500 FT	24 x 14 x 12 Continuous length	
c) 100 FT	18 x 9 x 8 Continuous length	
d) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	
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#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: M4706

M4706, 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	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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 3/31/2025

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