

# **Customer Specification**

### **PART NO. M4644**

#### **Construction**

					Diameters (In)	
1) Compone	ent 1	20 X 1 CC	20 X 1 COND			
a) Conducto	r	22 (7/30)	AWG Tinned Copper		0.030	
b) Insulatior	l	0.010" W	all, Nom. PVC, Semi Rigid		0.050	
(1) Color Co	de	Alpha Wi	Alpha Wire Color Code E			
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	8	VIOLET	15	WHITE/YELLOW	
2	BROWN	9	SLATE	16	WHITE/GREEN	
3	RED	10	WHITE	17	WHITE/BLUE	
4	ORANGE	11	WHITE/BLACK	18	WHITE/VIOLET	
5	YELLOW	12	WHITE/BROWN	19	WHITE/SLATE	
6	GREEN	13	WHITE/RED	20	WHITE/BLACK/BROWN	
7	BLUE	14	WHITE/ORANGE			
2) Cable Ass	embly	20 Comp	onents Cabled			
a) Twists:		3.2 Twists	/foot (min)			
b) Orientation:		Compone OUTSIDE	ents to be arranged from INS LAYER			
c) Core Wrap		Clear Myl	ar Tape, 20% Overlap, Min.			
3) Shield:		Alum/My	lar Tape, 20% Overlap, Min.			
a) Foil Direction		Foil Facin	g In			
b) Drain Wire		22 (7/30)	22 (7/30) AWG Tinned Copper			
4) Jacket		0.032" W	all, Nom.,PVC	0.333 (0.351 Max.)		
a) Color(s)		SLATE	SLATE			
b) Ripcord		1 End 810	1 End 810 Denier Nylon			
c) Print		EXXXXXX AWM 246 * = Facto	ALPHA WIRE-* P/N M4644 20C 22 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,	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 Reproducti Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for information.			

## **Properties**

Physical & Mechanical Properties			
1) Temperature Range	-20 to 80°C		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	115 Lbs, Maximum		
Electrical Properties	(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	16.5 Ω/1000ft @20°C, Nominal		
6) OA Shield DCR	Shield DCR 10.4 Ω/1000ft @20°C, Nominal		

#### Other

	Other Control of the					
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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	13.5 x 10 x 4 Continuous length		
c) 100 FT	12 x 5.94 x 5 Continuous length		
d) Bulk(Made-to-order)			
	[Spool dimensions may vary slightly]		
	[LSPOOL GRITICHS THAY YORY SIGNICY]		

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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

To Whom It May Concern:

Alpha Wire Part Number: M4644

M4644, 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 "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 4/28/2024

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