

# **Customer Specification**

#### PART NO. XM1822K

#### **Construction**

						Diameters	(ln)	
1) Component 1		22 X 1 CO	22 X 1 COND					
a) Conductor		18 (41/34)	18 (41/34) AWG Bare Copper			0.047		
b) Insulation (		0.016" Wa	0.016" Wall, Nom. PVC/ 0.005" Wall NYLON			0.089		
(1) Print		ALPHANU INVERTED	ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED					
(2) Color Code		Alpha Wire	Alpha Wire Color Code KW					
Cond	Color		Cond	Color	Со	nd	Color	
1	GREEN/YELLOW		1	BLACK#8	17		BLACK#16	
2	BLACK#1		0	BLACK#9	18		BLACK#17	
3	WHITE/BLACK		1	BLACK#10	19		BLACK#18	
4	BLACK#3	1	2	BLACK#11	20		BLACK#19	
5	BLACK#4	1	3	BLACK#12	21		BLACK#20	
6	BLACK#5		4	BLACK#13	22		BLACK#21	
7	BLACK#6		5	BLACK#14				
8	BLACK#7		6	BLACK#15				
2) Cable Assembly		22 Compo	22 Components Cabled					
a) Twists:		2.4 Twists/	2.4 Twists/foot (min)					
b) Orientation:			Components to be arranged from OUTSIDE LAYER to INSIDE LAYER					
c) Core Wrap		REMAY Ta	REMAY Tape, 25% Overlap, Min.					
3) Jacket		0.065" Wa	0.065" Wall, Nom.,PVC			0.656+/- 0.	035	
a) Color(s)		BLACK	BLACK					
b) Print		SERIES XM (UL) TC-ER DIR BUR C OR CRU A' CE ROHS (	ALPHA WIRE-* P/N XM1822K 22C 18 AWG (0.825mm2) SERIES XM (UL) WTTC 90C WET/DRY 1000V OR (UL) TC-ER 90C WET/DRY 600V SUN RES DIR BUR OIL RES I OR MTW 18 AWG OR CRU AWM I/II A/B 90C 600V FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code					

#### **Applicable Specifications**

1) UL			
a) Component 1	Unlisted Conductor	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>	
b) Overall	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>	
	TC	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>	
	EXPOSED RUN		
	SUN RES		
	OIL RES I		
	WTTC	90°C Dry / 90°C Wet / 1000 V <sub>RMS</sub>	
2) CSA International	C(RU) AWM I/II A/B	90°C / 600 V <sub>RMS</sub>	
	FT4		
3) Other	Conductors ASTM Class M		
	Conductors IEC Class 6 on AWG size		
4) 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 190	07/2006):
	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	-30 to 90°C(static), -5 to 90°C (dynamic)			
2) Bend Radius	6X Cable Diameter(static), 8X Cable Diameter(dynamic)			
3) Pull Tension	281 Lbs, Maximum			
4) Sunlight Resistance	Yes			
<b>Electrical Properties</b>	(For Engineering purposes only)			
1) Voltage Rating	600/1000 V <sub>RMS</sub>			
2) Capacitance	26 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Inductance	0.19 μH/ft, Nominal			
4) Conductor DCR	6.7 Ω/1000ft @20°C, Nominal			

### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) Bulk(Made-to-order)		
Notes:		
a) Suitable for constant flexing where cycle count will be less than 12,000,000 cycles.		

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: XM1822K

XM1822K, RoHS-Compliant Commencing With 3/16/2010 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 5/5/2024

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