

# **Customer Specification**

#### PART NO. XM1604K

#### **Construction**

						Diamete	rs (ln)
1) Component	1	4 X 1 COND					
a) Conductor		16 (65/34) AWG Bare Copper				0.059	
b) Insulation		0.016" Wall, Nom. PVC/ 0.005" Wall NYLON			0.101		
(1) Print		ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED					
(2) Color Code		Alpha Wire Color Cod	e KX				
Cond	Color		Cond	Color	Cond		Color
1	GREEN	J/YELLOW	3	BLACK#2			
2	BLACK	#1	4	BLACK#3			
2) Cable Assembly 4 Cor		4 Components Cabled				·	
		5.3 Twists/foot (min)					
b) Orientation:		Components to be arranged from OUTSIDE LAYER to INSIDE LAYER					
c) Core Wrap		REMAY Tape, 25% Overlap, Min.					
3) Jacket		0.050" Wall, Nom.,PVC				0.362+/-	0.019
a) Color(s) BLACK							
SERIE (UL) T b) Print DIR B OR CI CE RC		ALPHA WIRE-* P/N XI SERIES XM (UL) WTTC (UL) TC-ER 90C WET/I DIR BUR OIL RES I OR OR CRU AWM I/II A/E CE ROHS (DATE CODI * = Factory Code	90C WET/DRY DRY 600V SUN MTW 16 AWG 90C 600V FT4	1000V OR RES			

## **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**

	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 Exemption 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	81 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	600/1000 V <sub>RMS</sub>			
2) Capacitance	29 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Inductance	0.18 μH/ft, Nominal			
4) Conductor DCR	4.2 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: XM1604K

XM1604K, 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)

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 5/18/2024

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