

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

# Customer Specification PART NO. XM1412LCY

#### Construction

				Diameters (In)	
1) Component 1		12 X 1 COND			
a) Conductor		14 (105/34) AWG Bare Copper		0.074	
b) Insulation		0.016" Wall, Nom. PVC/ 0.005" Wall NYLON		0.116	
(1) Print		ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND			
(2) Color Code		Alpha Wire Color Code LW			
Cond	Color	Cond	Color	Cond	Color
1	GREEN/YELLOW	5	DK. BLUE#4	9	DK. BLUE#8
2	DK. BLUE#1	6	DK. BLUE#5	10	DK. BLUE#9
3	WHITE/BLUE	7	DK. BLUE#6	11	DK. BLUE#10
4	DK. BLUE#3	8	DK. BLUE#7	12	DK. BLUE#11
2) Cable Assembly		12 Components Cabled			
a) Twists:		2.5 Twists/foot (min)			
b) Orientation:		Components to be arranged from OUTSIDE LAYER to INSIDE LAYER			
c) Core Wrap		REMAY Tape, 25% Overlap, Min.			
3) Shield		Tinned Copper BRAID Shield,85% Coverage, Min.			
4) Jacket		0.065" Wall, Nom.,PVC		0.661+/- 0.029	
a) Color(s)		BLACK			
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.			
c) Print		ALPHA WIRE-* P/N XM1412LCY 12C 14 AWG (2.11mm2) THWN-2 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 14 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	THWN-2	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>
	тс	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/EC	

# Environmental

1) CE: EU Directive 2011/65/EU(RoHS	52):		
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011and the amending Directive 2015/863/EU of 4 June 2015. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.		
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. For up-to-date information, please see Alpha's REACH SVHC Declaration.		
3) California Proposition 65:	Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.		

# Properties

Physical & Mechanical Properties	
1) Temperature Range	-30 to 90°C(static), -5 to 90°C (dynamic)
	10X Cable Diameter(static), 10X Cable
2) Bend Radius	Diameter(dynamic)
3) Pull Tension	409 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600/1000 V <sub>RMS</sub>
2) Capacitance	55 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	99 pF/ft @1 kHz, Nominal
4) Inductance	0.17 μH/ft, Nominal
5) Conductor DCR	2.6 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	1.54 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.		

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

To Whom It May Concern:

Alpha Wire Part Number: XM1412LCY

XM1412LCY, RoHS-Compliant Commencing With 3/16/2010 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above 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) 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.

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:

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#### **Mouser Electronics**

Authorized Distributor

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