

# Customer Specification

## PART NO. XM1625K

### Construction

|                   |            |      |          |      |          | Diameters (In)   |                |
|-------------------|------------|------|----------|------|----------|--|----------------|
| 1) Component 1    |            |      |          |      |          | 25 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 Code KW   |                |
| Cond              | Color      | Cond | Color    | Cond | Color    |  |                |
| 1                 | GREEN/YELI | 10   | BLACK#9  | 19   | BLACK#18 |  |                |
| 2                 | BLACK#1    | 11   | BLACK#10 | 20   | BLACK#19 |  |                |
| 3                 | WHITE/BLA  | 12   | BLACK#11 | 21   | BLACK#20 |  |                |
| 4                 | BLACK#3    | 13   | BLACK#12 | 22   | BLACK#21 |  |                |
| 5                 | BLACK#4    | 14   | BLACK#13 | 23   | BLACK#22 |  |                |
| 6                 | BLACK#5    | 15   | BLACK#14 | 24   | BLACK#23 |  |                |
| 7                 | BLACK#6    | 16   | BLACK#15 | 25   | BLACK#24 |  |                |
| 8                 | BLACK#7    | 17   | BLACK#16 |      |          |  |                |
| 9                 | BLACK#8    | 18   | BLACK#17 |      |          |  |                |
| 2) Cable Assembly |            |      |          |      |          | 25 Components Cabled   |                |
| a) Twists:        |            |      |          |      |          | 1.9 Twists/foot (min)  |                |
| b) Orientation:   |            |      |          |      |          | Components to be arranged from OUTSIDE LAYER to INSIDE LAYER   |                |
| c) Core Wrap      |            |      |          |      |          | REMA Y Tape, 25% Overlap, Min.   |                |
| 3) Jacket         |            |      |          |      |          | 0.065" Wall, Nom.,PVC  | 0.793+/- 0.039 |
| a) Color(s)       |            |      |          |      |          | BLACK  |                |
| b) Print          |            |      |          |      |          | ALPHA WIRE-* P/N XM1625K 25C 16 AWG (1.31mm2)<br>SERIES XM (UL) WTTC 90C WET/DRY 1000V OR<br>(UL) TC-ER 90C WET/DRY 600V SUN RES<br>DIR BUR OIL RES I OR MTW 16 AWG<br>OR CRU AWM I/II A/B 90C 600V FT4<br>CE ROHS (DATE CODE) (SEQ FOOTAGE)<br>* = 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 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             | -30 to 90°C(static), -5 to 90°C (dynamic)             |
| 2) Bend Radius                   | 6X Cable Diameter(static), 8X Cable Diameter(dynamic) |
| 3) Pull Tension                  | 507 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                 | 4.3 Ω/1000ft @20°C, Nominal                           |

# Other

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

[www.alphawire.com](http://www.alphawire.com)

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: XM1625K

XM1625K, RoHS-Compliant Commencing With 16/03/2010 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 Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies that the listed part number is in compliance with 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 requirements. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

## Substance

Lead  
Mercury  
Cadmium  
Hexavalent Chromium  
Polybrominated Biphenyls (PBB)  
Polybrominated Diphenyl Ethers (PBDE),  
Including Deca-BDE  
Bis(2-ethylhexyl) phthalate (DEHP)  
Butyl benzyl phthalate (BBP)  
Dibutyl phthalate (DBP)  
Diisobutyl phthalate (DIBP)

## Maximum Control Value

0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
0.01% by weight (100 ppm)  
0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
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0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)

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Dave Watson, Director of Engineering & QA 31/03/2025

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