

# Customer Specification

## PART NO. M18134KW

### Construction

|                   |            |      |          |      |          | Diameters (In)  |                |
|-------------------|------------|------|----------|------|----------|---|----------------|
| 1) Component 1    |            |      |          |      |          | 34 X 1 COND   |                |
| a) Conductor      |            |      |          |      |          | 18 (19/30) AWG Bare Copper  | 0.050          |
| b) Insulation     |            |      |          |      |          | 0.016" Wall, Nom. PVC/ 0.005" Wall NYLON  | 0.092          |
| (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 | 13   | BLACK#12 | 25   | BLACK#24 |   |                |
| 2                 | BLACK#1    | 14   | BLACK#13 | 26   | BLACK#25 |   |                |
| 3                 | WHITE/BLA  | 15   | BLACK#14 | 27   | BLACK#26 |   |                |
| 4                 | BLACK#3    | 16   | BLACK#15 | 28   | BLACK#27 |   |                |
| 5                 | BLACK#4    | 17   | BLACK#16 | 29   | BLACK#28 |   |                |
| 6                 | BLACK#5    | 18   | BLACK#17 | 30   | BLACK#29 |   |                |
| 7                 | BLACK#6    | 19   | BLACK#18 | 31   | BLACK#30 |   |                |
| 8                 | BLACK#7    | 20   | BLACK#19 | 32   | BLACK#31 |   |                |
| 9                 | BLACK#8    | 21   | BLACK#20 | 33   | BLACK#32 |   |                |
| 10                | BLACK#9    | 22   | BLACK#21 | 34   | BLACK#33 |   |                |
| 11                | BLACK#10   | 23   | BLACK#22 |      |          |   |                |
| 12                | BLACK#11   | 24   | BLACK#23 |      |          |   |                |
| 2) Cable Assembly |            |      |          |      |          | 34 Components Cabled  |                |
| a) Twists:        |            |      |          |      |          | 1.3 Twists/foot (min)   |                |
| b) Orientation:   |            |      |          |      |          | Components to be arranged from OUTSIDE LAYER to INSIDE LAYER  |                |
| c) Core Wrap      |            |      |          |      |          | Clear Mylar Tape, 25% Overlap, Min.   |                |
| 3) Jacket         |            |      |          |      |          | 0.065" Wall, Nom.,PVC   | 0.777+/- 0.041 |
| a) Color(s)       |            |      |          |      |          | SLATE   |                |
| b) Print          |            |      |          |      |          | ALPHA WIRE-* P/N M18134KW 34C 18 AWG (0.963mm2)<br>SERIES M (UL) WTTTC 90C WET/DRY 1000V OR<br>(UL) TC-ER 90C WET/DRY 600V SUN RES<br>DIR BUR OIL RES I OR MTW 18 AWG OR (UL) PLTC 90C<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                | TC                                  | 90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>  |
|                      | PLTC                                | 90°C  |
|                      | SUN RES                             |   |
|                      | EXPOSED RUN                         |   |
|                      | DIRECT BURIAL                       |   |
|                      | OIL RES I                           |   |
|                      | MTW                                 | 90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>  |
|                      | 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 K             |   |
| 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

|  |
|--|
|  |
|--|

| <b>Physical &amp; Mechanical Properties</b> |   |
|---|---|
| 1) Temperature Range                        | -30 to 90°C(static), -5 to 90°C (dynamic)             |
| 2) Bend Radius                              | 8X Cable Diameter(static), 8X Cable Diameter(dynamic) |
| 3) Pull Tension                             | 507 Lbs, Maximum                                      |
| 4) Sunlight Resistance                      | Yes   |
| 5) Direct Burial                            | Yes   |
| <b>Electrical Properties</b>                |   |
| (For Engineering purposes only)             |   |
| 1) Voltage Rating                           | 600 V <sub>RMS</sub>                                  |
| 2) Capacitance                              | 27 pF/ft @1 kHz, Nominal Conductor to Conductor       |
| 3) Inductance                               | 0.19 μH/ft, Nominal                                   |
| 4) Conductor DCR                            | 5.7 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 intermittent or light duty flexing where cycle count will be less than 1,500,000 cycles. |                                     |

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

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

ALPHA WIRE - CONFIDENTIAL AND PROPRIETARY Notice to persons receiving this document and/or technical information. This document is confidential and is the exclusive property of ALPHA WIRE, and is merely on loan and subject to recall by ALPHA WIRE at any time. By taking possession of this document, the recipient acknowledges and agrees that this document cannot be used in any manner adverse to the interests of ALPHA WIRE, and that no portion of this document may be copied or otherwise reproduced without the prior written consent of ALPHA WIRE. In the case of conflicting contractual provisions, this notice shall govern the status of this document. <br /><br />  
©2019 ALPHA WIRE - all rights reserved.



