

# Customer Specification

## PART NO. 45544

### Construction

|                   |  | Diameters (In) |        |      |                    |
|-------------------|--|----------------|--------|------|--------------------|
| 1) Component 1    | 4 X 1 COND   |                |        |      |                    |
| a) Conductor      | 14 (41/30) AWG Tinned Copper   |                |        |      | 0.073              |
| b) Insulation     | 0.032" Wall, Nom. TPE  |                |        |      | 0.137              |
| (1) Color Code    | Alpha Wire Color Code E  |                |        |      |                    |
| Cond              | Color  | Cond           | Color  | Cond | Color              |
| 1                 | BLACK  | 3              | RED    |      |                    |
| 2                 | BROWN  | 4              | ORANGE |      |                    |
| 2) Cable Assembly | 4 Components Cabled  |                |        |      |                    |
| a) Twists:        | 2.5 Twists/foot (min)  |                |        |      |                    |
| b) Orientation:   | Components to be arranged from INSIDE LAYER to OUTSIDE LAYER   |                |        |      |                    |
| c) Core Wrap      | Nonwoven Polyester Tape, 20% Overlap, Min.   |                |        |      |                    |
| 3) Shield:        | A/P/A Tape, 20% Overlap, Min.  |                |        |      |                    |
| a) Drain Wire     | 14 (41/30) AWG Tinned Copper   |                |        |      |                    |
| b) Braid          | Tinned Copper, 70% Coverage, Nom.  |                |        |      |                    |
| 4) Jacket         | 0.055" Wall, Nom., TPE   |                |        |      | 0.473 (0.493 Max.) |
| a) Color(s)       | Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White  |                |        |      |                    |
| b) Ripcord        | 1 End 810 Denier Nylon   |                |        |      |                    |
| c) Print          | ALPHA WIRE-* P/N 45544 4C 14 AWG<br>XTRAGUARD(R) 4 E324185 (UL) TYPE WTTC 90C DRY<br>1000V OR (UL) TYPE TC 90C DRY 600V SUN RES<br>OR AWM 20238 105C 600V 14 AWG<br>OR CRU AWM I/II A/B 125C 600V FT1<br>CE ROHS (SEQ FOOTAGE)<br>* = Factory Code |                |        |      |                    |

### Applicable Specifications

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|                      |                                     |                              |
|----------------------|-------------------------------------|------------------------------|
| 1) UL                | AWM/STYLE 20328                     | 105°C / 600 V <sub>RMS</sub> |
|                      | TC                                  | 90°C / 600 V <sub>RMS</sub>  |
|                      | WTTC                                | 90°C / 1000 V <sub>RMS</sub> |
|                      | SUN RES                             |                              |
| 2) CSA International | C(RU) AWM I/II A/B FT1              | 125°C / 600 V <sub>RMS</sub> |
|                      | SUN RES (Black only)                |                              |
| 3) 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             | -50 to 125°C                                      |
| 2) Bend Radius                   | 10X Cable Diameter                                |
| 3) Pull Tension                  | 168 Lbs, Maximum                                  |
| 4) Sunlight Resistance           | Yes   |
| Electrical Properties            |   |
| (For Engineering purposes only)  |   |
| 1) Voltage Rating                | 600/1000 V <sub>RMS</sub>                         |
| 2) Capacitance                   | 22.3 pF/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Ground Capacitance            | 40 pF/ft @1 kHz, Nominal                          |
| 4) Inductance                    | 0.19 µH/ft, Nominal                               |
| 5) Conductor DCR                 | 2.8 Ω/1000ft @20°C, Nominal                       |
| 6) OA Shield DCR                 | 1.38 Ω/1000ft @20°C, Nominal                      |

## Other

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|--|-------------------------------------|
| <b>Packaging</b>   | Flange x Traverse x Barrel (inches) |
| a) Bulk(Made-to-order)   |                                     |
| <b>Notes:</b>  |                                     |
| a) Print legend will contain CSA SUN RES on black cables only. |                                     |
|  |                                     |

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

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 45544

45544, RoHS-Compliant Commencing With 1/20/2017 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials is fully compliant with Directive 2011/65/ Directive, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipr 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product also complies with U definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item.** It should be noted that this prc this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. Additionally, Alpha c RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2006. This product is also in compliance w

## 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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The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the d 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 specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legisl product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 4/28/2024

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374  
Tel: 1-908-925-8000