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

Request a Sample

# Customer Specification

# PART NO. 45452

## Construction

| | | | | Diameters (In) | |
|---|---|---|---|---|---|
| 1) Component 1 | | 2 X 1 PAIR | | | |
| a) Conductor | | 20 (7/28) AWG Tinned Copper | | 0.038 | |
| b) Insulation | | 0.016" Wall, Nom. TPE | | 0.070 | |
| (1) Color Code | | Alpha Wire Color Code B | | | |
| Pair | Color | Pair | Color | Pair | Color |
| 1 | WHITE-BLACK | 2 | WHITE-BROWN | | |
| c) Pair | | 2/Cond Cabled Together | | | |
| (1) Twists: | | 6.0 Twists/foot (min) | | | |
| 2) Cable Assembly | | 2 Components Cabled | | | |
| a) Twists: | | 4.4 Twists/foot (min) | | | |
| b) Core Wrap | | Nonwoven Polyester Tape, 25% Overlap, Min. | | | |
| 3) Shield: | | Alum/Mylar Tape, 25% Overlap, Min. | | | |
| a) Foil Direction | | Foil Facing In | | | |
| b) Drain Wire | | 20 (7/28) AWG Tinned Copper | | | |
| 4) Jacket | | 0.045" Wall, Nom.,TPE | | 0.328 (0.342 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 45452 2PR 20 AWG<br>XTRAGUARD(R) 4 (UL) TYPE PLTC 105C SUN RES OR AWM<br>20237/21918 125C 300 V OR<br>CRU AWM I/II A/B 125C 300 V FT1<br>P-07-KA140023-MSHA CE ROHS<br>(SEQ FOOTAGE)<br>* = Factory Code | | | |

## Applicable Specifications

| | | |
|---|---|---|
| 1) UL | AWM/STYLE 20237 | 125°C / 300 $V_{RMS}$ |
| | PLTC | 105°C |
| | AWM/STYLE 21918 | 125°C / 300 $V_{RMS}$ |
| | SUN RES | |
| 2) CSA International | C(RU) AWM I/II A/B FT1 | 125°C / 300 $V_{RMS}$ |
| | SUN RES (Black only) | |
| 3) Other | PENNSYLVANIA BUREAU OF MINE SAFETY APPROVED | |
| 4) CE: | EU Low Voltage Directive 2006/95/EC | |

## Environmental

| | |
|---|---|
| 1) CE: EU Directive 2011/65/EU(RoHS2): | |
| | This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C. |
| 2) California Proposition 65: | The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65. |

## Properties

| | |
|---|---|
| Physical & Mechanical Properties | |
| 1) Temperature Range | -50 to 125°C |
| 2) Bend Radius | 10X Cable Diameter |
| 3) Pull Tension | 44 Lbs, Maximum |
| 4) Sunlight Resistance | Yes |
| Electrical Properties | (For Engineering purposes only) |
| 1) Voltage Rating | 300 $V_{RMS}$ |
| 2) Mutual Capacitance | 19.8 pf/ft @1 kHz, Nominal |
| 3) Ground Capacitance | 36 pf/ft @1 kHz, Nominal |
| 4) Characteristic Impedance | 76 Ω |
| 5) Inductance | 0.19 µH/ft, Nominal |
| 6) Conductor DCR | 10.4 Ω/1000ft @20°C, Nominal |
| 7) OA Shield DCR | 8.2 Ω/1000ft @20°C, Nominal |

## Other

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

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 45452

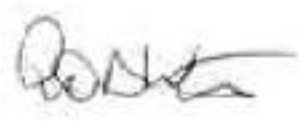
45452 , RoHS-Compliant Commencing With 10/1/2014 Production

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, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to this Directive for the specific definitions and extents of this Directive. **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 11364-2006.

| **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) |

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 Company:



Dave Watson, Director of Engineering & QA — 6/14/2016

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