

## **Customer Specification**

### **PART NO. 6463**

#### Construction

|                   |           |               |       |      |       | Diameter ("in")   |                    |
|-------------------|-----------|---------------|-------|------|-------|---|--------------------|
| 1) Component 1    |           |               |       |      |       | 2 x 1 COND  |                    |
| a) Conductor      |           |               |       |      |       | 22 (7/30) AWG BC  | 0.029              |
| b) Insulation     |           |               |       |      |       | 0.0365" Wall, Nom. Foam HDPE  | 0.102              |
| (1) Colo          | or(s)     |               |       |      |       |   |                    |
| Cond              | Color     | Cond          | Color | Cond | Color |   |                    |
| 1                 | RED       | 2             | GREEN |      |       |   |                    |
| 2) Cable          | e Assembl | <u>.</u><br>У | •     | •    | •     | 2 Components Cabled   |                    |
| a) Twist          | s         |               |       |      |       | 4.8 Twists/ft. (min.)   |                    |
| 3) Shield         | d         |               |       |      |       | Alum/Mylar Tape, 25% Overlap (min.)   |                    |
| a) Foil Direction |           |               |       |      |       | Foil Facing Out   |                    |
| b) Braid          |           |               |       |      |       | TC, 65% Coverage (min.)   |                    |
| 4) Jacket         |           |               |       |      |       | 0.042" Wall, Nom., PVC  | 0.315 (0.325 max.) |
| a) Color(s)       |           |               |       |      |       | VIOLET  |                    |
| b) Print          |           |               |       |      |       | ALPHA WIRE P/N 6463<br>PROFIBUS CABLE 1PR22 SHIELDED PVC (UL) CMG<br>EXXXXX OR PLTC OR C(UL) CMG SUN RES<br>CE ROHS (SEQ FOOTAGE EVERY 2FT)<br>Note: Product may have c(UL) or CSA markings depending<br>upon plant of manufacture. |                    |

#### **Applicable Specifications**

| 1) UL                | CMG                                 | 75°C |
|----------------------|-------------------------------------|------|
|                      | SUN RES                             |      |
|                      | PLTC                                | 75°C |
| 2) CSA International | CMG                                 | 75°C |
| 3) CE                | EU Low Voltage Directive 2006/95/EC |      |
|                      |                                     | I    |

#### 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. Refer to the <u>RoHS Certificate of Compliance</u> for more detail. |
| 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 <u>REACH SVHC Declaration</u> .                              |

## **Properties**

| Physical & Mechanical Properties |                                     |  |
|----------------------------------|-------------------------------------|--|
| 1) Temperature Range             | -30 to 75°C                         |  |
| 2) Bend Radius                   | 10X Cable Diameter                  |  |
| 3) Pull Tension                  | 14 lbs. max.                        |  |
| Electrical Properties            | Engineering purposes only           |  |
| 1) Voltage Rating                | 300 V <sub>RMS</sub>                |  |
| 2) Characteristic Impedance      | 150 ω +/- 15                        |  |
| 3) Mutual Capacitance            | 8.5 pf/ft. @1 kHz, Nominal          |  |
| 4) Ground Capacitance            | 27.9 pf/ft. @1 kHz, Nominal         |  |
| 5) Velocity of Propagation       | 78%                                 |  |
| 6) Conductor DCR                 | 16 ω/1000ft. @20°C, Nominal         |  |
| 7) OA Shield DCR                 | 3.9 ω/1000ft. @20°C, Nominal        |  |
| 8) Current                       | 2.3 amps per conductor @30°C (max.) |  |
| 9) Attenuation (max. dB/100ft.)  | 0.34 @200 kHz                       |  |
|                                  | 0.81 @4 MHz                         |  |
|                                  | 1.64 @16 MHz                        |  |

### Other

| Packaging            | Flange x Traverse x Barrel (inches) |
|----------------------|-------------------------------------|
| a) 1000 FT           | 18 x 12 x 8 Continuous Length       |
| b) 500 FT            | 12 x 10 x 5 Continuous Length       |
| c) 100 FT            | 12 x 4.5 x 3.5 Continuous Length    |
|                      | Spool dimensions may vary slightly. |
| Note:                |                                     |
| a) PROFIBUS DP Cable |                                     |
|                      |                                     |

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.

💋 AlphaWire

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

To Whom It May Concern:

Alpha Wire Part Number: 6463

6463, RoHS-Compliant Commencing With 01/07/2008 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 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. T the list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitio **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control c

| 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)  |

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the d 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 c Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and reg Authorized Signatory for the Alpha Wire:

@ Alt

Dave Watson, Director of Engineering & QA 01/04/2025

Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000