

# Customer Specification PART NO. 45462

#### **Construction**

|                   |       |                                                                        |                                                                                                                                                                                                                                                                                                          | Diameters (In) | )                  |  |
|-------------------|-------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------|--|
| 1) Component 1    |       | 2 X 1 COND                                                             | 2 X 1 COND                                                                                                                                                                                                                                                                                               |                |                    |  |
| a) Conductor      |       | 20 (7/28) AV                                                           | 20 (7/28) AWG TC                                                                                                                                                                                                                                                                                         |                | 0.038              |  |
| b) Insulation     |       | 0.016" Wall,                                                           | 0.016" Wall, Nom. TPE                                                                                                                                                                                                                                                                                    |                | 0.070              |  |
| (1) Color Code    |       | Alpha Wire 0                                                           | Alpha Wire Color Code D                                                                                                                                                                                                                                                                                  |                |                    |  |
| Cond              | Color | Cond                                                                   | Color                                                                                                                                                                                                                                                                                                    | Cond           | Color              |  |
| 1                 | BLACK | 2                                                                      | RED                                                                                                                                                                                                                                                                                                      |                |                    |  |
| 2) Cable Assembly |       | 2 Componer                                                             | nts Cabled                                                                                                                                                                                                                                                                                               |                |                    |  |
| a) Twists:        |       | 8.0 Twists/fo                                                          | 8.0 Twists/foot (min)                                                                                                                                                                                                                                                                                    |                |                    |  |
| b) Core Wrap      |       | Nonwoven F                                                             | Nonwoven Polyester Tape, 25% Overlap, Min.                                                                                                                                                                                                                                                               |                |                    |  |
| 3) Shield:        |       | Alum/Mylar <sup>-</sup>                                                | Alum/Mylar Tape, 25% Overlap, Min.                                                                                                                                                                                                                                                                       |                |                    |  |
| a) Foil Direction |       | Foil Facing I                                                          | Foil Facing In                                                                                                                                                                                                                                                                                           |                |                    |  |
| b) Drain Wire     |       | 20 (7/28) AV                                                           | 20 (7/28) AWG TC                                                                                                                                                                                                                                                                                         |                |                    |  |
| 4) Jacket         |       | 0.045" Wall,                                                           | 0.045" Wall, Nom.,TPE                                                                                                                                                                                                                                                                                    |                | 0.238 (0.248 Max.) |  |
| a) Color(s)       |       | Slate, Black,                                                          | Slate, Black, Yellow, Orange, Blue, Green, Red                                                                                                                                                                                                                                                           |                | Vhite              |  |
| b) Ripcord        |       | 1 End 810 D                                                            | 1 End 810 Denier Nylon                                                                                                                                                                                                                                                                                   |                |                    |  |
| c) Print          |       | XTRAGUARI<br>125C 300 VC<br>125C 300 VC<br>CE (SEQ FO<br>* = Factory C | ALPHA WIRE-* P/N 45462 2C 20 AWG<br>XTRAGUARD(R) 4 (UL) TYPE PLTC 105C OR AWM 20237<br>125C 300 VOLTS LLXXXXX CSA AWM IA/B IIA/B<br>125C 300 VOLTS FT1 P-07-KA070017-MSHA<br>CE (SEQ FOOTAGE)<br>* = Factory Code<br>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.] |                |                    |  |

## **Applicable Specifications**

| 1) UL                | AWM/STYLE 20237                                | 125°C / 300 V <sub>RMS</sub> |  |
|----------------------|------------------------------------------------|------------------------------|--|
|                      | PLTC                                           | 105°C                        |  |
| 2) CSA International | AWM I/II A/B                                   | 125°C / 300 V <sub>RMS</sub> |  |
|                      | FT1                                            |                              |  |
| 3) Other             | PENNSYLVANIA BUREAU OF MINE SAFETY<br>APPROVED |                              |  |
| 4) CE:               | LVD 73/23/EEC Amendment 93/68/EEC              |                              |  |

# Environmental

| 1) EU Directive 2002/95/EC(RoHS): |                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|                                   | All materials used in the manufacture of this part are compliant with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment under the now annulled Exemption 9A which allowed Deca-BDE. Alpha Wire is working to completely remove PBDE's from all products. Consult Alpha Wire's web site for compliance Date of Manufacture. |  |  |  |
| 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                 | 26 Lbs, Maximum                                   |  |  |  |
| 4) Sunlight Resistance          | Yes                                               |  |  |  |
| Electrical Properties           | (For Engineering purposes only)                   |  |  |  |
| 1) Voltage Rating               | 300 V <sub>RMS</sub>                              |  |  |  |
| 2) Capacitance                  | 23.8 pf/ft @1 kHz, Nominal Conductor to Conductor |  |  |  |
| 3) Ground Capacitance           | 43 pf/ft @1 kHz, Nominal                          |  |  |  |
| 4) Characteristic Impedance     | 66                                                |  |  |  |
| 5) Inductance                   | 0.19 μH/ft, Nominal                               |  |  |  |
| 6) Conductor DCR                | 10.2 /1000ft @20°C, Nominal                       |  |  |  |
| 7) OA Shield DCR                | 8.2 /1000ft @20°C, Nominal                        |  |  |  |

#### Other

| Packaging              | Flange x Traverse x Barrel (inches)  |
|------------------------|--------------------------------------|
| a) 1000 FT             | 12 x 12 x 3.5 Continuous length      |
| b) 500 FT              | 12 x 6 x 3.5 Continuous length       |
| c) Bulk(Made-to-order) |                                      |
|                        | [Spool dimensions may vary slightly] |

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