

## Customer Specification

### PART NO. 3542/7

## Construction

|                   |         |      |        |      |        | Diameters (In)                    |  |
|-------------------|---------|------|--------|------|--------|-----------------------------------|--|
| 1) Component 1    |         |      |        |      |        | 20 X 1 COND                       |  |
| a) Conductor      |         |      |        |      |        | 24 (7/32) AWG TC                  |  |
| b) Insulation     |         |      |        |      |        | 0.010" Wall, Nom. PVC             |  |
| (1) Color(s)      |         |      |        |      |        |                                   |  |
| Cond              | Color   | Cond | Color  | Cond | Color  |                                   |  |
| 1                 | BROWN   | 8    | SLATE  | 15   | GREEN  |                                   |  |
| 2                 | RED     | 9    | WHITE  | 16   | BLUE   |                                   |  |
| 3                 | ORANGE  | 10   | BLACK  | 17   | VIOLET |                                   |  |
| 4                 | YELLOW  | 11   | BROWN  | 18   | SLATE  |                                   |  |
| 5                 | GREEN   | 12   | RED    | 19   | WHITE  |                                   |  |
| 6                 | BLUE    | 13   | ORANGE | 20   | BLACK  |                                   |  |
| 7                 | VILLOET | 14   | YELLOW |      |        |                                   |  |
| 2) Cable Assembly |         |      |        |      |        | 20 Components assembled parallel. |  |
|                   |         |      |        |      |        | 0.044 +/- 0.002 x                 |  |
|                   |         |      |        |      |        | 0.880 +/- 0.040                   |  |

## Applicable Specifications

|                |                          |                              |
|----------------|--------------------------|------------------------------|
| 1) UL          | AWM/STYLE 2713           | 80°C / 150 V <sub>RMS</sub>  |
|                | VW-1                     |                              |
| 2) Military    |                          |                              |
| a) Component 1 | MIL-DTL-16878/1 (Type B) | 105°C / 600 V <sub>RMS</sub> |

## Environmental

|  |
|--|
|  |
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|                                     |  |
|-------------------------------------|--|
| 1) EU Directive 2011/65/EU(RoHS2):  |  |
|                                     | All materials used in the manufacture of this part are in compliance with European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for <a href="#">RoHS C of C</a> . |
| 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 <a href="#">Alpha's REACH SVHC Declaration</a> .                             |
| 3) 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             | -55 to 105°C                                    |
| 2) Bend Radius                   | 10X Cable Diameter                              |
| 3) Pull Tension                  | 70 Lbs, Maximum                                 |
| Electrical Properties            |   |
|                                  | (For Engineering purposes only)                 |
| 1) Voltage Rating                | 600 V <sub>RMS</sub>                            |
| 2) Capacitance                   | 30 pf/ft @1 kHz, Nominal Conductor to Conductor |
| 3) Inductance                    | 0.19 μH/ft, Nominal                             |
| 4) Conductor DCR                 | 25 Ω/1000ft @20°C, Nominal                      |

## Other

| Packaging | Flange x Traverse x Barrel (inches)         |
|-----------|---|
| a) 100 FT | 11 x 1 x 3 Continuous length                |
|           | <i>[Spool dimensions may vary slightly]</i> |

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

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# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 3542/7

3542/7, RoHS-Compliant Commencing With 3/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product also complies with UK - RoHS. The reader is referred to these Directives for the specific definitions and extents of the Directives. **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 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

## Substance

| 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) ,<br>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) |

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 4/1/2025

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