

**ALPHA WIRE COMPANY**  
**CUSTOMER PRODUCT SPECIFICATION**

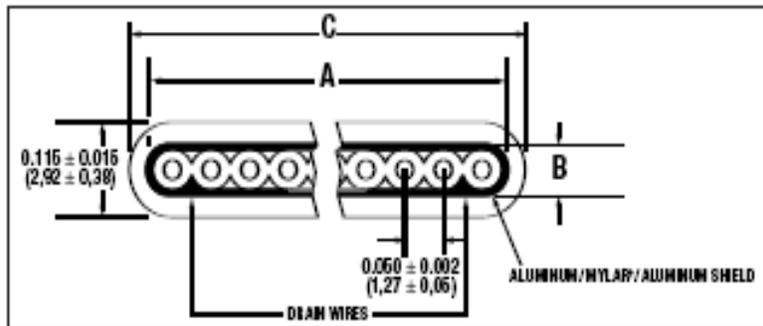
Part Numbers: 3590/9 – 3590/64  
Spec Number: C3590-9  
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Issue: 3  
Issue Date: 3/14/2007  
Effective Date: 5/1/2007

**A. Construction**

- 1) Conductor
  - a) Material Tinned Copper, Per ASTM B-33
  - b) AWG, Stranding 28, 7/36
- 2) Insulation
  - a) Material Lead Free Polyvinyl Chloride, Extruded
  - b) Nominal Wall Thickness 0.010
  - c) Diameter 0.035 +/- 0.002
  - d) Color Gray, Red Polarity Stripe on Leading Edge
- 3) Shield
  - a) Material Aluminum/Polyester
  - b) Overlap 25%, Minimum
  - c) Drain Wire 2 x 28 AWG (7/36) Tinned Copper
- 4) Assembly
  - a) Number of Conductors See Table 1
  - b) Configuration Flat Cable
  - c) Center to Center Spacing 0.050 +/- 0.002
  - d) Core Width See Table 1
- 5) Jacket
  - a) Material Lead Free Polyvinyl Chloride, Extruded
  - b) Jacket Width See Table 1
  - c) Jacket Thickness (B) 0.115 +/- 0.015
  - d) Min. Point Thickness 0.007
  - e) Color Gray
  - f) Surface Print Per Alpha Standard SP-001
  - g) Print Legend ALPHA - \* (UL) CL2 105C 28 AWG

\* - Vendor Designation



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If vendor certifying agency requirements are in conflict with this document, **it is incumbent upon the vendor to notify the Alpha Wire Engineering Department** and mark up differences on this document and submit them for **review and approval prior to any production**. Be advised that **product legend information and product label information must be in concert**; both are the responsibility of the vendor.

It is the **responsibility of the vendor** to insure that this product meets the requirements of subservient certifying agency documents even though they are not directly noted herein.

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Table 1

Part Number	Conductors	Core Width (A)	Jacket Width (C)
3590/9	9	0.450 +/- 0.010	0.520 +/- 0.020
3590/10	10	0.500 +/- 0.010	0.570 +/- 0.020
3590/14	14	0.700 +/- 0.010	0.770 +/- 0.020
3590/15	15	0.750 +/- 0.010	0.820 +/- 0.020
3590/16	16	0.800 +/- 0.010	0.870 +/- 0.020
3590/20	20	1.000 +/- 0.015	1.070 +/- 0.030
3590/24	24	1.200 +/- 0.015	1.270 +/- 0.030
3590/25	25	1.250 +/- 0.015	1.320 +/- 0.030
3590/26	26	1.300 +/- 0.015	1.370 +/- 0.030
3590/34	34	1.700 +/- 0.020	1.770 +/- 0.035
3590/37	37	1.850 +/- 0.020	1.950 +/- 0.035
3590/40	40	2.000 +/- 0.020	2.070 +/- 0.035
3590/50	50	2.500 +/- 0.020	2.570 +/- 0.035
3590/60	60	3.000 +/- 0.020	3.070 +/- 0.035

**B. Industry Approvals and Ratings**

- |                            |                                  |
|----------------------------|----------------------------------|
| 1) UL                      | UL Standard 13, Type CL2<br>VW-1 |
| 2) Voltage Rating          | 150 Volts                        |
| 3) Temperature Rating      | 105°C                            |
| 4) Conductor DC Resistance | 67.5 Ohms/1000 ft @ 20C, Nominal |
| 5) Voltage Withstand       | 1500 Volts RMS, Minimum          |
| 6) Insulation Resistance   | 300 Meg Ohms/1000 ft, Minimum    |
| 7) Impedance               | 70 Ohms, Nominal                 |
| 8) Capacitance             | 20 pf/ft., Nominal               |
| 9) Propagation Delay       | 1.45 ns/ft., Nominal             |

**C. Packaging Requirements**

- |                     |   |
|---------------------|---|
| 1) Alpha Standard   | PS-004, Latest Revision                         |
| 2) Standard Package | 100 feet (Max. 2 of lengths, 25 ft. Min Length) |

**D. Environmental**

- |                              |   |
|------------------------------|---|
| 1) RoHS Directive 2002/95/EC | Restricted substances must not be present in these products beyond allowable trace amounts as defined by the RoHS directive. Certifications to this effect are to be forwarded to the Alpha Engineering Group, Elizabeth, NJ for (1) the first order of goods, (2) whenever material changes are made by the vendor, or (3) whenever the governing RoHS document is changed or modified |
|------------------------------|---|

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relative to restricted substances. The vendor shall provide the levels of each restricted substance and the method by which it was developed, i.e., calculated, Atomic Absorption, Argon Plasma, or Acid Digestion. It is the vendors' responsibility to keep this information current.

2) California Proposition 65

All materials used in the manufacture of this part must contain no more than 300ppm of lead and meet all other chemical requirements of California Proposition 65.

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