

# **Customer Specification**

### **PART NO. 1709**

### **Construction**

						Diameters ("in")	
1) Component 1 a) Conductor						2 x 1 COND	
						24 (10/34) AWG Tinned Copper	0.024
b) Insulation						0.016" Wall, Nom. Polyethylene (PE)	0.056
(1) Colo	or(s)						
Cond	Color	Cond	Color	Cond	Color		
1	WHITE	2	BLACK				
2) Cable	e Assembly				•	2 Components Cabled	
a) Twist	:S					8.0 Twists/foot (min.)	
b) Orientation						Components to be arranged from INSIDE LAYER-to- OUTSIDE LAYER	
c) Core Wrap					Clear Mylar Tape, 25% Overlap (min.)		
3) Shield					Tinned Copper SPIRAL Shield,90% Coverage (min.)		
4) Jacket						0.030" Wall, Nom. PVC	0.185 (0.195 max.
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 1709 CE ROHS * = Factory Code	

## **Applicable Specifications**

1) CE	EU Low Voltage Directive 2014/35/EU	

#### **Environmental**

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3)	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015. No Exemptions are required for RoHS Compliance on this item.
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.
3) California Proposition 65	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more detail.

# **Properties**

Physical & Mechanical Properties		
1) Temperature Range	-20 to 60°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	8.9 lbs (max.)	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	1000 V <sub>RMS</sub>	
2) Characteristic Impedance	87 ω	
3) Inductance	0.22 μH/ft, Nominal	
4) Mutual Capacitance	18 pF/ft @1 kHz, Nominal	
5) Ground Capacitance	32 pF/ft @1 kHz, Nominal	
6) Conductor DCR	29 ω/1000ft @20°C, Nominal	
7) OA Shield DCR	7.6 ω/1000ft @20°C, Nominal	_

## Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	11 x 8.5 x 5 Continuous length	
b) 500 FT	10.5 x 5 x 3.5 Continuous length	
c) 100 FT	6.5 x 4 x 2.5 Continuous length	
	Spool dimensions may vary slightly.	

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 1709

1709, RoHS-Compliant Commencing With 01/03/2005 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 diguide 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 content information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 31/03/2025

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