2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-800-52 ALPHA
Web: www.alphawire.com

Customer Specification

PART NO. 58909

Construction

	Diameters (In)	
1) Component 1	9 X 1 PAIR	
a) Conductor	24 (7/32) AWG TC	0.024
b) Insulation	0.012" Wall, Nom. FEP	0.048
(1) Color Code	Alpha Wire Color Code N	

Pair	Color	Pair	Color	Pair	Color
1	BLACK-YELLOW	4	ORANGE-GREEN	7	RED/WHITE WHITE/RED
2	RED-VIOLET	5	BLACK/WHI WHITE/BLAC	8	ORANGE/W WHITE/ORAI
3	BLUE-BROWN	6	BROWN/WH WHITE/BRO\	9	YELLOW/WI WHITE/YELL(

c) Pair	2/Cond Cabled Together	
(1) Twists:	9.6 Twists/foot (min)	
2) Cable Assembly	9 Components Cabled	
a) Twists:	2.8 Twists/foot (min)	
b) Core Wrap	Clear Mylar Tape, 25% Overlap, Min.	
3) Shield:	Alum/Mylar Tape, 25% Overlap, Min.	
a) Foil Direction	Foil Facing In	
b) Drain Wire	24 (7/32) AWG TC	
4) Jacket	0.011" Wall, Nom.,PVDF	0.315 (0.332 Max.)
a) Color(s)	SLATE	
b) Print	ALPHA WIRE-* P/N 58909 9PR 24 AWG SHIELDED 125C (UL) TYPE CMP OR C(UL) TYPE CMP FT6 CE ROHS * = Factory Code *[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]*	

Applicable Specifications

1) UL	CMP	125°C
2) CSA International	FT6	
	C(UL) TYPE CMP	125°C
3) CE:	EU Low Voltage Directive 2006/95/EC	

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. Consult Alpha Wire's web site for RoHS C of C.
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 REACH SVHC Declaration.
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	-25 to 125°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	67 Lbs, Maximum
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	150 V_{RMS}
2) Characteristic Impedance	104 ω +/- 10
3) Inductance	0.2 µH/ft, Nominal
4) Mutual Capacitance	15 pF/ft @1 kHz, Nominal
5) Ground Capacitance	27 pF/ft @1 kHz, Nominal
6) Conductor DCR	26 ω/1000ft @20°C, Nominal
7) OA Shield DCR	13.4 ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 12 x 8 Max. 3 separate pieces; Min length/piece 250 FT.
b) 500 FT	12 x 10 x 5 Continuous length
	[Spool dimensions may vary slightly]

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 58909

58909, RoHS-Compliant Commencing With 5/1/2005 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	**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 date of its release. The information provided is designed only as a general 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 document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 5/29/2025

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