

# Customer Specification

## PART NO. 6309

### Construction

		Diameters (In)			
1) Component 1		25 X 1 COND			
a) Conductor		24 (7/32) AWG TC			
b) Insulation		0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color Code		Alpha Wire Company Color Code F			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	10	ORANGE/BLACK	19	BLUE/RED
2	WHITE	11	BLUE/BLACK	20	RED/GREEN
3	RED	12	BLACK/WHITE	21	ORANGE/GREEN
4	GREEN	13	RED/WHITE	22	BLACK/WHITE/RED
5	ORANGE	14	GREEN/WHITE	23	WHITE/BLACK/RED
6	BLUE	15	BLUE/WHITE	24	RED/BLACK/WHITE
7	WHITE/BLACK	16	BLACK/RED	25	GREEN/BLACK/WHITE
8	RED/BLACK	17	WHITE/RED		
9	GREEN/BLACK	18	ORANGE/RED		
2) Cable Assembly		25 Components Cabled			
a) Twists:		3.0 Twists/foot (min)			
3) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing Out			
b) Drain Wire		24 (7/32) AWG TC			
4) Jacket		0.032" Wall, Nom.,PVC		0.332 (0.351 Max.)	
a) Color(s)		SLATE			
b) Print		ALPHA WIRE-* P/N 6309 25C 24 AWG SHIELDED 75C (UL) TYPE CM OR AWM 2464 --- LLXXXXXX CSA TYPE CMG FT4 ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

### Applicable Specifications

1) UL	AWM/STYLE 2464	80&deg;C / 300 V <sub>RMS</sub>
	CM	75&deg;C
	VW-1	
2) CSA International	CMG	60&deg;C
	FT4	

## Environmental

1) EU Directive 2002/95/EC(RoHS):	
	All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. 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	-20 to 80&deg;C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	91 Lbs, Maximum
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	32 pf/ft @ 1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	58 pf/ft @ 1 kHz, Nominal
4) Inductance	0.19 µH/ft, Nominal
5) Conductor DCR	26 O/1000ft @ 20&deg;C, Nominal
6) OA Shield DCR	13.4 O/1000ft @ 20&deg;C, Nominal

## Other

1) Packaging	
a) 1000 FT	
b) 500 FT	
c) 100 FT	

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

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207

Tel: 1-800-52 ALPHA (25742)

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Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:6309

6309 , RoHS-Compliant Commencing With8/1/2005Production

*This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.***

<b>Substance</b>	<b>Maximum Control Value</b>
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% 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)

*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 Company:

Dave Watson, Director of Engineering &QA

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