



Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207  
Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

# Customer Specification

## PART NO. 3420

### Construction

				Diameters (In)	
1) Component 1		20 X 1 COND			
a) Conductor		18 (19/30) AWG TC		0.050	
b) Insulation		0.016" Wall, Nom. PVC		0.082	
(1) Color Code		Alpha Wire Color Code F			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	8	RED/BLACK	15	BLUE/WHITE
2	WHITE	9	GREEN/BLACK	16	BLACK/RED
3	RED	10	ORANGE/BLACK	17	WHITE/RED
4	GREEN	11	BLUE/BLACK	18	ORANGE/RED
5	ORANGE	12	BLACK/WHITE	19	BLUE/RED
6	BLUE	13	RED/WHITE	20	RED/GREEN
7	WHITE/BLACK	14	GREEN/WHITE		
2) Cable Assembly		20 Components Cabled			
a) Twists:		1.9 Twists/foot (min)			
b) Core Wrap		Clear Mylar Tape, 25% Overlap, Min.			
3) Shield		TC BRAID Shield,90% Coverage, Min.			
4) Jacket		0.045" Wall, Nom.,PVC		0.550 (0.570 Max.)	
a) Color(s)		SLATE			
b) Print		ALPHA WIRE-* P/N 3420 ROHS * = Factory Code			

### Applicable Specifications

1) Military		
a) Component 1	MIL-W-16878/Type C	105°C / 1000 V <sub>RMS</sub>

### 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	-55 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	314 Lbs, Maximum
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	1000 V <sub>RMS</sub>
2) Capacitance	53 pf/ft @ 1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	95 pf/ft @ 1 kHz, Nominal
4) Inductance	0.17 µH/ft, Nominal
5) Conductor DCR	6.1 /1000ft @20°C, Nominal
6) OA Shield DCR	1.5 /1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 100 FT	16 x 11 x 8 Continuous length
	[Spool dimensions may vary slightly]

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:3420

3420 , RoHS-Compliant Commencing With 10/1/2005 Production

*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.***

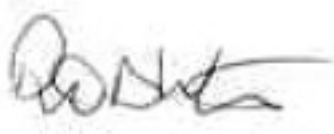
Substance

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)	0.1% by weight (1000 ppm)
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

11/1/2012

# Mouser Electronics

Authorized Distributor

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