



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

# Customer Specification

## PART NO. 1451/16

### Construction

		Diameters (In)			
1) Component 1	3 X 1 COND				
a) Conductor	16 (65/34) AWG TC				
b) Insulation	0.0255" Wall, Nom. EPDM Rubber	0.110			
(1) Color Code	Alpha Wire Company Color Code H				
Cond	Color	Cond	Color	Cond	Color
1	BLACK	2	WHITE	3	RED
2) Cable Assembly	3 Components Cabled				
a) Twists:	3.4 Twists/foot (min)				
3) Shield	TC BRAID Shield, 85% Coverage, Min.				
4) Jacket	0.037" Wall, Nom., NEOPRENE	0.350+-0.016			
a) Color(s)	BLACK				
b) Jacket Separator	Paper Tape, 25% Overlap, Min and Cotton Serve.				

### Applicable Specifications

### 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 60°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	68 Lbs, Maximum
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	38 pf/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	68 pf/ft @1 kHz, Nominal
4) Inductance	0.19 µH/ft, Nominal
5) Conductor DCR	4.4 O/1000ft @20°C, Nominal
6) OA Shield DCR	3.2 O/1000ft @20°C, Nominal

## Other

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

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 1451/16

1451/16, RoHS-Compliant Commencing With 3/31/2009 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	0.1% 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:

A handwritten signature in black ink, appearing to read 'Dave Watson'.

Dave Watson, Director of Engineering & QA

1/21/2011