

# **Customer Specification**

### **PART NO. 6416**

#### Construction

						Diameter ("in")	
1) Component 1						2 x 1 PAIR	
a) Conductor						20 (7/28) AWG Tinned Copper	0.038
b) Insulation						0.010" Wall, Nom. PVC, Semi-Rigid	0.058
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED	2	GREEN-WHITE				
c) Pai	r					2/Cond Cabled Together	
(1) Tv	vists					8.0 Twists/foot (min.)	
Indivi	dually Applie	d					
d) Shield						Foil Free Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing In	
(2) Drain Wire						22 (7/30) AWG Tinned Copper	
2) Cable Assembly						2 Components Cabled	
a) Twists						4.0 Twists/foot (min.)	
b) Orientation						Components to be arranged from INSIDE LAYER-to-OUTSIDE LAYER	
3) Jacket						0.041" Wall, Nom. PVC	0.295 (0.309 max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 6416 2PR 20 AWG SHIELDED 75C (UL) TYPE CM OR AWM 2464 OR C(UL) 75C TYPE CMG FT4 CE 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°C / 300 V <sub>RMS</sub>	
	СМ	75°C	
	VW-1		
2) CSA International	CMG	75°C	
	FT4		
3) CE	EU Low Voltage Directive 2014/35/EU		

### Environmental

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.	
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.	
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.	
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## **Properties**

Physical & Mechanical Properties					
1) Temperature Range	-20 to 80°C				
2) Bend Radius	10X Cable Diameter				
3) Pull Tension	46 lbs. (max.)				
Electrical Properties	For Engineering purposes only				
1) Voltage Rating	300 V <sub>RMS</sub>				
2) Mutual Capacitance	55 pF/ft @1 kHz, Nominal				
3) Ground Capacitance	95 pF/ft @1 kHz, Nominal				
4) Conductor DCR	10.3 ω/1000ft @20°C, Nominal				
5) Ind. Shield DC Resistance	13.9 ω/1000ft @20°C, Nominal				

### Other

Flange x Traverse x Barrel (inches)	
18 x 9 x 8 Continuous Length	
12 x 10.5 x 5 Continuous Length	
Spool dimensions may vary slightly.	
-	18 x 9 x 8 Continuous Length   12 x 10.5 x 5 Continuous Length

#### www.alphawire.com

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Tel: 1-800-52 ALPHA

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

To Whom It May Concern:

Alpha Wire Part Number: 6416

6416, 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 d 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 c Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and reg Authorized Signatory for the Alpha Wire:

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Dave Watson, Director of Engineering & QA 01/04/2025

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