

Customer Specification

PART NO. 6420

Construction

						Diameter ("in")	
1) Component 1						6 x 1 PAIR	
a) Conductor						22 (7/30) AWG Tinned Copper	0.030
b) Insulation						0.013" Wall, Nom. PVC	0.056
(1) Print						ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING & INVERTED	
(2) Color Code						Alpha Wire Color Code BR	
Pair	Color	Pair	Color	Pair	Color		
1	BLACK#1-RED#1	3	BLACK#3-RED#3	5	BLACK#5-RED#5		
2	BLACK#2-RED#2	4	BLACK#4-RED#4	6	BLACK#6-RED#6		
c) Pair						2/Cond Cabled Together	
(1) Twists						8.0 Twists/foot (approx.)	
2) Cable Assembly						6 Components Cabled	
a) Twists						3.0 Twists/foot (min.)	
b) Orientation						Components to be arranged from INSIDE LAYER-to-OUTSIDE LAYER	
c) 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 Tinned Copper	
4) Jacket						0.043" Wall, Nom. PVC	0.370 (0.388 max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 6420 6PR 22 AWG SHIELDED 105C (UL) TYPE PLTC SUN RES OR TYPE CM OR C(UL) 60C TYPE CMG FT4 CE ROHS * = Factory Code <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i>	

Applicable Specifications

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1) UL	CM	105°C
	PLTC	105°C
	SUN RES	
2) CSA International	C(UL) TYPE CMG	60°C
	FT4	
3) CE	EU Low Voltage Directive 2014/35/EU	

Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3)	
	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.
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.
3) California Proposition 65	
	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.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	69 lbs. (max.)
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Mutual Capacitance	28 pF/ft @1 kHz, Nominal
3) Ground Capacitance	50 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	75 ω
5) Inductance	0.19 μ H/ft, Nominal
6) Conductor DCR	16.6 ω /1000ft @20°C, Nominal
7) OA Shield DCR	13.4 ω /1000ft @20°C, Nominal

Other

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Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 14.25 x 8 Continuous Length
b) 500 FT	13.5 x 10 x 4 Continuous Length
	<i>Spool dimensions may vary slightly.</i>

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EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 6420

6420, RoHS-Compliant Commencing With 01/08/2005 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 Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. This document also certifies that the listed part number is in compliance with the list of restricted substances to 10 items (commonly known as RoHS 3). The reader is referred to these Directives for the specific definitions and restrictions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control" requirements.

Substance

Lead
Mercury
Cadmium
Hexavalent Chromium
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl Ethers (PBDE),
Including Deca-BDE
Bis(2-ethylhexyl) phthalate (DEHP)
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)

Maximum Control Value

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
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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 issuance. This document is intended to provide guidance 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 for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Alpha Wire is an Authorized Signatory for the Alpha Wire:

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

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