

## Customer Specification

### PART NO. 6321

### Construction

						Diameter ("in")	
1) Component 1						7 x 1 PAIR	
a) Conductor						24 (7/32) AWG Tinned Copper	0.024
b) Insulation						0.019" Wall, Nom. Polyethylene, Foam	0.062
(1) Color Code						Alpha Wire Color Code A	
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED	4	BLACK-BLUE	7	BLACK-ORANGE		
2	BLACK-WHITE	5	BLACK-BROWN				
3	BLACK-GREEN	6	BLACK-YELLOW				
c) Pair						2/Cond Cabled Together	
(1) Twists						6.9 Twists/foot (min.)	
Individually Applied							
d) Shield						Foil Free Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing In	
(2) Drain Wire						24 (7/32) AWG Tinned Copper	
2) Cable Assembly						7 Components Cabled	
a) Twists						2.4 Twists/foot (min.)	
b) Orientation						Components to be arranged from INSIDE LAYER-to-OUTSIDE LAYER	
3) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
a) Foil Direction						Foil Facing Out	
b) Drain Wire						24 (7/32) AWG Tinned Copper	
c) Braid						Tinned Copper, 65% Coverage (min.)	
4) Jacket						0.048" Wall, Nom. PVC	0.464 (0.483 max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 6321 7PR 24 AWG SHIELDED 75C (UL) TYPE CM OR AWM 2493 --- LLXXXXXX CSA TYPE CMH FT1 CE ROHS * = Factory Code Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.	

## Applicable Specifications

1) UL	AWM/STYLE 2493	60°C
	CM	75°C
	VW-1	
2) CSA International	CMH	60°C
	FT1	
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 75°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	84 lbs. (max.)
Electrical Properties	
For Engineering purposes only	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Characteristic Impedance	100 $\omega$
3) Mutual Capacitance	12.5 pF/ft @1 kHz, Nominal
4) Ground Capacitance	22 pF/ft @1 kHz, Nominal
5) Conductor DCR	26 $\omega$ /1000ft @20°C, Nominal
6) Ind. Shield DC Resistance	19.8 $\omega$ /1000ft @20°C, Nominal
7) OA Shield DCR	2.6 $\omega$ /1000ft @20°C, Nominal

## Other

<b>Packaging</b>	<b>Flange x Traverse x Barrel (inches)</b>
a) 1000 FT	24 x 14 x 12 Continuous Length
b) 500 FT	18 x 14.25 x 8 Continuous Length
c) 100 FT	12 x 5.94 x 5 Continuous Length
	<i>Spool dimensions may vary slightly.</i>

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

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

ALPHA WIRE - CONFIDENTIAL AND PROPRIETARY Notice to persons receiving this document and/or technical information. This document is confidential and is the exclusive property of ALPHA WIRE, and is merely on loan and subject to recall by ALPHA WIRE at any time. By taking possession of this document, the recipient acknowledges and agrees that this document cannot be used in any manner adverse to the interests of ALPHA WIRE, and that no portion of this document may be copied or otherwise reproduced without the prior written consent of ALPHA WIRE. In the case of conflicting contractual provisions, this notice shall govern the status of this document. <br /><br />

©2019 ALPHA WIRE - all rights reserved.



Alpha Wire 6321

[illegible]

Lead	□□□□□□□□□□0.1% (1000 ppm)
Mercury	□□□□□□□□□□0.1% (1000 ppm)
Cadmium	□□□□□□□□□□0.01% (100 ppm)
Hexavalent Chromium	□□□□□□□□□□0.1% (1000 ppm)
Polybrominated Biphenyls (PBB)	□□□□□□□□□□0.1% (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE), Including Deca-BDE	□□□□□□□□□□0.1% (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	□□□□□□□□□□0.1% (1000 ppm)
Butyl benzyl phthalate (BBP)	□□□□□□□□□□0.1% (1000 ppm)
Dibutyl phthalate (DBP)	□□□□□□□□□□0.1% (1000 ppm)
Diisobutyl phthalate (DIBP)	□□□□□□□□□□0.1% (1000 ppm)

Alpha Wire □□□□□□□□

DeBW

