

# Customer Specification

## PART NO. 6462

### Construction

						Diameter ("in")	
1) Component 1						2 x 1 COND	
a) Conductor						22 (SOLID) AWG BC	0.025
b) Insulation						0.037" Wall, Nom. Foam HDPE	0.099
(1) Color(s)							
Cond	Color	Cond	Color	Cond	Color		
1	RED	2	GREEN				
2) Cable Assembly						2 Components Cabled	
a) Twists						4.4 Twists/ft. (min.)	
3) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
a) Foil Direction						Foil Facing Out	
b) Braid						TC, 65% Coverage (min.)	
4) Jacket						0.042" Wall, Nom., PVC	0.315 (0.328 max.)
a) Color(s)						VIOLET	
b) Print						ALPHA WIRE P/N 6462 PROFIBUS CABLE 1PR22 (UL) CMG EXXXXX OR PLTC OR C(UL) CMG SUN RES OR AWM 20201 600V CE ROHS (SEQ FOOTAGE EVERY 2FT) <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i>	

### Applicable Specifications

1) UL	CMG	75°C
	AWM/STYLE 20201	60°C / 600 V <sub>RMS</sub>
	SUN RES	
	PLTC	75°C
2) CSA International	CMG	75°C
3) CE	EU Low Voltage Directive 2006/95/EC	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2)	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No exemptions are required for RoHS Compliance on this item. Refer to the <a href="#">RoHS Certificate of Compliance</a> for more detail.
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. For up-to-date information, please see Alpha's <a href="#">REACH SVHC Declaration</a> .

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-30 to 75°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	14 lbs. max.
Electrical Properties	
	<i>Engineering purposes only</i>
1) Voltage Rating	300 V <sub>RMS</sub>
2) Characteristic Impedance	150 $\omega$ +/- 15
3) Mutual Capacitance	8.5 pf/ft. @1 kHz, Nominal
4) Ground Capacitance	27.9 pf/ft. @1 kHz, Nominal
5) Velocity of Propagation	78%
6) Conductor DCR	16 $\omega$ /1000ft. @20°C, Nominal
7) OA Shield DCR	3.9 $\omega$ /1000ft. @20°C, Nominal
8) Current	2.3 amps per conductor @30°C (max.)
9) Attenuation (max. dB/100ft.)	0.27 @200 kHz
	0.67 @4 MHz
	1.37 @16 MHz

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 12 x 8 Continuous Length
b) 500 FT	12 x 10 x 5 Continuous Length
c) 100 FT	12 x 4.5 x 3.5 Continuous Length
	<i>Spool dimensions may vary slightly.</i>
<b>Note:</b>	
a) PROFIBUS DP Cable	

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

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 6462

6462, RoHS-Compliant Commencing With 01/07/2008 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 not responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 31/03/2025

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