

Customer Specification

PART NO. 6456

Construction

				Diameters (In)	
1) Component 1		3 X 1 PAIR			
a) Conductor		22 (7/30) AWG Tinned Copper		0.030	
b) Insulation		0.0225" Wall, Nom. Foam HDPE		0.075	
(1) Color(s)					
Pair	Color	Pair	Color	Pair	Color
1	WHITE/BLUE-BLUE/WHITE	2	WHITE/ORANGE-ORANGE/WHITE	3	WHITE/GREEN-GREEN/WHITE
c) Pair		2/Cond Cabled Together			
(1) Twists:		4.8 Twists/foot (min)			
2) Cable Assembly		3 Components Cabled			
a) Twists:		3.2 Twists/foot (min)			
3) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing Out			
b) Drain Wire		22 (7/30) AWG Tinned Copper			
c) Braid		Tinned Copper,65% Coverage, Min.			
4) Jacket		0.053" Wall, Nom.,PVC		0.414	
a) Color(s)		BLACK			
b) Print		ALPHA WIRE P/N 6456 3PR 22 AWG EXXXXX SHIELDED (UL) CM OR PLTC SUN RES OR C(UL) CM --- FT1 CE ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

Applicable Specifications

1) UL	PLTC	60°C
	CM	60°C
	SUN RES	
2) CSA International	CM	60°C
	FT1	
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. Consult Alpha Wire's web site for RoHS C of C .
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 REACH SVHC Declaration .

Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 60°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	44 Lbs, Maximum
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	300 V _{RMS}
2) Characteristic Impedance	120 Ω +/- 12
3) Mutual Capacitance	11 pf/ft @1 kHz, Nominal
4) Ground Capacitance	20.9 pf/ft @1 kHz, Nominal
5) Velocity of Propagation	78 %
6) Conductor DCR	15.3 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	2 Ω/1000ft @20°C, Nominal
8) Current	2.7 amps per conductor @30°C, Maximum
9) Attenuation, Max dB/100ft	0.5 @ 1 MHz

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 5000 FT	48 x 26 x 18 Continuous length
b) 1000 FT	24 x 14 x 12 Continuous length
c) 500 FT	16 x 11 x 8 Continuous length
d) 100 FT	12 x 10 x 5 Continuous length
	<i>[Spool dimensions may vary slightly]</i>
Notes:	
a) EIA Industrial RS485 cable.	
b) 5000 ft. put-up available by special order only, minimums may apply.	

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 6456

6456, RoHS-Compliant Commencing With 7/1/2008 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, is manufactured in accordance with Directive 2002/95/EC (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of the product. This certification extends to amending Directive 2015/863/EU which expanded the list of restricted substances to 10 items (commonly known as RoHS 3). This product complies with these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item.** This product complies with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product

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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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 4/11/2024

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