

# **Customer Specification**

## **PART NO. 6453**

#### Construction

						Diameter ("in")		
1) Component 1						1 x 1 PAIR		
a) Conductor						22 (7/30) AWG Tinned Copper	0.030	
b) Insulation						0.0285" Wall, Nom. Foam HDPE	0.087	
(1) Color(s)								
Pair	Color	Pair	Color	Pair	Color			
1	WHITE/BLUE- BLUE/WHITE							
c) Cabling						2 COND Cabled		
(1) Twists						4.4 Twists/ft. (min.)		
(2) Orientation						Components to be arranged from INSIDE LAYER-to-OUTSIDE LAYER		
2) 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.)		
3) Jacket						0.042" Wall, Nom., PVC	0.284 (0.297 max.)	
a) Color(s)						BLACK		
b) Pri	b) Print					ALPHA WIRE-* P/N 6453 1PR 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.	n	

#### **Applicable Specifications**

60°C
60°C
ge Directive 2014/35/EU
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## 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)	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.	

# Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 60°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	20.5 lbs. max.
Electrical Properties	Engineering purposes only
1) Voltage Rating	300 V <sub>RMS</sub>
2) Characteristic Impedance	120 ω +/- 10
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	15.1 ω/1000ft. @20°C, Nominal
7) OA Shield DCR	4.3 ω/1000ft. @20°C, Nominal
8) Current	2.7 amps per conductor @30°C (max.)
9) Attenuation, Max dB/100ft	0.5 @1 MHz

### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 5000 FT	30 x 14 x 12 Continuous Length	
b) 1500 FT	18 x 14.25 x 8 Continuous Length	
c) 1000 FT	18 x 9 x 8 Continuous Length	
d) 500 FT	12 x 10.5 x 5 Continuous Length	
e) 100 FT	10.5 x 5 x 3.5 Continuous Length	
	Spool dimensions may vary slightly.	
Note:		
a) EIA Industrial RS485 cable		

#### www.alphawire.com

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Alpha Wire DDDD6453

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DDDD 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) Disobutyl phthalate (DIBP)

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2025/3/31