

## Customer Specification

**PART NO. 9854C**

## Construction

						<b>Diameter ("in")</b>	
1) Component 1						3 x 1 PAIR	
a) Conductor						28 (7/36) AWG TC	0.015
b) Insulation						0.0085" Wall, Nom. Polypropylene (PP)	0.033
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	WHITE-GRAY	2	YELLOW-ORANGE	3	GREEN-BLUE		
c) Pair						2/Cond Cabled Together	
(1) Twists:						12.0 Twists/ft. (min.)	
Individually Applied							
d) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing Out	
2) Component 2						1 X 1 PAIR	
a) Conductor						24 (7/32) AWG TC	0.024
b) Insulation						0.010" Wall, Nom. PVC, Semi-Rigid	0.044
(1) Color(s)							
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED						
c) Pair						2/Cond Cabled Together	
(1) Twists:						9.6 Twists/ft. (min.)	
Individually Applied							
d) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing Out	
3) Cable Assembly						4 Components Cabled	
a) Twists						4.0 Twists/foot (min.)	
b) Drain Wire						24 (7/32) AWG TC under core wrap common to pairs	
c) Core Wrap						Clear Mylar Tape, 25% Overlap (min.)	
4) Shield:						A/P/A Tape, 25% Overlap (min.)	
a) Braid						#36 AWG TC,90% Coverage (min.)	
5) Jacket						0.032" Wall, Nom., PVC	0.250 (0.265 max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 9854C IEEE 802.3 TRANSCEIVER CABLE 3PR28 1PR24 SHIELDED 75C (UL) CM OR AWM 2919 LOW VOLTAGE COMPUTER CABLE OR C(UL) CMG FT4 CE ROHS * = Factory Code <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i>	

Applicable Specifications

1) UL	CM	75°C
	AWM/STYLE 2919	80°C / 30 V <sub>RMS</sub>
2) CSA International	C(UL) TYPE CMG	75°C
	FT4	
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> .
3) California Proposition 65	Outer surface materials used in manufacturing this part meet the requirements of California Proposition 65.

# Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	18.8 lbs. max.
Electrical Properties	
Engineering purposes only	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Component 1	
a) Characteristic Impedance	78 $\omega$ +/- 5
b) Mutual Capacitance	19.7 pf/ft. @1 kHz, Nominal
c) Velocity of Propagation	66 %
d) Conductor DCR	65 $\omega$ /1000f.t @20°C, Nominal
e) Attenuation, Max dB/100ft	1.7 @1 MHz
	3.5 @5 MHz
	4.8 @10 MHz
3) Component 2	
a) Conductor DCR	25 $\omega$ /1000ft. @20°C, Nominal
4) OA Shield DCR	3.2 $\omega$ /1000ft. @20°C, Nominal

# Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 12 x 3.5 Continuous Length
	Spool dimensions may vary slightly.

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

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## EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 9854C

9854C, RoHS-Compliant Commencing With 11/1/2004 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 2011/65/EU of the European Parliament, better known as the RoHS Directive (commonly known as RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. 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 also complies with UK - RoHS. The reader is referred to these Directives for the specific definitions and extents of the Directives. **No Exemptions are required for RoHS Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2014. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

### Substance

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

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 3/16/2025

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# Mouser Electronics

Authorized Distributor

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