

Customer Specification

PART NO. 58643

Construction

						Diameters (In)	
1) Component 1						3 X 1 PAIR	
a) Conductor						16 (7/.0192) AWG TC	0.058
b) Insulation						0.007" Wall, Nom. FEP	0.072
(1) Color Code						Alpha Wire Color Code A1	
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED	2	BLACK-WHITE	3	BLACK-GREEN		
c) Pair						2/Cond Cabled Together	
(1) Twists:						4.8 Twists/foot (min)	
Individually Applied:							
d) Shield:						Foil Free Alum/Mylar Tape, 25% Overlap, Min.	
(1) Foil Direction						Foil Facing In	
(2) Drain Wire						18 (7/.0152) AWG TC	
2) Cable Assembly						3 Components Cabled	
a) Twists:						2.4 Twists/foot (min)	
b) Core Wrap						Clear Mylar Tape, 25% Overlap, Min.	
3) Jacket						0.012" Wall, Nom., PVDF	0.309 (0.321 Max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 58643 3PR 16 AWG SHIELDED 125C (UL) TYPE CMP OR C(UL) TYPE CMP FT6 CE ROHS * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	

Applicable Specifications

1) UL	CMP	125°C
2) CSA International	FT6	
	C(UL) TYPE CMP	125°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. 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 .
3) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-25 to 125°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	160 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	150 V _{RMS}
2) Characteristic Impedance	33 ω +/- 10
3) Inductance	0.14 μH/ft, Nominal
4) Mutual Capacitance	53 pF/ft @1 kHz, Nominal
5) Ground Capacitance	95 pF/ft @1 kHz, Nominal
6) Conductor DCR	4.4 ω/1000ft @20°C, Nominal
7) Ind. Shield DC Resistance	6 ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	16 x 11 x 8 Max. 3 separate pieces; Min length/piece 250 FT.
	<i>[Spool dimensions may vary slightly]</i>

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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.

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EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 58643

58643, RoHS-Compliant Commencing With 01/05/2005 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. 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 **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control"

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)

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 not to provide regulatory information for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

A handwritten signature in blue ink, appearing to read 'QBW', with a long horizontal line extending to the right.

Dave Watson, Director of Engineering & QA 16/08/2025

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