

Customer Specification

PART NO. 5946

Construction

						Diameters (In)	
1) Component 1						5 X 1 PAIR	
a) Conductor						28 (7/36) AWG Tinned Copper	0.015
b) Insulation						0.010" Wall, Nom. PVC, Semi Rigid	0.035
(1) Color Code						Alpha Wire Color Code B	
Pair	Color	Pair	Color	Pair	Color		
1	WHITE-BLACK	3	WHITE-RED	5	WHITE-YELLOW		
2	WHITE-BROWN	4	WHITE-ORANGE				
c) Pair						2/Cond Cabled Together	
(1) Twists:						12.0 Twists/foot (min)	
2) Cable Assembly						5 Components Cabled	
a) Twists:						5.3 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Nonwoven Polyester Tape, 25% Overlap, Min.	
3) Shield:						A/P/A Tape, 25% Overlap, Min.	
a) Drain Wire						28 (7/36) AWG Tinned Copper	
b) Braid						Tinned Copper, 70% Coverage, Nom.	
4) Jacket						0.032" Wall, Nom., PVC	0.252 (0.267 Max.)
a) Color(s)						Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N 5946 5PR 28 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C SUN RES OR AWM 2464 80C 300V OR AWM 2517 105C 300V VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4 CE ROHS OIL RESISTANT (SEQ FOOTAGE) * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]	

Applicable Specifications

1) UL		
a) Component 1	AWM/STYLE 10002	105°C / 300 V _{RMS}
b) Overall	AWM/STYLE 2464	80°C / 300 V _{RMS}
	CM	105°C
	VW-1	
	AWM/STYLE 2517	105°C / 300 V _{RMS}
	SUN RES	
2) CSA International	CMG	105°C
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) Other	Oil Resistant	
5) CE:	EU Low Voltage Directive 2014/35/EU	

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):	
	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.
3) California Proposition 65:	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement. See the Alpha Wire website for more information.

Properties

[illegible]

Physical & Mechanical Properties	
1) Temperature Range	-35 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	18.4 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Mutual Capacitance	20.4 pF/ft @1 kHz, Nominal
3) Ground Capacitance	37 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	92 Ω
5) Inductance	0.22 μH/ft, Nominal
6) Conductor DCR	66 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	4.8 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	13.5 x 10 x 4 Continuous length
b) 500 FT	12 x 5.94 x 5 Continuous length
c) 100 FT	10.5 x 5 x 3.5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
Notes:	
a) Oil Resistant Jacket (7d @ 60C).	

www.alphawire.com

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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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SpecPDFFooterConfidential



EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5946

5946, RoHS-Compliant Commencing With 01/10/2008 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 (2011/65/EU), 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

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 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 04/09/2025

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