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# Customer Specification

## PART NO. 86165CY

### Construction

		Diameters (In)			
1) Component 1		5 X 1 COND			
a) Conductor		16 (65/34) AWG Tinned Copper		0.056	
b) Insulation		0.010" Wall, Nom. PVC, Semi Rigid		0.076	
(1) Color Code		Alpha Wire Color Code D			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	3	WHITE	5	ORANGE
2	RED	4	GREEN		
2) Cable Assembly		5 Components Cabled			
a) Twists:		4.8 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:		Flex Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing Out			
b) Drain Wire		26 (7/34) AWG Tinned Copper			
c) Single Serve		Tinned Copper, 90% Coverage, Min.			
4) Jacket		0.043" Wall, Nom., PVC		0.318 +/- 0.013	
a) Color(s)		SLATE			
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.			
c) Print		ALPHA WIRE-* P/N 86165CY 5C 16 AWG XTRAGUARD(R) CONTINUOUS FLEX DATA CABLE (UL) TYPE PLTC 105C OR TYPE CM 105C --- C(UL) CMG OR AWM 2661 105C 300V OR AWM 21894 105C 300V SUN RES 60C OIL --- LLXXXXXX CSA AWM I/II A/B FT4 105C 300V CE ROHS (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 <sub>RMS</sub>
b) Overall	AWM/STYLE 2661	105°C / 300 V <sub>RMS</sub>
	CM	105°C
	AWM/STYLE 21894	105°C / 300 V <sub>RMS</sub>
	SUN RES	
	60C OIL	
	PLTC	105°C
2) CSA International	AWM I/II A/B	105°C / 300 V <sub>RMS</sub>
	C(UL) TYPE CMG	105°C
	FT4	
3) CE:	EU Low Voltage Directive 2014/35/EU	

## 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 and the amending Directive 2015/863/EU of 4 June 2015. 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:	
	Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-10 to 105°C(static), +5 to 105°C (dynamic)
2) Bend Radius	8X Cable Diameter(static), 8X Cable Diameter(dynamic)
3) Pull Tension	108 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	51 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	92 pF/ft @1 kHz, Nominal
4) Inductance	0.15 µH/ft, Nominal
5) Conductor DCR	4.5 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	3.3 Ω/1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 12 x 8 Continuous length
b) 500 FT	12 x 10 x 5 Continuous length
c) 100 FT	12 x 4.5 x 3.5 Continuous length
	<i>[Spool dimensions may vary slightly]</i>

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 86165CY

86165CY , RoHS-Compliant Commencing With 2/15/2018 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 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) 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.

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 its release. The information provided is designed only as a general guide 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 be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA

8/17/2018

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