

# Customer Specification

## PART NO. 85107CY

### Construction

						Diameters (In)	
1) Component 1						1 X 7 COND	
a) Conductor						10 (658(7x94)/38) AWG Bare Copper	0.132
b) Insulation						0.022" Wall, Nom. PVC	0.176
(1) Print						ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED	
(2) Color(s)							
Cond	Color	Cond	Color	Cond	Color		
1	RED #1	4	RED #4	7	YELLOW/GREEN/C		
2	RED #2	5	RED #5				
3	RED #3	6	RED #6				
c) Cabling						7 COND Cabled	
(1) Twists:						2.1 Twists/foot (min)	
(2) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
(3) Core Wrap						REMAI Tape, 25% Overlap, Min.	
d) Jacket						0.025" Wall, Nom.,PVC, Oil Resistant	0.666+/- 0.024
(1) Color(s)						BLACK	
(2) Jacket Separator						Tissue Tape, 20% Overlap, Min.	
2) Shield						Tinned Copper BRAID Shield,85% Coverage, Nom.	
3) Jacket						0.100" Wall, Nom.,PVC, Oil Resistant	0.907+/- 0.039
a) Color(s)						BLACK	
b) Jacket Separator						Tissue Tape, 20% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N 85107CY 7C 10 AWG XTRAGUARD(R) CONTINUOUS FLEX CONTROL CABLE RU AWM 2587 CONSTANT FLEXING OR CRU AWM I/II A/B FT1 90C 600V CE ROHS (SEQ FOOTAGE) * = Factory Code	

### Applicable Specifications

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1) UL		
a) Component 1	AWM/STYLE 10012	90°C / 600 V <sub>RMS</sub>
b) Overall	AWM/STYLE 2587	90°C / 600 V <sub>RMS</sub>
2) CSA International	C(RU) AWM I/II A/B	90°C / 600 V <sub>RMS</sub>
	FT1	
3) Other	VDE 0472, Section 803 Oil Test	
4) 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

Physical & Mechanical Properties	
1) Temperature Range	-40 to 90°C(static), -5 to 90°C (dynamic)
2) Bend Radius	8X Cable Diameter(static), 8X Cable Diameter(dynamic)
3) Pull Tension	604 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	60 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	108 pF/ft @1 kHz, Nominal
4) Inductance	0.15 µH/ft, Nominal
5) Conductor DCR	1.02 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	0.99 Ω/1000ft @20°C, Nominal

## Other

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Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	48 x 26 x 18 Continuous length
b) 500 FT	30 x 14 x 12 Continuous length
c) 100 FT	24 x 14 x 12 Continuous length
	<i>[Spool dimensions may vary slightly]</i>

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

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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# EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 85107CY

85107CY, RoHS-Compliant Commencing With 10/1/2005 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 7/17/2024

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374  
Tel: 1-908-925-8000