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# Customer Specification

## PART NO. 86018CY

### Construction

		Diameters (In)			
1) Component 1		18 X 1 COND			
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 D			
Cond	Color	Cond	Color	Cond	Color
1	BLACK	7	BROWN	13	RED/GREEN
2	RED	8	YELLOW	14	RED/YELLOW
3	WHITE	9	VIOLET	15	RED/BLACK
4	GREEN	10	SLATE	16	WHITE/BLACK
5	ORANGE	11	PINK	17	WHITE/RED
6	BLUE	12	TAN	18	WHITE/GREEN
2) Cable Assembly		18 Components Cabled			
a) Twists:		6.0 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		0.040" Wall, Nom., PVC		0.282+/- 0.017	
a) Color(s)		SLATE			
b) Jacket Separator		Tissue Tape, 25% Overlap, Min.			
c) Print		ALPHA WIRE-* P/N 86018CY 18C 28 AWG XTRAGUARD(R) CONTINUOUS FLEX DATA CABLE (UL) 105C TYPE CM --- 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	
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), 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. 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	31 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	25 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	45 pF/ft @1 kHz, Nominal
4) Inductance	0.22 µH/ft, Nominal
5) Conductor DCR	67 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	3.6 Ω/1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	16 x 11 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>

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

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 86018CY

86018CY , RoHS-Compliant Commencing With 8/1/2005 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 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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA

3/24/2020

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Authorized Distributor

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