

Customer Specification

PART NO. XM1842KCY

Construction

						Diameters (In)	
1) Component 1						42 X 1 COND	
a) Conductor						18 (41/34) AWG Bare Copper	0.047
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON	0.089
(1) Print						ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED	
(2) Color Code						Alpha Wire Color Code KW	
Cond	Color	Cond	Color	Cond	Color		
1	GREEN/YEL	15	BLACK#14	29	BLACK#28		
2	BLACK#1	16	BLACK#15	30	BLACK#29		
3	WHITE/BLA	17	BLACK#16	31	BLACK#30		
4	BLACK#3	18	BLACK#17	32	BLACK#31		
5	BLACK#4	19	BLACK#18	33	BLACK#32		
6	BLACK#5	20	BLACK#19	34	BLACK#33		
7	BLACK#6	21	BLACK#20	35	BLACK#34		
8	BLACK#7	22	BLACK#21	36	BLACK#35		
9	BLACK#8	23	BLACK#22	37	BLACK#36		
10	BLACK#9	24	BLACK#23	38	BLACK#37		
11	BLACK#10	25	BLACK#24	39	BLACK#38		
12	BLACK#11	26	BLACK#25	40	BLACK#39		
13	BLACK#12	27	BLACK#26	41	BLACK#40		
14	BLACK#13	28	BLACK#27	42	BLACK#41		
2) Cable Assembly						42 Components Cabled	
a) Twists:						1.8 Twists/foot (min)	
b) Orientation:						Components to be arranged from OUTSIDE LAYER to INSIDE LAYER	
c) Core Wrap						REMA Y Tape, 25% Overlap, Min.	
3) Shield						Tinned Copper BRAID Shield,85% Coverage, Min.	
4) Jacket						0.085" Wall, Nom.,PVC	0.915+/- 0.046
a) Color(s)						BLACK	
b) Jacket Separator						Tissue Tape, 25% Overlap, Min.	
c) Print						ALPHA WIRE-* P/N XM1842KCY 42C 18 AWG (0.825mm2) SERIES XM (UL) WTTC 90C WET/DRY 1000V OR (UL) TC-ER 90C WET/DRY 600V SUN RES DIR BUR OIL RES I OR MTW 18 AWG OR CRU AWM I/II A/B 90C 600V FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code	

Applicable Specifications

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1) UL		
a) Component 1	Unlisted Conductor	90°C Dry / 90°C Wet / 600 V _{RMS}
b) Overall	MTW	90°C Dry / 60°C Wet / 600 V _{RMS}
	TC	90°C Dry / 90°C Wet / 600 V _{RMS}
	EXPOSED RUN	
	SUN RES	
	OIL RES I	
	WTTC	90°C Dry / 90°C Wet / 1000 V _{RMS}
2) CSA International	C(RU) AWM I/II A/B	90°C / 600 V _{RMS}
	FT4	
3) Other	Conductors ASTM Class M	
	Conductors IEC Class 6 on AWG size	
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

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Physical & Mechanical Properties	
1) Temperature Range	-30 to 90°C(static), -5 to 90°C (dynamic)
2) Bend Radius	10X Cable Diameter(static), 10X Cable Diameter(dynamic)
3) Pull Tension	562 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600/1000 V _{RMS}
2) Capacitance	39 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	70 pF/ft @1 kHz, Nominal
4) Inductance	0.19 μH/ft, Nominal
5) Conductor DCR	6.7 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	1.07 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	
Notes:	
a) Suitable for constant flexing where cycle count will be less than 12,000,000 cycles.	

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