

Customer Specification

PART NO. F18042KW

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) Jacket						0.085" Wall, Nom.,TPE	0.874+/- 0.045
a) Color(s)						BLACK	
b) Print						ALPHA WIRE-* P/N F18042KW 42C 18 AWG (0.825mm2) SERIES F (UL) TYPE TC-ER 90C WET/DRY 600V OIL RES I/II -40C SUN RES OR TYPE PLTC 90C OR C(UL) CIC CONTROL/TC 18 AWG -40C 90C WET 90C DRY PVC/NYLON INS FT4 OR CRU AWM I/II A/B 90C 600V FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]	

Applicable Specifications

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Physical & Mechanical Properties	
1) Temperature Range	-40 to 90°C(static), -5 to 90°C (dynamic)
2) Bend Radius	6X Cable Diameter(static), 8X Cable Diameter(dynamic)
3) Pull Tension	537 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Capacitance	26 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.19 µH/ft, Nominal
4) Conductor DCR	6.7 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 20,000,000 cycles.	

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Lead	□□□□□□□□□□0.1% (1000 ppm)
Mercury	□□□□□□□□□□0.1% (1000 ppm)
Cadmium	□□□□□□□□□□0.01% (100 ppm)
Hexavalent Chromium	□□□□□□□□□□0.1% (1000 ppm)
Polybrominated Biphenyls (PBB)	□□□□□□□□□□0.1% (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE), Including Deca-BDE	□□□□□□□□□□0.1% (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	□□□□□□□□□□0.1% (1000 ppm)
Butyl benzyl phthalate (BBP)	□□□□□□□□□□0.1% (1000 ppm)
Dibutyl phthalate (DBP)	□□□□□□□□□□0.1% (1000 ppm)
Diisobutyl phthalate (DIBP)	□□□□□□□□□□0.1% (1000 ppm)

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