

## Customer Specification

**PART NO. 5139/27C**

## Construction

						Diameters (In)		
1) Component 1						27 X 1 PAIR		
a) Conductor						18 (16/30) AWG Tinned Copper		0.047
b) Insulation						0.016" Wall, Nom. PVC		0.079
(1) Color Code						Alpha Wire Color Code A		
Pair	Color	Pair	Color	Pair	Color			
1	BLACK-RED	10	RED-BLUE	19	WHITE-BLUE			
2	BLACK-WHITE	11	RED-YELLOW	20	WHITE-BROWN			
3	BLACK-GREEN	12	RED-BROWN	21	WHITE-ORANGE			
4	BLACK-BLUE	13	RED-ORANGE	22	WHITE-YELLOW			
5	BLACK-BROWN	14	GREEN-BLUE	23	BLUE-BROWN			
6	BLACK-YELLOW	15	GREEN-WHITE	24	BLUE-ORANGE			
7	BLACK-ORANGE	16	GREEN-BROWN	25	BLUE-YELLOW			
8	RED-GREEN	17	GREEN-ORANGE	26	BROWN-ORANGE			
9	RED-WHITE	18	GREEN-YELLOW	27	BROWN-YELLOW			
c) Pair						2/Cond Cabled Together		
(1) Twists:						5.3 Twists/foot (min)		
2) Cable Assembly						27 Components Cabled		
a) Twists:						1.0 Twists/foot (min)		
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER		
c) Core Wrap						Nonwoven Polyester Tape, 20% Overlap, Min.		
3) Shield:						A/P/A Tape, 20% Overlap, Min.		
a) Drain Wire						18 (16/30) AWG Tinned Copper		
b) Braid						Tinned Copper,70% Coverage, Nom.		
4) Jacket						0.083" Wall, Nom.,PVC		1.000 (1.036 Max.)
a) Color(s)						Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White		
b) Ripcord						1 End 810 Denier Nylon		
c) Print						ALPHA WIRE-* P/N 5139/27C 27PR 18 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C SUN RES OR AWM 2464 80C 300V OR AWM 2517 105C 300V VW-1 OR C(UL) TYPE CMG 105C FT4 CE ROHS OIL RESISTANT (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	-30 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	707 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Mutual Capacitance	32 pF/ft @1 kHz, Nominal
3) Ground Capacitance	58 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	67 Ω
5) Inductance	0.18 μH/ft, Nominal
6) Conductor DCR	7.1 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	1.15 Ω/1000ft @20°C, Nominal

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	48 x 26 x 18 Continuous length
b) 500 FT	36 x 14 x 12 Continuous length
c) 100 FT	24 x 14 x 12 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
<b>Notes:</b>	
a) Oil Resistant Jacket (7d @ 60C).	

[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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**Alpha** 2011/65/EU RoHS2015/863/EURoHSSJ/T 11364-2014

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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