

Customer Specification

PART NO. 5269/77C

Construction

	Diameters (In)	
1) Component 1	77 X 1 PAIR	
a) Conductor	24 (7/32) AWG Tinned Copper	0.024
b) Insulation	0.010" Wall, Nom. PVC, Semi Rigid	0.044
(1) Color Code	Alpha Wire Color Code B	

Pair	Color	Pair	Color	Pair	Color
1	WHITE-BLACK	27	RED-GREEN	53	WHITE/BLACK VIOLET
2	WHITE-BROWN	28	RED-BLUE	54	WHITE/BLACK SLATE
3	WHITE-RED	29	RED-VIOLET	55	WHITE/BROWN BLACK
4	WHITE-ORANGE	30	RED-SLATE	56	WHITE/BROWN BROWN
5	WHITE-YELLOW	31	ORANGE-YELLOW	57	WHITE/BROWN RED
6	WHITE-GREEN	32	ORANGE-GREEN	58	WHITE/BROWN ORANGE
7	WHITE-BLUE	33	ORANGE-BLUE	59	WHITE/BROWN YELLOW
8	WHITE-VIOLET	34	ORANGE-VIOLET	60	WHITE/BROWN GREEN
9	WHITE-SLATE	35	ORANGE-SLATE	61	WHITE/BROWN BLUE
10	BLACK-BROWN	36	YELLOW-GREEN	62	WHITE/BROWN VIOLET
11	BLACK-RED	37	YELLOW-BLUE	63	WHITE/BROWN SLATE
12	BLACK-ORANGE	38	YELLOW-VIOLET	64	WHITE/RED BLACK
13	BLACK-YELLOW	39	YELLOW-SLATE	65	WHITE/RED BROWN
14	BLACK-GREEN	40	GREEN-BLUE	66	WHITE/RED RED
15	BLACK-BLUE	41	GREEN-VIOLET	67	WHITE/RED ORANGE
16	BLACK-VIOLET	42	GREEN-SLATE	68	WHITE/RED YELLOW
17	BLACK-SLATE	43	BLUE-VIOLET	69	WHITE/RED GREEN
18	BROWN-RED	44	BLUE-SLATE	70	WHITE/RED BLUE
19	BROWN-ORANGE	45	VIOLET-SLATE	71	WHITE/RED VIOLET
20	BROWN-YELLOW	46	WHITE/BLACK BLACK	72	WHITE/RED SLATE
21	BROWN-GREEN	47	WHITE/BLACK BROWN	73	WHITE/ORANGE BLACK
22	BROWN-BLUE	48	WHITE/BLACK RED	74	WHITE/ORANGE BROWN
23	BROWN-VIOLET	49	WHITE/BLACK ORANGE	75	WHITE/ORANGE RED
24	BROWN-SLATE	50	WHITE/BLACK YELLOW	76	WHITE/ORANGE ORANGE
25	RED-ORANGE	51	WHITE/BLACK GREEN	77	WHITE/ORANGE YELLOW
26	RED-YELLOW	52	WHITE/BLACK BLUE		

c) Pair	2/Cond Cabled Together	
(1) Twists:	9.6 Twists/foot (min)	
2) Cable Assembly	77 Components Cabled	
a) Twists:	1.1 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) Jacket	0.083" Wall, Nom.,PVC	0.904 (0.952 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 5269/77C 77PR 24 AWG XTRAGUARD(R) 1 (UL) TYPE CM 105C SUN RES OR AWM 2464 80C 300V OR AWM 2517 105C 300V VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4 CE ROHS OIL RESISTANT (SEQ FOOTAGE) * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	

Applicable Specifications

1) UL		
a) Component 1	AWM/STYLE 10002	105°C / 300 V _{RMS}
b) Overall	AWM/STYLE 2517	105°C / 300 V _{RMS}
	SUN RES	
	AWM/STYLE 2464	80°C / 300 V _{RMS}
	CM	105°C
	VW-1	
2) CSA International	CMG	105°C
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) Other	Oil Resistant	
5) CE:	EU Low Voltage Directive 2014/35/EU	

Environmental

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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	-35 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	542 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Mutual Capacitance	21.2 pF/ft @1 kHz, Nominal
3) Characteristic Impedance	87 Ω
4) Inductance	0.19 μH/ft, Nominal
5) Conductor DCR	26 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	30 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>
Notes:	
a) Oil Resistant Jacket (7d @ 60C).	

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5269/77C

5269/77C, RoHS-Compliant Commencing With 8/1/2005 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	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 4/1/2025

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