

## 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 [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 2517	105°C / 300 V <sub>RMS</sub>
	SUN RES	
	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	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

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 <sub>RMS</sub>
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)	
	[Spool dimensions may vary slightly]
<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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# 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

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)

## Maximum Control Value

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 5/7/2024

Alpha Wire  
2200 US Highway 27 South  
Richmond, IN 47374  
Tel: 1-908-925-8000