



## **Customer Specification**

**PART NO. 5120/40C** 

C	Construction		

						Diameters (In)	
1) Component 1						40 X 1 COND	
a) Conductor					24 (7/32) AWG Tinned Copper	0.024	
b) Insu	lation					0.010" Wall, Nom. PVC, Semi Rigid	0.044
(1) Col	or Code					Alpha Wire Color Code E	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	15	WHITE/YEI	29	WHITE/BR(		
2	BROWN	16	WHITE/GR	30	WHITE/BR(		
3	RED	17	WHITE/BLI	31	WHITE/BR(		
4	ORANGE	18	WHITE/VIC	32	WHITE/BR(		
5	YELLOW	19	WHITE/SL/	33	WHITE/BR(		
6	GREEN	20	WHITE/BL	34	WHITE/BR(		
7	BLUE	21	WHITE/BL	35	WHITE/RED		
8	VIOLET	22	WHITE/BL	36	WHITE/REE		
9	SLATE	23	WHITE/BL	37	WHITE/REE		
10	WHITE	24	WHITE/BL/	38	WHITE/RED		
11	WHITE/BL	25	WHITE/BL/	39	WHITE/REC		
12	WHITE/BR	26	WHITE/BL/	40	WHITE/RED		
13	WHITE/RE	27	WHITE/BL				
14	WHITE/OR	28	WHITE/BR				
2) Cable Assembly					40 Components Cabled		
a) Twists:					2.5 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) Shie	ld:					A/P/A Tape, 20% Overlap, Min.	
a) Drai	n Wire					24 (7/32) AWG Tinned Copper	
b) Brai	d					Tinned Copper,70% Coverage, Nom.	
4) Jack	et					0.032" Wall, Nom.,PVC	0.418 (0.441 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 5120/40C 40C 24 AWG XTRAGUARD(R) 1 SHIELDED (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>	
	СМ	105°C	
	VW-1		
2) CSA International	CMG	105°C	
	FT4		
B) 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	151 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Capacitance	31 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Ground Capacitance	56 pF/ft @1 kHz, Nominal			
4) Inductance	0.19 μH/ft, Nominal			
5) Conductor DCR	26 Ω/1000ft @20°C, Nominal			
6) OA Shield DCR	2.47 Ω/1000ft @20°C, Nominal			

#### **Other**

2 Continuous length  Continuous length
3
F.C. (; 1 )
5 Continuous length
ensions may vary slightly]

#### www.alphawire.com

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### **EU/UK/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 5120/40C

5120/40C, 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)

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

12/14/2024

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## **Mouser Electronics**

**Authorized Distributor** 

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Alpha Wire:

5120/40C SL005