

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

Request a Sample

# Customer Specification PART NO. 5120/20C

## Construction

	-					
				Diameters (In)		
1) Component 1		20 X 1 COND	20 X 1 COND			
a) Conductor		24 (7/32) AWO	24 (7/32) AWG Tinned Copper		0.024	
b) Insulation		0.010" Wall, N	0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color Code		Alpha Wire Co	Alpha Wire Color Code E			
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	8	VIOLET	15	WHITE/YELLOW	
2	BROWN	9	SLATE	16	WHITE/GREEN	
3	RED	10	WHITE	17	WHITE/BLUE	
4	ORANGE	11	WHITE/BLACK	18	WHITE/VIOLET	
5	YELLOW	12	WHITE/BROWN	19	WHITE/SLATE	
6	GREEN	13	WHITE/RED	20	WHITE/BLACK/BROW N	
7	BLUE	14	WHITE/ORANGE			
2) Cable Assembly		20 Componen	20 Components Cabled			
a) Twists:		4.4 Twists/foo	4.4 Twists/foot (min)			
b) Orientation:			Components to be arranged from INSIDE LAYER to OUTSIDE LAYER		c) Core Wrap	
Nonwoven Polyester Tape, 25% Overlap, Min.		/lin.			3) Shield:	
A/P/A Tape, 25% Overlap, Min.					a) Drain Wire	
24 (7/32) AWG Tinned Copper					b) Braid	
Tinned Copper,70% Coverage, Min.					4) Jacket	
0.032" Wall, Nom.,PVC		0.328 (0.346 N	0.328 (0.346 Max.)		a) Color(s)	
Slate, Black, Yell	low, Orange, Blue, Green,	Red, Sand Beige, W	Sand Beige, White		b) Ripcord	
1 End 810 Denier Nylon					c) Print	

**Applicable Specifications** 

1) UL		
a) Component 1	AWM/STYLE 10002	105°C / 300 V <sub>RMS</sub>
b) Overall	AWM/STYLE 21894	105°C / 300 V <sub>RMS</sub>
	SUN RES	
	60C OIL	
	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	СМ	105°C
	VW-1	
2) CSA International	СМG	105°C
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) CE:	EU Low Voltage Directive 2006/95/EC	

#### Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):				
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.			
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. For up-to-date information, please see Alpha's REACH SVHC Declaration.			
3) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.			

## Properties

Physical & Mechanical Properties				
1) Temperature Range	-35 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	79 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	<sup>300 V</sup> RMS			
2) Capacitance	32 pf/ft @1 kHz, Nominal Conductor to Conductor			
3) Ground Capacitance	58 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	3 Ω/1000ft @20°C, Nominal			

#### Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	18 x 12 x 8 Continuous length
b) 500 FT	12 x 12 x 3.5 Continuous length
c) 100 FT	12 x 4.5 x 3.5 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

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

To Whom It May Concern:

Alpha Wire Part Number: 5120/20C

5120/20C, RoHS-Compliant Commencing With 8/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above 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) 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.

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 & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 11/8/2016