

Request a Sample

# Customer Specification PART NO. 5020/20C

#### Construction

Construct				Diameters (In)	)	
1) Component 1		20 X 1 COND		,		
a) Conductor		24 (7/32) AWG	24 (7/32) AWG Tinned Copper		0.024	
b) Insulation		0.010" Wall, Nor	0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color Code		Alpha Wire Colo	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 Components	20 Components Cabled			
a) Twists:		4.4 Twists/foot (	4.4 Twists/foot (min)			
b) Orientation:			Components to be arranged from INSIDE LAYER to OUTSIDE LAYER			
c) Core Wrap		Nonwoven Polye	Nonwoven Polyester Tape, 25% Overlap, Min.			
3) Jacket		0.032" Wall, Nor	0.032" Wall, Nom.,PVC		0.300 (0.318 Max.)	
a) Color(s)		Slate, Black, Yel	Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White			
b) Ripcord		1 End 810 Denie	1 End 810 Denier Nylon			
c) Print		XTRAGUARD(R) 300V OR AWM 2 VW-1 LLXXXX CE ROHS (SEQ * = Factory Code	ALPHA WIRE-* P/N 5020/20C 20C 24 AWG XTRAGUARD(R) 1 (UL) TYPE CM 105C OR AWM 2464 80C 300V OR AWM 21894 105C 300V SUN RES 60C OIL VW-1 LLXXXXXX CSA 105C TYPE CMG FT4 CE ROHS (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 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	СМС	105°C	
	FT4		
3) IEC	EN 60332-1 Flame Behavior		
	EN 60332-2 Flame Behavior		
4) CE:	EU Low Voltage Directive 2014/35/EC	EU Low Voltage Directive 2014/35/EC	

# 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:	Exempt from warning labels based on the Consent Judgment. Please see Alpha's CA Prop 65 Statement for more information.			

**Properties** 

Physical & Mechanical Properties				
1) Temperature Range	-35 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	70 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Capacitance	21.8 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Inductance	0.19 μH/ft, Nominal			
4) Conductor DCR	26 Ω/1000ft @20°C, Nominal			

# Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	16 x 11 x 8 Continuous length
b) 500 FT	12 x 10 x 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: 5020/20C

5020/20C, 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

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