

## **Customer Specification**

#### **PART NO. 5070/20C**

#### **Construction**

					Diameters (In)	
1) Component 1		20 X 1 COND				
a) Conductor		18 (16/30) AWG Tinned Copper			0.047	
b) Insulation		0.016" Wall, Nom. PVC			0.079	
(1) Color Code		Alpha Wire Color Code D				
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	8	YELLOW	15	RED/BLACK	
2	RED	9	VIOLET	16	WHITE/BLACK	
3	WHITE	10	SLATE	17	WHITE/RED	
4	GREEN	11	PINK	18	WHITE/GREEN	
5	ORANGE	12	TAN	19	WHITE/YELLOW	
6	BLUE	13	RED/GREEN	20	WHITE/BLUE	
7	BROWN	14	RED/YELLOW			
2) Cable Assembly		20 Components Cabled				
a) Twists:		2.0 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		0.032" Wall, Nom.,PVC			0.484 (0.503 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 5070/20C 20C 18 AWG  XTRAGUARD(R) 1 (UL) TYPE CM 105C SUN RES OR AWM  2464 80C 300V OR AWM 2517 105C 300V  VW-1 OR C(UL) TYPE CMG 105C 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 1569	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	C(UL) TYPE 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**

	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 Exemption are required for RoHS Compliance on this item.		
2) REACH Regulation (EC 190	07/2006):		
	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	-30 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	251 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Capacitance	30 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Inductance	0.18 μH/ft, Nominal			
4) Conductor DCR	7.1 Ω/1000ft @20°C, Nominal			

#### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	24 x 14 x 12 Continuous length	
b) 500 FT	18 x 14.25 x 8 Continuous length	
c) 100 FT	18 x 9 x 8 Continuous length	
d) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	
Notes:		
a) Oil Resistant Jacket (7d @ 60C).		

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 5070/20C

5070/20C, RoHS-Compliant Commencing With 8/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, 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 4/30/2024

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