

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

# Customer Specification PART NO. 5170/20C

#### Construction

				Diameters (In)		
1) Component 1		20 X 1 COND	20 X 1 COND			
a) Conductor		18 (16/30) AWG	18 (16/30) AWG Tinned Copper			
b) Insulation		0.016" Wall, Nom	0.016" Wall, Nom. PVC		0.079	
(1) Color Code		Alpha Wire Color	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:		2.4 Twists/foot (min)				
b) Orientation:		Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap		Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield:		A/P/A Tape, 25% Overlap, Min.				
a) Drain Wire		18 (16/30) AWG Tinned Copper				
b) Braid		Tinned Copper,70% Coverage, Min.				
4) Jacket		0.032" Wall, Nom.,PVC		0.512 (0.532 Max.)		
a) Color(s)		Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White		eige, White		
b) Ripcord		1 End 810 Denier Nylon				
c) Print		ALPHA WIRE-* P/N 5170/20C 20C 18 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C OR AWM				

2464 80C 300V OR AWM 21894 105C 300V SUN RES 60C OIL VW-1 OR C(UL) TYPE CMG 105C 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 1569	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	C(UL) TYPE CMG	105°C
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) CE:	EU Low Voltage Directive 2014/35/EC	

### Environmental

1) CE: EU Directive 2011/65/EU(RoH	S2):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011and the amending Directive 2015/863/EU of 4 June 2015 . 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:	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	-30 to 105°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	273 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>	
2) Capacitance	45 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	81 pF/ft @1 kHz, Nominal	
4) Inductance	0.18 µH/ft, Nominal	
5) Conductor DCR	7.1 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	1.54 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	20 x 11 x 8 Continuous length
c) 100 FT	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]

#### www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207

Tel: 1-800-52 ALPHA (25742)

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.



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

To Whom It May Concern:

Alpha Wire Part Number: 5170/20C

5170/20C, 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)

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 & QA Alpha Wire 711 Lidgerwood Ave. Elizabeth, NJ 07207 Tel: 1-908-925-8000 8/25/2020

#### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Multi-Conductor Cables category:

Click to view products by Alpha manufacturer:

Other Similar products are found below :

8916-GRY-100 8917-BLK-100 8917-GRN/YEL-100 8918-GRN/YEL-100 8920-BRN-1000 8920-RED-1000 89907-LT-DEC/GRY-500 CR3909-000 CR3927-000 01342.35T.01 01364.35T.01 003201-000 CS2885-000 CS8782-000 CS9912-000 6200UE-NAT-U1000 CTC-0062-20-9/5-9 CTC-0062-22-9/5-9 6304FE-877-U500 6309UE-877-1000 6320UE-NAT-U1000 644833-000 6502FE 8771000 6504UE-877-U1000 CW9530-000 CX6543-000 CXA-0066-20-4-9CS2973 CXA-0078-16-1-9CS2405 CXA-0078-22-4-9CS2405 CXA-0078-24-4-9CS2405 CXA-0140-16-6/9-9CS2405 CY0660-000 706/2R-BLACK-EACH 720451-000 730859-000 MCC-USB-4-250 752687-000 768146-000 773159-000 7934A-BLK-1000 8125-CHR-100 8164-CHR-1000 820457-000 8205-CHR-1000 8240-BLK-U1000 82723-NAT-1000 82907-NAT-500 83003-YEL-500 83005-WHT-500 83006-DK-GRN-100