

Alpha Wire | 1320 City Center Drive, Suite 100, Carmel, IN 46032 Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

# Customer Specification PART NO. 5296C

#### Construction

				Diameters (In)	
1) Component 1		6 X 1 PAIR			
a) Conductor		20 (7/28) AWG Tinned Copper		0.038	
b) Insulation		0.016" Wall, Nom. PVC		0.070	
(1) Color Code		Alpha Wire Color Code A			
Pair	Color	Pair	Color	Pair	Color
1	BLACK-RED	3	BLACK-GREEN	5	BLACK-BROWN
2	BLACK-WHITE	4	BLACK-BLUE	6	BLACK-YELLOW
c) Pair		2/Cond Cabled Together			
(1) Twists:		6.0 Twists/foot (min)			
2) Cable Assembly		6 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, 20% Overlap, Min.			
3) Shield:		A/P/A Tape, 20% Overlap, Min.			
a) Drain Wire		20 (7/28) AWG Tinned Copper			
b) Braid		Tinned Copper,70% Coverage, Nom.			
4) Jacket		0.032" Wall, Nom.,PVC		0.443 (0.461 Max.)	
a) Color(s)		Slate, Black, Yellow, Orange, Blue, Gr		een, Red, Sand Beige, White	
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N 5296C 6PR 20 AWG XTRAGUARD(R) 1 SHIELDED (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 r manufacture.]	may have c(UL) or CSA markings depending upon plant of
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## **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>
	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) 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	-30 to 105°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	120 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>	
2) Mutual Capacitance	29 pF/ft @1 kHz, Nominal	
3) Ground Capacitance	52 pF/ft @1 kHz, Nominal	
4) Characteristic Impedance	74 Ω	
5) Inductance	0.19 μH/ft, Nominal	
6) Conductor DCR	10.3 Ω/1000ft @20°C, Nominal	
7) OA Shield DCR	2.24 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 9 x 8 Continuous length
c) 100 FT	12 x 5.94 x 5 Continuous length
d) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]
Notes:	
a) Oil Resistant Jacket (7d @ 60C).	

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

To Whom It May Concern:

Alpha Wire Part Number: 5296C

5296C, 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). 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 Alpha Wire 2200 US Highway 27 South Richmond, IN 47374 Tel: 1-908-925-8000 10/17/2023

#### **Mouser Electronics**

Authorized Distributor

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Alpha Wire: 5296C SL001 5296C SL002