

# **Customer Specification**

#### **PART NO. 6023C**

#### **Construction**

						Diameter ("in")	
1) Component 1						3 x 1 PAIR	
a) Conductor						18 (16/30) AWG Tinned Copper	0.047
b) Insulation						0.016" Wall, Nom. Polypropylene (PP)	0.079
(1) Color Code					Alpha Wire Color Code A		
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED	2	BLACK- WHITE	3	BLACK- GREEN		
c) Pa	ir					2/Cond Cabled Together	
(1) T <sub>\</sub>	wists					5.3 Twists/foot (min.)	
Indiv	idually Applie	d					
d) Sh	ield					Foil Free Alum/Mylar Tape, 25% Overlap (min.)	
(1) Foil Direction						Foil Facing In	
(2) Drain Wire						20 (10/30) AWG Tinned Copper	
2) Cable Assembly						3 Components Cabled	
a) Twists						2.7 Twists/foot (min.)	
b) Orientation						Components to be arranged from INSIDE LAYER-to- OUTSIDE LAYER	
c) Core Wrap						Clear Mylar Tape, 25% Overlap (min.)	
3) Jacket						0.047" Wall, Nom. PVC	0.406 (0.421 max.)
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N 6023C 3PR 18 AWG EXXXXX SHIELDED 75C (UL) C(UL) CMG FT4 OR AWM 2493 CE ROHS * = 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 1992	80°C / 300 V <sub>RMS</sub>
b) Overall	AWM/STYLE 2493	60°C
	VW-1	
	CMG	75°C
2) CSA International	FT4	
	C(UL) TYPE CMG	75°C
3) 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 detail.

# **Properties**

Physical & Mechanical Properties		
1) Temperature Range	-20 to 75°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	99 lbs. (max.)	
Electrical Properties	For Engineering purposes only	
1) Voltage Rating	300 V <sub>RMS</sub>	
2) Characteristic Impedance	59 ω	
3) Inductance	0.18 μH/ft, Nominal	
4) Mutual Capacitance	26 pF/ft @1 kHz, Nominal	
5) Ground Capacitance	47 pF/ft @1 kHz, Nominal	
6) Conductor DCR	7.2 ω/1000ft @20°C, Nominal	
7) Ind. Shield DC Resistance	9.1 ω/1000ft @20°C, Nominal	

#### Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	20 x 11 x 8 Continuous Length
b) 500 FT	18 x 9 x 8 Continuous Length
c) 100 FT	12 x 5.94 x 5 Continuous Length
	Spool dimensions may vary slightly.

#### www.alphawire.com

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Tel: 1-800-52 ALPHA

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

To Whom It May Concern:

Alpha Wire Part Number: 6023C

6023C, RoHS-Compliant Commencing With 11/1/2004 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	<b>Maximum Control Value</b>
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 3/31/2025

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