

Customer Specification

PART NO. 5103C

Construction

						Diameters (In)	
1) Component 1						3 X 1 COND	
a) Conductor						22 (7/30) AWG Tinned Copper	0.030
b) Insulation						0.010" Wall, Nom. PVC, Semi Rigid	0.050
(1) Color Code						Alpha Wire Color Code E	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	2	BROWN	3	RED		
2) Cable Assembly						3 Components Cabled	
a) Twists:						8.0 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						22 (7/30) AWG Tinned Copper	
b) Braid						Tinned Copper, 70% Coverage, Nom.	
4) Jacket						0.032" Wall, Nom., PVC	0.204 (0.214 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 5103C 3C 22 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C SUN RES OR AWM 2464 80C 300V OR AWM 2517 105C 300V VW-1 --- LLXXXXXX CSA 105C TYPE CMG FT4 CE ROHS OIL RESISTANT (SEQ FOOTAGE) * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	

Applicable Specifications

Physical & Mechanical Properties	
1) Temperature Range	-35 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	24 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	300 V _{RMS}
2) Capacitance	35 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	63 pF/ft @1 kHz, Nominal
4) Inductance	0.18 µH/ft, Nominal
5) Conductor DCR	16.3 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	6.3 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 10.5 x 5 Continuous length
b) 500 FT	10.5 x 5 x 3.5 Continuous length
c) 100 FT	6.5 x 4 x 2.5 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>
Notes:	
a) Oil Resistant Jacket (7d @ 60C).	

www.alphawire.com

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

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: 5103C

5103C, 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

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 3/31/2025

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-908-925-8000