

# **Customer Specification**

#### **PART NO. 45103**

#### **Construction**

					Diameters (II	n)
1) Component 1	3 X 1 COND	3 X 1 COND				
a) Conductor	22 (7/30) AWG	22 (7/30) AWG Tinned Copper			0.030	
b) Insulation	0.016" Wall, N	0.016" Wall, Nom. TPE			0.062	
(1) Color Code	Alpha Wire Co	lor Code E				
Cond	Color	Cond	Color	Cond		Color
1	BLACK	2	BROWN	3		RED
2) Cable Assembly	3 Components	s Cabled				
a) Twists:	6.0 Twists/foo	t (min)				
b) Orientation:	Components t	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap	Nonwoven Po	Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield:	A/P/A Tape, 2	A/P/A Tape, 25% Overlap, Min.				
a) Drain Wire	22 (7/30) AWG	22 (7/30) AWG Tinned Copper				
b) Braid	Tinned Coppe	Tinned Copper,70% Coverage, Nom.				
4) Jacket	0.045" Wall, N	0.045" Wall, Nom.,TPE 0.256 (0.267 Max.)				
a) Color(s)	Slate, Black, Ye	Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White				
b) Ripcord	1 End 810 Der	1 End 810 Denier Nylon				
c) Print	XTRAGUARD(F 20237/21918 CRU AWM I/II	125C 300 V OR A/B 125C 300 V FT1 :3-MSHA CE ROHS E)	105C SUN RES OR AWM			

## **Applicable Specifications**

1) UL	AWM/STYLE 20237	125°C / 300 V <sub>RMS</sub>
	PLTC	105°C
	AWM/STYLE 21918	125°C / 300 V <sub>RMS</sub>
	SUN RES	
2) CSA International	C(RU) AWM I/II A/B FT1	125°C / 300 V <sub>RMS</sub>
	SUN RES (Black only)	
3) Other	PENNSYLVANIA BUREAU OF MINE SAFETY APPROVED	
4) CE:	EU Low Voltage Directive 2014/35/EU	<del>-</del>

## **Environmental**

	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	
	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	-50 to 125℃		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	24.6 Lbs, Maximum		
4) Sunlight Resistance	Yes		
Electrical Properties	(For Engineering purposes only)		
1) Voltage Rating	300 V <sub>RMS</sub>		
2) Capacitance	20.2 pF/ft @1 kHz, Nominal Conductor to Conductor		
3) Ground Capacitance	36 pF/ft @1 kHz, Nominal		
4) Inductance	0.2 μH/ft, Nominal		
5) Conductor DCR	16.3 Ω/1000ft @20°C, Nominal		
6) OA Shield DCR	4.5 Ω/1000ft @20°C, Nominal		

## Other

Packaging	Flange x Traverse x Barrel (inches)	
a) Bulk(Made-to-order)		
Notes:		
a) Print legend will contain CSA SUN RES on black cables only.		

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 45103

45103, RoHS-Compliant Commencing With 10/1/2014 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 5/5/2024

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