

# **Customer Specification**

#### **PART NO. 45529**

#### **Construction**

						Diameters	(ln)
1) Component 1		9 X 1 COND					
a) Conductor		18 (16/30) AWG Tinned Copper				0.047	
b) Insulation 0.032" \		0.032" Wall,	32" Wall, Nom. TPE				
(1) Color Code Alpha V			ha Wire Color Code E				
Cond	Color		Cond	Color	Cond		Color
1	BLACI	<	4	ORANGE	7		BLUE
2	BROW	/N	5	YELLOW	8		VIOLET
3	RED		6	GREEN	9		SLATE
2) Cable Assembl	у	9 Componer	nts Cabled				
a) Twists: 2.0 Tv		2.0 Twists/fc	2.0 Twists/foot (min)				
b) Orientation: Compo		Components	omponents to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap Nonwoven Po		lyester Tape, 20% Overlap, Min.					
3) Shield: A/P/A Tape, 20		20% Overlap, Min	0% Overlap, Min.				
a) Drain Wire 18 (16/30) AW		/G Tinned Copper					
b) Braid Tinned Co		Tinned Copp	Copper,70% Coverage, Nom.				
4) Jacket		0.065" Wall, Nom.,TPE				0.567 (0.593	B Max.)
a) Color(s) Slate, Black, Yello		Yellow, Orange, B	ow, Orange, Blue, Green, Red, Sand Beige, White				
b) Ripcord 1 End 810 Denier Nylon							
C) Print A		ALPHA WIRE-* P/N 45529 9C 18 AWG  XTRAGUARD(R) 4 E324185 (UL) TYPE WTTC 90C DRY  1000V OR (UL) TYPE TC 90C DRY 600V SUN RES OR  AWM 20328 105C 600V 18 AWG OR CRU AWM I/II A/B  125C 600V FT1 P-07-KA140023-MSHA  CE ROHS (SEQ FOOTAGE)  * = Factory Code					

### **Applicable Specifications**

1) UL	AWM/STYLE 20328	105°C / 600 V <sub>RMS</sub>
	TC	90°C / 600 V <sub>RMS</sub>
	WTTC	90°C / 1000 V <sub>RMS</sub>
	SUN RES	
2) CSA International	C(RU) AWM I/II A/B FT1	125°C / 600 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	

## **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	)7/2006):
	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	-50 to 125°C	
2) Bend Radius	10X Cable Diameter	
3) Pull Tension	135 Lbs, Maximum	
4) Sunlight Resistance	Yes	
<b>Electrical Properties</b>	(For Engineering purposes only)	
1) Voltage Rating	600/1000 V <sub>RMS</sub>	
2) Capacitance	17.6 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	32 pF/ft @1 kHz, Nominal	
4) Inductance	0.22 μH/ft, Nominal	
5) Conductor DCR	7 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	1.49 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

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: 45529

45529, RoHS-Compliant Commencing With 1/20/2017 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)

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 5/2/2024

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-908-925-8000