

# Customer Specification

## PART NO. 45133

### Construction

						Diameters (In)	
1) Component 1						3 X 1 PAIR	
a) Conductor						18 (16/30) AWG Tinned Copper	
b) Insulation						0.016" Wall, Nom. TPE	
(1) Color Code						Alpha Wire Color Code B	
Pair	Color	Pair	Color	Pair	Color		
1	WHITE-BLACK	2	WHITE-BROWN	3	WHITE-RED		
c) Pair						2/Cond Cabled Together	
(1) Twists:						5.3 Twists/foot (min)	
2) Cable Assembly						3 Components Cabled	
a) Twists:						3.0 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						18 (16/30) AWG Tinned Copper	
b) Braid						Tinned Copper, 70% Coverage, Nom.	
4) Jacket						0.055" Wall, Nom., TPE	
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 45133 3PR 18 AWG XTRAGUARD(R) 4 (UL) TYPE PLTC 105C SUN RES OR AWM 20237/21918 125C 300 V OR CRU AWM I/II A/B 125C 300 V FT1 P-07-KA140023-MSHA CE ROHS (SEQ FOOTAGE) * = Factory Code	

### Applicable Specifications

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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	

## 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	-50 to 125°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	93 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Mutual Capacitance	19.7 pF/ft @1 kHz, Nominal
3) Ground Capacitance	35 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	81 Ω
5) Inductance	0.18 μH/ft, Nominal
6) Conductor DCR	7.1 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	2.32 Ω/1000ft @20°C, Nominal

# Other

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

[www.alphawire.com](http://www.alphawire.com)

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