

Customer Specification

PART NO. 45459/15

Construction

						Diameters (In)	
1) Component 1						15 X 1 PAIR	
a) Conductor						20 (7/28) AWG Tinned Copper	0.038
b) Insulation						0.016" Wall, Nom. TPE	0.070
(1) Color Code						Alpha Wire Color Code B	
Pair	Color	Pair	Color	Pair	Color		
1	WHITE-BLACK	6	WHITE-GREEN	11	BLACK-RED		
2	WHITE-BROWN	7	WHITE-BLUE	12	BLACK-ORANGE		
3	WHITE-RED	8	WHITE-VIOLET	13	BLACK-YELLOW		
4	WHITE-ORANGE	9	WHITE-SLATE	14	BLACK-GREEN		
5	WHITE-YELLOW	10	BLACK-BROWN	15	BLACK-BLUE		
c) Pair						2/Cond Cabled Together	
(1) Twists:						6.0 Twists/foot (min)	
2) Cable Assembly						15 Components Cabled	
a) Twists:						1.5 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:						Alum/Mylar Tape, 20% Overlap, Min.	
a) Foil Direction						Foil Facing In	
b) Drain Wire						20 (7/28) AWG Tinned Copper	
4) Jacket						0.065" Wall, Nom., TPE	0.668 (0.696 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 45459/15 15PR 20 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

1) UL	AWM/STYLE 20237	125°C / 300 V _{RMS}
	PLTC	105°C
	AWM/STYLE 21918	125°C / 300 V _{RMS}
	SUN RES	
2) CSA International	C(RU) AWM I/II A/B FT1	125°C / 300 V _{RMS}
	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

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Physical & Mechanical Properties	
1) Temperature Range	-50 to 125°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	271 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Mutual Capacitance	16.4 pF/ft @1 kHz, Nominal
3) Ground Capacitance	30 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	98 Ω
5) Inductance	0.19 μH/ft, Nominal
6) Conductor DCR	10.3 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	6.4 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

Although Alpha Wire (“Alpha”) makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

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SpecPDFFooterConfidential



EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 45459/15

45459/15, RoHS-Compliant Commencing With 01/10/2014 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Union (2011/65/EU), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitions. **Compliance on this item.** Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control"

Substance

Lead
Mercury
Cadmium
Hexavalent Chromium
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl Ethers (PBDE) ,
Including Deca-BDE
Bis(2-ethylhexyl) phthalate (DEHP)
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)

Maximum Control Value

0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)
0.01% by weight (100 ppm)
0.1% by weight (1000 ppm)
0.1% by weight (1000 ppm)

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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 this document. This document is intended to be used as a 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 to provide Regulatory information for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

A handwritten signature in blue ink, appearing to read 'QBW', with a long horizontal line extending to the right.

Dave Watson, Director of Engineering & QA 16/08/2025

Alpha Wire
711 Lidgerwood Ave.
Elizabeth, NJ 07207
Tel: 1-908-925-8000