

ALPHA WIRE
CUSTOMER PRODUCT SPECIFICATION

Part Number: 518480
Page 1 of 2 Pages

Issue: 1
Issue Date: 2/12/2015
Effective Date: 4/9/2015

A. Construction

Diameters (In)

- 1) Component 1 2 X 1 COND
 a) Conductor 16 (65/34) AWG Bare Copper 0.059
 b) Insulation 0.016" Wall, Nom. PVC 0.091
 (1) Color(s)

Cond	Color	Cond	Color	Cond	Color
1	RED	2	BLACK		

- 2) Component 2 2 X 1 COND
 a) Conductor 20 (19/32) AWG Bare Copper 0.040
 b) Insulation 0.010" Wall, Nom. PVC 0.060
 (1) Color(s)

Cond	Color	Cond	Color	Cond	Color
1	SLATE	2	VIOLET		

- 3) Component 3 6 X 1 COND
 a) Conductor 22 (19/34) AWG Bare Copper 0.032
 b) Insulation 0.011" Wall, Nom. PVC 0.054
 (1) Color(s)

Cond	Color	Cond	Color	Cond	Color
1	PINK	3	YELLOW	5	BLUE
2	WHITE/BLACK	4	GREEN	6	BROWN

- 4) Cable Assembly 10 Components Cabled
 a) Twists: 3.7 Twists/foot (min)
 b) Core Wrap REMAY Tape, 25% Overlap, Min.
 5) Jacket 0.035" Wall, Nom., TPE 0.314 (0.329 Max.)
 a) Color(s) BLACK
 b) Jacket Separator Tissue Tape, 25% Overlap, Min.
 c) Print ALPHA WIRE-* P/N 518480 2C 16 AWG 2C 20 AWG 6C 22 AWG
 (UL) PLTC 105C OR AWM 20327 105C 300V OR
 CRU AWM I/II A/B 105C 300V FT4 ROHS
 CE (SEQ FOOTAGE)
 * = Factory Code

B. Applicable Specifications

- 1) UL PLTC 105°C
 AWM/STYLE 20327 105°C / 300 V_{RMS}
 2) CSA International C(RU) AWM I/II A/B 105°C / 300 V_{RMS}
 FT4
 3) CE: EU Low Voltage Directive 2006/95/EC

C. Environmental Compliance

- 1) CE: EU Directive 2011/65/EU(RoHS2):
 This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for [RoHS C of C](#).
 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. For up-to-date information, please see [Alpha's REACH SVHC Declaration](#).

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D. Physical & Mechanical Properties

- 1) Temperature Range -20 to 105°C
- 2) Bend Radius 10X Cable Diameter
- 3) Pull Tension 95 Lbs, Maximum

E. Electrical Properties

(For Engineering purposes only)

- 1) Voltage Rating 300 V_{RMS}
- 2) Component 1
 - a) Capacitance 36 pf/ft @1 kHz, Nominal Conductor to Conductor
 - b) Characteristic Impedance 58 Ω
 - c) Inductance 0.17 μH/ft, Nominal
 - d) Conductor DCR 4.1 Ω/1000ft @20°C, Nominal
- 3) Component 2
 - a) Capacitance 37 pf/ft @1 kHz, Nominal Conductor to Conductor
 - b) Characteristic Impedance 57 Ω
 - c) Inductance 0.16 μH/ft, Nominal
 - d) Conductor DCR 8.8 Ω/1000ft @20°C, Nominal
- 4) Component 3
 - a) Capacitance 33 pf/ft @1 kHz, Nominal Conductor to Conductor
 - b) Inductance 0.18 μH/ft, Nominal
 - c) Conductor DCR 14.2 Ω/1000ft @20°C, Nominal

F. Other

- 1) Packaging Flange x Traverse x Barrel (inches)
 - a) Bulk(Made-to-order)

This Design is custom, Made-To-Order & once accepted, the order is NON-CANCELLABLE & NON-RETURNABLE.

Accepted By: <i>Just Sh</i>	Date: <i>2/17/15</i>
Company: <i>BRAUN ABILITY</i>	Title: <i>ELECTRICAL Engineer</i>

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