

Customer Specification

PART NO. M8748160

Construction

						Diameters (In)	
1) Component 1						16 X 1 PAIR	
a) Conductor						18 (7/.0152) AWG Bare Copper	0.046
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON	0.088
(1) Print						ALPHA NUMERIC NUMBERS - WHITE CONDUCTOR ONLY (ONE-1) ALTERNATE INVERTED 2"SPACING(CTR. TO CTR.)	
(2) Color Code						Alpha Wire Color Code BW	
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-WHITE#1	7	BLACK-WHITE#7	13	BLACK-WHITE#13		
2	BLACK-WHITE#2	8	BLACK-WHITE#8	14	BLACK-WHITE#14		
3	BLACK-WHITE#3	9	BLACK-WHITE#9	15	BLACK-WHITE#15		
4	BLACK-WHITE#4	10	BLACK-WHITE#10	16	BLACK-WHITE#16		
5	BLACK-WHITE#5	11	BLACK-WHITE#11				
6	BLACK-WHITE#6	12	BLACK-WHITE#12				
c) Pair						2/Cond Cabled Together	
(1) Twists:						4.8 Twists/foot (min)	
Individually Applied:							
d) Shield:						Foil Free Alum/Mylar Tape, 25% Overlap, Min.	
(1) Foil Direction						Foil Facing In	
(2) Drain Wire						20 (7/28) AWG Tinned Copper	
2) Cable Assembly						16 Components Cabled	
a) Twists:						1.1 Twists/foot (min)	
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
c) Core Wrap						Clear Mylar Tape, 25% Overlap, Min.	
3) Shield:						Alum/Mylar Tape, 25% Overlap, Min.	
a) Foil Direction						Foil Facing In	
b) Drain Wire						20 (7/28) AWG Tinned Copper	
4) Jacket						0.085" Wall, Nom.,PVC	0.926 (0.972 Max.)
a) Color(s)						BLACK	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N M8748160 16PR 18 AWG EXXXXXX (UL) TYPE TC-ER 600V 90C DRY 75C WET SUN. RES. DIR. BUR. CE ROHS * = Factory Code	

Applicable Specifications

1) UL	TC	90°C / 600 V _{RMS}
	SUN RES	
	DIRECT BURIAL	
	EXPOSED RUN	
2) 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	-25 to 90°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	555 Lbs, Maximum
4) Sunlight Resistance	Yes
5) Direct Burial	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Mutual Capacitance	44 pF/ft @1 kHz, Nominal
3) Ground Capacitance	79 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	49 Ω
5) Inductance	0.19 μH/ft, Nominal
6) Conductor DCR	6.7 Ω/1000ft @20°C, Nominal
7) Component Shield DCR	8.3 Ω/1000ft @20°C, Nominal
8) OA Shield DCR	5.5 Ω/1000ft @20°C, Nominal

Other

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Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	48 x 26 x 18 Continuous length
b) 500 FT	30 x 14 x 12 Continuous length
c) 100 FT	24 x 14 x 12 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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