

# Customer Specification PART NO. M8708160

### Construction

			Diameters (I	ln)	
1	16 X 1 PAIR	16 X 1 PAIR			
	18 (7/.0152) A	AWG BC	0.046	0.046	
	0.016" Wall, N NYLON	0.016" Wall, Nom. PVC/ 0.005" Wall NYLON		0.088	
	Alpha Wire Co	Alpha Wire Color Code BW			
Color	Pair	Color	Pair	Color	
BLACK- WHITE#1	7	BLACK- WHITE#7	13	BLACK- WHITE#13	
BLACK- WHITE#2	8	BLACK- WHITE#8	14	BLACK- WHITE#14	
BLACK- WHITE#3	9	BLACK- WHITE#9	15	BLACK- WHITE#15	
BLACK- WHITE#4	10	BLACK- WHITE#10	16	BLACK- WHITE#16	
BLACK- WHITE#5	11	BLACK- WHITE#11			
BLACK- WHITE#6	12	BLACK- WHITE#12			
	2/Cond Cable	2/Cond Cabled Together			
	4.8 Twists/foo	4.8 Twists/foot (min)			
nbly	16 Componer	16 Components Cabled			
	1.2 Twists/foo	1.2 Twists/foot (min)			
	Clear Mylar T	Clear Mylar Tape, 25% Overlap, Min.			
	Alum/Mylar Ta	Alum/Mylar Tape, 25% Overlap, Min.			
1	Foil Facing In	Foil Facing In			
	Color BLACK- WHITE#1 BLACK- WHITE#2 BLACK- WHITE#3 BLACK- WHITE#4 BLACK- WHITE#5 BLACK- WHITE#6	18 (7/.0152) A 0.016" Wall, N NYLON ALPHA NUMI (ONE-1) ALTE Alpha Wire Co Alpha Wire Co Pair BLACK- WHITE#1  BLACK- WHITE#2  BLACK- WHITE#3  BLACK- WHITE#4  10  BLACK- WHITE#5  11  BLACK- WHITE#5  12  2/Cond Cable 4.8 Twists/foo Clear Mylar T Alum/Mylar Ts	18 (7/.0152) AWG BC  0.016" Wall, Nom. PVC/ 0.005" Wall NYLON  ALPHA NUMERIC NUMBERS - WHI (ONE-1) ALTERNATE INVERTED 2"  Alpha Wire Color Code BW  Color  BLACK- WHITE#1  BLACK- WHITE#2  BLACK- WHITE#3  BLACK- WHITE#4  10  BLACK- WHITE#4  BLACK- WHITE#5  BLACK- WHITE#5  BLACK- WHITE#6  12  2/Cond Cabled Together  4.8 Twists/foot (min)  Clear Mylar Tape, 25% Overlap, Min Alum/Mylar Tape, 25% Overlap, Min	18 (7/.0152) AWG BC	

b) Drain Wire	20 (7/28) AWG TC	
4) Jacket	0.085" Wall, Nom.,PVC	0.856 (0.901 Max.)
a) Color(s)	BLACK	
b) Ripcord	1 End 810 Denier Nylon	
c) Print	ALPHA WIRE-* P/N M8708160 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	тс	90°C / 600 V <sub>RMS</sub>
	SUN RES	
	DIRECT BURIAL	
	EXPOSED RUN	
2) CE:	EU Low Voltage Directive 2006/95/EC	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS	S2):
	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.

# **Properties**

Physical & Mechanical Properties	
1) Temperature Range	-25 to 90°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	415 Lbs, Maximum
4) Sunlight Resistance	Yes

5) Direct Burial	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	600 V <sub>RMS</sub>
2) Mutual Capacitance	30 pf/ft @1 kHz, Nominal
3) Ground Capacitance	54 pf/ft @1 kHz, Nominal
4) Characteristic Impedance	74 Ω
5) Inductance	0.19 μH/ft, Nominal
6) Conductor DCR	6.7 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	5.9 Ω/1000ft @20°C, Nominal

#### Other

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)	
	[Spool dimensions may vary slightly]

#### www.alphawire.com

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#### **EU/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: M8708160

M8708160, RoHS-Compliant Commencing With 1/1/2006 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 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) 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.

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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA

9/30/2021

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