

## **Customer Specification**

### **PART NO. M33800**

#### Construction

					Diamet	ers (In)	
1) Component 1 2 X 1 COND		ND					
		52) AWG Bare Copper	G Bare Copper			0.046	
b) Insulation	nsulation 0.016" Wall, No		n. PVC/ 0.005" Wall NYLON				
(1) Color Code	Alpha Wi	ire Color Code J			`		
Cond	Color	Cond	Color	Cond		Color	
1	BLACK	2	RED				
2) Cable Assembly	2 Compo	onents Cabled	·	·			
a) Twists: 4.8 Twists/foot (		s/foot (min)					
b) Orientation:	Compon	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER					
c) Core Wrap	Clear My	lar Tape, 25% Overlap, N	e, 25% Overlap, Min.				
3) Shield:	eld: Alum/Mylar Taj		pe, 25% Overlap, Min.				
a) Foil Direction Foil Facing In		ng In					
b) Drain Wire 20 (7/28) AWG T		AWG Tinned Copper					
4) Jacket 0.047" Wall, Nor		all, Nom.,PVC	n.,PVC			0.277 (0.292 Max.)	
a) Color(s)	BLACK	BLACK					
b) Print	ALPHA WIRE-* P/N M33800 2C 18 AWG EXXXXXX (UL) TYPE TC 600V 90C DRY 75C WET SUN RES DIR BUR CE ROHS * = Factory Code						

## **Applicable Specifications**

1) UL	SUN RES		
	DIRECT BURIAL		
	ТС	90°C Dry / 75°C Wet / 600 V <sub>RMS</sub>	
2) CE:	EU Low Voltage Directive 20	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 190	07/2006):
	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	34 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) Capacitance	40 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	72 pF/ft @1 kHz, Nominal	
4) Characteristic Impedance	52 Ω	
5) Inductance	0.19 μH/ft, Nominal	
6) Conductor DCR	6.6 Ω/1000ft @20°C, Nominal	
7) OA Shield DCR	8.2 Ω/1000ft @20°C, Nominal	

## Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	13.5 x 10 x 4 Continuous length	
b) 500 FT	12 x 10.5 x 5 Continuous length	
c) 100 FT	10.5 x 5 x 3.5 Continuous length	
d) Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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

To Whom It May Concern:

Alpha Wire Part Number: M33800

M33800, RoHS-Compliant Commencing With 2/1/2006 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, 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). This product also complies with UK - RoHS. 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. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

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 4/28/2024

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-908-925-8000