

## **Customer Specification**

### PART NO. M16133RW

#### Construction

						Diameters (In)	
1) Component 1						33 X 1 COND	
a) Conductor						16 (26/30) AWG Bare Copper	0.060
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON	0.102
(1) Print						ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED	
(2) Col	lor Code					Alpha Wire Color Code RW	
Cond	Color	Cond	Color	Cond	Color		
1	GREEN/YELLOW	12	RED#11	23	RED#22		
2	RED#1	13	RED#12	24	RED#23		
3	WHITE/RED	14	RED#13	25	RED#24		
4	RED#3	15	RED#14	26	RED#25		
5	RED#4	16	RED#15	27	RED#26		
6	RED#5	17	RED#16	28	RED#27		
7	RED#6	18	RED#17	29	RED#28		
8	RED#7	19	RED#18	30	RED#29		
9	RED#8	20	RED#19	31	RED#30		
10	RED#9	21	RED#20	32	RED#31		
11	RED#10	22	RED#21	33	RED#32		
2) Cable Assembly					33 Components Cabled		
a) Twists:						1.3 Twists/foot (min)	
b) Orientation:						Components to be arranged from OUTSIDE LAYER to INSIDE LAYER	
c) Core Wrap						Clear Mylar Tape, 25% Overlap, Min.	
3) Jacket						0.085" Wall, Nom.,PVC	0.857+/- 0.041
a) Color(s)						SLATE	
b) Print						ALPHA WIRE-* P/N M16133RW 33C 16 AWG (1.32mm2) SERIES M (UL) WTTC 90C WET/DRY 1000V OR (UL) TC-ER 90C WET/DRY 600V SUN RES DIR BUR OIL RES I OR MTW 16 AWG OR (UL) PLTC 90C OR CRU AWM I/II A/B 90C 600V FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code	

# Applicable Specifications

1) UL	ТС	90°C Dry / 90°C Wet / 600 V <sub>RMS</sub>	
	EXPOSED RUN		
	SUN RES		
	PLTC	90°C	
	DIRECT BURIAL		
	OIL RES I		
	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>	
	WTTC	90°C Dry / 90°C Wet / 1000 V <sub>RMS</sub>	
2) CSA International	FT4		
	C(RU) AWM I/II A/B	90°C / 600 V <sub>RMS</sub>	
) Other Conductors ASTM Class K			
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



Physical & Mechanical Properties				
1) Temperature Range	-30 to 90°C(static), -5 to 90°C (dynamic)			
2) Bend Radius	8X Cable Diameter(static), 8X Cable Diameter(dynamic)			
3) Pull Tension	674 Lbs, Maximum			
4) Sunlight Resistance	Yes			
5) Direct Burial	Yes			
<b>Electrical Properties</b>	(For Engineering purposes only)			
1) Voltage Rating	600 V <sub>RMS</sub>			
2) Capacitance	29 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Inductance	0.18 μH/ft, Nominal			
4) Conductor DCR	4.1 Ω/1000ft @20°C, Nominal			

#### Other

Packaging	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	
Notes:	
a) Suitable for intermittent or light duty flexing where cycle count will be less than 1,500,000 cycles.	

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: M16133RW

M16133RW, RoHS-Compliant Commencing With 01/08/2005 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 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. T the list of restricted substances to 10 items (commonly known as RoHS 3) The reader is referred to these Directives for the specific definitio **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control c

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)		

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the d 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 c Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and reg Authorized Signatory for the Alpha Wire:

Q AI to

Dave Watson, Director of Engineering & QA 01/04/2025

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