



# Customer Specification

## PART NO. F16012RW

### Construction

		<b>Diameters (In)</b>			
1) Component 1		12 X 1 COND			
a) Conductor		16 (65/34) AWG BC			
b) Insulation		0.016" Wall, Nom. PVC/ 0.005" Wall NYLON		0.101	
(1) Print		ALPHA NUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED			
(2) Color Code		Alpha Wire Company Color Code RW			
Cond	Color	Cond	Color	Cond	Color
1	GREEN/YELLOW	5	RED#4	9	RED#8
2	RED#1	6	RED#5	10	RED#9
3	WHITE/RED	7	RED#6	11	RED#10
4	RED#3	8	RED#7	12	RED#11
2) Cable Assembly		12 Components Cabled			
a) Twists:		3.0 Twists/foot (min)			
b) Core Wrap		REMA Y Tape, 25% Overlap, Min.			
3) Jacket		0.065" Wall, Nom., TPE		0.565+/- 0.028	
a) Color(s)		BLACK			
b) Print		ALPHA WIRE-* P/N F16012RW 12C 16 AWG (1.31mm2) TFFN SERIES F (UL) TYPE TC-ER 90C 600V OIL RES I/II SUN RES OR TYPE PLTC 90C --- LLXXXXXX CSA AWM IA/B IIA/B 90C 600V FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>			

### Applicable Specifications

1) UL		
a) Component 1	MTW	90°C / 600 V <sub>RMS</sub>
	TFFN	90°C / 600 V <sub>RMS</sub>
b) Overall	TC	90°C / 600 V <sub>RMS</sub>
	EXPOSED RUN	
	SUN RES	
	PLTC	90°C
	OIL RES I/II	
2) CSA International	AWM I/II A/B	90°C / 600 V <sub>RMS</sub>
	FT4	
3) CE:	LVD 73/23/EEC Amendment 93/68/EEC	

## Environmental

1) EU Directive 2002/95/EC(RoHS):	
	All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture.
2) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-25 to 90°C(static), -5 to 90°C (dynamic)
2) Bend Radius	10X Cable Diameter(static), 10X Cable Diameter(dynamic)
3) Pull Tension	243 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	600 V <sub>RMS</sub>
2) Capacitance	31 pf/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.18 µH/ft, Nominal
4) Conductor DCR	4.2 /1000ft @20°C, Nominal

## Other

1) Packaging	
a) Bulk(Made-to-order)	

www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207  
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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:F16012RW

F16012RW , RoHS-Compliant Commencing With8/1/2005Production

*This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.***

<b>Substance</b>	<b>Maximum Control Value</b>
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.1% 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)

*The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general 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 document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.*

Authorized Signatory for the Alpha Wire Company:

A handwritten signature in black ink, appearing to read 'Dave Watson'.

Dave Watson, Director of Engineering &QA

1/21/2011