

Customer Specification

PART NO. F16042RW

Construction

						Diameters (In)		
1) Component 1						42 X 1 COND		
a) Conductor						16 (65/34) AWG Bare Copper		0.059
b) Insulation						0.016" Wall, Nom. PVC/ 0.005" Wall NYLON		0.101
(1) Print						ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED		
(2) Color Code						Alpha Wire Color Code RW		
Cond	Color	Cond	Color	Cond	Color			
1	GREEN/YELLOW	15	RED#14	29	RED#28			
2	RED#1	16	RED#15	30	RED#29			
3	WHITE/RED	17	RED#16	31	RED#30			
4	RED#3	18	RED#17	32	RED#31			
5	RED#4	19	RED#18	33	RED#32			
6	RED#5	20	RED#19	34	RED#33			
7	RED#6	21	RED#20	35	RED#34			
8	RED#7	22	RED#21	36	RED#35			
9	RED#8	23	RED#22	37	RED#36			
10	RED#9	24	RED#23	38	RED#37			
11	RED#10	25	RED#24	39	RED#38			
12	RED#11	26	RED#25	40	RED#39			
13	RED#12	27	RED#26	41	RED#40			
14	RED#13	28	RED#27	42	RED#41			
2) Cable Assembly						42 Components Cabled		
a) Twists:						1.5 Twists/foot (min)		
b) Orientation:						Components to be arranged from OUTSIDE LAYER to INSIDE LAYER		
c) Core Wrap						REMAI Tape, 25% Overlap, Min.		
3) Jacket						0.085" Wall, Nom.,TPE		0.966+/- 0.046
a) Color(s)						BLACK		
b) Print						ALPHA WIRE-* P/N F16042RW 42C 16 AWG (1.31mm2) SERIES F (UL) TYPE TC-ER 90C WET/DRY 600V OIL RES I/II -40C SUN RES OR TYPE PLTC 90C OR C(UL) CIC CONTROL/TC 16 AWG -40C 90C WET 90C DRY PVC/NYLON INS FT4 OR CRU AWM I/II A/B 90C 600V FT4 CE ROHS (DATE CODE) (SEQ FOOTAGE) * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]		

Applicable Specifications

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Physical & Mechanical Properties	
1) Temperature Range	-40 to 90°C(static), -5 to 90°C (dynamic)
2) Bend Radius	6X Cable Diameter(static), 8X Cable Diameter(dynamic)
3) Pull Tension	851 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Capacitance	29 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.18 µH/ft, Nominal
4) Conductor DCR	4.3 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	
Notes:	
a) Suitable for constant flexing where cycle count will be less than 20,000,000 cycles.	

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EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: F16042RW

F16042RW, 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 Union (RoHS 2), with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. 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 **Compliance on this item**. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control"

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 date of issuance. This document is intended to provide guidance 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 provide a warranty or guarantee of any kind. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations. Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering & QA 12/08/2025

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