

# Customer Specification

## PART NO. 87705

### Construction

				Diameters (In)	
1) Component 1		5 X 1 COND			
a) Conductor		10 (37/.0167) AWG BC			
b) Insulation		0.030" Wall, Nom. Hytrel		0.177	
(1) Print		ALPHA NUMERIC NUMBERS - 1-ONE ALTERNATING AND INVERTED			
(2) Color Code		Alpha Wire Company Color Code KX			
Cond	Color	Cond	Color	Cond	Color
1	GREEN/YELLOW	3	BLACK#2	5	BLACK#4
2	BLACK#1	4	BLACK#3		
2) Cable Assembly		5 Components Cabled			
a) Twists:		1.0 Twists/foot (min)			
b) Core Wrap		Teflon(skived) Tape, 25% Overlap, Min.			
3) Jacket		0.070" Wall, Nom.,Polyurethane (PU)		0.627 (0.650 Max.)	
a) Color(s)		BLACK			
b) Print		ALPHA WIRE-* P/N 87705 XTRAGUARD FLEXIBLE TORSION CABLE XTREME PERFORMANCE FOR XTREME ENVIRONMENTS - RU AWM 20234 --- LLXXXXXX CSA AWM IIA/B IIA/B 80C 600VOLTS FT1 CE ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

### Applicable Specifications

1) UL		
a) Component 1	AWM/STYLE 10162	90°C / 600 V <sub>RMS</sub>
b) Overall	AWM/STYLE 20234	80°C / 600 V <sub>RMS</sub>
	VW-1	
2) CSA International	AWM I/II A/B	80°C / 600 V <sub>RMS</sub>
	FT1	
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	-30 to 80°C(static), -10 to 80°C (dynamic)
2) Bend Radius	10X Cable Diameter(static), 15X Cable Diameter(dynamic)
3) Pull Tension	405 Lbs, Maximum
Electrical Properties	
(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	0.16 µH/ft, Nominal
4) Conductor DCR	1.02 /1000ft @20°C, Nominal

## Other

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

[www.alphawire.com](http://www.alphawire.com)

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207  
Tel: 1-800-52 ALPHA (25742)

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## RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:87705

87705 , RoHS-Compliant Commencing With11/1/2004Production

*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.***

Substance	Maximum Control Value
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)	0.1% by weight (1000 ppm)
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

1/23/2011