

# Customer Specification

## PART NO. M3190

### Construction

		Diameters (In)			
1) Component 1		38 X 1 PAIR			
a) Conductor		22 (SOLID) AWG TC		0.025	
b) Insulation		0.008" Wall, Nom. Polypropylene(PP)		0.041	
(1) Color Code		Alpha Wire Color Code K			
Pair	Color	Pair	Color	Pair	Color
1	BLACK-RED	14	GREEN-WHITE	27	BROWN-ORANGE
2	BLACK-WHITE	15	GREEN-BLUE	28	ORANGE-YELLOW
3	BLACK-GREEN	16	GREEN-YELLOW	29	VIOLET-ORANGE
4	BLACK-BLUE	17	GREEN-BROWN	30	VIOLET-RED
5	BLACK-YELLOW	18	GREEN-ORANGE	31	VIOLET-WHITE
6	BLACK-BROWN	19	WHITE-BLUE	32	VIOLET-GREEN
7	BLACK-ORANGE	20	WHITE-YELLOW	33	VIOLET-BLUE
8	RED-WHITE	21	WHITE-BROWN	34	VIOLET-YELLOW
9	RED-GREEN	22	WHITE-ORANGE	35	VIOLET-BROWN
10	RED-BLUE	23	BLUE-YELLOW	36	VIOLET-BLACK
11	RED-YELLOW	24	BLUE-BROWN	37	SLATE-WHITE
12	RED-BROWN	25	BLUE-ORANGE	38	SLATE-RED
13	RED-ORANGE	26	BROWN-YELLOW		
c) Pair		2/Cond Cabled Together			

(1) Twists:	12.0 Twists/foot (min)	
2) Cable Assembly	38 Components Cabled	
a) Twists:	1.7 Twists/foot (min)	
b) Core Wrap	Clear Mylar Tape, 25% Overlap, Min.	
3) Shield:	Alum/Mylar Tape, 25% Overlap, Min.	
a) Foil Direction	Foil Facing In	
b) Drain Wire	22 (7/30) AWG TC	
4) Jacket	0.045" Wall, Nom.,PVC	0.579 (0.612 Max.)
a) Color(s)	SLATE	
b) Ripcord	1 End 810 Denier Nylon	
c) Print	ALPHA WIRE-* P/N M3190 38PR 22 AWG EXXXXXX SHIELDED 75C CMG (UL) C(UL) OR AWM 2464 CE ROHS * = Factory Code <i>[Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]</i>	

## Applicable Specifications

1) UL	CMG	75°C
	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
2) CSA International	C(UL) TYPE CMG	75°C
	FT4	
3) CE:	EU Low Voltage Directive 2006/95/EC	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.
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. For up-to-date information, please see Alpha's REACH SVHC Declaration.
3) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	388 Lbs, Maximum
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Mutual Capacitance	16.9 pf/ft @1 kHz, Nominal
3) Ground Capacitance	30 pf/ft @1 kHz, Nominal
4) Characteristic Impedance	90 Ω
5) Inductance	0.17 μH/ft, Nominal
6) Conductor DCR	17.4 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	9.2 Ω/1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 500 FT	24 x 14 x 12 Continuous length
c) 100 FT	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M3190

M3190, RoHS-Compliant Commencing With 7/1/2006 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 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) 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.

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 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:

Dave Watson, Director of Engineering & QA

8/25/2020

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