



Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207  
Tel: 1-800-52 ALPHA (25742), Web: [www.alphawire.com](http://www.alphawire.com)

# Customer Specification

## PART NO. M3192

Construction

		Diameters (In)
1) Component 1	102 X 1 PAIR	
a) Conductor	22 (SOLID) AWG TC	0.025
b) Insulation	0.010" Wall, Nom. PVC	0.045
(1) Color Code	Alpha Wire Color Code B	

Pair	Color	Pair	Color	Pair	Color
1	WHITE-BLACK	35	ORANGE-SLATE	69	WHITE/RED-GREEN
2	WHITE-BROWN	36	YELLOW-GREEN	70	WHITE/RED-BLUE
3	WHITE-RED	37	YELLOW-BLUE	71	WHITE/RED-VIOLET
4	WHITE-ORANGE	38	YELLOW-VIOLET	72	WHITE/RED-SLATE
5	WHITE-YELLOW	39	YELLOW-SLATE	73	WHITE/ORANGE-BLACK
6	WHITE-GREEN	40	GREEN-BLUE	74	WHITE/ORANGE-BROWN
7	WHITE-BLUE	41	GREEN-VIOLET	75	WHITE/ORANGE-RED
8	WHITE-VIOLET	42	GREEN-SLATE	76	WHITE/ORANGE-ORANGE
9	WHITE-SLATE	43	BLUE-VIOLET	77	WHITE/ORANGE-YELLOW
10	BLACK-BROWN	44	BLUE-SLATE	78	WHITE/ORANGE-GREEN
11	BLACK-RED	45	VIOLET-SLATE	79	WHITE/ORANGE-BLUE
12	BLACK-ORANGE	46	WHITE/BLACK-BLACK	80	WHITE/ORANGE-VIOLET
13	BLACK-YELLOW	47	WHITE/BLACK-BROWN	81	WHITE/ORANGE-SLATE
14	BLACK-GREEN	48	WHITE/BLACK-RED	82	WHITE/YELLOW-BLACK
15	BLACK-BLUE	49	WHITE/BLACK-ORANGE	83	WHITE/YELLOW-BROWN
16	BLACK-VIOLET	50	WHITE/BLACK-YELLOW	84	WHITE/YELLOW-RED
17	BLACK-SLATE	51	WHITE/BLACK-GREEN	85	WHITE/YELLOW-ORANGE
18	BROWN-RED	52	WHITE/BLACK-BLUE	86	WHITE/YELLOW-YELLOW
19	BROWN-ORANGE	53	WHITE/BLACK-VIOLET	87	WHITE/YELLOW-GREEN
20	BROWN-YELLOW	54	WHITE/BLACK-SLATE	88	WHITE/YELLOW-BLUE
21	BROWN-GREEN	55	WHITE/BROWN-BLACK	89	WHITE/YELLOW-VIOLET
22	BROWN-BLUE	56	WHITE/BROWN-BROWN	90	WHITE/YELLOW-SLATE
23	BROWN-VIOLET	57	WHITE/BROWN-RED	91	WHITE/GREEN-BLACK
24	BROWN-SLATE	58	WHITE/BROWN-ORANGE	92	WHITE/GREEN-BROWN
25	RED-ORANGE	59	WHITE/BROWN-YELLOW	93	WHITE/GREEN-RED
26	RED-YELLOW	60	WHITE/BROWN-GREEN	94	WHITE/GREEN-ORANGE

27	RED-GREEN	61	WHITE/BROWN-BLUE	95	WHITE/GREEN-YELLOW
28	RED-BLUE	62	WHITE/BROWN-VIOLET	96	WHITE/GREEN-GREEN
29	RED-VIOLET	63	WHITE/BROWN-SLATE	97	WHITE/GREEN-BLUE
30	RED-SLATE	64	WHITE/RED-BLACK	98	WHITE/GREEN-VIOLET
31	ORANGE-YELLOW	65	WHITE/RED-BROWN	99	WHITE/GREEN-SLATE
32	ORANGE-GREEN	66	WHITE/RED-RED	100	WHITE/BLUE-BLACK
33	ORANGE-BLUE	67	WHITE/RED-ORANGE	101	WHITE/BLUE-BROWN
34	ORANGE-VIOLET	68	WHITE/RED-YELLOW	102	WHITE/BLUE-RED
c) Pair		2/Cond Cabled Together			
(1) Twists:		9.6 Twists/foot (min)			
2) Cable Assembly		102 Components Cabled			
a) Twists:		0.9 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		0.085" Wall, Nom.,PVC		1.041 (1.096 Max.)	
a) Color(s)		SLATE			
b) Ripcord		1 End 810 Denier Nylon			
c) Print		ALPHA WIRE-* P/N M3192 102PR 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 requirements of California Proposition 65.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	1031 Lbs, Maximum
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Mutual Capacitance	34 pf/ft @1 kHz, Nominal
3) Ground Capacitance	61 pf/ft @1 kHz, Nominal
4) Characteristic Impedance	65 Ω
5) Inductance	0.19 μH/ft, Nominal
6) Conductor DCR	17.3 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	6.4 Ω/1000ft @20°C, Nominal

## Other

<b>Packaging</b>	Flange x Traverse x Barrel (inches)
a) 1000 FT	48 x 26 x 18 Continuous length
b) 500 FT	36 x 14 x 12 Continuous length
c) 100 FT	24 x 14 x 12 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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# EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M3192

M3192 , RoHS-Compliant Commencing With 7/1/2006 Production

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, 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 this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item.** It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. 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 11364-2006.

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)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA

5/13/2013