

## Customer Specification

**PART NO. M5377**

## Construction

						Diameter ("in")	
1) Component 1						50 x 1 COND	
a) Conductor						20 (7/28) AWG Tinned Copper	0.038
b) Insulation						0.016" Wall, Nom. PVC	0.070
(1) Color Code						Alpha Wire Color Code D	
Cond	Color	Cond	Color	Cond	Color		
1	BLACK	18	WHITE/GR	35	WHITE/RED		
2	RED	19	WHITE/YEL	36	WHITE/RED		
3	WHITE	20	WHITE/BLU	37	WHITE/RED		
4	GREEN	21	WHITE/BR	38	WHITE/RED		
5	ORANGE	22	WHITE/OR	39	WHITE/RED		
6	BLUE	23	WHITE/SL	40	WHITE/GRI		
7	BROWN	24	WHITE/VIC	41	WHITE/GRI		
8	YELLOW	25	WHITE/BL	42	WHITE/GRI		
9	VIOLET	26	WHITE/BL	43	WHITE/GRI		
10	SLATE	27	WHITE/BL	44	WHITE/GRI		
11	PINK	28	WHITE/BL	45	WHITE/GRI		
12	TAN	29	WHITE/BL	46	WHITE/BLU		
13	RED/GREE	30	WHITE/BL	47	WHITE/BLU		
14	RED/YELL	31	WHITE/BL	48	WHITE/BLU		
15	RED/BLAC	32	WHITE/BL	49	WHITE/BLU		
16	WHITE/BL	33	WHITE/BL	50	WHITE/BLU		
17	WHITE/RE	34	WHITE/RE				
2) Cable Assembly						50 Components Cabled	
a) Twists						1.4 twists/ft. (min.)	
b) Orientation						Components to be arranged from INSIDE LAYER-to-OUTSIDE LAYER	
c) Core Wrap						Clear Mylar Tape, 20% Overlap (min.)	
3) Shield						Alum/Mylar Tape, 20% Overlap (min.)	
a) Foil Direction						Foil Facing Out	
b) Drain Wire						20 (7/28) AWG Tinned Copper	
c) Braid						Tinned Copper, 70% Coverage, Nom.	
4) Jacket						0.053" Wall, Nom., PVC	0.713 (0.742 max.)
a) Color(s)						SLATE	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N M5377 50C 20 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

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1) UL	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	CMG	75°C
2) CSA International	FT4	
	C(UL) TYPE CMG	75°C
3) CE	EU Low Voltage Directive 2014/35/EU	

## Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3)	
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015. No exemptions are required for RoHS Compliance on this item.
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.
3) California Proposition 65	This product may contain substances known to the State of California to cause Cancer or Reproductive Harm, but is exempt from labeling based on the Consent Judgement.

## Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	460 lbs. max.
Electrical Properties	
Engineering purposes only	
1) Voltage Rating	300 V <sub>RMS</sub>
2) Capacitance	45 pF/ft. @1 kHz, Nominal Conductor-to-Conductor
3) Ground Capacitance	81 pF/ft. @1 kHz, Nominal
4) Inductance	0.19 µH/ft., Nominal
5) Conductor DCR	10.3 ω/1000ft. @20°C, Nominal
6) OA Shield DCR	1.28 ω/1000ft. @20°C, Nominal

## Other

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Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	36 x 14 x 12 Continuous Length
b) 500 FT	30 x 14 x 12 Continuous Length
c) 100 FT	18 x 9 x 8 Continuous Length
d) Bulk ( <i>Made-to-order</i> )	
	<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: M5377

M5377, RoHS-Compliant Commencing With 01/11/2004 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 (2011/65/EU), 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

Lead  
Mercury  
Cadmium  
Hexavalent Chromium  
Polybrominated Biphenyls (PBB)  
Polybrominated Diphenyl Ethers (PBDE) ,  
Including Deca-BDE  
Bis(2-ethylhexyl) phthalate (DEHP)  
Butyl benzyl phthalate (BBP)  
Dibutyl phthalate (DBP)  
Diisobutyl phthalate (DIBP)

### Maximum Control Value

0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
0.01% by weight (100 ppm)  
0.1% by weight (1000 ppm)  
0.1% by weight (1000 ppm)  
  
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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 regulatory information for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulatory requirements. Authorized Signatory for the Alpha Wire:

A handwritten signature in blue ink, appearing to read 'QBW', with a long horizontal line extending to the right.

Dave Watson, Director of Engineering & QA 16/09/2025

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