

Customer Specification

PART NO. M5666

Construction

						Diameter ("in")	
1) Component 1						37 x 1 PAIR	
a) Conductor						22 (7/30) AWG Tinned Copper	0.030
b) Insulation						0.010" Wall, Nom. PVC, Semi-Rigid	0.050
(1) Color Code						Alpha Wire Color Code B	
Pair	Color	Pair	Color	Pair	Color		
1	WHITE-BLACK	14	BLACK-GREEN	27	RED-GREEN		
2	WHITE-BROWN	15	BLACK-BLUE	28	RED-BLUE		
3	WHITE-RED	16	BLACK-VIOLET	29	RED-VIOLET		
4	WHITE-ORANGE	17	BLACK-SLATE	30	RED-SLATE		
5	WHITE-YELLOW	18	BROWN-RED	31	ORANGE-YELLOW		
6	WHITE-GREEN	19	BROWN-ORANGE	32	ORANGE-GREEN		
7	WHITE-BLUE	20	BROWN-YELLOW	33	ORANGE-BLUE		
8	WHITE-VIOLET	21	BROWN-GREEN	34	ORANGE-VIOLET		
9	WHITE-SLATE	22	BROWN-BLUE	35	ORANGE-SLATE		
10	BLACK-BROWN	23	BROWN-VIOLET	36	YELLOW-GREEN		
11	BLACK-RED	24	BROWN-SLATE	37	YELLOW-BLUE		
12	BLACK-ORANGE	25	RED-ORANGE				
13	BLACK-YELLOW	26	RED-YELLOW				
c) Pair						2/Cond Cabled Together	
(1) Twists						8.0 twists/ft. (min.)	
2) Cable Assembly						37 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						22 (7/30) AWG Tinned Copper	
c) Braid						Tinned Copper, 70% Coverage, Nom.	
4) Jacket						0.063" Wall, Nom., PVC	0.735 (0.771 Max.)
a) Color(s)						SLATE	
b) Ripcord						1 End 810 Denier Nylon	
c) Print						ALPHA WIRE-* P/N M5666 37PR 22 AWG EXXXXXX SHIELDED 75C CMG (UL) C(UL) OR AWM 2343 CE ROHS * = Factory Code <i>Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.</i>	

Applicable Specifications

1) UL		
a) Component 1	AWM/STYLE 1061	80°C / 300 V _{RMS}
b) Overall	CMG	75°C
	AWM/STYLE 2343	80°C / 300 V _{RMS}
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. See the Alpha Wire website for more information.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 80°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	426 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Mutual Capacitance	24.2 pF/ft @1 kHz, Nominal
3) Ground Capacitance	44 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	78 Ω
5) Inductance	0.18 μH/ft, Nominal
6) Conductor DCR	16.6 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	1.35 Ω/1000ft @20°C, Nominal

Other

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(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M5666

M5666, RoHS-Compliant Commencing With 7/1/2005 Production

Note: all colors and put-ups

This document certifies that the Alpha part number cited above, including all packaging materials, 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). This product also complies with UK - RoHS. 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. This product is also in compliance with China RoHS 2 per GB/T 26572-2011.

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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 3/31/2025

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