2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-800-52 ALPHA
Web: www.alphawire.com

Customer Specification

PART NO. M4154

Construction

						Diameter ("in")	
1) Component 1						2 x 1 COAX	
a) Conductor						20 (7/28) AWG TC	0.038
b) Insulation						0.019" Wall, Nom. Polyethylene (PE)	0.076
(1) Color(s)							
Cond	Color	Cond	Color	Cond	Color		
1	CLEAR	2	BLUE				
2) Cable Assembly						2 Components Cabled	
a) Twists						4.0 Twists/ft. (min.)	
3) Shield						Alum/Mylar Tape, 25% Overlap (min.)	
a) Foil Direction						Foil Facing Out	
b) Drain Wire						20 (7/28) AWG TC	
c) Braid						TC, 55% Coverage (min.)	
4) Jacket						0.031" Wall, Nom., PVC	0.238+/- 0.003
a) Color(s)						BLUE	
b) Print						ALPHA WIRE-* P/N M4154 1PR20 SHIELDED EXXXXX 75C (UL) CM OR AWM 2464 OR C(UL) TYPE CM CE ROHS * = Factory Code *Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.*	

Applicable Specifications

1) UL	CM	75°C
	AWM/STYLE 2464	80°C / 300 V_{RMS}
2) CSA International	C(UL) TYPE CM	75°C
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. Refer to the RoHS Certificate of Compliance for more information.
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	Outer surface materials used in manufacturing 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	28 lbs. max.
Electrical Properties	*Engineering purposes only*
1) Voltage Rating	300 V_{RMS}
2) Characteristic Impedance	78 ω +/- 3
3) Inductance	0.12 µH/ft., Nominal
4) Mutual Capacitance	19.7 pf/ft. @1 kHz, Nominal
5) Ground Capacitance	36 pf/ft. @1 kHz, Nominal
6) Velocity of Propagation	66 %
7) Conductor DCR	9.5 ω/1000ft. @20°C, Nominal
8) OA Shield DCR	4.1 ω/1000ft. @20°C, Nominal
9) Attenuation (nom. dB/100ft.)	0.6 @1 MHz
	2.1 @10 MHz
	5@ 50 MHz
	7.5 @100 MHz
	11 @200 MHz
	16 @400 MHz

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	12 x 10 x 5 Continuous Length
b) 500 FT	12 x 4.5 x 3.5 Continuous Length
c) 100 FT	6.5 x 4 x 2.5 Continuous Length
d) Bulk *(made-to-order)*	
	Spool dimensions may vary slightly.

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M4154

M4154, RoHS-Compliant Commencing With 2/1/2006 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)

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 8/15/2024

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374
Tel: 1-908-925-8000