

Customer Specification

PART NO. 3542

Construction

						Diameters (In)	
1) Component 1						20 X 1 COND	
a) Conductor						24 (19/36) AWG TC	0.025
b) Insulation						0.010" Wall, Nom. PVC	0.045
(1) Color(s)							
Cond	Color	Cond	Color	Cond	Color		
1	BROWN	8	SLATE	15	GREEN		
2	RED	9	WHITE	16	BLUE		
3	ORANGE	10	BLACK	17	VIOLET		
4	YELLOW	11	BROWN	18	SLATE		
5	GREEN	12	RED	19	WHITE		
6	BLUE	13	ORANGE	20	BLACK		
7	VIOLET	14	YELLOW				
2) Cable Assembly						20 Components assembled parallel.	0.045 +/- 0.002 x
							0.900 +/- 0.040

Applicable Specifications

1) UL	AWM/STYLE 2713	80°C / 150 V _{RMS}
	VW-1	
2) Military		
a) Component 1	MIL-DTL-16878/1 (Type B)	105°C / 600 V _{RMS}

Environmental

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1) EU Directive 2011/65/EU(RoHS2):	
	All materials used in the manufacture of this part are in compliance with European Directive 2011/65/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. 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	-55 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	75 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Capacitance	32 pf/ft @1 kHz, Nominal Conductor to Conductor
3) Inductance	0.19 µH/ft, Nominal
4) Conductor DCR	23.9 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 100 FT	11 x 1 x 3 Continuous length
	<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: 3542

3542, RoHS-Compliant Commencing With 3/1/2005 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

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)

Maximum Control Value

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 7/31/2025

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