

Customer Specification

PART NO. 2831/2

Construction

						Diameters (In)		
1) Component 1						2 X 1 COND		
a) Conductor						24 (19/36) AWG Silver Plated Copper		0.025
b) Insulation						0.010" Wall, Nom. PTFE		0.044
(1) Color Code						Alpha Wire Color Code G		
Cond	Color	Cond	Color	Cond	Color			
1	WHITE	2	BLACK					
2) Cable Assembly						2 Components Cabled		
a) Twists:						9.6 Twists/foot (min)		
b) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER		
3) Shield						Silver Platted Copper BRAID Shield,90% Coverage, Min.		
4) Jacket						0.010" Wall, Nom.,FEP		0.132 (0.145 Max.)
a) Color(s)						WHITE		

Applicable Specifications

1) Military			
a) Component 1	MIL-W-16878/4 (Type E)		200°C / 600 V _{RMS}
2) Other			
a) Component 1	NEMA HP3-EXBEE		200°C / 600 V _{RMS}
3) CE:	EU Low Voltage Directive 2014/35/EU		

Environmental

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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	-55 to 200°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	10.1 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Capacitance	22.9 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	41 pF/ft @1 kHz, Nominal
4) Characteristic Impedance	64 Ω
5) Inductance	0.18 μH/ft, Nominal
6) Conductor DCR	22.4 Ω/1000ft @20°C, Nominal
7) OA Shield DCR	7.6 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	10.5 x 5 x 3.5 Max. 3 separate pieces; Min length/piece 100 FT.
b) 100 FT	6.5 x 2 x 1.9 Continuous length
	<i>[Spool dimensions may vary slightly]</i>

www.alphawire.com

Alpha Wire
2200 US Highway 27 South
Richmond, IN 47374

Tel: 1-800-52 ALPHA

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

EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 2831/2

2831/2, 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

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 6/23/2026

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