

Customer Specification

PART NO. 5420/12

Construction

					Diameters (In)
1) Component 1	12 X 1 COND				
a) Conductor	20 (10/30) AWG Tinned Copper				0.037
b) Insulation	0.0325" Wall, Nom. PVC				0.102
(1) Color Code	Alpha Wire Color Code E				
Cond	Color	Cond	Color	Cond	Color
1	BLACK	5	YELLOW	9	SLATE
2	BROWN	6	GREEN	10	WHITE
3	RED	7	BLUE	11	WHITE/BLACK
4	ORANGE	8	VIOLET	12	WHITE/BROWN
2) Cable Assembly	12 Components Cabled				
a) Twists:	1.9 Twists/foot (min)				
b) Orientation:	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap	Nonwoven Polyester Tape, 20% Overlap, Min.				
3) Shield:	Alum/Mylar Tape, 20% Overlap, Min.				
a) Foil Direction	Foil Facing In				
b) Drain Wire	20 (7/28) AWG Tinned Copper				
4) Jacket	0.063" Wall, Nom.,PVC				0.558 (0.586 Max.)
a) Color(s)	Slate, Black, Yellow, Orange, Blue, Green, Red, Sand Beige, White				
b) Ripcord	1 End 810 Denier Nylon				
c) Print	ALPHA WIRE-* P/N 5420/12 12C 20 AWG XTRAGUARD(R) 1 (UL) MTW 600V OR AWM 2501 105C 600V OR AWM 21896 105C 600V SUN RES 60C OIL VW-1 OR CRU AWM I/II A/B 105C 600V FT4 CE ROHS (SEQ FOOTAGE) * = Factory Code				

Applicable Specifications

Physical & Mechanical Properties

1) Temperature Range	-30 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	103 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties (For Engineering purposes only)	
1) Voltage Rating	600 V _{RMS}
2) Capacitance	28 pF/ft @1 kHz, Nominal Conductor to Conductor
3) Ground Capacitance	50 pF/ft @1 kHz, Nominal
4) Inductance	0.24 µH/ft, Nominal
5) Conductor DCR	11.5 Ω/1000ft @20°C, Nominal
6) OA Shield DCR	6.9 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	30 x 14 x 12 Continuous length
b) 500 FT	18 x 14.25 x 8 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: 5420/12

5420/12, RoHS-Compliant Commencing With 8/1/2005 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

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering 4/28/2024

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