

# **Customer Specification**

## **PART NO. 5430/2**

#### **Construction**

				D	iameters (In)	
1) Component 1	2 X 1 COND	2 X 1 COND				
a) Conductor	18 (16/30) A	WG Tinned Copper		0	.047	
b) Insulation	ulation 0.032" Wall, Nom. P			0	.111	
(1) Color Code	Alpha Wire	Color Code E				
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	2	BROWN			
2) Cable Assembly	/ 2 Componer	nts Cabled	·		·	
a) Twists:	3.7 Twists/fo	3.7 Twists/foot (min)				
b) Orientation:	Components	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap	Nonwoven F	Nonwoven Polyester Tape, 25% Overlap, Min.				
3) Shield:	Alum/Mylar	Alum/Mylar Tape, 25% Overlap, Min.				
a) Foil Direction	Foil Facing I	Foil Facing In				
b) Drain Wire	18 (16/30) A	18 (16/30) AWG Tinned Copper				
4) Jacket	0.063" Wall,	0.063" Wall, Nom.,PVC			.356 (0.374 Max.)	
a) Color(s)	Slate, Black,	Yellow, Orange, Blue, (	Green, Red, Sand Beige,	White		
b) Ripcord	1 End 810 D	1 End 810 Denier Nylon				
c) Print	XTRAGUARD 600V OR AV VW-1 OR CF	E-* P/N 5430/2 2C 18 A O(R) 1 (UL) MTW 600V VM 21896 105C 600V S BU AWM I/II A/B 105C S (SEQ FOOTAGE)	OR AWM 2501 105C SUN RES 60C OIL			

## **Applicable Specifications**

1) UL		
a) Component 1	AWM/STYLE 1015	105°C / 600 V <sub>RMS</sub>
	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>
b) Overall	MTW	90°C Dry / 60°C Wet / 600 V <sub>RMS</sub>
	AWM/STYLE 21896	105°C / 600 V <sub>RMS</sub>
	SUN RES	
	60C OIL	
	AWM/STYLE 2501	105°C / 600 V <sub>RMS</sub>
	VW-1	
2) CSA International		
a) Component 1	TEW	105°C / 600 V <sub>RMS</sub>
b) Overall	C(RU) AWM I/II A/B	105°C / 600 V <sub>RMS</sub>
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) CE:	EU Low Voltage Directive 2014/35/EU	J

### **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.				
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	-30 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	38 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	600 V <sub>RMS</sub>			
2) Capacitance	34 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Ground Capacitance	61 pF/ft @1 kHz, Nominal			
4) Characteristic Impedance	62 Ω			
5) Inductance	0.22 μH/ft, Nominal			
6) Conductor DCR	7 Ω/1000ft @20°C, Nominal			
7) OA Shield DCR	6 Ω/1000ft @20°C, Nominal			

#### **Other**

Flange x Traverse x Barrel (inches)	
18 x 14.25 x 8 Continuous length	
13.5 x 10 x 4 Continuous length	
12 x 5.94 x 5 Continuous length	
[Spool dimensions may vary slightly]	
	18 x 14.25 x 8 Continuous length 13.5 x 10 x 4 Continuous length 12 x 5.94 x 5 Continuous length

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#### **EU/UK/China ROHS CERTIFICATE OF COMPLIANCE**

To Whom It May Concern:

Alpha Wire Part Number: 5430/2

5430/2, 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	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 4/29/2024

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