

# **Customer Specification**

#### **PART NO. 1181/50C**

#### **Construction**

						Diamete	rs ("in")
1) Component 1			50 X 1 COND				
a) Conductor			22 (7/30) AWG Tinned Copper			0.030	
b) Insulation			0.010" W	all, Nom. PVC, Semi Rigid		0.050	
(1) Color C	ode		Alpha Wi	re Color Code D		`	
Cond	Color	Cond		Color	Co	ond	Color
1	BLACK	18	,	WHITE/GREEN	35	;	WHITE/RED/RED
2	RED	19	,	WHITE/YELLOW	36	5	WHITE/RED/GREEN
3	WHITE	20	,	WHITE/BLUE	37	7	WHITE/RED/BLUE
4	GREEN	21	,	WHITE/BROWN	38	3	WHITE/RED/BROWN
5	ORANGE	22	,	WHITE/ORANGE	39	)	WHITE/RED/VIOLET
6	BLUE	23	,	WHITE/SLATE	40	)	WHITE/GREEN/BLACK
7	BROWN	24	,	WHITE/VIOLET	41		WHITE/GREEN/RED
8	YELLOW	25		WHITE/BLACK/RED	42	)	WHITE/GREEN/GREEN
9	VIOLET	26		WHITE/BLACK/GREEN	43	3	WHITE/GREEN/BLUE
10	SLATE	27		WHITE/BLACK/YELLOW	44		WHITE/GREEN/BROWN
11	PINK	28		WHITE/BLACK/BLUE	45	·	WHITE/GREEN/VIOLET
12	TAN	29		white/black/brown	46	5	WHITE/BLUE/BLACK
13	RED/GREEN	30		WHITE/BLACK/ORANGE	47	r	WHITE/BLUE/RED
14	RED/YELLOW	31	,	WHITE/BLACK/SLATE	48	3	WHITE/BLUE/GREEN
15	RED/BLACK	32	,	WHITE/BLACK/VIOLET	49	)	WHITE/BLUE/BLUE
16	WHITE/BLACK	33	,	WHITE/BLACK/BLACK 50		)	WHITE/BLUE/BROWN
17	WHITE/RED	34	,	WHITE/RED/BLACK			
2) Cable Assembly			50 Components Cabled				
a) Twists:			2.0 Twists/foot (min)				
b) Orientation:			Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
3) Jacket			0.035" Wall, Nom., PVC		0.478 (0.5	603 Max.)	
			SLATE				
b) Print			ALPHA WIRE-* P/N 1181/50C 50C 22 AWG 75C (UL) TYPE CM OR AWM 2576 OR C(UL) 75C TYPE CMG FT4 CE ROHS * = Factory Code Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.				

# **Applicable Specifications**

1) UL	AWM/STYLE 2576	80°C / 150 V <sub>RMS</sub>	
	СМ	75°C	
	VW-1		
2) CSA International	C(UL) TYPE CMG	75°C	
	FT4		
3) CE	EU Low Voltage Directive 2014/35/EU		

#### **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.			
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 detail.			

## **Properties**

Physical & Mechanical Properties				
1) Temperature Range	-20 to 80°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	275 lbs, Maximum			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Capacitance	22.8 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Inductance	0.18 μH/ft, Nominal			
4) Conductor DCR	16.5 ω/1000ft @20°C, Nominal			

#### Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	24 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	
	[Spool dimensions may vary slightly]	

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 1181/50C

1181/50C, 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)

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 5/3/2024

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