



# **Customer Specification**

**PART NO. 25390/50** 

C	Construction		

				Diame	eters (In)	
1) Compor	ent 1		50 X 1 COND			
a) Conductor			18 (16/30) AWG Tinned Copper	0.047		
b) Insulation			0.016" Wall, Nom. PVC	0.079	0.079	
(1) Color Code			Alpha Wire Color Code D	,		
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	18	WHITE/GREEN	35	WHITE/RED/RED	
2	RED	19	WHITE/YELLOW	36	WHITE/RED/GREEN	
3	WHITE	20	WHITE/BLUE	37	WHITE/RED/BLUE	
4	GREEN	21	WHITE/BROWN	38	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	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	WHITE/BLUE/BLACK	
13	RED/GREEN	30	WHITE/BLACK/ORANGE	47	WHITE/BLUE/RED	
14	RED/YELLOW	31	WHITE/BLACK/SLATE	48	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 As	sembly		50 Components Cabled			
a) Twists:			1.3 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			18 (16/30) AWG Tinned Copper			
4) Jacket			0.053" Wall, Nom.,Polyurethane (TPU) 0.762 (0.792 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 25390/50 XTRAGUARD(R) 2 RU AWM 20668 VW-1 OR CRU AWM I/II A/B 90C 300 VOLTS FT1 CE ROHS (SEQ FOOTAGE) * = Factory Code			

# **Applicable Specifications**

1) UL			
a) Component 1	AWM/STYLE 1569	105°C / 300 V <sub>RMS</sub>	
b) Overall	AWM/STYLE 20668	90°C / 300 V <sub>RMS</sub>	
	VW-1		
2) CSA International	C(RU) AWM I/II A/B	90°C / 300 V <sub>RMS</sub>	
	FT1		
3) CE:	EU Low Voltage Directive 2014/3	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 Parlia and of the Council of 8 June 2011 and the amending Directive 2015/863/EU of 4 June 2015 . No Ex are required for RoHS Compliance on this item.		
2) 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	-30 to 90°C		
2) Bend Radius	10X Cable Diameter		
3) Pull Tension	641 Lbs, Maximum		
4) Sunlight Resistance Yes			
<b>Electrical Properties</b>	(For Engineering purposes only)		
1) Voltage Rating	300 V <sub>RMS</sub>		
2) Capacitance	45 pF/ft @1 kHz, Nominal Conductor to Conductor		
3) Ground Capacitance	81 pF/ft @1 kHz, Nominal		
4) Inductance	0.18 μH/ft, Nominal		
Conductor DCR 7.1 Ω/1000ft @20°C, Nominal			
6) OA Shield DCR	4.7 Ω/1000ft @20°C, Nominal		

## Other

Packaging	Flange x Traverse x Barrel (inches)
a) Bulk(Made-to-order)	

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 25390/50

25390/50, 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 4/28/2024

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