

## **Customer Specification**

PART NO. 25170/40

Construction

						Diameters	; (In)
1) Component 1			40 X 1 COND				
a) Conductor			18 (16/30) AWG Tinned Copper		0.047		
b) Insulation			0.016" \	0.016" Wall, Nom. PVC		0.079	
(1) Color Code			Alpha Wire Color Code D				
Cond	Color	Cond		Color	Co	nd	Color
1	BLACK	15		RED/BLACK	29		WHITE/BLACK/BROWN
2	RED	16		WHITE/BLACK	30		WHITE/BLACK/ORANGE
3	WHITE	17		WHITE/RED	31		WHITE/BLACK/SLATE
4	GREEN	18		WHITE/GREEN	32		WHITE/BLACK/VIOLET
5	ORANGE	19		WHITE/YELLOW	33		WHITE/BLACK/BLACK
6	BLUE	20		WHITE/BLUE	34		WHITE/RED/BLACK
7	BROWN	21		WHITE/BROWN	35		WHITE/RED/RED
8	YELLOW	22		WHITE/ORANGE	36		WHITE/RED/GREEN
9	VIOLET	23		WHITE/SLATE	37		WHITE/RED/BLUE
10	SLATE	24		WHITE/VIOLET	38		WHITE/RED/BROWN
11	PINK	25		WHITE/BLACK/RED	39		WHITE/RED/VIOLET
12	TAN	26		WHITE/BLACK/GREEN	40		WHITE/GREEN/BLACK
13	RED/GREEN	27		WHITE/BLACK/YELLOW			
14	RED/YELLOW	28		WHITE/BLACK/BLUE			
2) Cable A	ssembly		40 Com	ponents Cabled			
a) Twists:			1.4 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:			A/P/A Tape, 20% Overlap, Min.				
a) Drain Wire			18 (16/30) AWG Tinned Copper				
b) Braid			Tinned Copper,70% Coverage, Nom.				
4) Jacket			0.053" Wall, Nom.,Polyurethane (TPU)			0.722 (0.75	0 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 25170/40 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

AWM/STYLE 1569	105°C / 300 V <sub>RMS</sub>	
AWM/STYLE 20668	90°C / 300 V <sub>RMS</sub>	
VW-1		
C(RU) AWM I/II A/B	90°C / 300 V <sub>RMS</sub>	
FT1		
EU Low Voltage Directive 2014/35/EU		
	AWM/STYLE 20668 VW-1 C(RU) AWM I/II A/B FT1	

#### **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) 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	529 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(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	
5) Conductor DCR	7.1 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	1.14 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: 25170/40

25170/40, RoHS-Compliant Commencing With 2005/8/1 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 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 2024/5/18

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