



Customer Specification

PART NO. 25180/40

Construction

						Diameters	s (In)
1) Component 1			40 X 1 COND				
a) Conductor			16 (19/.0117) AWG Tinned Copper			0.059	
b) Insulation			0.016" Wall, Nom. PVC			0.091	
(1) Color Code			Alpha Wire Color Code D				
Cond	Color	Cond	Color	Color		nd	Color
1	BLACK	15	RED/BLA	.СК	29		WHITE/BLACK/BROWN
2	RED	16	WHITE/E	BLACK	30		WHITE/BLACK/ORANGE
3	WHITE	17	WHITE/F	RED	31		WHITE/BLACK/SLATE
4	GREEN	18	WHITE/C	GREEN	32		WHITE/BLACK/VIOLET
5	ORANGE	19	WHITE/Y	'ELLOW	33		WHITE/BLACK/BLACK
6	BLUE	20	WHITE/E	BLUE	34		WHITE/RED/BLACK
7	BROWN	21	WHITE/E	BROWN	35		WHITE/RED/RED
8	YELLOW	22	WHITE/C	DRANGE	36		WHITE/RED/GREEN
9	VIOLET	23	WHITE/S	SLATE	37		WHITE/RED/BLUE
10	SLATE	24	WHITE/\	/IOLET	38		WHITE/RED/BROWN
11	PINK	25	WHITE/E	BLACK/RED	39		WHITE/RED/VIOLET
12	TAN	26	WHITE/E	BLACK/GREEN	40		WHITE/GREEN/BLACK
13	RED/GREEN	27	WHITE/E	BLACK/YELLOW			
14	RED/YELLOW	28	WHITE/E	BLACK/BLUE			
2) Cable Assembly			40 Components Cabled				
a) Twists:			1.2 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			16 (19/.0117) AWG Tinned Copper				
b) Braid			Tinned Copper,70% Coverage, Nom.				
4) Jacket			0.083" Wall, Nom.,Polyurethane (TPU)			0.869 (0.89	98 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 25180/40 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

1) UL		
a) Component 1	AWM/STYLE 1569	105°C / 300 V _{RMS}
b) Overall	AWM/STYLE 20668	90°C / 300 V _{RMS}
	VW-1	
2) CSA International	C(RU) AWM I/II A/B	90°C / 300 V _{RMS}
	FT1	
3) CE:	EU Low Voltage Directive 2014/3	5/EU

Environmental

1) CE: EU Directive 2011/65/EU(RoHS2), EU Directive 2015/863/EU (RoHS3):			
1	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	854 Lbs, Maximum	
4) Sunlight Resistance	Yes	
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}	
2) Capacitance	51 pF/ft @1 kHz, Nominal Conductor to Conductor	
3) Ground Capacitance	92 pF/ft @1 kHz, Nominal	
4) Inductance	0.17 μH/ft, Nominal	
5) Conductor DCR	4.4 Ω/1000ft @20°C, Nominal	
6) OA Shield DCR	0.97 Ω/1000ft @20°C, Nominal	

Other

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

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 25180/40

25180/40, 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 5/6/2024

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