

## **Customer Specification**

## PART NO. 5480/25C

#### Construction

•	1				s (In)	
a) Conductor	1) Component 1		25 X 1 PAIR			
	a) Conductor		24 (7/32) AWG Tinned Copper		0.024	
b) Insulation		0.010" Wa	0.010" Wall, Nom. PVC, Semi Rigid		0.044	
(1) Color Code		Alpha Wir	Alpha Wire Color Code K			
Pair	Color	Pair	Color	Pair	Color	
1	BLACK-RED	10	RED-BLUE	19	WHITE-BLUE	
2	BLACK-WHITE	11	RED-YELLOW	20	WHITE-YELLOW	
3	BLACK-GREEN	12	RED-BROWN	21	WHITE-BROWN	
4	BLACK-BLUE	13	RED-ORANGE	22	WHITE-ORANGE	
5	BLACK-YELLOW	14	GREEN-WHITE	23	BLUE-YELLOW	
6	BLACK-BROWN	15	GREEN-BLUE	24	BLUE-BROWN	
7	BLACK-ORANGE	16	GREEN-YELLOW	25	BLUE-ORANGE	
8	RED-WHITE	17	GREEN-BROWN			
9	RED-GREEN	18	GREEN-ORANGE			
c) Pair		2/Cond Ca	2/Cond Cabled Together			
(1) Twists:		9.6 Twists/	9.6 Twists/foot (min)			
2) Cable Assembly		25 Compo	25 Components Cabled			
a) Twists:		1.8 Twists/	1.8 Twists/foot (min)			
b) Orientation:			Components to be arranged from INSIDE LAYER to OUTSIDE LAYER			
3) Shield:		Alum/Myla	Alum/Mylar Tape, 20% Overlap, Min.			
a) Foil Direction		Foil Facing	Foil Facing In			
b) Drain Wire		24 (7/32)	24 (7/32) AWG Tinned Copper			
4) Jacket		0.045" Wa	0.045" Wall, Nom.,PVC		0.527 (0.556 Max.)	
a) Color(s)		SLATE	SLATE			
b) Print		SHIELDED OR C(UL) ( * = Factor	ALPHA WIRE-* P/N 5480/25C 25PR 24 AWG SHIELDED 75C (UL) TYPE CM OR AWM 2464 OR C(UL) 60C 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 2464	80°C / 300 V <sub>RMS</sub>
	СМ	75°C
2) CSA International	C(UL) TYPE CMG	60°C
	FT4	
3) CE:	EU Low Voltage Directive 2014/35/EU	
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### Environmental

1) CE: EU Directive 2011/65/E	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 190	)7/2006):	
	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 in information.	

## Properties

Physical & Mechanical Properties				
1) Temperature Range	-20 to 80°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	179 Lbs, Maximum			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Mutual Capacitance	22.5 pF/ft @1 kHz, Nominal			
3) Ground Capacitance	40 pF/ft @1 kHz, Nominal			
4) Characteristic Impedance	83 Ω			
5) Inductance	0.19 μH/ft, Nominal			
6) Conductor DCR	26 Ω/1000ft @20°C, Nominal			
7) OA Shield DCR	11.6 Ω/1000ft @20°C, Nominal			

### Other

Flange x Traverse x Barrel (inches)	
30 x 14 x 12 Continuous length	
18 x 14.25 x 8 Continuous length	
18 x 9 x 8 Continuous length	
[Spool dimensions may vary slightly]	
	30 x 14 x 12 Continuous length 18 x 14.25 x 8 Continuous length 18 x 9 x 8 Continuous length

#### www.alphawire.com

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

To Whom It May Concern:

Alpha Wire Part Number: 5480/25C

5480/25C, 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 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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