



Customer Specification

PART NO. 5480/50C

Construction

	Diameters ("in")	
1) Component 1	50 x 1 PAIR	
a) Conductor	24 (7/32) AWG Tinned Copper	0.024
b) Insulation	0.010" Wall, Nom. PVC, Semi-Rigid	0.044
(1) Color Code	Alpha Wire Color Code C	

BROWN-	18 19 20	BROWN/WHWHITE BROWN/SL/	35	GREEN/WHI		
WHITE GREEN- WHITE BROWN-				RED		
WHITE BROWN-	20	WHITE	36	GREEN/BRO RED		
		SLATE/WHI1 WHITE	37	GREEN/SLA ⁻ RED		
VVIIIIE	21	BLUE-RED	38	BROWN/WI RED		
SLATE- WHITE	22	ORANGE- RED	39	BROWN/SL/ RED		
BLUE/WHITI WHITE	23	GREEN-RED	40	SLATE/WHI1 RED		
BLUE/ORAN WHITE	24	BROWN- RED	41	BLUE- BLACK		
BLUE/GREEN WHITE	25	SLATE-RED	42	ORANGE- BLACK		
BLUE/BROW WHITE	26	BLUE/WHITI RED	43	GREEN- BLACK		
BLUE/SLATE WHITE	27	BLUE/ORAN RED	44	BROWN- BLACK		
ORANGE/W WHITE	28	BLUE/GREEN RED	45	SLATE- BLACK		
ORANGE/GI WHITE	29	BLUE/BROW RED	46	BLUE/WHITI BLACK		
ORANGE/BF WHITE	30	BLUE/SLATE RED	47	BLUE/ORAN BLACK		
ORANGE/SL WHITE	31	ORANGE/W RED	48	BLUE/GREEN BLACK		
WHILE		KED		BLUE/BROW BLACK		
GREEN/BRC WHITE	33	ORANGE/BF RED	50	BLUE/SLATE BLACK		
GREEN/SLA ⁻ WHITE	34	ORANGE/SL RED				
r					2/Cond Cabled Together	
vists					9.6 Twists/foot (min.)	
ole Assembly					50 Components Cabled	
sts					1.4 Twists/foot (min.)	
					Components to be arranged from INSIDE LAYER-to- OUTSIDE LAYER	
3) Shield					Alum/Mylar Tape, 20% Overlap (min.)	
					Foil Facing In	
·					24 (7/32) AWG Tinned Copper	
					0.053" Wall, Nom. PVC	0.699 (0.739 max
or(s)					SLATE	
nt					ALPHA WIRE-* P/N 5480/50C 50PR 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	
	BLUE/ORAN WHITE BLUE/GREEN WHITE BLUE/BROW WHITE BLUE/SLATE WHITE ORANGE/W WHITE ORANGE/GI WHITE ORANGE/SL WHITE GREEN/WHI WHITE GREEN/WHI WHITE GREEN/SLA WHITE GREEN/SLA WHITE GREEN/SLA WHITE GREEN/SLA WHITE GREEN/SLA WHITE GREEN/SLA WHITE cists ble Assembly sts entation eld Direction in Wire ket or(s)	WHITE BLUE/ORAN WHITE BLUE/GREEN WHITE BLUE/BROW WHITE BLUE/SLATE WHITE ORANGE/W WHITE ORANGE/GI WHITE ORANGE/BF WHITE ORANGE/SL WHITE ORANGE/SL WHITE GREEN/WHI WHITE GREEN/BRC WHITE GREEN/SLA WHITE	WHITE BLUE/ORAN WHITE BLUE/GREET WHITE BLUE/BROW WHITE BLUE/SLATE BLUE/SLATE ORANGE/W WHITE ORANGE/GI ORANGE/SI WHITE ORANGE/BF WHITE ORANGE/SI WHITE GREEN/WHI 32 ORANGE/GI WHITE GREEN/BRC WHITE GREEN/SLA' WHITE ORANGE/SI WHITE GREEN/SLA' WHITE	WHITE BLUE/ORAN WHITE BLUE/GREET WHITE BLUE/BROW WHITE BLUE/BROW WHITE BLUE/SLATE WHITE ORANGE/W WHITE ORANGE/GI WHITE ORANGE/GI WHITE ORANGE/SL WHITE GREEN/WHI WHITE GREEN/BRC WHITE GREEN/SLA WHITE GREEN/SLA WHITE ORANGE/SL WHITE GREEN/SLA WHITE ORANGE/SL WHITE GREEN/SLA WHITE ORANGE/SL WHITE GREEN/SLA WHITE ORANGE/SL WHITE ORANGE/SL WHITE GREEN/SLA WHITE ORANGE/SL WHITE GREEN/SLA WHITE ORANGE/SL WHITE ORANGE/SL WHITE GREEN/SLA WHITE ORANGE/SL WHITE	WHITE 23 GREEN-RED 40 RED BLUE/ORAN 24 BROWN- RED 41 BLUE-BLACK BLUE/GREET 25 SLATE-RED 42 ORANGE-BLACK BLUE/BROWN 26 BLUE/WHITI 43 GREEN-BLACK BLUE/SLATE 27 BLUE/ORAN RED 45 BLACK ORANGE/WHITE 29 BLUE/BROWN RED 46 BLUE/WHITI BLACK ORANGE/GI 29 BLUE/BROWN RED 46 BLUE/WHITI BLACK ORANGE/GI WHITE 30 BLUE/SLATE WHITE 31 ORANGE/W RED 48 BLUE/GREET BLACK ORANGE/SL WHITE 31 ORANGE/W A8 BLUE/GREEN BLACK GREEN/WHI 32 ORANGE/GI RED 49 BLUE/BROWN BLACK GREEN/WHITE 33 ORANGE/GI RED 49 BLUE/BROWN BLACK GREEN/WHITE 31 ORANGE/GI RED BLUE/BROWN BLACK GREEN/SLATE RED 50 BLUE/SLATE BLACK WHITE 32 ORANGE/SL WHITE BLACK GREEN/SLATE RED 50 BLUE/SLATE BLACK WHITE 34 ORANGE/SL WHITE BLACK GREEN/SLATE RED 50 BLUE/SLATE BLACK WHITE 34 ORANGE/SL WHITE BLACK ORANGE/SL WHITE STAN BLACK ORANGE/SL W	WHITE

Applicable Specifications

1) UL	AWM/STYLE 2464	80°C / 300 V _{RMS}
	CM	75°C
2) CSA International	C(UL) TYPE CMG	60°C
	FT4	
CE EU Low Voltage Directive 2014/35/EU		
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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	355 lbs. (max.)	
Electrical Properties	For Engineering purposes only	
1) Voltage Rating	300 V _{RMS}	
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	10.2 ω/1000ft @20°C, Nominal	
7) OA SIIIEU DCK	10.2 W/ TOOUT @20 C, NOTHINA	-

Other

Packaging	Flange x Traverse x Barrel (inches)	
a) 1000 FT	36 x 14 x 12 Continuous Length	
b) 500 FT	30 x 14 x 12 Continuous Length	
c) 100 FT	18 x 9 x 8 Continuous Length	
d) Bulk (made-to-order)		
	Spool dimensions may vary slightly.	
	Spool dancisions may vary sugnity.	

www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

Tel: 1-800-52 ALPHA

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EU/UK/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: 5480/50C

5480/50C, 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)

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Authorized Signatory for the Alpha Wire:

Dave Watson, Director of Engineering

10/25/2024

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374 Tel: 1-908-925-8000