

# **Customer Specification**

### **PART NO. 5452C**

#### **Construction**

						Diameters (In)	
1) Component 1						2 X 1 PAIR	
a) Conductor						20 (7/28) AWG Tinned Copper	0.038
b) Insulation						0.016" Wall, Nom. PVC	0.070
(1) Color Code						Alpha Wire Color Code A	
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-RED	2	BLACK- WHITE				
c) Pa	ir					2/Cond Cabled Together	
(1) T	wists:					6.0 Twists/foot (min)	
2) Ca	able Assembly					2 Components Cabled	
a) Tv	vists:					3.7 Twists/foot (min)	
b) Orientation:					Components to be arranged from INSIDE LAYER to OUTSIDE LAYER		
c) Core Wrap					Nonwoven Polyester Tape, 25% Overlap, Min.		
3) Shield:					Alum/Mylar Tape, 25% Overlap, Min.		
a) Foil Direction					Foil Facing In		
b) Drain Wire					20 (7/28) AWG Tinned Copper		
4) Ja	cket					0.032" Wall, Nom.,PVC	0.302 (0.316 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 5452C 2PR 20 AWG XTRAGUARD(R) 1 SHIELDED (UL) TYPE CM 105C SUN RES OR AWM 2464 80C 300V OR AWM 2517 105C 300V VW-1 OR C(UL) TYPE CMG 105C FT4 CE ROHS OIL RESISTANT (SEQ FOOTAGE) * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]	

## **Applicable Specifications**

1) UL		
a) Component 1	AWM/STYLE 1569	105°C / 300 V <sub>RMS</sub>
b) Overall	AWM/STYLE 2517	105°C / 300 V <sub>RMS</sub>
	SUN RES	
	AWM/STYLE 2464	80°C / 300 V <sub>RMS</sub>
	СМ	105°C
	VW-1	
2) CSA International	C(UL) TYPE CMG	105°C
	FT4	
3) IEC	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) Other	Oil Resistant	
5) CE:	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 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 information.

# **Properties**

Physical & Mechanical Properties				
1) Temperature Range	-30 to 105°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	44 Lbs, Maximum			
4) Sunlight Resistance	Yes			
Electrical Properties	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Mutual Capacitance	35 pF/ft @1 kHz, Nominal			
3) Ground Capacitance	63 pF/ft @1 kHz, Nominal			
4) Characteristic Impedance	58 Ω			
5) Inductance	0.19 μH/ft, Nominal			
6) Conductor DCR	10.3 Ω/1000ft @20°C, Nominal			
7) OA Shield DCR	8.2 Ω/1000ft @20°C. Nominal	8.2 Ω/1000ft @20°C, Nominal		

#### **Other**

Packaging	Flange x Traverse x Barrel (inches)		
a) 1000 FT	18 x 9 x 8 Continuous length		
b) 500 FT	12 x 10.5 x 5 Continuous length		
c) 100 FT	10.5 x 5 x 3.5 Continuous length		
d) Bulk(Made-to-order)			
	[Spool dimensions may vary slightly]		
Notes:			
a) Oil Resistant Jacket (7d @ 60C).			

#### www.alphawire.com

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Lead Mercury □□□□□□□□0.1% (1000 ppm) Cadmium Hexavalent Chromium □□□□□□□□0.1% (1000 ppm) Polybrominated Biphenyls (PBB) □□□□□□□□0.1% (1000 ppm) Polybrominated Diphenyl Ethers (PBDE), □□□□□□□□0.1% (1000 ppm) Including Deca-BDE Bis(2-ethylhexyl) phthalate (DEHP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) □□□□□□□□0.1% (1000 ppm) Diisobutyl phthalate (DIBP)

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