

# **Customer Specification**

## **PART NO. 55451**

#### Construction

						Diameters (In)	
1) Component 1						1 X 1 PAIR	
a) Conductor						20 (7/28) AWG Tinned Copper	0.038
b) Insulation					0.011" Wall, Nom. FEP	0.060	
(1) Co	lor Code					Alpha Wire Color Code A	
Pair	Color	Pair	Color	Pair	Color		-
1	BLACK-RED						
c) Cab	ling					2 COND Cabled	
(1) Tw	ists:					6.9 Twists/foot (min)	
(2) Orientation:						Components to be arranged from INSIDE LAYER to OUTSIDE LAYER	
(3) Core Wrap					PTFE(skived) Tape, 25% Overlap, Min.		
2) Shield:					Alum/Mylar Tape, 25% Overlap, Min.		
a) Foil Direction					Foil Facing In		
b) Drain Wire					20 (7/28) AWG Tinned Copper		
3) Jacket					0.027" Wall, Nom.,FEP	0.186 (0.196 Max.)	
a) Tint Color(s)					Natural Tan, Slate, Black, Yellow, Orange, Blue, Green, Red, White		
b) Ripcord					Para-Aramid fiber(Kevlar, Twaron or equal)		
c) Print					ALPHA WIRE-* XTRAGUARD(R) 5 20 AWG SHIELDED 150C E163860 (UL) C(UL) TYPE CMP OR AWM 20229 IEC EN 60332-1/-2 CE ROHS * = 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 1886	150°C / 300 V <sub>RMS</sub>
b) Overall	СМР	150°C
	AWM/STYLE 20229	150°C / 300 V <sub>RMS</sub>
	UL-910/NFPA 262 (Steiner Tunnel) Flame Test	
2) CSA International	C(UL) TYPE CMP	150°C
	FT6	
3) IEC	EN 50356 Spark Testing	
	EN 50395, Section 10, Faults in Insulation	
	EN 50396, Section 4, Test Methods for Dimensions	
	EN 60228 Conductors, Class 2	
	EN 60332-1 Flame Behavior	
	EN 60332-2 Flame Behavior	
4) Other	ICEA T-29-520 210,000 BTU/Hr. Flame Test	
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	-80 to 200°C				
2) Bend Radius	10X Cable Diameter				
3) Pull Tension	26 Lbs, Maximum				
Electrical Properties	(For Engineering purposes only)				
1) Voltage Rating	300 V <sub>RMS</sub>				
2) Mutual Capacitance	25 pF/ft @1 kHz, Nominal				
3) Ground Capacitance	45 pF/ft @1 kHz, Nominal				
4) Characteristic Impedance	58 Ω				
5) Inductance	0.17 μH/ft, Nominal				
6) Conductor DCR	10.1 Ω/1000ft @20°C, Nominal				
7) OA Shield DCR	9.3 Ω/1000ft @20°C, Nominal				

### Other

Packaging	Flange x Traverse x Barrel (inches)
a) 3280 FT	18 x 14.25 x 8 Continuous length
b) Bulk(Made-to-order)	
	[Spool dimensions may vary slightly]
Notes:	
a) Nature Tan color 3280ft packaging is for special order.	

#### www.alphawire.com

Alpha Wire 2200 US Highway 27 South Richmond, IN 47374

#### Tel: 1-800-52 ALPHA

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure there accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.





Alpha Wire DDDD55451

55451000RoHS0000 2005/8/1 000000

DDDD Lead Mercury Cadmium Hexavalent Chromium Polybrominated Biphenyls (PBB) Polybrominated Diphenyl Ethers (PBDE), Including Deca-BDE Bis(2-ethylhexyl) phthalate (DEHP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) Disobutyl phthalate (DIBP)

 DDDDDDDDDDD0.1% (1000 ppm)

 DDDDDDDD0.1% (1000 ppm)

 DDDDDDD0.01% (1000 ppm)

 DDDDDDD0.1% (1000 ppm)

 DDDDDDD00.1% (1000 ppm)

 DDDDDDDDD0.1% (1000 ppm)

 DDDDDDDD0.1% (1000 ppm)

 DDDDDDDD0.1% (1000 ppm)

 DDDDDDDD0.1% (1000 ppm)

 DDDDDDDD00.1% (1000 ppm)

Alpha Wire DDDDDDDD

@ Alt

DDDDDDD Dave Watson

2025/4/1