

## **Customer Specification**

#### **PART NO. 55159**

#### Construction

				Diameters	(In)	
1) Component 1	9 X 1 COND	9 X 1 COND				
a) Conductor	20 (7/28) AWG Tir	20 (7/28) AWG Tinned Copper			0.038	
b) Insulation	0.010" Wall, Nom.	0.010" Wall, Nom. FEP		0.058	0.058	
(1) Color Code Alpha Wire Color Code E						
Cond	Color	Cond	Color	Cond	Color	
1	BLACK	4	ORANGE	7	BLUE	
2	BROWN	5	YELLOW	8	VIOLET	
3	RED	6	GREEN	9	SLATE	
2) Cable Assembly	9 Components Ca	9 Components Cabled				
a) Twists:	4.0 Twists/foot (m	4.0 Twists/foot (min)				
b) Orientation:	Components to b	Components to be arranged from INSIDE LAYER to OUTSIDE LAYER				
c) Core Wrap	PTFE(skived) Tape	PTFE(skived) Tape, 25% Overlap, Min.				
3) Shield:	A/P/A Tape, 25%	A/P/A Tape, 25% Overlap, Min.				
a) Drain Wire	20 (7/28) AWG Tir	20 (7/28) AWG Tinned Copper				
b) Braid	Tinned Copper,70	Tinned Copper,70% Coverage, Min.				
4) Jacket	0.027" Wall, Nom.	0.027" Wall, Nom.,FEP 0.299 (0.313 Max.)			3 Max.)	
a) Tint Color(s)	Natural Tan, Slate	Natural Tan, Slate, Black, Yellow, Orange, Blue, Green, Red, White				
b) Ripcord	Para-Aramid fiber	Para-Aramid fiber(Kevlar, Twaron or equal)				
c) Marker Tape	OR AWM 20229 - CE ROHS * = Factory Code	XTRAGUARD(R) 5 - 20 AWG SHIELDED 150C (UL) CMP OR AWM 20229 LLXXXXXX CSA CMP FT6 CE ROHS				

#### **Applicable Specifications**

1) UL	СМР	150°C	
	AWM/STYLE 20229	150°C / 300 V <sub>RMS</sub>	
2) CSA International	СМР	150°C	
	FT6		
3) CE:	EU Low Voltage Directive 2014/3	EU Low Voltage Directive 2014/35/EU	

## 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 more information.

#### **Properties**

Physical & Mechanical Properties				
1) Temperature Range	-80 to 200°C			
2) Bend Radius	10X Cable Diameter			
3) Pull Tension	93 Lbs, Maximum			
<b>Electrical Properties</b>	(For Engineering purposes only)			
1) Voltage Rating	300 V <sub>RMS</sub>			
2) Capacitance	23.8 pF/ft @1 kHz, Nominal Conductor to Conductor			
3) Ground Capacitance	43 pF/ft @1 kHz, Nominal			
4) Inductance	0.17 μH/ft, Nominal			
5) Conductor DCR	10.2 Ω/1000ft @20°C, Nominal			
OA Shield DCR 2.41 Ω/1000ft @20°C, Nominal				

### Other

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

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: 55159

55159, 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 4/29/2024

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