

Customer Specification

PART NO. 6459

Construction

				Diameters (In)	
1) Component 1		2 X 1 COND			
a) Conductor		18 (7/26) AWG TC		0.046	
b) Insulation		0.021" Wall, Nom. Polypropylene(PP)		0.088	
(1) Color(s)					
Cond	Color	Cond	Color	Cond	Color
1	BLUE	2	ORANGE		
2) Cable Assembly		2 Components Cabled			
a) Twists:		4.8 Twists/foot (min)			
3) Shield:		Alum/Mylar Tape, 25% Overlap, Min.			
a) Foil Direction		Foil Facing In			
b) Drain Wire		20 (7/28) AWG TC			
4) Over Wrap:		Polypropylene Tape, 25% Overlap, Min.			
5) Jacket		0.050" Wall, Nom.,PVC		0.292 (0.304 Max.)	
a) Color(s)		ORANGE			
b) Ripcord		1310 Denier Nylon			
c) Print		ALPHA WIRE-* P/N 6459 FIELDBUS TYPE A 31.25 KB/S EXXXXX 2C18 SHIELDED (UL) 105C PLTC-ER OR ITC SUN RES OR CM OR C(UL) CM --- OIL RES (SEQ FOOTAGE EVERY 2 FT) * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]			

Applicable Specifications

1) UL	PLTC	105°C
	ITC	105°C
	CM	105°C
	SUN RES	
	EXPOSED RUN	
2) CSA International	CM	105°C

Environmental

1) EU Directive 2002/95/EC(RoHS):	All materials used in the manufacture of this part are in compliance with EU Directive 2002/95/EU regarding the restriction of use of certain hazardous substances in electrical and electronic equipment. Consult Alpha Wire's web site for compliance Date of Manufacture.
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Properties

Physical & Mechanical Properties	
1) Temperature Range	-30 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	37 Lbs, Maximum
Electrical Properties	
(For Engineering purposes only)	
1) Voltage Rating	300 V _{RMS}
2) Characteristic Impedance	100 Ω +/- 10
3) Inductance	0.19 μH/ft, Nominal
4) Mutual Capacitance	24 pf/ft @1 kHz, Nominal
5) Ground Capacitance	45 pf/ft @1 kHz, Nominal
6) Velocity of Propagation	66 %
7) Conductor DCR	7.5 Ω/1000ft @20°C, Nominal
8) OA Shield DCR	7.5 Ω/1000ft @20°C, Nominal
9) Current	5.2 amps per conductor @30°C, Maximum
10) Attenuation, Max dB/100ft	0.91 @ 39 kHz

Other

1) Packaging	
a) 1000 FT	
b) 500 FT	
c) 100 FT	
2) Notes:	
a) FIELDBUS TYPE A CABLE	

www.alphawire.com

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RoHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number:6459

6459 , RoHS-Compliant Commencing With7/1/2008Production

*This document certifies that the Alpha part numbers cited above are manufactured in accordance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, better known as the RoHS Directives, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to these Directives for the specific definitions and extents of these Directives. **No Exemptions are required for RoHS Compliance on this item.***

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)

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 Company:

Dave Watson, Director of Engineering &QA

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