

Customer Specification PART NO. M9240123

Construction

		Diameters (In)
1) Component 1	12 X 1 PAIR	
a)Conductor 1	20 (SOLID) AWG CHROMEL	0.032
b)Conductor 2	20 (SOLID) AWG ALUMEL	0.032
c)Insulation	0.016" Wall, Nom. PVC	0.064
(1) Print	ALPHANUMERIC NUMBERS - 1-ONE ALTERNATING AND	
	INVERTED	
(2) Color(s)	CHROMEL: YELLOW, ALUMEL: RED	
	Pair number printed on Yellow conductors	
d)Pair	2/Cond Cabled Together	
(1) Twists:	6.9 Twists/foot (min)	
Individually Applied:		
e) Shield:	Foil Free Alum/Mylar Tape, 25% Overlap, Min.	
(1) Foil Direction	Foil Facing In	
(2) Drain Wire	20 (7/28) AWG TC	
2)Cable Assembly	12 Components Cabled	
a) Twists:	1.3 Twists/foot (min)	
b) Core Wrap	Clear Mylar 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 TC	
5)Jacket	0.065" Wall, Nom.,PVC	0.623 (0.648 Max.)
a) Color(s)	YELLOW	
b) Ripcord	1 End 810 Denier Nylon	
c)Print	ALPHA WIRE-* P/N M9240123	
	EXXXXX 105C 20 AWG (UL) PLTC/ITC	
	THCPL EXTN TYPE KX ROHSCE	
	* = Factory Code	

Applicable Specifications

PLTC	105°C		
ITC	105°C		
CL3			
ANSI MC96.1 Type KX			
•	ITC CL3	ITC 105°C CL3	ITC 105°C CL3

Environmental

1)CE:EU Directive 2011/65/EU	J(RoHS2):
	This product complies with European Directive 2011/65/EU (RoHS Directive) of the
	European Parliament and of the Council of 8 June 2011. No Exemptions are
	required for RoHS Compliance on this item. Consult Alpha Wire's web site for
	RoHS C of C.
2) REACH Regulation (EC 190	07/2006):
	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. Forup-to-date information, please see Alpha's REACH SVHC Declaration.
3) California Proposition 65:	
	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

Properties

Physical & Mechanical Properties		
1)Temperature Range	-20 to 105°C	
	2)Bend Radius	
10X Cable Diameter		
3)Pull Tension	315 Lbs, Maximum	
	4)Sunlight Resistance	
Yes		
Electrical Properties	(For Engineering purposes only)	
1) Voltage Rating300 VRMS		
2) Component 1		
a)Inductance	0.2 μH/ft, Nominal	
	b)Conductor 1 DCR	
425 Ω/1000ft @20°C, Nominal		
c)Conductor 2 DCR	176 Ω/1000ft @20°C, Nominal	
	d)Component Shield DCR	
9.2 Ω/1000ft @20°C, Nominal		
e)OA Shield DCR	6.4 Ω/1000ft @20°C, Nominal	

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	16 x 11 x 8 Continuous length	
d)Bulk(Made-to-order)		
	[Spool dimensions may vary slightly]	
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EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M9240123

M9240123, RoHS-Compliant Commencing With 1/1/2006 Production

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive, 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 this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item**. It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. 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 11364-2006.

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)

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Authorized Signatory for the Alpha Wire Company:

Dave Watson, Director of Engineering & QA

5/14/2013