

ALPHA WIRE COMPANY
CUSTOMER PRODUCT SPECIFICATION

Part Number: 6461
Page 1 of 2 Pages

Issue: 1
Issue Date: 5/20/2008
Effective Date: 5/20/2008

A. Construction

Diameters

- | | | | |
|----|---------------|-----------------------------|-------|
| 1) | Component 1 | 2 X 1 COND | |
| | a) Conductor | 22 (7/30) AWG TC | |
| | b) Insulation | 0.046" Wall, Nom. Foam HDPE | 0.121 |
| | (1) Color(s) | | |

Cond	Color	Cond	Color	Cond	Color
1	BLUE	2	ORANGE		

- | | | | |
|----|-------------------|---|-------|
| 2) | Cable Assembly | 2 Components Cabled | |
| | a) Twists: | 3.0 Twists/foot (min) | |
| 3) | Shield: | Alum/Mylar Tape, 25% Overlap, Min. | |
| | a) Foil Direction | Foil Facing Out | |
| | b) Drain Wire | 20 (7/28) AWG TC | |
| 4) | Jacket | 0.050" Wall, Nom., PVC | 0.351 |
| | a) Color(s) | ORANGE | |
| | b) Ripcord | 1310 Denier Nylon | |
| | c) Print | ALPHA WIRE P/N 6461
FIELD BUS 1PR22 SHIELDED (UL) CM 75C EXXXXX OR
PLTC SUN RES OR C(UL) CM 75C | |

B. Industry Approvals

- | | | | |
|----|--------------------------------|---------|------|
| 1) | UL | PLTC | 75°C |
| | | CM | 75°C |
| | | SUN RES | |
| 2) | CSA International | CM | 75°C |
| 3) | 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.

C. Physical & Mechanical Properties

- | | | | |
|----|-------------------|--------------------|--|
| 1) | Temperature Range | -40 to 75°C | |
| 2) | Bend Radius | 10X Cable Diameter | |
| 3) | Pull Tension | 19.7 Lbs, Maximum | |

D. Electrical Properties

- | | | | |
|---------------------------------|---------------------------|---------------------------------------|--|
| (For Engineering purposes only) | | | |
| 1) | Voltage Rating | 300 V _{RMS} | |
| 2) | Characteristic Impedance | 150 Ω +/- 15 | |
| 3) | Inductance | 0.3 μH/ft, Nominal | |
| 4) | Mutual Capacitance | 9.2 pf/ft @1 kHz, Nominal | |
| 5) | Ground Capacitance | 16 pf/ft @1 kHz, Nominal | |
| 6) | Velocity of Propagation | 78 % | |
| 7) | Conductor DCR | 17.1 Ω/1000ft @20°C, Nominal | |
| 8) | OA Shield DCR | 3.3 Ω/1000ft @20°C, Nominal | |
| 9) | Current | 2.5 amps per conductor @30°C, Maximum | |
| 10) | Attenuation, Max dB/100ft | 1.98 @ 250 kHz | |
| | | 3.05 @ 625 kHz | |
| | | 3.96 @ 1.25 MHz | |
| | | 6.1 @ 3.125 MHz | |

E. Other

- | | | | |
|----|------------|--|--|
| 1) | Packaging | | |
| | a) 1000 FT | | |
| | b) 500 FT | | |
| | c) 100 FT | | |
| 2) | Notes: | | |

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a) FOUNDATION Fieldbus Cable

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