

LONGTRONIC® FD Profibus DP

SF/UTP 1x2x22AWG/19 PUR

P/N: ZL5101032

Version: A/07

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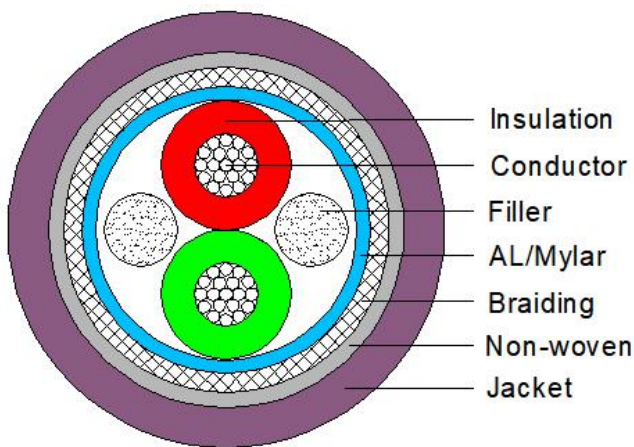
Description

This is a cable with 150 Ω characteristic impedance for data transmission.

This cable is designed for industrial field bus systems of automation and communication, such as process control and automation. Application for moved installation.

22AWG/19 stranded BC conductor, Foam-PE insulation, Filler, AL/Mylar + Tinned copper braiding overall screen, Non-woven tape, PUR jacket.

Design



Conductor 19*0.15 mm stranded bare copper wire

Insulation Foam-PE
OD: 2.70 ± 0.10 mm
Color: Red, Green

Filler PP

Overall screen AL/Mylar
Tinned copper braiding, coverage ≥ 80 %

Tape Non-woven tape

Jacket PUR
Color: Violet (Similar to RAL4001)
OD: 8.00 ± 0.30 mm

Marking ZHAOLONG □ LONGTRONIC® □ BUS □ PROFIBUS-DP □ FD □ 1x2x22AWG □ PUR □ □ □ □
E324007 □  □ AWM □ 21329 □ 80 °C □ 600V □ FT2 □ □ □ □ XXXXXX □ ****m

Note:

1. □ means blank;
2. XXXXXX means batch number;
3. ****m means meter

Electrical characteristics (20℃)

Conductor resistance	$\leq 55 \Omega/\text{km}$
Dielectric strength	AC 2.0 kV for 1 min.
Insulation resistance	$\geq 5000 \text{ M}\Omega \cdot \text{km}$
Mutual Capacitance	Nom. 30 pF/m at 800 Hz or 1000 Hz
Velocity of propagation	Nom. 78%
Characteristic impedance	$270 \pm 27 \Omega$ at 9.6 kHz $185 \pm 18.5 \Omega$ at 38.4 kHz $150 \pm 15 \Omega$ at 3~20 MHz
Attenuation	$\leq 3.0 \text{ dB/km}$ at 9.6 kHz $\leq 4.0 \text{ dB/km}$ at 38.4 kHz $\leq 11.0 \text{ dB/km}$ at 200 kHz $\leq 25.0 \text{ dB/km}$ at 4 MHz $\leq 49.0 \text{ dB/km}$ at 16 MHz

Other characteristics

Operating temperature	Fixed: $-40 \sim +80 \text{ }^{\circ}\text{C}$ Moving: $-20 \sim +60 \text{ }^{\circ}\text{C}$
Installation temperature	$-20 \sim +60 \text{ }^{\circ}\text{C}$
Min bending radius	Fixed: $5 \times \text{OD}$ Moving: $8 \times \text{OD}$
Rated voltage	300 V
Halogen free	IEC 60754-1
Oil resistance	IRM 902, $100^{\circ}\text{C} \times 96\text{h}$ (UL 758)
Flame resistance	IEC 60332-1-2, FT2
Sunlight resistance	300 h (UL1581)
Trailing chain test	≥ 5 million cycles Drag chain route: 0.9 m Bending radius: 75 mm Test Acceleration: 25m/s^2 Speed: 2.6m/s
Torsion test	≥ 5 million cycles Rotation angle: $\pm 180^{\circ}$ Rotation distance: 0.6 m Rotation rate: 60 cycles/min.

This cable meets RoHS requirements.

Packing information

Packaging	500 m / drum
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