

LONGTRONIC® DeviceNet thick cable

1x2x18AWG/19+1x2x15AWG/19 PUR

P/N: ZL5103020

Version: A/01

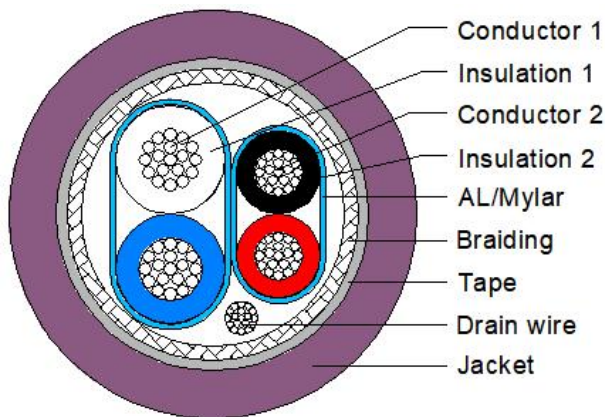
Date: 2023-12-05

Description

This is a cable with 120 Ω characteristic impedance for data transmission. Application for occasional moved installation.

18AWG/19 stranded TC conductor with Foam-PE insulation, 15AWG/19 stranded TC conductor with HDPE insulation, AL/Mylar individual screen, Drain wire, Tinned copper braiding overall screen, Non-woven tape, PUR jacket.

Design



Conductor	① 18AWG(19*0.25 mm) stranded tinned copper wire
	② 15AWG(19*0.34 mm) stranded tinned copper wire
Insulation	① Foam-PE
	OD: 3.80 $\pm$ 0.15 mm
	Color: White, Blue
	② HDPE
	OD: 2.65 $\pm$ 0.15 mm
	Color: Red, Black
Individual screen	AL/Mylar
Drain wire	19*0.25 mm stranded tinned copper wire
Overall screen	Tinned copper braiding, coverage about 80 %
Tape	Non-woven
Jacket	PUR
	Color: Violet (Similar to RAL4001)
	OD: 11.80 $\pm$ 0.40 mm

Marking ZHAOLONG □ LONGTRONIC® □ BUS □ DeviceNET □ 2x18AWG/19+2x15AWG/19 □ 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 °C)

Data pair(18AWG):

Conductor resistance	$\leq 22.60 \Omega/\text{km}$
Dielectric strength	AC 2.0 kV for 1 min.
Insulation resistance	$\geq 5000 \text{ M}\Omega \cdot \text{km}$
Mutual Capacitance	Nom. 39.37 pF/m at 800 Hz or 1000 Hz
Capacitance between one conductor and other conductor connected to shield	Nom. 78.74 pF/m at 800 Hz or 1000 Hz
Velocity of propagation	Nom. 70%
Characteristic impedance	$120 \pm 12 \Omega$ at 1.0 MHz
Attenuation	$\leq 0.43 \text{ dB}/100\text{m}$ at 125 kHz $\leq 0.82 \text{ dB}/100\text{m}$ at 500 kHz $\leq 1.31 \text{ dB}/100\text{m}$ at 1.0 MHz

Power pair(15AWG):

Conductor resistance	$\leq 11.81 \Omega/\text{km}$
Dielectric strength	AC 2.0 kV for 1 min.
Insulation resistance	$\geq 5000 \text{ M}\Omega \cdot \text{km}$

Other characteristics

Operating temperature	Fixed: -40 ~ +80 °C
Installation temperature	-20 ~ +60 °C
Min bending radius	Fixed: 5 × OD Occasional Moving: 10 × OD
Rated voltage	600 V
Oil resistance	IRM 902, 70 °C × 4h (EN 50290-2-22)
Flame resistance	VW-1
Sunlight resistance	300 h (UL1581)
This cable meets RoHS requirements.	

Packing information

Packaging	500 m / drum
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Prepared by: Yunkang Shen	Checked by: Bin You	Approved by: Bin You
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