

LONGTRONIC® Profinet Type C

SF/UTP 4x22AWG/19 PVC

P/N: ZL5201020

Version: A/03

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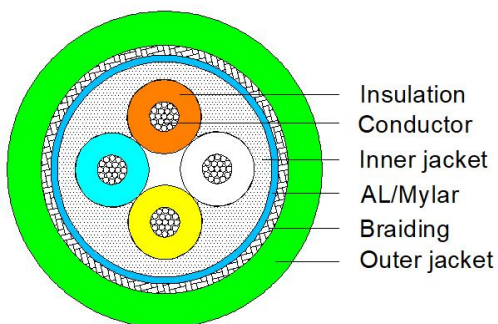
Description

This is a cable with 100 Ω characteristic impedance for data transmission.

Double screened design supported excellent EMC performance. Application for moved installation.

22AWG/19 stranded TC conductor, HDPE insulation, PVC inner jacket, AL/Mylar + Tinned copper braiding overall screen, PVC jacket.

Design



Conductor 19*0.15mm stranded tinned copper wire

Insulation HDPE

OD: 1.50 ± 0.10 mm

Color: Pair 1: White, Blue Pair 2: Yellow, Orange

Cabling Four wires stranded together to a quad

Inner jacket PVC

Overall screen AL/Mylar tape

Tinned copper braiding, coverage $\geq 85\%$

Outer jacket PVC

Color :Green(Similar to RAL 6018)

Thickness: Approx 0.85 mm

OD: 6.5 ± 0.3 mm

Marking: ZHAOLONG □ LONGTRONIC® □ ETHERNET □ PROFINET □ TYPE □ C □ 4x22AWG □ PVC

□ □ □ □ E324007 □  □ AWM □ 21912 □ 80 °C □ 600V □ FT2 □ □ □ □ XXXXXX □ ****m

Note:

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

Electrical Characteristics(20°C)

Conductor resistance $\leq 60 \Omega/\text{km}$

Resistance unbalance $\leq 2.0\%$ within a pair

$\leq 5.0\%$ between pairs

Dielectric strength	AC 2.0 kV for 1 min.
Insulation resistance	$\geq 5000 \text{ M}\Omega \cdot \text{km}$
Capacitance unbalance	$\leq 1600 \text{ pF/km}$ at 800 Hz or 1000 Hz
Transfer impedance	Grade 1 (IEC 61156-5)
Coupling attenuation	$\geq 80 \text{ dB}$ at 30~100 MHz
Conductor resistance	$\leq 60 \text{ }\Omega/\text{km}$
Resistance unbalance	$\leq 2.0 \%$ within a pair

Transmission characteristics (20℃)

Reference standard	IEC 61156-6
Delay skew	$\leq 20 \text{ ns/100m}$

Frequency (MHz)	Attenuation dB/100m Max.	RL dB Min.	NEXT dB Min.	PS NEXT dB Min.	ACR-F dB Min.	PS ACR-F dB Min.	Phase Delay ns/100m Max.
1	2.4	20.0	65.3	62.3	63.8	60.8	570.0
4	4.9	23.0	56.3	53.3	51.8	48.8	552.0
8	5.8	24.5	51.8	48.8	45.7	42.7	546.7
10	7.0	25.0	50.3	47.3	43.8	40.8	545.4
16	9.8	25.0	47.2	44.4	39.7	36.7	543.0
20	11.2	25.0	45.8	42.8	37.8	34.8	542.0
25	12.5	24.2	44.3	41.3	35.8	32.8	541.2
31.25	14.0	23.3	42.9	39.9	33.9	30.9	540.4
62.5	20.4	20.7	38.4	35.4	27.9	24.9	538.6
100	26.4	19.0	35.3	32.3	23.8	20.8	536.6

Other Characteristics

Operating temperature	Fixed: $-40 \sim +80 \text{ }^{\circ}\text{C}$ Moving: $+5 \sim +60 \text{ }^{\circ}\text{C}$
Installation temperature	$-20 \sim +60 \text{ }^{\circ}\text{C}$
Min bending radius	Fixed: $4 \times \text{OD}$ Moving: $8 \times \text{OD}$
Rated Voltage	600 V
Flame resistance	FT2, IEC 60332-1-2
Oil resistance	EN 50290-2-22 type TM54, JIS C 3005 type A
UV resistance	UL 1581 section1200
Tensile performance of the cable	Max. 50N
Crush test of the cable	Max. 3000N
Trailing chain test	≥ 5 million cycles Drag chain route: 0.6 m Bending radius: 55 mm Acceleration: 13 m/s^2 Speed: 2.6 m/s
Torsion test	≥ 5 million cycles Rotation angle: $\pm 180^{\circ}$

Rotation distance: 0.6 m

Rotation rate: 60 cycles/min.

Packing information

Packaging

500 m / drum