

SPE Cable: S/FTP 1P/18AWG-PVC

P/N: ZL5210001

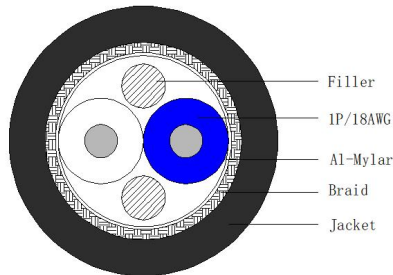
Version: A/04

1x2x18AWG/7

Date: 2022-12-16

Description

Single pair cable with operating frequency up to 20 MHz. This cable is used for transmission data rate of 10 Mb/s in industrial premises with maximum distance up to at least 1 km.

Design

Conductor 7*0.400 ± 0.08 mm bare copper

Insulation Foam PE

OD: 2.65 ± 0.15 mm

Color: White, Blue

Twist Color: White-Blue

Filler: PP Yarn

Screen Al-Mylar (Overlapping ≥ 15%)

Braid Tinned copper

Coverage ≥ 60%

Jacket PVC

Color: Black (Similar to RAL9004)

Thickness: 0.85 mm Nom.

OD: 7.6 ± 0.3 mm

Marking ZHAOLONG □ LONGTRONIC® □ SPE □ CABLE □ S/FTP □ 1x2x18AWG □ PVC □

IEC □ 60332-1-2 □ XXXXXX □ ****m

Note: "XXXXXX" means batch number; □ means blank; ****m means continuous length.

Electrical Characteristics (20°C)

Conductor resistance	≤ 22.0 Ω/km
Resistance unbalance	≤ 2.0 %
Dielectric strength	DC 1 kV for 1 min.
Insulation resistance	≥ 5000 MΩ·km
Capacitance unbalance	≤ 1600 pF/km at 800 Hz or 1000 Hz

Transmission Characteristics (20°C)

Reference specification IEC 61156-13 (TypeA-1000)

Fitted characteristic impedance $100 \pm 15 \Omega$ at 20 MHz

Frequency (MHz)	Att. dB/100m Max.	RL dB Min.	TCL dB Max.	ELTCTL dB Max.	Delay ns/100m Max.	Transfer impedance mΩ/m Max.
0.1	1.02	15.00	50.00	34.81	647.84	44.99
0.3	1.04	17.39	45.23	34.64	599.73	37.08
1	1.44	20.00	40.00	31.83	570.00	30.00
2	1.90	21.51	36.99	29.42	559.46	26.55
4	2.60	23.01	33.98	26.70	552.00	23.50
6	3.15	23.89	32.22	25.02	548.70	21.89
8	3.63	24.52	30.97	23.80	546.73	20.81
10	4.05	25.00	30.00	22.84	545.38	20.00
12	4.44	25.00	29.21	22.06	544.39	24.00
15	4.97	25.00	28.24	21.08	543.30	30.00
18	5.45	25.00	27.45	20.28	542.49	36.00
20	5.75	25.00	26.99	19.81	542.05	40.00

Other Characteristics

Operating temperature Fixed: -40 ~ +80 °C

Rated voltage for PoDL 60 V DC

Min. bending radius Fixed: $5 \times OD$

Flame resistance IEC 60332-1-2

Oil resistance IRM 902, 70°C × 4h (EN 50290-2-22)

This cable meets RoHS requirements.

Packing informationPackaging 500m / drum;
1000m / drum;

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