

CAT7 4x2x23/1 AWG Solid S/FTP LSZH-SHF1

Application: Shipboard installations, Maritime Environment, High data rates, Telecom systems, High bandwidth digital applications with low BER, Indoor/Outdoor use, fixed installations, Ships, High speed & Light craft.

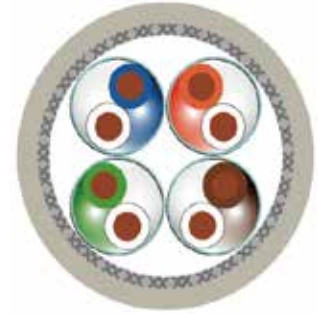
Install at: 0°C to + 60 °C, Bend minimum: 20 times O.D.

Operate at: -30°C to + 75 °C, Bend minimum: 10 times O.D.

Pull maximum: 110 N

Weight: 78 kg/km

Standards: ISO/IEC 11801 , IEC 61156-1, IEC 61156-5, IEC 60092-350, IEC 60092-360, RoHS-2 2011/65/EU, UL 1581



Design & Construction

Conductor: Soft annealed bare copper wire

Conductor size: 23 AWG

Insulation: PE-Foam/skin-PE

Insulation OD: Normal Ø1.38 ± 0.05 mm

Insulation thickness: 0.39mm

Pair: 2 insulated conductors stranded together into a pair

Color code: 1. White/blue + Blue 2. White/orange + Orange
3. White/green + Green 4. White/brown + Brown

Shield pair to pair: Aluminum Foil-Polyester Tape

Shield pair to pair coverage: 100%

Outer shield: Solid Tinned Copper Braid

Outer shield coverage: Nom 80%

Outer jacket: LSZH SHF1

Nominal outer sheath thickness: 0.75 ± 0.30 mm

Outer jacket OD: 8.0 ± 0.50 mm

Marking: YANGER® CAT7 4x2x23/1 AWG Solid S/FTP LSZH-SHF1 <batch no.> <meter marking>

Outer jacket color: Grey

Environmental properties and Fire Performances

Degree of acidity of gases: IEC 60754-1/2

Halogen acid gas: IEC 60754-1/2

Smoke Emission: IEC 61034-1/2

Flame retardant: IEC 60332-1-2

UV resistance: UL 1581

Fire retardant: IEC 60332-3-22

Electrical characteristics

Resistance of the conductor@20°C: ≤93.8 Ω/km

Insulation resistance: ≥5000 MΩ/km

Average characteristic impedance@ 100 MHz: 100 ± 5 Ω

Transfer impedance: ≤100 mΩ/m @10 MHz

Delay skew (4~100 MHz): ≤25 ns/100 m

Velocity factor: 74%

Conductor resistance unbalance within pair: ≤2.0%

Conductor resistance unbalance between pair: ≤4.0%

capacitance unbalance to earth at 800 Hz or 1000 Hz: ≤160 pF/100 m

Mutual capacitance: ≤56 nF/km

Electrical Properties

Frequency (MHz):	1	4	10	16	20	31.25	62.5	100	200	250	300	600
Attenuation dB/100m (Max.)	—	3.7	5.9	7.4	8.3	10.4	14.9	19.0	27.5	31.0	34.2	50.1
NEXT dB (Min.)	78.0	78.0	78.0	78.0	78.0	78.0	75.5	72.4	67.9	66.4	65.2	60.7
PS-NEXT (Min.)	75.0	75.0	75.0	75.0	75.0	75.0	72.5	69.4	64.9	63.4	62.2	57.7
ELFEXT dB (Min.)	78.0	78.0	75.3	71.2	69.3	65.4	59.4	55.3	49.3	47.3	45.8	38.4
Return Loss dB (Min.)	20.0	23.0	25.0	25.0	25.0	23.6	21.5	20.1	18.0	17.3	17.3	17.3
PSELFEXT (Min.)	75.0	75	72.3	68.2	66.3	62.4	56.4	52.3	46.3	44.3	42.8	35.4

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Yanger is indicative only and shall not be binding on Yanger or be treated as constituting a representation on the part of Yanger.