

Category 6A S/FTP 23AWG 500MHz LSZH Data Cable | B2ca



Category 6A class cables are designed for analog and digital signal transmission in voice, video and data applications in supported data communication systems up to 500 MHz. Cables meet the requirements of structural cabling standards including ANSI EIA/TIA 568, ISO/IEC 11801 and EN 50173 Class EA. Foam-skin insulation technology is used on the pairs.

Compliant Standards

ANSI TIA/EIA 568.2-D
ISO/IEC 11801 2nd ed., IEC 61156-5
EN 50173-1, EN 50288-10-1

Applications

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM
Power over Ethernet (PoE) / PoE+

EU Declaration

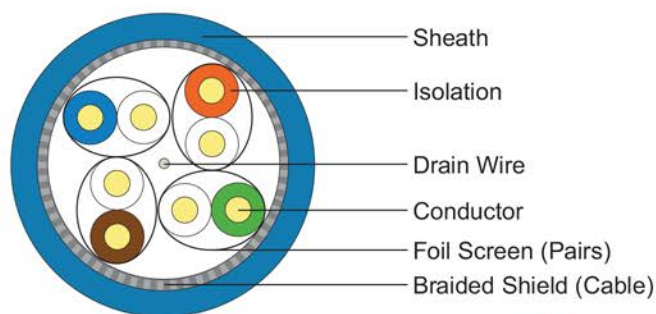
LVD:	Low Voltage Directive	2014/35/EU
RoHS:	Restriction of Hazardous Substances Directive	2011/65/EU

Flame Resistance

Flame Performance	Flame Retardancy	EN 60332-1-2
	Smoke Performance	EN 61034-2
	Halogen Acidity	EN 60754-1/2
Euro-class	B2ca-s1a, d1, a1	EN 13501-6:2018

Cable Construction

Conductor	Bare copper wire 23 AWG
Insulation	Polyolefin
Outer cable diameter	7.4 mm
App. Cable Weight	55 kg/km
Outer Sheath	LSZH - Low Smoke Zero Halogen
Color (standard)	Blue RAL 5015



Mechanical Properties

Min. Bending Radius	Installation:	8 x D
	Operation:	4 x D
Temperature Range	Installation:	0°C up to + 50°C
	Operation:	-20°C up to + 60°C
Tensile Strength	110 N	max.
Crush Resistance	1000 N/dm	min.
Impact Resistance	10 Impact	

Electrical Properties

Conductor Resistance	75.0 Ω/km	max.
Resistance Unbalance	2%	max.
Insulation Resistance	5000 MΩ x m	min.
Capacity	42 pF/m	nom.
Capacity Unbalance	1600 pF/km	max.
Characteristic Impedance	100±5 Ohm	@ 100 MHz
Nominal Velocity of Propagation	78-80%	
Propagation Delay	430 ns/100m	max.
Delay Skew	25 ns/100m	max.
Test Voltage	1000 V	

Transmission Properties

Frequency (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ACR (dB/100m)		PS-ACR (dB/100m)		ACR-F (dB/100m)		PS-ACR-F (dB/100m)		Return Loss (dB)	
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.
1.00	2.1	1.9	75.3	95.0	72.3	92.0	73.2	93.0	70.2	90.0	68.0	100.0	65.0	97.0	20.0	26.0
4.00	3.8	3.5	66.3	95.0	63.3	92.0	62.5	91.0	59.5	88.0	56.0	100.0	53.0	97.0	23.0	27.0
10.00	5.9	5.6	60.3	95.0	57.3	92.0	54.4	89.0	51.4	86.0	48.0	92.0	45.0	89.0	25.0	30.0
16.00	7.5	6.9	57.2	95.0	54.2	92.0	49.8	88.0	46.8	85.0	43.9	88.0	40.9	85.0	25.7	30.0
31.25	10.5	9.8	52.9	95.0	49.9	92.0	42.4	85.0	39.4	82.0	38.1	82.0	35.1	79.0	23.6	30.0
62.50	15.0	14.1	48.4	95.0	45.4	92.0	33.4	81.0	30.4	78.0	32.1	76.0	29.1	73.0	21.5	30.0
100.00	19.1	17.7	45.3	95.0	42.3	92.0	26.2	77.0	23.2	74.0	28.0	72.0	25.0	69.0	20.1	30.0
250.00	31.1	29.5	39.3	85.0	36.3	82.0	8.3	55.0	5.3	52.0	20.0	64.0	17.0	61.0	17.3	24.0
400.00	40.1	38.8	36.3	80.0	33.3	77.0	-3.8	41.0	-6.8	38.0	16.0	57.0	13.0	54.0	15.9	23.0
500.00	45.3	43.5	34.8	75.0	31.8	72.0	-10.4	31.0	-13.4	28.0	14.0	55.0	11.0	52.0	15.2	22.0

Ordering Code

C6A-SFTP-SLD-BU-B2CA-500M

Category 6A S/FTP Cable, Solid 23 AWG, Blue, CPR: B2ca, 500 Meters