

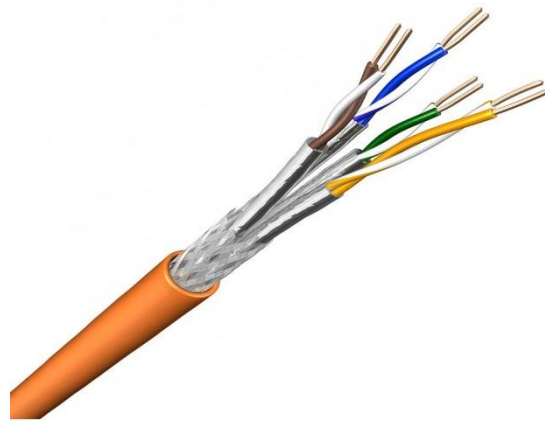


Cat.6A S/FTP AWG23/1

LAN cable with 4 pairs,
category 6A , with pair screen
and braiding



Standards: ISO/IEC 11801, IEC 61156-5
EN 50173-1, EN 50288-10-1; EIA/TIA 568-B



Ambient installation T°
C range
0 + 50 °C



Operating temp.
-20 + 60 °C



Storage temperature
range
-20 + 70 °C



Flame retardant
IEC 60332-1



Smoke density

Application

Cat. 6A S/FTP cables with 4 twisted pairs, 100 ohms very high speed, for horizontal floor or backbone distribution. This cables enable the use of protocols supported by Class EA for 10G Base-T applications. It is characterised up to 500 MHz 802.3 bt PoE++ up to type 4 applications compatible according to installation standards ISO/IEC 11801 and IEC60754-2;IEC61034;EN50399.It is suitable for the connection of sockets, patch fields and modules,also with IDC technology, for installation in buildings, in ducts and flush mounting.

Category 6A S/FTP cables are specifically designed to deliver robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 meters. The cable is future-proof for all applications according to Class C, D, E and

EA and suitable for the operation of PoE and PoE+over a channel length of up to100m. It is suitable for the following applications:Telephony, Ethernet, Fast Ethernet, Gigabit Ethernet and 10Gigabit Ethernet, 10BaseT, 100BaseT, 1000BaseT, 1GBase-T, 10GBaseTor up to10,000 Mbit/s.

Temperature limit conditions:

- Ambient installation temperature, range: from 0°C to +50°C
- Operating temperature, range: from -20 °C to +60°C

Mechanical properties:

Minimum internal bending radius:

(D = cable outer diameter)

- No load 4xD
- during installation (under load): 8xD
- packaging: 305m in box, 500m on wooden reel

Flame resistance:

- the cable is self-extinguishing according to IEC 60332-1 / EN 60332-1
- LSHF version additionally:
 - halogen-free according to IEC 60754-2; IEC 60332-1
 - non-corrosive combustion gases according to IEC 60754-2
 - minimal smoke emission according to IEC 61034-2

Cable construction

Conductor category class:	1 = solid conductor
Conductor material	Pure copper
AWG size	23/1
Insulation material	Skin-Foam-Skin or Polyethylene (HDPE)
Nominal diameter through insulation	1.28 mm
Twisting:	2 cores in a pair
Pair screen	Aluminium Polyester Tape
Cable lay up:	4 pairs to the core
Screen material	Tinned copper
Screen over stranding	Braiding
Sheath:	LSHF (LSZH,FRNC)
Outer diameter:	7.1-7.3 mm
Sheath color:	Blue (RAL 5012);Orange (RAL 2003)

Conductor color marking:

- 1st suit: blue/white with blue line
- 2nd suit: orange/white with orange line
- 3rd suit: green/white with green line
- 4th suit: brown/white with brown line

Electrical characteristics at 20°C ± 5°C

Resistance unbalance , max.	% 2
Loop resistance at 20°C , max.	(Ω /km) \leq 154
Test voltage (DC,1min)	v 1000
Operating voltage, max.	v 125
Capacitance unbalance	(pF/km) \leq 1500
Capacitance at 800 Hz	nF/km 43

Transmission characteristics

Propagation delay (max. 100MHz)	(ns/100m) \leq 427
Delay skew	(ns/100m) \leq 12
Nominal velocity of propagation	approx. 79 %

Technical data

Cable type	Number of pairs (23AWG)	insulation diameter mm	Outer diameter mm	weight kg/km	Tensile force N
Cat 6A S/FTP LSZH	4	1.28	7.1-7.3	58-60	100

Electrical performance

f (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1	1.8	100	97	98	95	105	102	-
4	3.4	100	97	97	94	105	102	27
10	5.1	100	97	95	92	96	93	30
16	6.5	100	97	94	91	92	89	30
20	7.3	100	97	92	89	91	88	30
31.25	9.1	100	97	91	88	86	83	30
62.5	13.2	100	97	87	84	81	78	30
100	17.1	100	97	83	80	76	73	30
125	19.2	96	92	77	74	74	71	26
155.5	21.7	95	91	73	70	72	69	26
175	23.1	94	90	71	68	71	68	25
200	25.1	93	89	68	65	70	67	25
250	28.3	92	87	64	61	69	66	24
300	31.5	90	86	59	56	67	64	24
400	38.2	87	84	49	46	64	61	23
500	42.7	86	82	43	40	62	59	22



The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.