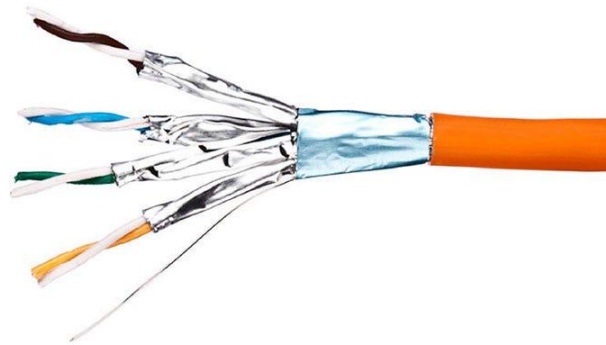


Cat.6A F/FTP AWG23/1

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



Standards: ISO/IEC 11801, IEC 61156-5
EN 50173-1, EN 50288-11-1; 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 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 14763-2 : 2019 and EN 50174-2 : 2018

Category 6A F/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. Each Category 6A F/FTP exceed the minimum specified performance for Category 6A F/FTP cables and support all CLASS EA applications. Conform to IEC, EIA-TIA performance requirements ,23AWG premium grade copper conductor and cable structure with cross separator inside for better cable performance

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 PE or Polyethylene(HDPE)
Nominal diameter through insulation	1.28 mm
Twisting:	2 cores in a pair
Pair screen	Aluminum Polyester Tape
Cable lay up:	4 pairs to the core
Screen over stranding	Aluminum Polyester Tape
Sheath:	LSHF (LSZH,FRNC)
Outer diameter:	7.4-7.8 mm
Sheath color:	Orange (RAL 2003); Blue (RAL 5012)

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) ≤ 154
Test voltage (DC,1min)	v 1000
Operating voltage, max.	v 125
Capacitance unbalance	(pF/km) ≤ 1500
Capacitance at 800 Hz	nF/km 43

Transmission characteristics

Propagation delay (max. 100MHz)	(ns/100m) ≤ 427
Delay skew	(ns/100m) ≤ 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 F/FTP LSZH	4	1.28	7.4-7.8	58-61	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	97	94	30
16	6.5	100	97	93	90	93	90	30
20	7.2	100	97	92	89	91	88	30
31.25	9.2	100	97	91	88	87	84	30
62.5	13.3	100	97	87	84	81	78	30
100	17.2	100	97	83	80	77	74	30
125	19.2	96	92	77	74	75	72	26
155.5	21.9	93	90	71	68	73	70	26
175	23.4	93	90	70	67	72	69	25
200	25.2	92	89	67	64	71	68	25
250	28.2	90	87	62	59	69	66	24
300	31.5	89	86	58	55	67	64	24
400	37.6	87	84	50	47	65	62	23
500	42.8	86	83	43	40	63	60	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.