

DATA CABLE
S/FTP 100 Ω CAT.7A AWG23 / 1000 MHZ
PIMF FRNC LSZH

PRESENTATION

For the connection of computer systems units in the office area, between the stations and the cable can run up to 1000 Mbit /s. It fully complies with the requirements for electromagnetic compatibility (EMC) of the European standard EN 55022. The copper braiding ensures perfect fit with shielded connectors. It's compliant with the European Construction Products Regulation, achieving Euroclass level Dca according to EN 13501-6.



STANDARDS

EN 50173-1; ISO/IEC 11801 ; EN 50288-4-1 ; EN 50167 ; EN50169 & IEC61156-5

CONSTRUCTION

1/ Conductor

Solid annealed copper AWG23

2/ Insulation

Each conductor is insulated with 3 layers of polyethylene compound skin foam skin.

3/ Stranding:

- ✓ Two wires are twisted together in pair.
- ✓ Each pair is screened with an overlapped laminated aluminium foil.
- ✓ The screened pairs are stranded together.

4/ Overall screen:

Braiding of tinned copper wire with a diameter of 0,10 mm and a coverage of 25%.

5/ Sheath:

The sheath is made of thermoplastic compound (LSZH and FRNC) according to NF EN 50290-2-27.

The sheath is fire-retardant (according to IEC 60332-3-24).

Color: Grey RAL 7035

The sheath dimensions shall be as follows:

Cable	External diameter of cable Ø(mm)	Nominal weight (kg/km)
Single S/FTP7+ AWG23 4x2xAWG23	7,8	59
Dual S/FTP7+ AWG23 2x(4x2xAWG23)	7,8x16,0	119

6/ Marking :

CABLE	TEXT
S/FTP CAT.7 4x2xAWG23 Grey	MEINHART 331046 LAN 1000 4x2xAWG23 PIMF FRNC S/FTP Cat.7 - EN 50173 metric marking.m
S/FTP CAT.7 2x4x2xAWG23 Grey	MEINHART 331046 LAN 1000 2x4x2xAWG23 PIMF FRNC S/FTP



	Cat.7 - EN 50173 metric marking.m
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ELECTRICAL CHARACTERISTICS

- ✓ Resistance at 20°C (max.) : 75 Ω/km
- ✓ Dielectric strength (1 mn, Vac) : 1,0 kV
- ✓ Insulation resistance (min.) at 200 Vcc : >5000 MΩ.km
- ✓ Mutual capacitance (nom.) : 45 nF/km
- ✓ Velocity of propagation (f>1 MHz) : 78 % of C.
- ✓ Characteristic Impedance : (From 1 to 100 Mhz) :100 ± 15 Ω
(From 100 to 600 Mhz): 100 ± 20 Ω

Frequency (MHz)	Attenuation (dB/100m)		Min. NEXT (dB/100m)		PSNEXT (dB)		ELFEXT (dB/100)		PSELFEXT (dB/100)		RETURN LOSS (dB/100)	
	Cat7+ . max (*)	Typical values	Cat7+ . min (*)	Typical values	Cat7+ . min (*)	Typical values	Cat7+ . min (*)	Typical values	Cat7+ . min (*)	Typical values	Cat7+ . min (*)	Typical values
1	2,1	2,1	78,0	100	75,0	100	78,0	100	75,0	100	-	24
4	3,6	3,6	78,0	100	75,0	100	78,0	100	75,0	100	23,0	30
10	5,8	5,8	78,0	100	75,0	100	78,0	100	75,0	100	25,0	30
16	7,3	7,1	78,0	100	75,0	100	71,2	100	68,2	95	25,0	32
20	8,2	8,0	78,0	100	75,0	100	69,3	100	66,3	97	25,0	32
31.25	10,3	9,6	78,0	100	75,0	100	65,4	95	62,4	93	23,6	35
62.5	14,6	14,5	78,0	97	75,0	97	59,4	93	56,4	87	21,5	35
100	18,5	18,0	75,4	95	72,4	95	55,3	90	52,3	82	20,1	30
155	23,2	23,0	72,5	93	69,5	90	51,5	83	48,5	77	18,8	28
200	26,5	26,0	70,9	90	67,9	87	49,3	78	46,3	75	17,3	26
300	32,7	32,5	68,2	85	65,2	82	45,8	68	42,8	67	17,3	25
600	47,1	47,0	63,7	82	60,7	75	39,7	55	36,7	52	17,3	19,5
900	58,5	58,0	61,1	80	58,1	65	36,2	37	33,2	35	15,5	19
1000	61,9	61,0	60,4	75	57,4	62	35,3	35	32,3	33	15,1	18

(*) Cat.7 according to IEC61156-5

INSTALLATION RECOMMENDATION AND ENVIRONMENT CHARACTERISTICS:

- ✓ Temperature of function -20°C ÷ +70°C
- ✓ Bending radius Static (fixed installation): 4xØ Dynamic (moved application): 8xØ
- ✓ Tensile stress Max. 110N
- ✓ Operating voltage 100V max
- ✓ Flame retardancy According to IEC 60332-1-2
- ✓ Fire retardancy According to IEC 60332-3-24 category C
- ✓ Low smoke opacity According to IEC 61034-2
- ✓ Halogen free and low corrosivity of gases According to IEC 60754-2
- ✓ Low toxicity According to IEC 60754-1
- ✓ RoHS conformity. According to European Parliament N: 2011/65/EU.
- ✓ REACH conformity According to European Parliament N: 1907/2006/CE.