

## S/FTP(1000-7A)4x2xAWG23/1-FRNC

Product-Nr.: 3933



### Usage

In modern data networks, 4-pair data cables for system-neutral network cabling have been in use for years. These so-called twisted pair data cables are also successfully used in professional audio technology. Especially in large audio control rooms, such as sports stadiums, the management of digital audio signals is just as complex as the network in electronic data processing. The intermediate storage and provision of audio data is also made considerably easier by digital technology.

### Construction

Photo	Colours and design may differ from the picture
Number of cores	8
Number of pairs	4
Inner conductor dimensions	23 AWG
Inner Conductor material	Cu bare
Insulation dimensions [mm]	1,39
Insulation material	Skin-Foam-Skin Polyolefin
Colours	blue-white, orange-white, green-white, brown-white
Pair shielding	Al foil 100% coverage
Pair stranding	2,78mm 4 pairs
Overall shielding	Cu tinned
Screening opt. coverage [%]	16
Jacket wall thickness [mm]	0,60
Jacket dimensions [mm]	7,30 ± 0,2
Jacket material	FRNC orange

### Electrical Properties

Characteristic impedance [Ω]	100 ± 5 (1-1000 MHz)
Capacitance approx. [pF/m]	40 (1kHz, nominal)
Capacity unbalance [pF/m]	≤ 1,6 (1kHz)
DC resistance inner conductor [Ω/km]	< 77
Resistance unbalance	≤ 2%
Insulation resistance [MΩ*km]	≥ 500
Nominal velocity of propagation [approx.]	75 - 77%
Propagation delay [ns/100m]	< 534 (+36/(f) <sup>1/2</sup> ns/100m)
Delay skew [ns/100m]	< 15
Test voltage AC [kV AC]	n.s
Operating voltage [V]	< 72 V dc
Coupling attenuation	IEC 61156-5 Typ. II
Transfer impedance [mΩ/m]	IEC 61156-5 Grade 1
Power line segregation	ISO/IEC 14763-2 & EN50174-2 Class C

### Mechanical Properties

Min. bending radius (static) [mm]	30
Min. bending radius (dynamic) [mm]	60
Max. tensile strength [N]	150
Operating temperature range [°C]	-20 / +60
Storage temperature range [°C]	-20 / +75
Installation temperature range [°C]	0 / +50
UV-resistance	Limited

**Transmission properties [20°C]**

f [MHz]	a [dB/100m]		NEXT [dB]		PS- NEXT [dB]		ELFEXT [dB/100m]		PS- ELFEXT [dB/100m]		rl [dB]		TCL [dB]	EL- TCTL [dB]	PS- ANEXT [dB]	PS- AFEXT [dB]
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	min.	min.	min.
1	NS	1.8	78.0	100	75.0	97	78.0	105	75.0	103	20.0	23	40.0	35.0	67.0	67.0
4	3.74	3.4	78.0	100	75.0	97	78.0	93	75.0	91	23.0	25	40.0	23.0	67.0	67.0
16	7.41	6.8	78.0	100	75.0	97	69.9	81	66.9	79	25.0	30	38.0	10.9	67.0	67.0
25	9.29	8.7	78.0	100	75.0	97	66.0	77	63.0	75	24.3	30	36.0	7.0	67.0	65.2
31.25	10.41	9.6	78.0	100	75.0	97	64.1	75	61.1	73	23.6	28	35.1	5.1	67.0	63.3
62.5	14.88	13.7	75.5	100	72.5	97	58.0	69	55.1	67	21.5	28	32.0	NS	67.0	57.3
100	19.20	17.4	72.4	100	69.4	97	54.0	65	51.0	63	20.1	25	30.0	NS	67.0	53.2
250	30.97	28.1	66.4	90	63.4	87	46.0	57	43.0	55	17.3	25	26.0	NS	67.0	45.2
500	45.26	40.0	61.9	86	58.9	83	40.0	50	37.0	48	17.3	23	NS	NS	67.0	39.2
600	50.10	44.8	60.7	85	57.7	82	38.4	49	35.4	47	17.3	23	NS	NS	65.8	37.6

Alle Angaben verstehen sich, falls nicht anders angegeben, als Nennwert. Änderungen in Konstruktion und Ausführung vorbehalten.