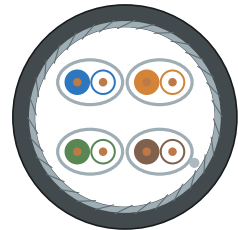


Cat7A S/FTP

4 pairs / 23 AWG / LSZH / 1000 MHz



Ø 7.2 mm approx.

SCHEMATIC / NOT TO SCALE

UPCOM series illustration. Jacket colour and conductor size follow the specification below.

7.20 mm

APPROX. OUTER DIAMETER

62 kg/km

APPROX. CABLE WEIGHT

28 kg/km

COPPER WEIGHT

The 1000 MHz Cat7A cable combines 23 AWG solid copper, foam polyethylene insulation, individual pair foils and an overall tinned copper braid. The construction is intended for screened high-bandwidth cabling systems.

CONSTRUCTION

Conductor	Solid annealed copper, 23 AWG
Insulation	Foam polyethylene (PE); EN 50290-2-23
Core assembly	4 twisted pairs
Pair identification	Colour coded to ANSI/TIA-568
Individual pair screen	Aluminium/polyester foil on each pair
Overall screen	Tinned copper braid
Drain wire	Tinned copper
Outer jacket	Low smoke zero halogen (LSZH); EN 50290-2-27
Jacket colour	RAL 1016 Yellow; other colours on request

APPLICATION

10BASE-T, 100BASE-TX and 1000BASE-T, plus 10GBASE-T. IEEE 802.3af / 802.3at / 802.3bt (Types 1-4).

Link length, connecting hardware and PoE bundle temperature must be checked for the complete installation.

Cat7A S/FTP

4 pairs / 23 AWG / LSZH

ELECTRICAL CHARACTERISTICS / 20°C

Conductor resistance at 20°C	< 75 Ω/km	Delay skew	< 25 ns/100 m
Resistance unbalance	< 1%	Operating voltage	72 V
Insulation resistance, 500 V DC / 1 min	> 5000 MΩ·km	Dielectric test, 1 min	1000 V
Mutual capacitance	43 pF/m	Transverse conversion loss (TCL)	Minimum level 2
Capacitance unbalance	1600 pF/km	Coupling attenuation	Type 1
Characteristic impedance at 100 MHz	100 ± 5 Ω	Transfer impedance	Grade 1
Velocity of propagation	78%	Segregation class	d

SELECTED TRANSMISSION CHARACTERISTICS

Frequency MHz	Insertion loss dB / 100 m	NEXT dB	PS NEXT dB	Return loss dB
4	3.5	101	97	30
10	5.7	101	97	33
16	7.1	101	97	33
31.25	10.2	100	97	33
62.5	14.2	100	97	32
100	17.6	100	97	30
250	29.8	100	92	30
300	31.6	93	62.6	27
600	45.2	91	57.9	25
1000	63	84	82	20

Cable reference values over the stated operating band. Channel performance depends on the installed link.

INSTALLATION AND JACKET

Operating temperature	-20°C to +60°C	LSZH-jacketed version for projects specifying low smoke and halogen-free materials. A jacket designation alone does not establish a CPR Euroclass.
Minimum bend radius	8 × D / approx. 57.6 mm	
D	Actual cable outer diameter	

Flame propagation: IEC/EN 60332-1-2. Smoke: IEC/EN 61034-2. Halogen acid gas and corrosivity: IEC/EN 60754-1 and IEC/EN 60754-2.

Reference specifications: IEC 61156-5, ISO/IEC 11801, EN 50173-1, EN 50288-9-1.

CPR classification and the corresponding Declaration of Performance must be confirmed for the ordered construction.