

ANNEX CAT7001

S/FTP patch cable

Application

Work area and patch cord cable
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T
Power over Ethernet (PoE) / PoE+

Standards

EN 50173-1; EN 50288-4-2; ISO/IEC 11801; IEC 61156-6; IEEE 802.3af

Flame resistance

LSHF (FRNC) IEC 60332-1; IEC 60754-2; IEC 61034

Construction

Conductor	stranded bare copper wire \varnothing 0.48 mm (AWG 26/7)
Insulation	Foam Skin Polyethylene, \varnothing 1.0 mm
Twisting	2 cores to the pair
Pair screen	Al-laminated plastic foil
Cable lay up	4 pairs (PiMF) to the core
Screen	Copper braid, tinned
Sheath	LSHF, color see "Technical data"

Mechanical properties

Bending radius	without load	≥ 25 mm
	with load	≥ 50 mm

Electrical properties

at 20°C \pm 5°C

Loop resistance		250 Ω /km
Resistance unbalance		$\leq 3\%$
Insulation resistance	(500 V)	≥ 2000 M Ω *km
Mutual capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Mean characteristic impedance	at 100 MHz	100 \pm 5 Ω
Nominal velocity of propagation		approx. 79 %
Propagation delay		460 ns/100m
Delay skew		12 ns/100m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	25 m Ω /m
	at 10 MHz	25 m Ω /m
Coupling attenuation		80 dB