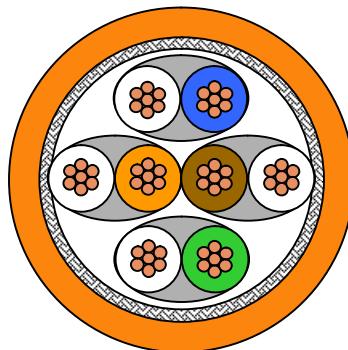


PLU030423 Cat. 7

S/FTP Patch cable



Application

Work area and patch cord cable
 IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T
 IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards

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

Flame resistance

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

Construction

Conductor	stranded bare copper wire Ø 0.42 mm (AWG 27/7)
Insulation	Foam Skin Polyethylene, Ø 0.98 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	PVC or LSHF, color see "Technical data"

Mechanical properties

Bending radius	without load	25 mm
	with load	50 mm
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

PLU030423 Cat.7
Electrical properties

at 20°C± 5°C

Loop resistance		340 Ω/km
Resistance unbalance		3%
Insulation resistance	(500 V)	2000 MΩ*km
Mutual capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	1500 pF/km
Characteristic impedance	(1-100 MHz)	(100 ± 15) Ω
	(100 - 250) MHz (250 - 600) MHz	(100 ± 18) Ω (100 ± 25) Ω
Nominal velocity of propagation		ca. 79 %
Propagation delay		427 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 mΩ/m
	at 10 MHz	15 mΩ/m
	at 30 MHz	30 mΩ/m
Coupling attenuation		75 dB

Electrical data (nominal)

acc. to Cat.7 (at 20°C)

F (MHz)	Attenuation (dB/10m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1.0	0.3	90	87	90	80	77	23
4.0	0.6	90	87	89	80	77	24
10.0	1.0	90	87	89	80	77	25
16.0	1.3	90	87	89	76	73	25
20.0	1.4	90	87	89	74	71	25
31.2	1.8	90	87	88	70	67	25
62.5	2.6	90	87	87	64	61	23
100.0	3.2	87	84	84	60	57	21
125.0	3.6	85	82	81	58	55	20
155.5	4.0	84	81	80	56	53	19
175.0	4.3	83	80	79	55	52	19
200.0	4.6	82	79	77	54	51	18
250.0	5.1	81	78	76	52	49	18
300.0	5.6	80	77	74	50	47	17
450.0	6.9	77	74	70	47	44	17
600.0	7.9	75	72	67	44	41	17
750.0	8.7	73	70	64	42	39	
900.0	9.7	72	69	62	41	38	
1000,0	10,2	71	68	61	40	37	