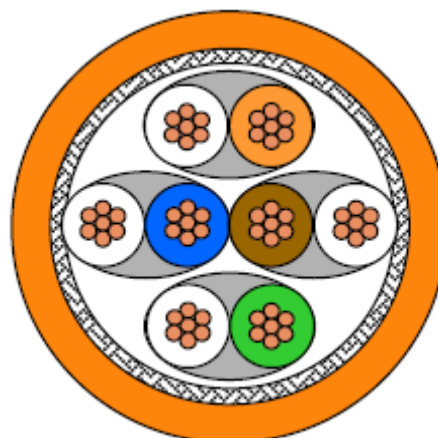


DATA SHEET	CE68xxEN
S/FTP Patch Cable CAT.6	Valid from : 13.01.2014

S/FTP Patch Cable CAT.6a

Li-02YSCH 4x2x0.42L PiMF (AWG 27)
100Ω-data cable ISO/IEC 11801 CAT-7



Application area: Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;
IEEE 802.5 16 MB; ISDN; FDDI; ATM

Applicable standards: EIA/TIA 568A;
ISO/IEC 11801 2nd ed.; JTC1 SC25 N655
EN 50173; CLC/TC215(Sec)94;
prEN 50288-4-2

Flame retardant: UL 1581 VW 1 Flame Test

FRNC-B: IEC 332-1; VDE 0472 detail 804, Check B

Connector: RJ45 Hirose TM21

Part Number	Type	Colour	Length	Outside diameter	Attraction	Packing Unit
CE6847	S/FTP Patch Cable CAT.6	grey	0.5 m	5.9 mm	100 N	5
CE6848	S/FTP Patch Cable CAT.6	grey	1.0 m	5.9 mm	100 N	5
CE6849	S/FTP Patch Cable CAT.6	grey	1.5 m	5.9 mm	100 N	5
CE6850	S/FTP Patch Cable CAT.6	grey	2.0 m	5.9 mm	100 N	5
CE6851	S/FTP Patch Cable CAT.6	grey	3.0 m	5.9 mm	100 N	5
CE6852	S/FTP Patch Cable CAT.6	grey	5.0 m	5.9 mm	100 N	5
CE6853	S/FTP Patch Cable CAT.6	grey	7.5 m	5.9 mm	100 N	5
CE6854	S/FTP Patch Cable CAT.6	grey	10.0 m	5.9 mm	100 N	5
CE6855	S/FTP Patch Cable CAT.6	grey	15.0 m	5.9 mm	100 N	1
CE6856	S/FTP Patch Cable CAT.6	grey	20.0 m	5.9 mm	100 N	1

By request, also available in other colours (blue, red, green, yellow, orange, white)! Add colour code to the part number: BL= blue; RT= red; GN= green; GE= yellow; OG= orange; WH = white

Mechanical Properties

Bending radius	≥ 25 mm without tensile load ≥ 50 mm with tensile load
Operating temperature	fixed installation -20 °C to + 60 °C mobile operation 0 °C to + 50 °C

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Assembly

Conductor	bare stranded copper wire Ø 0.42 mm (AWG 27/7)
Insulation	Polyethylene, Ø 0.98 mm
Twisting	2 wire to pair
Screen pair	Aluminium-bonded polyester tape
Twisting to core	4 pair (PiMF) to core
Overall screen	Cu-netting tin-plated (ca. 45 % cover)
Outer sheath	PVC or FRNC

Electrical Properties

(at 20 °C ± 5 °C)

Loop impedance	≤ 340 Ω /km
Resistance asymmetric	≤ 3%
Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	Nom. 43 nF/km
Capacitance asymmetric (Pair/Ground)	≤ 1500 pF/km
Characteristic impedance (1-100 MHz)	(100 ± 15) Ω
(100-250 MHz)	(100 ± 18) Ω
(250-600 MHz)	(100 ± 25) Ω
Relative velocity of propagation	ca. 79 %
Propagation delay	≤ 427 ns/100m
Delay difference	≤ 12 ns/100m
Test voltage (DC, 1 min)	1000 V
Wire/wire and wire/shielding	
Transfer resistance	at 1 MHz ≤ 25 mΩ /m at 10 MHz ≤ 15 mΩ /m at 30 MHz ≤ 30 mΩ /m

Technical properties acc. CAT.7 (at 20 °C)

Frequency (MHz)	Attenuation (dB/10m) nom.	NEXT (dB)		PS-NEXT (dB)		ELFEXT (dB/10m)		PS-ELFEXT (dB/10m)		RL (dB) min.
		min.	nom.	min.	nom.	min.	nom.	min.	nom.	
1	0.3	80	90	80	87	70	80	67	77	23
4	0.6	80	90	80	87	58	80	55	77	23
10	1.0	80	90	80	87	50	80	47	77	23
16	1.3	80	90	80	87	46	76	43	73	23
20	1.4	80	90	80	87	44	74	41	71	23
31.2	1.8	80	90	75	87	40	70	37	67	23
62.5	2.6	75	90	71	87	34	64	31	61	23
100	3.2	72	87	68	84	30	60	27	57	23
125	3.6	71	85	66	82	28	58	25	55	21
155.5	4.0	70	84	65	81	26	56	23	53	21
175	4.3	69	83	64	80	25	55	22	52	21
200	4.6	68	82	63	79	24	54	21	51	21
250	5.1	66	81	62	78	22	52	19	49	19
300	5.6	65	80	60	77	20	50	17	47	19
450	6.9	63	77	58	74	17	47	14	44	19
600	7.9	61	75	56	72	14	44	11	41	19
750	8.7		73		70		42		39	