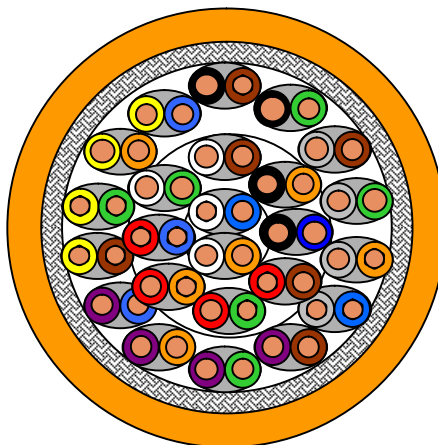




UC^{FUTURE} COMPACT23 Cat.7 S/FTP 24P LSHF-FR

S/FTP Data Centre Cable Cat. 7



Application¹

IEEE 802.3: 10Base-T; 100Base-T; 10GBase-T, ISDN; xDSL

IEEE 802.5 16 MB; ISDN; TPDDI; ATM155Mbit/s

The conductor diameter is smaller compared to the standard installation cables. This leads to an increased attenuation and therefore the operating distance is reduced (80 m instead of 90 m installation cable in standard permanent link).

Standards

ISO/IEC 11801 2nd ed.

EN 50173-5

IEC 61156-5

EN 50288-4-1

Flame resistance

PVC

IEC 60332-1

LSHF-FR

IEC 60332-3-24; IEC 60754-2; IEC 61034

Construction

Conductor	Bare copper wire, diameter 0.56 mm (AWG23)	
Insulation	Foam-skin PP, diameter 1.4 mm	
Twisting	2 insulated wires to the pair	
Pair screening	Pet-Al foil around each pair	
Stranding	3 layers of screened pairs (2+8+14)	
Identification	Pair 1 –4: a- Core wt;	b- Core bl, or, gn, br,
	Pair 5 –8: a- Core rd;	b- Core bl, or, gn, br,
	Pair 9 –12: a- Core bk;	b- Core bl, or, gn, br,
	Pair 13 –16: a- Core ye;	b- Core bl, or, gn, br,
	Pair 17 –20: a- Core vi;	b- Core bl, or, gn, br,
	Pair 21 –24: a- Core gr;;	b- Core bl, or, gn, br,
Screen	Tinned copper braid 85% coverage	
Sheath	LSHF-FR, diameter 18 mm	
Printing	DRAKA UC ^{FUTURE} COMPACT23 Cat.7 S/FTP 24P + batch number + meter marking	

¹ Maximum permissible length of installed cable must not exceed 80 m, in order to comply with channel requirements of ISO/IEC11801 amendment 1.1.



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Mechanical properties

Minimum bending radius	Without load	≥ 100 mm
	With load	≥ 200 mm
Temperature range	During operation	-20°C up to +60°C*
	During installation	0°C up to +50°C

Electrical properties

at 20°C

Loop resistance		≤ 190 Ω/km
Resistance unbalance		≤ 2%
Test voltage	core/core	1000 V _{DC} 1 min
	core/screen	1000 V _{DC} 1 min
Capacitance	800 Hz	nom. 44 nF/km
Capacitance unbalance		≤ 1600 pF/km
Impedance	1 – 100 MHz	100 Ω ± 5Ω
Nominal velocity of propagation		ca. 76%
Insulation resistance	500 V	≥ 2000 MΩkm
Coupling attenuation		≥ 85 dB

Electrical Data (nominal)

acc. to Cat.7 (at 20°C)

F (MHZ)	Attenuation (dB/90m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1.0	1.8	100	97	98	95	105	105	-
4.0	3.4	100	97	97	94	105	102	27
10.0	5.4	100	97	95	92	97	94	30
16.0	6.8	100	97	93	90	93	90	30
20.0	7.7	100	97	92	89	91	88	30
31.2	9.6	100	97	90	87	87	84	30
62.5	13.7	100	97	86	83	81	78	30
100.0	17.4	100	97	83	80	77	74	30
125.0	19.5	95	92	75	72	75	72	26
155.5	21.9	94	91	72	69	73	70	26
175.0	23.3	93	90	70	67	72	69	25
200.0	25.0	92	89	67	64	71	68	25
250.0	28.1	90	87	62	59	69	66	24
300.0	30.9	89	86	58	55	67	64	24
400.0	38.3	87	84	48	45	64	61	23
500.0	43.0	86	83	43	40	61	58	22
600.0	44.8	85	82	40	37	60	57	22

Technical data

Product code	Designation	Type	Outer diameter mm	Fire load		Weight kg/km	Copper content kg/km	Tensile force N
				MJ/km	kWh/m			
1016777	J-09YS(St)CH	24x2x0,56 PiMF	18	3120	0,87	380	207	840

* POE, reduce the temperature range