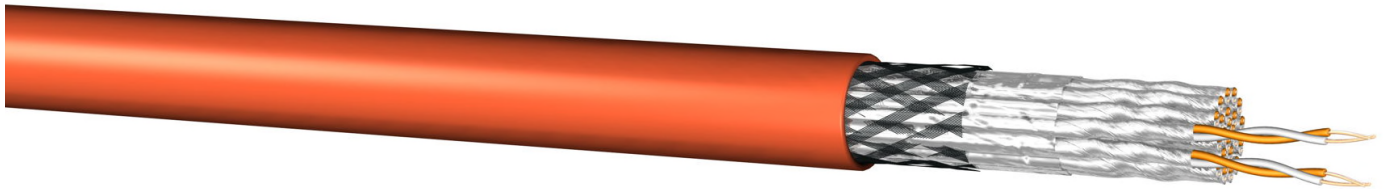


UC^{FUTURE} COMPACT23 Cat.7 S/FTP 24P LSHF-FR D_{ca}

S/FTP Data Centre Cable Cat. 7 AWG23/1



Application

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

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

Power over Ethernet (PoE) / Type 1-4

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

IEC 61156-6 work area cable

ISO/IEC 11801

EN 50173-5; EN 50288-4-2

IEEE 802.3at / af / bt

Flame resistance

EN 50399: Class D_{ca}s2d1a1; Class E_{ca}

LSHF-FR(FRNC): IEC 60332-3-24; IEC 60332-1; 60754-2; IEC 61034

Construction

Conductor	Bare copper wire, diameter) Ø 0.56 mm (AWG23/1)
Insulation	Foam-skin PP, diameter 1.4 mm
Twisting	2 insulated wires to the pair
Pair screening	Pet-Al foil around each pair
Stranding	6 (5+1) bundles with 4 foiled pairs bl, or, gn, br Coloured tapes are around each bundle
Screen	Tinned copper braid 85% coverage
Sheath	LSHF-FR, diameter 18.0 mm orange RAL 2003
Printing	DRAKA UC ^{Future} COMPACT23 Cat.7 S/FTP 24P + batch number + meter marking

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	10°C up to +40°C

UC^{FUTURE} COMPACT23 Cat.7 S/FTP 24P LSHF-FR D_{ca}
Electrical properties
at 20°C ± 5°C

Loop resistance		≤ 176 Ω /km	
Resistance unbalance		≤ 2%	
Insulation resistance	(500 V)	≥ 2000 MΩ *km	
Mutual capacitance	at 800 Hz	Nom. 43 nF/km	
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km	
Mean characteristic impedance	@ 100 MHz	100 ± 5 Ω	
Nominal velocity of propagation		Ca. 79 %	
Propagation delay	Nominal	< 450 ns/100m	
Delay skew	Nominal	< 15 ns/100m	
Test voltage	(DC, 1 min) core/ core and core/screen	1000 V	
Transfer impedance	bei 1 MHz	≤ 5 mΩ /m	Grade 1
	bei 10 MHz	≤ 5 mΩ /m	
	bei 30 MHz	≤ 10 mΩ /m	
Coupling attenuation		≥ 85 dB	Type 1
Segregation classification acc. EN 50174-2			„D“

Electrical data (nominal)
acc. Cat.7 (at 20°C)

F (MHZ)	Attenuation (dB/90m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS-ACRF (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

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

Product order data

Product Reference Code	Designation	Product name	Outer diameter mm	Euro Class	Fire load		Weight kg/km	Copper content kg/km	Tensile force N
					MJ/km	kWh/m			
60013693	J-09YS(St)CH	UC ^{FUTURE} COMPACT23 Cat.7 S/FTP 24P LSHF-FR	18	D _{ca} S2d1a1	3120	0,87	330	165	840

* POE, reduce temperature range

Product Code Table

Product Description	PG Reference Code	PG Part Number
UC ^{FUTURE} COMPACT23 C7 S/FTP 24P	60013693	60013693

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