

Draka - UC FUTURE COMPACT AWG27 Cat.7 S/FTP 6x4P LSHF, blue



UC FUTURE - Draka Datacom Solution

The solution for Data Centre cabling. A dependable, fast and always available part of Draka Datacom Solution!

For this application Draka has developed the new UCFuture program which contains slim cable designs based on existing work area cable standards, which are perfect for zone cabling in data centres because of these characteristics:

- Up to 100% higher packing density in cable trays
- Fully compliant with established cable standards
- PIMF design to eliminate any Alien-Xtalk interferences
- Full 10GBase-T performance over a channel distance of 70m



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Technical Data

Application

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

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

Construction

Conductor	CU-wire, Ø 0.42 mm (AWG27/7)
Insulation	Foam skin PP, diameter 0.98 mm
Twisting	2 cores to the pair
Pair screening	Al-laminated plastic foil
Cable lay up	4x pimf to the core
Cable Screen	Tinned copper braid
Sheath	LSHF blue
Stranding (6x)	0+6 stranded to the cable core, filler in the centre

Mechanical properties

Minimum 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

Electrical properties at 20°C ± 5°C

Loop resistance		≤ 340 Ω/km
Resistance unbalance		≤ 3%
Insulation resistance	(500 V)	≥ 5000 MΩkm
Capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance		≤ 1600 pF/km
Impedance	100 MHz	(100 ± 15) Ω
Nominal velocity of propagation		ca. 79%
Signal transit time		≤ 427 ns/100m
Delay skew		≤ 12 ns/100m
Test voltage	(DC, 1 min.) core/core & core/screen	1000 V
Coupling resistance	at 1 MHz	25 mΩ/m
	at 10 MHz	15 mΩ/m

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	at 30 MHz	30 mΩ/m
Coupling attenuation		75 dB

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

F	Attenuation	NEXT	PS-NEXT	ACR	ELFEXT	PS-ELFEXT	Return loss
MHZ	dB/10m	dB	dB	dB/100m	dB/100m	dB/100m	dB
1.0	0.3	90	87	87	80	77	23
4.0	0.6	90	87	84	80	77	24
10.0	1.0	90	87	80	80	77	25
16.0	1.3	90	87	77	76	73	25
20.0	1.4	90	87	76	74	71	25
31.2	1.8	90	87	72	70	67	25
62.5	2.6	90	87	64	64	61	23
100.0	3.2	87	84	55	60	57	21
125.0	3.6	85	82	49	58	55	20
155.5	4.0	84	81	44	56	53	19
175.0	4.3	83	80	40	55	52	19
200.0	4.6	82	79	36	54	51	18
250.0	5.1	81	78	30	52	49	18
300.0	5.6	80	77	24	50	47	17
450.0	6.9	77	74	8	47	44	17
600.0	7.9	75	72	-4	44	41	17
750.0	8.7	73	70		42	39	
900.0	9.7	72	69		41	38	
1000.0	10.2	71	68		40	37	

Technical Data

Designation	Li-02YSCH
Type	4x2x0.42L PiMF FRNC
Outer diameter	17.8 mm
Fire load	2094 MJ/km
Fire load	0.582 kWh/m
Weight	272 kg/km
Copper number	144
Tensile force	600 N

Product variants & accessories

Art.-No.	Description
UC-FUT-CSS27-6X4P	Draka - UC FUTURE COMPACT AWG27 Cat.7 S/FTP 6x4P LSHF, blue