

Cat.7 *SU/FTP <1000 MHz>* *DataGuard® Armoured (SWA)*

Application

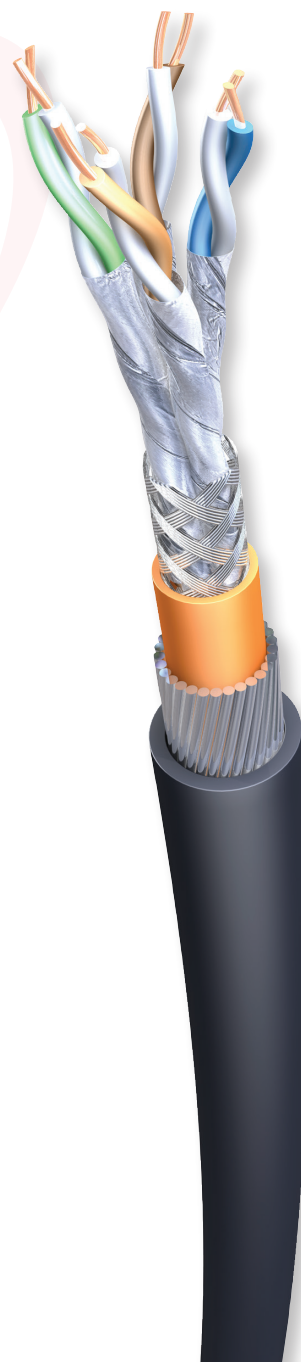
Data cable for analogue and digital signal transmission in the frequency range up to 1000MHz. It is designed for primary (campus), secondary (riser) and tertiary (horizontal) wiring. Use: IEEE 802.3: 10/100/1000/10GBase-T; TIEEE 802.5:16 MB; ISDN ; FDDI ; ATM ; Cable sharing.

Cable Design

Conductor	Bare copper wire (23awg)
Core Insulation	SFS-PE Ø 1,38 mm
Core Identification	wh-bu, wh-or, wh-gn, wh-bn
Core Stranding	cores twisted to pairs
Pair Screen	Individual Aluminium/polyester tape
Cable lay up	4 shielded pairs stranded together
Braid	Tinned copper wire braid
Sheath	LSZH FireFighet® : Ø 7,70 mm
Armour	DataGuard™ Steel Wire Armour (SWA)
Outer Jacket	LSZH FireFighet® : Ø 12,0 mm ± 10%

Standards

Applicable Standards	EN 50288-4-1; EN 50173; IEC61156-5; EN50173-1; ISO/IEC 11801 2nd ed. RoHS 2011/65/EU
Flammability Rating	IEC 60332-1, IEC 60332-3-24, IEC 60754-2, EN 61034, IEC 61034, Euroclass Dca,s1,d2,a1



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Specification

Part Number	Type
147475-01	Black Cat7 SU/FTP 4x2xAWG23/1 <1000 MHz> LSZH DataGuard® (SWA)
147475-02	Blue Cat7 SU/FTP 4x2xAWG23/1 <1000 MHz> LSZH DataGuard® (SWA)
147475-03	Green Cat7 SU/FTP 4x2xAWG23/1 <1000 MHz> LSZH DataGuard® (SWA)
147475-06	Yellow Cat7 SU/FTP 4x2xAWG23/1 <1000 MHz> LSZH DataGuard® (SWA)

Thermal Characteristics

Temperature range	Dynamic (installation)	0 to +50	°C
	Static (installed)	-20 to +60	°C

Electrical Data @ 20°C

Conductor loop resistance max.	≤ 14.5 Ω/100m
Insulation resistance min.	≥ 5 GΩ x km
Characteristic Impedance 1-100 MHz	100 ± 15 Ω
Characteristic Impedance 100-250 MHz	100 ± 22 Ω
Characteristic Impedance 250-600 MHz	100 ± 25 Ω
Transfer Impedance max. (10 MHz)	5 mΩ/m
Mutual Capacitance nom.	45 nF/km
Relative propagation velocity ca.	0,78 c
Screen attenuation ≤ 1000 MHz min.	75 dB
Test voltage	700 V-AC

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Electrical Characteristics

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	EL-FEXT (dB/100m)	Return Loss (dB)
	Nom.	Nom.	Nom.	Nom.	Nom.
1	1.7	100	98.3	95	25
4	3.2	100	96.8	93	28
10	5.2	100	94.8	92	30
16	6.5	100	93.5	91	30
20	7.3	100	92.7	90	30
31.25	9.4	100	90.6	86	30
62.5	13.6	100	86.4	82	30
100	17.0	100	83.0	77	30
155	22.2	98	75.8	73	28
200	24.3	95	70.7	70	26
300	30.2	93	62.8	67	25
400	25.2	90	54.8	64	24
500	39.1	87	47.9	62	23
600	43.5	85	41.5	60	23
800	50.0	80	30.0	56	22
900	55.2	78	21.8	53	21
1000	58.1	75	16.9	50	20

The performance data given are typical measured values

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