

# DATASHEET

## Cat.8.2 Installation Cable S/FTP 2000MHz AWG22



Cat.8.2 FRNC-C



### Description

The installation cable 99827.x is constructed for transmissions up to **2000 MHz** and exceeds with the electrical transmission properties the requirements of the category 8 and lower. With this cable transmission rates up to **40 GBit** according to IEEE 802.3 are possible. Application: Primary (campus), Secondary (riser), Tertiary (horizontal)

### Mechanical characteristics

Bending radius (dynamic)	8 x OD
Bending radius (static)	4 x OD

### Cable construction

Cable structure	S/FTP
Category	8.2
Conductor category	Kl.1 = single wire
Conductor material	CU, tinned
AWG-size/quantity of cores	22/1
Diameter conductor	0.64 mm
Screen over stranding	braiding
Stranding element	pairs
Screen over stranding element	foil
Core insulation	foam-skin PE
Core identification	colour

### Cable sheath

Material outer sheath	FRNC-C
Euro class	Dca
Flame retardant	acc. EN 60332-3-24
Halogen free	acc. EN 60754-1/2

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### Cable sheath

Low smoke	acc. EN 61034-2
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### Environmental conditions

Operating temperature, flexible	0 – 50 °C
Operating temperature, fix	-20 – 60 °C

### Electrical characteristics

PoE	acc. to IEEE 802.3af;yes
NVP value	73 %
Loop resistance	130 Ohm/km
Resistance unbalance	1 %
Insulation resistance (500V)	≥ 5000 MOhm/km
Test voltage DC, 1 min	1000 V
Capacity to earth	nom. 43 nF/km
Impedance	100 ± 5 Ohm
Delay skew	20 ns/100m
Transfer impedance at 1MHz	5 mOhm/m
Transfer impedance at 10MHz	5 mOhm/m
Transfer impedance at 30MHz	10 mOhm/m
Transfer impedance at 100MHz	20 mOhm/m
Separation class acc. EN50174-2	D
Coupling attenuation Type	Typ 1
Coupling attenuation	85 dB
Max. Frequency	2000MHz MHz

### Standards, approvals, certifications

Cabling standards	EN 50173-1;ISO/IEC 11801
Harmonised Standard	EN 50575
Transmission standards	IEEE 802.3 10Mbit bis 40Gbit
Cable	IEC 61156-5;EN 50288-9-1

### Available variants

Article no.	Title	Length	Colour outer sheath	RAL colour	Number of cores	Type	Outer diameter approx.	Copper weight	Weight	Max. tractive force	Fire load
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Article no.	Title	Length	Colour outer sheath	RAL colour	Number of cores	Type	Outer diameter approx.	Copper weight	Weight	Max. tractive force	Fire load
99827.1	UC FUTURE C22 Cat.8.2 S/FTP 4P 2GHz, LSHF-FR	1.0 m	yellow	RAL1021	8	simplex	8.5 mm	47 kg/km	80 kg/km	340 N	674 MJ/km
99827.500	UC FUTURE C22 Cat.8.2 S/FTP 4P 2GHz, LSHF-FR 500m	500.0 m	yellow	RAL1021	8	simplex	8.5 mm	47 kg/km	80 kg/km	340 N	674 MJ/km
99827.100	UC FUTURE C22 Cat.8.2 S/FTP 4P 2GHz, LSHF-FR 100m	100.0 m	yellow	RAL1021	8	simplex	8.5 mm	47 kg/km	80 kg/km	340 N	674 MJ/km

### Technical drawings

### Elektrische Daten (nominal)

gem. Cat8.2 (bei 20°C)

F (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	Return loss (dB)	PS-NEXT (dB)	PS-ACR (dB/100m)	ACR-F (dB/100m)	PS-ACR-F (dB/100m)
1	1,8	102	100	29	99	97	100	97
4	3,0	102	99	33	99	96	98	95
10	4,9	102	97	32	99	94	97	94
16	6,3	102	96	32	99	93	97	84
20	7,0	102	95	31	99	92	96	93
31.25	8,9	100	91	31	97	88	95	92
62.50	12,5	100	87	30	97	84	94	91
100	16,1	100	84	27	97	81	90	87
155	18,0	99	81	26	96	78	88	85
200	19,1	98	79	24	95	76	84	81
250	24,2	97	73	22	94	70	83	80
300	28,2	97	71	22	94	68	81	78
600	48,0	96	48	22	93	45	80	77
1000	55,8	89	33	20	86	30	75	72
1200	58,6	86	27	20	83	24	73	70
1500	67,5	83	15	19	80	12	66	63
1600	68,4	79	11	18	76	8	65	62
2000	78,1	75	-3	18	72	-6	59	56

### accessory

E-20092

RJ45 Keystone STP, Cat.8 Class 1

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### accessory

K9210.25

Cat.8.1/Class I Installation link

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