

Coaxial Cable SUCOFEED_7/8_LA_FR

Description

Copper outer conductor, 50 Ohm, 5 GHz, 85°C, ø27.9 mm, LSFH jacket, Flame retardant, CPR qualified



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Tube	typ. 9.4 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 22.6 mm
Outer conductor	Copper	Tube, corrugated100%	typ. 25.4 mm
Jacket	LSFH (modified polyethylene)	RAL 9011 - graphite black	27.9 mm +/- 0.3

Print: HUBER+SUHNER_SUCOFEED_7/8_LA_FR_#batch-number#_#metric-length#

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 5 GHz
Capacitance	typ. 75 pF/m
Inductance	typ. 0.2 μH/m
Velocity of signal propagation	typ. 89 %
Signal delay	typ. 3.7 ns/m
Insulation resistance	≥ 5 x 10 ⁶ MΩm
Screening effectiveness	≥ 120 dB
Operating voltage	≤ 3 kVrms (at sea level)
Test voltage	6 kVrms (50 Hz/1 min) _{rms}
Outer conductor resistance DC	≤ 1.12 Ω/km
Inner conductor resistance DC	≤ 1.35 Ω/km

Mechanical Data

Weight	≤ 52 kg/100 m
Bending Radius	static ≥ 120 mm
Bending Radius	repeated (for ≤ 15 bendings) ≥ 250 mm
Tensile strength	≤ 1500 N
Bending force moment	≤ 19 Nm

Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-25 °C... +60 °C
Flammability	IEC 60332-1, IEC 60332-3 (A),
Smoke density	IEC 61034
Halogen test	IEC 60754-2
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
2011/305/EU (CPR)	compliant, B2ca-s1a,d0,a1

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Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group M25 23 mm / 50 Ohm

Suitable Tools

Cable tool 74_Z-0-23-17

Suitable Grounding Kit

Cable grounding kit 9076.99.N078 9076.99.P078

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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.033954611 typ.

b = 0.00362963 typ.

f_{max.} = 5

P ≤ at 1GHz = 2230

Frequency (GHz)	Nom. attenuation (dB / 100 m) sea level 20° C ambient temperature	Nom. attenuation (dB / 100 ft) sea level 20° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
0,100	1,11	0,34	7052
0,150	1,37	0,42	5758
0,200	1,59	0,48	4986
0,400	2,29	0,70	3526
0,450	2,44	0,74	3324
0,500	2,58	0,79	3154
0,700	3,09	0,94	2665
0,800	3,33	1,01	2493
0,900	3,55	1,08	2351
1,000	3,76	1,15	2230
1,500	4,70	1,43	1821
1,700	5,04	1,54	1710
1,800	5,21	1,59	1662
2,000	5,53	1,68	1577
2,200	5,83	1,78	1503
2,500	6,28	1,91	1410
2,800	6,70	2,04	1333

Matrix typical Return Loss

Frequency Range (MHz)	Frequency Range (MHz)	Frequency Range (MHz)	Frequency Range (MHz)
380 to 470	806 to 960	1710 to 2200	5 to 3000
typ. 28.5 dB	typ. 26.9 dB	typ. 25.6 dB	typ. 20 dB