

Data Sheet

Coaxial Cable SUCOFEED_1/2_FR

Description

Corrugated coaxial cable - flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper clad Aluminum	Wire	typ. 4.8 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 12.1 mm
Outer conductor	Copper	Tube (c)100%	typ. 13.8 mm
Jacket	LSFH (modified polyethylene)	RAL 7000 - gr	15.9 mm +/- 0.4

Print: HUBER+SUHNER_SUCOFEED_1/2_FR_#batch-number#_#metric-length#

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 8 GHz
Capacitance	typ. 75.9 pF/m
Inductance	typ. 0.2 μH/m
Velocity of signal propagation	typ. 88 %
Signal delay	typ. 3.8 ns/m
Insulation resistance	≥ 5 x 10 ⁶ MΩm
Screening effectiveness	≥ 120 dB
Operating voltage	≤ 1.6 kVrms (at sea level)
Test voltage	3.3 kVrms (50 Hz/1 min)
Outer conductor resistance DC	≤ 1.95 Ω/km
Inner conductor resistance DC	≤ 1.6 Ω/km

Mechanical Data

Weight		≤ 27.6 kg/100 m
Bending Radius	static	≥ 70 mm
Bending Radius	repeated (for ≤ 15 bendings)	≥ 125 mm
Tensile strength		≤ 1100 N
Bending force moment		≤ 5 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)	compliant

Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	M12 12 mm / 50 Ohm
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Suitable Tools

Cable tool	74_Z-0-12-15
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Suitable Grounding Kit

Cable grounding kit	9076.99.N012 9076.99.P012
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SUCOFEEED_1/2_FR****Matrix** typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.067398706 typ.

b = 0.005459591 typ.

f_{max.} = 8

P ≤ at 1GHz = 1040

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	2.19	0.67	3289
0.150	2.69	0.82	2685
0.200	3.12	0.95	2326
0.400	4.48	1.37	1644
0.450	4.77	1.45	1550
0.500	5.04	1.54	1471
0.700	6.02	1.84	1243
0.800	6.47	1.97	1163
0.900	6.89	2.10	1096
1.000	7.29	2.22	1040
1.500	9.07	2.77	849
1.700	9.72	2.96	798
1.800	10.03	3.06	775
2.000	10.62	3.24	735
2.200	11.20	3.41	701
2.500	12.02	3.66	658
3.000	13.31	4.06	600

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. 21 dB