

Coaxial Cable SUCOFEED_1/2_FR

Description

Copper outer conductor, 50 Ohm, 8.8 GHz, 85°C, ø15.9 mm,
LSFH jacket, Flame retardant, CPR qualified



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, corrugated100%	typ. 13.8 mm
Jacket	LSFH (modified polyethylene)	RAL 9011 - graphite black	15.9 mm +/- 0.4

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

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 8.8 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) _{rms}
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
Bending Radius	repeated (for ≤ 15 bendings)
Tensile strength	≥ 70 mm
Bending force moment	≥ 125 mm
	≤ 1100 N
	≤ 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 - including 2015/863 and 2017/2102)	compliant
2011/305/EU (CPR)	compliant, B2ca-s1a,d1,a1

Coaxial Cable
SUCOFEEED_1/2_FR

Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group M12 12 mm / 50 Ohm

Suitable Tools

Suitable Grounding Kit

Cable grounding kit 9076.99.N012 9076.99.P012

Coaxial Cable SUCOFEED_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.

$f_{\max.} = 8.8$

P ≤ at 1GHz = 1040

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / 100 m)	(dB / 100 ft)	(watt)
	sea level 20° C ambient temperature	sea level 20° C ambient temperature	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
2,800	12,81	3,90	622
3,300	14,05	4,28	573
3,500	14,52	4,43	556
4,000	15,66	4,77	520
5,000	17,80	5,43	465
6,000	19,78	6,03	425
7,000	21,65	6,60	393
8,000	23,43	7,14	368
8,800	24,80	7,56	351

Matrix typical Return Loss

Frequency Range	Frequency Range	Frequency Range	Frequency Range
(MHz)	(MHz)	(MHz)	(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

Coaxial Cable SUCOFEED_1/2_FR