

## 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 <sup>6</sup> MΩm
Screening effectiveness	≥ 120 dB
Operating voltage	≤ 1.6 kVrms (at sea level)
Test voltage	3.3 kVrms (50 Hz/1 min) <sub>rms</sub>
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 - including 2015/863 and 2017/2102)	compliant
2011/305/EU (CPR)	compliant, B2ca-s1a,d1,a1

### 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

#### Suitable Grounding Kit

Cable grounding kit	9076.99.N012 9076.99.P012
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## 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 (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
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 (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