

Coaxial Cable SUCOFEED_1_5/8_FR

Description

Corrugated coaxial cable - flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Tube, corrugated	typ. 17.3 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 42.8 mm
Outer conductor	Copper	Tube, corrugated 100%	typ. 46.4 mm
Jacket	LSFH (modified polyethylene)	RAL 9011 - graphite black	49.8 mm +/- 0.7

Print: HUBER+SUHNER_SUCOFEED_1_5/8_FR_#batch-number#_#metric-length#

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 2.75 GHz
Capacitance	typ. 76.8 pF/m
Inductance	typ. 0.2 μ H/m
Velocity of signal propagation	typ. 87.5 %
Signal delay	typ. 3.8 ns/m
Insulation resistance	$\geq 5 \times 10^6$ M Ω m
Screening effectiveness	≥ 120 dB
Operating voltage	≤ 5.4 kVrms (at sea level)
Test voltage	11 kVrms (50 Hz/1 min) _{rms}
Outer conductor resistance DC	≤ 0.52 Ω /km
Inner conductor resistance DC	≤ 0.83 Ω /km

Mechanical Data

Weight	≤ 160 kg/100 m
Bending Radius	static ≥ 300 mm
Bending Radius	repeated (for ≤ 15 bendings) ≥ 510 mm
Tensile strength	≤ 2400 N
Bending force moment	≤ 220 Nm

Environmental Data

Temperature range	-40 °C... +80 °C
Installation temperature	-20 °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	M42 42 mm / 50 Ohm
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Suitable Tools

Cable tool	74_Z-0-42-14
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Suitable Grounding Kit

Cable grounding kit	9076.99.N158 9076.99.P158
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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 = 0.019740499 typ.

b = 0.004595012 typ.

f_{max.} = 2.75

P ≤ at 1GHz = 4100

Frequency (GHz)	Nom. attenuation (dB / 100 m)	Nom. attenuation (dB / 100 ft)	Max. CW power (watt)
	sea level 20° C ambient temperature	sea level 20° C ambient temperature	sea level 40° C ambient temperature
0,100	0,67	0,20	12965
0,150	0,83	0,25	10586
0,200	0,97	0,30	9168
0,400	1,43	0,44	6483
0,450	1,53	0,47	6112
0,500	1,63	0,50	5798
0,700	1,97	0,60	4900
0,800	2,13	0,65	4584
0,900	2,29	0,70	4322
1,000	2,43	0,74	4100
1,500	3,11	0,95	3348
1,700	3,35	1,02	3145
1,800	3,48	1,06	3056
2,000	3,71	1,13	2899
2,200	3,94	1,20	2764
2,500	4,27	1,30	2593
2,800	4,59	1,40	2450

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	1 to 2700
typ. 28.5 dB	typ. 26.9 dB	typ. 25.6 dB	typ. 20 dB