

Coaxial Cable SUCOFEED_7/8_LW_LA

Description

Corrugated coaxial cable - low weight - low attenuation



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Tube	typ. 9.4 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 22.8 mm
Outer conductor	Aluminium	Tube (c)100%	typ. 25.4 mm
Jacket	PE-LD (Low-density polyethylene)	RAL 9005 - bk	27.9 mm +/- 0.3

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

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 5 GHz
Capacitance	typ. 74 pF/m
Inductance	typ. 0.19 μH/m
Velocity of signal propagation	typ. 90 %
Signal delay	typ. 3.8 ns/m
Insulation resistance	≥ 3 x 10 ⁶ MΩm
Screening effectiveness	≥ 120 dB
Operating voltage	≤ 2.95 kVrms (at sea level)
Test voltage	6 kVrms (50 Hz/1 min)
Outer conductor resistance DC	≤ 1.82 Ω/km
Inner conductor resistance DC	≤ 1.38 Ω/km

Mechanical Data

Weight	≤ 38 kg/100 m
Bending Radius	static ≥ 120 mm
Bending Radius	repeated (for ≤ 15 bendings) ≥ 250 mm
Tensile strength	≤ 1440 N
Bending force moment	≤ 13.5 Nm

Environmental Data

Temperature range	-55 °C... +85 °C
Installation temperature	-40 °C... +60 °C
Halogen test	IEC 60754-1
2011/65/EU (RoHS)	compliant

Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group M25 23 mm / 50 Ohm

Suitable Tools

Suitable Grounding Kit

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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 = 0.03842685 typ.

b = 0.00320771 typ.

f_{max.} = 5

P ≤ at 1GHz = 2520

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	1.25	0.38	7969
0.150	1.54	0.47	6507
0.200	1.78	0.54	5635
0.400	2.56	0.78	3984
0.450	2.72	0.83	3757
0.500	2.88	0.88	3564
0.700	3.44	1.05	3012
0.800	3.69	1.13	2817
0.900	3.93	1.20	2656
1.000	4.16	1.27	2520
1.500	5.19	1.58	2058
1.700	5.56	1.69	1933
1.800	5.73	1.75	1878
2.000	6.08	1.85	1782
2.200	6.41	1.95	1699
2.500	6.88	2.10	1594
3.000	7.62	2.32	1455

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. 28.4 dB	typ. 25.1 dB	typ. 25.1 dB	typ. 20 dB