Data Sheet

Coaxial Cable
SUCOFEED_7/8

Description

Corrugated coaxial cable

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Tube	typ. 9 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 22.3 mm
Outer conductor	Copper	Tube (c)100%	typ. 24.8 mm
Jacket	PE-LD (Low-density polyethylene)	RAL 9005 - bk	27.6 mm +/- 0.4

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Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 5 GHz
Capacitance	typ. 75.8 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	≤ 2.91 kVrms (at sea level)
Test voltage	6 kVrms (50 Hz/1 min)
Outer conductor resistance DC	≤ 1.35 Ω/km
Inner conductor resistance DC	≤ 1.55 Ω/km

Mechanical Data

Weight		≤ 53 kg/100 m
Bending Radius	static	≥ 120 mm
Bending Radius	repeated (for ≤ 15 bendings)	≥ 250 mm
Tensile strength		≤ 1400 N
Bending force moment		≤ 19 Nm

Environmental Data

Temperature range	-55 °C... +85 °C
Installation temperature	-25 °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	M23 22 mm / 50 Ohm

Suitable Tools

Cable tool	74_Z-0-23-16

Suitable Grounding Kit

Cable grounding kit	9076.99.N078 9076.99.P078

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a =	0.036097419 typ.	b =	0.005025812 typ.	$f_{max.}$ =	5	P ≤ at 1GHz =	2190

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	1.19	0.36	6925
0.150	1.47	0.45	5655
0.200	1.71	0.52	4897
0.400	2.48	0.76	3463
0.450	2.65	0.81	3265
0.500	2.80	0.85	3097
0.700	3.37	1.03	2618
0.800	3.63	1.11	2448
0.900	3.88	1.18	2308
1.000	4.11	1.25	2190
1.500	5.17	1.58	1788
1.700	5.56	1.69	1680
1.800	5.75	1.75	1632
2.000	6.11	1.86	1549
2.200	6.46	1.97	1476
2.500	6.96	2.12	1385
3.000	7.76	2.37	1264

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. 20 dB