

Coaxial Cable SUCOFEED_7/8_HF

Description

Copper outer conductor, 50 Ohm, 4.9 GHz, 85°C, ø27.5 mm, PE jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Tube, corrugated	typ. 9.4 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 22.4 mm
Outer conductor	Copper	Tube, corrugated100%	typ. 25 mm
Jacket	PE-LD (Low-density polyethylene)	RAL 9005 - bk	27.5 mm +/- 0.2

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

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	≤ 4.9 GHz
Capacitance	typ. 75.4 pF/m
Inductance	typ. 0.2 μH/m
Velocity of signal propagation	typ. 85 %
Signal delay	typ. 3.9 ns/m
Insulation resistance	≥ 5 x 10 ⁶ MΩm
Screening effectiveness	≥ 120 dB
Operating voltage	≤ 3 kVrms (at sea level)
Test voltage	6 kVrms (50 Hz/1 min) _{rms}
Outer conductor resistance DC	≤ 2.2 Ω/km
Inner conductor resistance DC	≤ 3.2 Ω/km

Mechanical Data

Weight	≤ 48 kg/100 m
Bending Radius	static
Bending Radius	repeated (for ≤ 15 bendings)
Tensile strength	≥ 90 mm
Bending force moment	≥ 125 mm
	≤ 1020 N
	≤ 16.3 Nm

Environmental Data

Temperature range	-55 °C... +85 °C
Installation temperature	-25 °C... +60 °C
Halogen test	IEC 60754-1
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant

Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	M24 22 mm / 50 Ohm
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Suitable Tools

Cable tool	74_Z-0-23-16
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Suitable Grounding Kit

Cable grounding kit	9076.99.N078 9076.99.P078
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Coaxial Cable
SUCOFEEED_7/8_HFMatrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.035488036 typ.

b = 0.007030847 typ.

 $f_{\max.} = 4.9$

P ≤ at 1GHz = 1940

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	1,19	0,36	6135
0,150	1,48	0,45	5009
0,200	1,73	0,53	4338
0,400	2,53	0,77	3067
0,450	2,70	0,82	2892
0,500	2,86	0,87	2744
0,700	3,46	1,05	2319
0,800	3,74	1,14	2169
0,900	4,00	1,22	2045
1,000	4,25	1,30	1940
1,500	5,40	1,65	1584
1,700	5,82	1,77	1488
1,800	6,03	1,84	1446
2,000	6,42	1,96	1372
2,200	6,81	2,08	1308
2,500	7,37	2,25	1227
2,800	7,91	2,41	1159
3,300	8,77	2,67	1068
3,500	9,10	2,77	1037
4,000	9,91	3,02	970
5,000	11,45	3,49	868

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 3000
typ. 28.5 dB	typ. 26.9 dB	typ. 25.6 dB	typ. 20 dB