

## Coaxial Cable SUCOFORM\_141

### Description

SUCOFORM, the handformable microwave cable



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.94 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 99%	3.58 mm

Print: HUBER+SUHNER SUCOFORM 141 50 Ohm (PA no.)

#### Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	33 GHz
Capacitance	92 pF/m
Velocity of signal propagation	71 %
Signal delay	4.7 ns/m
Insulation resistance	≥ 1 x 10 <sup>8</sup> MΩm
Min. screening effectiveness	≥ 100 dB (up to 18 GHz)
Max. operating voltage	≤ 1.9 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight		4 kg/100 m
Min. bending radius	static	8 mm
	repeated (for ≤ 50 bendings)	40 mm

#### Environmental Data

Temperature range	-65 °C... +165 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-1, UL 1581 § 1080 (VW-1),
2011/95/EC (RoHS)	compliant

### Additional Information

#### Ordering Information

Order as SUCOFORM\_141

#### Remarks

(For details refer to the HUBER+SUHNER MICROWAVE CABLES AND ASSEMBLIES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

Cable group Y12 3 mm / 50 Ohm

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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 = 0.355

b = 0.04

$f_{max} = 33$

P at 1GHz = 425

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
1.65	0.52	0.159	331
3.3	0.78	0.237	234
4.95	0.99	0.301	191
6.6	1.18	0.358	165
8.25	1.35	0.411	148
9.9	1.51	0.461	135
11.55	1.67	0.509	125
13.2	1.82	0.554	117
14.85	1.96	0.598	110
16.5	2.1	0.641	105
18.15	2.24	0.682	100
19.8	2.37	0.723	96
21.45	2.5	0.763	92
23.1	2.63	0.802	88
24.75	2.76	0.840	85
26.4	2.88	0.878	83
28.05	3.0	0.915	80
29.7	3.12	0.952	78
31.35	3.24	0.988	76
33.0	3.36	1.024	74