

## Flexible RF cable

**S\_02112\_D** Item: 22511910

### Description

S: Low loss RF cables with foam PE dielectrics

50 Ohm, 6 GHz, 85°C, ø4.5 mm, PUR jacket



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	SPE (Foamed Polyethylene)		2.39 mm
Outer conductor	Copper	Braid, 96%	2.9 mm
Outer conductor	Copper	Braid, 84 %	3.5 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	4.5 mm +/- 0.15

Print: HUBER+SUHNER S 02112 D 50 Ohm (production order number)

#### Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	83 pF/m
Velocity of signal propagation	82 %
Signal delay	4.08 ns/m
Screening effectiveness	≥ 81 dB (up to 6 GHz)
Operating voltage	≤ 0.35 kV <sub>rms</sub> (at sea level)
Test voltage	0.7 kV <sub>rms</sub> (50 Hz/1 min)
Phase vs Temperature	-40°C... + 70°C

#### Mechanical Data

Weight		3.7 kg/100 m
Min. bending radius	static	22 mm
	repeated (for ≤ 50 bendings)	45 mm

#### Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen test	IEC 60754
Halogen free	Yes
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant
Flex life test	MIL-T-81490 - §4.7.15 - prod. II - modified

### Additional Information

#### Remarks

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

#### Suitable Connectors

Cable group S8 2 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 = 0.5272

b = 0.1353

$f_{\max} = 6$

P at 1GHz = 80

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 (W) sea level 40° C ambient temperature
0,3	0,33	0,100	146
0,6	0,49	0,149	103
0,9	0,62	0,190	84
1,2	0,74	0,226	73
1,5	0,85	0,259	65
1,8	0,95	0,290	60
2,1	1,05	0,319	55
2,4	1,14	0,348	52
2,7	1,23	0,375	49
3,0	1,32	0,402	46
3,3	1,4	0,428	44
3,6	1,49	0,453	42
3,9	1,57	0,478	41
4,2	1,65	0,502	39
4,5	1,73	0,526	38
4,8	1,8	0,550	37
5,1	1,88	0,573	35
5,4	1,96	0,596	34
5,7	2,03	0,619	34
6,0	2,1	0,641	33