

## Flexible RF cable S\_10162\_B-11

### Description

S: Low loss RF cables with foam PE dielectrics

50 Ohm, 7.5 GHz, 85°C, ø12.9 mm, LSFH jacket, Flame retardant,  
Railway qualified



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper clad Aluminum	Wire	3.8 mm
Dielectric	SPE (Foamed Polyethylene)		9.9 mm
Outer conductor	Copper	longitudinal Foil, 100%	10 mm
Outer conductor	Copper	Braid, 80 %	10.8 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	12.9 mm +/- 0.2

Print: HUBER+SUHNER S 10162 B-11 50 Ohm (PA no.)

#### Electrical Data

Impedance		50 Ω +/- 2
Operating Frequency		7.5 GHz
Capacitance		77 pF/m
Velocity of signal propagation		87 %
Signal delay		3.85 ns/m
Insulation resistance		≥ 1 x 10 <sup>8</sup> MΩm
Min. screening effectiveness		≥ 90 dB (up to 7.5 GHz)
Max. operating voltage		≤ 1.7 kV <sub>rms</sub> (at sea level)
Test voltage		3.4 kV <sub>rms</sub> (50 Hz/1 min)
Phase vs Temperature	-40°C... + 70°C	3000 ppm
Phase vs Bending		2 °/GHz

#### Mechanical Data

Weight		15 kg/100 m
Min. bending radius	static	100 mm
	repeated (for ≤ 50 bendings)	200 mm

#### Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-1, EN 60332-1-2, EN 50266-2-4, IEC 60332-3-24, BS 4066-3, NF C 32-070 C2
Smoke density	EN 61034-2
Halogen test	IEC 60754
Uv resistance test	ISO 4892-2A
Toxic fume	BS 6853 Annex B
2011/65/EU (RoHS)	compliant

### Additional Information

EN 45545-2 compliant hazard level for indoor cables: HL3

NFPA-130 compliant

An operating temperature of -55°C is feasible for static applications.

#### Ordering Information

Order as S\_10162\_B-11

#### Remarks

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

#### Suitable Connectors

Cable group S39 10 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 = 0.0826

b = 0.0129

$f_{max} = 7.5$

P at 1GHz = 700

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
0,38	0,06	0,017	1136
0,75	0,08	0,025	808
1,12	0,1	0,031	661
1,5	0,12	0,037	572
1,88	0,14	0,042	511
2,25	0,15	0,047	467
2,62	0,17	0,051	432
3,0	0,18	0,055	404
3,38	0,2	0,060	381
3,75	0,21	0,063	361
4,12	0,22	0,067	345
4,5	0,23	0,071	330
4,88	0,25	0,075	317
5,25	0,26	0,078	306
5,62	0,27	0,082	295
6,0	0,28	0,085	286
6,38	0,29	0,089	277
6,75	0,3	0,092	269
7,12	0,31	0,095	262
7,5	0,32	0,098	256