

## Flexible RF cable RADOX\_RF\_213

### Description

RADOX RF: Highly flame retardant LSFH alternatives to RG cables

RG213 LSFH, 50 Ohm, 2 GHz, 105°C, ø10.6 mm, RADOX® jacket, Flame retardant, Railway qualified



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper	Strand-07	2.25 mm
Dielectric	PEX (Polyethylene cross-linked)		7.25 mm
Outer conductor	Copper, Silver plated	Braid, 95%	8.09 mm
Jacket	RADOX EM104	RAL 9005 - bk	10.6 mm +/- 0.1

Print: HUBER+SUHNER RADOX\_RF\_213 50 Ohm (PA no.)

#### Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	2 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 41 dB (up to 2 GHz)
Operating voltage	≤ 5 kV <sub>rms</sub> (at sea level)
Test voltage	10 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight		16.8 kg/100 m
Min. bending radius	static	50 mm
	repeated (for ≤ 50 bendings)	100 mm
	dynamic	150 mm

#### Environmental Data

Temperature range	-40 °C ... +105 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	EN 60332-1-2, IEC 60332-3-25
Smoke density test	EN 61034-2
Halogen test	IEC 60754
Halogen free	Yes
2011/65/EU (RoHS)	compliant
2006/1907/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed

### Additional Information

EN 45545 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 RADOX\_RF\_213

#### Remarks

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

#### Suitable Connectors

Cable group U42 7 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 = 0.191

b = 0.0689

$f_{\max} = 2$

P at 1GHz = 560

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
0,1	0,07	0,021	1771
0,2	0,1	0,030	1252
0,3	0,13	0,038	1022
0,4	0,15	0,045	885
0,5	0,17	0,052	792
0,6	0,19	0,058	723
0,7	0,21	0,063	669
0,8	0,23	0,069	626
0,9	0,24	0,074	590
1,0	0,26	0,079	560
1,1	0,28	0,084	534
1,2	0,29	0,089	511
1,3	0,31	0,094	491
1,4	0,32	0,098	473
1,5	0,34	0,103	457
1,6	0,35	0,107	443
1,7	0,37	0,112	430
1,8	0,38	0,116	417
1,9	0,39	0,120	406
2,0	0,41	0,124	396