

Flexible RF cable RADOX_RF_58

Description

RADOX RF: Highly flame retardant LSFH alternatives to RG cables

RG58 LSFH, 50 Ohm, 2 GHz, 105°C, ø5.1 mm, RADOX® jacket,
Flame retardant, Railway qualified



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	PEX (Polyethylene cross-linked)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96%	3.6 mm
Jacket	RADOX EM104	RAL 9005 - bk	5.1 mm +/- 0.05

Print: HUBER+SUHNER RADOX_RF_58 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	5.05 ns/m
Insulation resistance	≥ 1 x 10 ⁸ MQm
Min. screening effectiveness	≥ 40 dB (up to 2 GHz)
Max. operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	4.13 kg/100 m
Min. bending radius	static repeated (for ≤ 50 bendings) dynamic
	25 mm 50 mm 100 mm

Environmental Data

Temperature range	-40 °C... +105 °C
Installation temperature	-20 °C... +60 °C
Flammability	EN 60332-1-2, EN 50305, 9.1.2
Smoke density	EN 61034-2
Halogen test	IEC 60754
2011/65/EU (RoHS)	compliant

Additional Information

EN 45545 compliant
Hazard level for indoor cables: HL3
NFPA-130 compliant

Ordering Information

Order as RADOX_RF_58

Remarks

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

Suitable Connectors

Cable group U7 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 = 0.4003

b = 0.1637

f_{max} = 2

P at 1GHz = 130

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
0,1	0,14	0,044	411
0,2	0,21	0,065	291
0,3	0,27	0,082	237
0,4	0,32	0,097	206
0,5	0,36	0,111	184
0,6	0,41	0,124	168
0,7	0,45	0,137	155
0,8	0,49	0,149	145
0,9	0,53	0,161	137
1,0	0,56	0,172	130
1,1	0,6	0,183	124
1,2	0,63	0,194	119
1,3	0,67	0,204	114
1,4	0,7	0,214	110
1,5	0,74	0,224	106
1,6	0,77	0,234	103
1,7	0,8	0,244	100
1,8	0,83	0,253	97
1,9	0,86	0,263	94
2,0	0,89	0,272	92