

Flexible RF cable SX_04172_B-60

Description

SX: Low loss RF cables with cross-linked foam PE dielectrics

50 Ohm, 6 GHz, 105°C, ø5.5 mm, RADOX® jacket, Flame retardant, UL AWM style 1354, Railway qualified



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.4 mm
Dielectric	SPEX (Crosslink Foam PE)		3.8 mm
Outer conductor	Aluminum / PES	longitudinal Foil	4.2 mm
	Copper, Tin plated	Braid, 86 %	4.6 mm
Jacket	RADOX	RAL 9005 - bk	5.5 mm +/- 0.1

Print: HUBER+SUHNER SX04172B-60 50Ohm (UL logo) AWM Style1354 IEC60332-3-22 (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	80.3 pF/m
Velocity of signal propagation	83 %
Signal delay	4.01 ns/m
Screening effectiveness	≥ 80 dB (up to 2.2 GHz)
Operating voltage	≤ 0.7 kV _{rms} (at sea level)
Test voltage	1.4 kV _{rms} (50 Hz/1 min)
Voltage Rating UL	30 V

Mechanical Data

Weight		4.78 kg/100 m
Min. bending radius	static	25 mm
	repeated	90 mm

Environmental Data

Temperature range	-40 °C ... +105 °C
Temperature rating UL	80 °C
Flame propagation test	EN 60332-1-2, IEC 60332-3-22, EN 50305, 9.1.2, EN 50266-2-2, NF C 32-070 C2, NF C 32-070 C1
Smoke density test	EN 61034-2
Toxicity test	NF X 70-100
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 45545-2 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 SX_04172_B-60

Remarks

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

Suitable Connectors

Cable group X9 4 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 = 0.2375

b = 0.0438

$f_{\max} = 6$

P at 1GHz = 198

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	0,14	0,044	361
0,6	0,21	0,064	256
0,9	0,26	0,081	209
1,2	0,31	0,095	181
1,5	0,36	0,109	162
1,8	0,4	0,121	148
2,1	0,44	0,133	137
2,4	0,47	0,144	128
2,7	0,51	0,155	120
3,0	0,54	0,165	114
3,3	0,58	0,176	109
3,6	0,61	0,185	104
3,9	0,64	0,195	100
4,2	0,67	0,204	97
4,5	0,7	0,214	93
4,8	0,73	0,223	90
5,1	0,76	0,232	88
5,4	0,79	0,240	85
5,7	0,82	0,249	83
6,0	0,84	0,257	81