

Coupled Mode Cables

RXL Series



Cable Types	Nominal Size				
	1/4"	3/8"	1/2"	1/2"	1/2"
Standard Jacketing, Buriable, Not Fire Retardant	RXL1-1A	RXL2-2A	RXL4-1A	RXL4-2A	RXL4-3A
Standard Jacketing, Not Buriable, Not Fire Retardant	RXL1-1AX	RXL2-2AX	RXL4-1AX	RXL4-2AX	RXL4-3AX
Fire-Retardant, Non-Halogenated Jacketing (IEC 332-1)	RXL1-1RN	RXL2-2RN	RXL4-1RN	RXL4-2RN	RXL4-3RN
Fire-Retardant, Non-Halogenated Jacketing (IEC 332-1, IEC 332-3, IEEE 323)*	–	RXL2-2RNT1	RXL4-1RNT1	–	–
Fire-Retardant, Non-Halogenated Jacketing (IEC 332-1, IEC 332-3, IEEE 323, UL1600 Compliant)*	RXL1-1RNT	RXL2-2RNT	RXL4-1RNT	RXL4-2RNT	RXL4-3RNT
Electrical Characteristics					
Impedance, ohms	50	50	50	50	50
Velocity, percent	78	88	88	88	88
Typical VSWR	1.3	1.3	1.3	1.3	1.3
150 MHz					
Attenuation,* dB/100 ft	2.71	1.49	1.01	1.10	1.7
Attenuation,* dB/100 m	8.9	4.9	3.3	3.6	5.6
50% Coupling Loss* at 6 ft (2m), dB ± 10 dB	58	56	58	52	46.0
1 km System Loss, dB	147	105	91	88	102.0
450 MHz					
Attenuation, dB/100 ft	5.09	2.59	2.01	2.50	4.1
Attenuation, dB/100 m	16.7	8.5	6.6	8.2	13.5
50% Coupling Loss* at 6 ft (2m), dB ± 10 dB	62	61	63	57	50.0
1 km System Loss, dB	229	146	129	139	185.0
900 MHz					
Attenuation,* dB/100 ft	7.10	3.69	2.90	3.60	5.5
Attenuation,* dB/100 m	23.3	12.1	9.5	11.8	18.1
50% Coupling Loss* at 6 ft (2m), dB ± 10 dB	69	68	68	63	62.0
1 km System Loss, dB	302	189	163	181	243.0
1800 MHz					
Attenuation,* dB/100 ft	9.7	5.3	4.0	4.9	6.8
Attenuation,* dB/100 m	31.8	17.4	13.1	16.1	22.3
50% Coupling Loss* at 6 ft (2m), dB ± 10 dB	71	74	73	69	66
1 km System Loss, dB	389	248	204	230	289
2400 MHz					
Attenuation,* dB/100 ft	–	–	4.8	5.8	7.5
Attenuation,* dB/100 m	–	–	15.7	19	24.9
50% Coupling Loss* at 6 ft (2m), dB ± 10 dB	–	–	73	69	66
1 km System Loss, dB	–	–	230	259	349
Mechanical Characteristics					
Diameter over Jacket, in (mm)	0.30 (7.6)	0.44 (11)	0.73 (19)	0.73 (19)	0.73 (19)
Minimum Bending Radius, in (mm)	1 (25)	3.75 (95)	5 (125)	5 (125)	5 (125)
Cable Weight, lb/ft (kg/m)	0.055 (0.082)	0.08 (0.12)	0.22 (0.33)	0.22 (0.33)	0.22 (0.33)
* Cable Spacing from Wall, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)	2 (51)

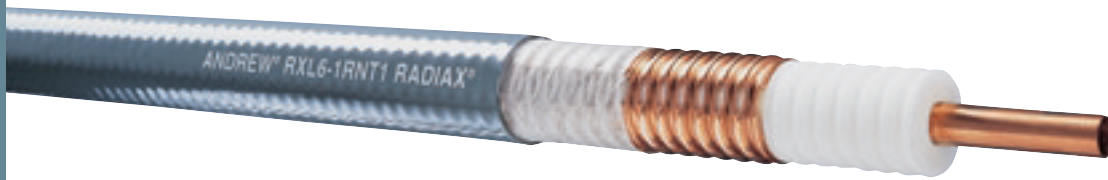
Note: To obtain 95% coupling loss data, use Raleigh fading statistics for coupled mode cables.

Note: Attenuation and coupling loss data are based on averaged measurements taken in an actual customer tunnel.



Coupled Mode Cables

RXL Series



Cable Types	Nominal Size				
	5/8"	7/8"	1-1/4"	1-5/8"	1-5/8"
Standard Jacketing	–	RXL5-1A	RXL6-1A	RXL7-1A	RXL7-3A
Standard Jacketing, Not Buriable, Not Fire Retardant	RXL4.5-1AX	RXL5-1AX	RXL6-1AX	RXL7-1AX	RXL7-3AX
Fire-Retardant, Non-Halogenated Jacketing (IEC 332-1)	RXL4.5-1RN	RXL5-1RN	RXL6-1RN	RXL7-1RN	RXL7-3RN
Fire-Retardant, Non-Halogenated Jacketing (IEC 332-1, IEC 332-3, IEEE 323)	RXL4.5-1RNT1	RXL5-1RNT1	RXL6-1RNT1	RXL7-1RNT1	RXL7-3RNT1
Fire-Retardant, Non-Halogenated Jacketing (IEC 332-1, IEC 332-3, IEEE 323, UL1600 Compliant)	–	RXL5-1RNT	RXL6-1RNT	RXL7-1RNT	RXL7-3RNT
Electrical Characteristics					
Impedance, ohms	50	50	50	50	50
Velocity, percent	89	89	89	88	88
Typical VSWR	1.3	1.3	1.3	1.3	1.3
75 MHz					
Attenuation,* dB/100 ft	0.5	–	–	–	–
Attenuation,* dB/100 m	1.7	–	–	–	–
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	63.0	–	–	–	–
1 km System Loss, dB	80.0	–	–	–	–
150 MHz					
Attenuation,* dB/100 ft	0.7	0.5	0.4	0.2	0.3
Attenuation,* dB/100 m	2.3	1.8	1.3	0.8	1.0
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	70.0	62.0	64.0	71.0	60.0
1 km System Loss, dB	93.0	80.0	77.0	78.6	69.8
450 MHz					
Attenuation,* dB/100 ft	1.3	1.1	0.9	0.6	0.8
Attenuation,* dB/100 m	4.1	3.6	3.0	2.0	2.5
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	74.0	72.0	75.0	80.0	67.0
1 km System Loss, dB	115.0	108.0	105.0	100.0	92.0
900 MHz					
Attenuation,* dB/100 ft	1.9	1.6	1.2	0.8	1.0
Attenuation,* dB/100 m	6.2	5.1	4.0	2.7	3.3
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	76.0	72.0	77.0	79.0	68.0
1 km System Loss, dB	138.0	123.0	117.0	106.0	101.0
1800 MHz					
Attenuation,* dB/100 ft	2.9	2.3	1.7	1.3	1.6
Attenuation,* dB/100 m	9.4	7.6	5.6	4.4	5.1
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	68.0	84.0	84.0	89.0	78.0
1 km System Loss, dB	162.0	160.0	140.0	133.0	129.0
2200 MHz					
Attenuation,* dB/100 ft	3.2	–	–	–	–
Attenuation,* dB/100 m	10.5	–	–	–	–
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	73.0	–	–	–	–
1 km System Loss, dB	178.0	–	–	–	–
2400 MHz					
Attenuation,* dB/100 ft	–	2.8	2.1	1.7	2.4
Attenuation,* dB/100 m	–	9.2	6.9	5.6	7.83
Coupling Loss* at 6 ft (2 m), dB ± 10 dB	–	76	76	89	79
1 km System Loss, dB	–	168	145	145	157.7
Mechanical Characteristics					
Max. Diameter over Jacket, in (mm)	0.865 (22)	1.15 (29)	1.60 (41)	2.02 (51)	2.02 (51)
Minimum Bending Radius, in (mm)	8 (200)	10 (254)	15 (380)	20 (508)	20 (508)
Max. Cable Weight, lb/ft (kg/m)	0.15 (0.22)	0.41 (0.61)	0.73 (1.09)	1.02 (1.52)	1.02 (1.52)
* Cable Spacing from Wall, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)	4 (102)

Note: To obtain 95% coupling loss data, use Raleigh fading statistics for coupled mode cables.

Note: Attenuation and coupling loss data are based on averaged measurements taken in an actual customer tunnel.