



Cheminax Coaxial Cables

Small, lightweight coaxial cables

Applications

Cheminax controlled electrical cables are used in the aircraft and aerospace industries. They have a wide range of applications in missiles, avionics, radio frequency and microwave systems, computers, security and surveillance systems and communications.

Cheminax coaxial cables were designed to solve interconnect problems in electronic systems, such as computers, military equipment and other areas of high-density packing, where cables are required to perform to more exacting specifications than standard radio grade (RG) or UL recognised (UR) constructions.

Cables can be designed that are either smaller and lighter than standard RG and UR cables or provide significantly lower attenuation and capacitance with no significant increase in size.

Features & Benefits

- Small size, light weight
- Low capacitance and attenuation
- High velocity of propagation
- High flexibility

Operating Temperature

- -65°C to 200°C

Standard coax cables - dimensions and electrical properties

Part Number	Impedance (Ohms)	Capacitance (pF/m)	Attenuation (dB/100m)		Conductor (mm)	Dielectric Dia nominal (mm)	Jacket Material	Cable Dia nominal (mm)	Weight nominal (kg/100m)
			100 MHz	400MHz					
5020A1311-0	50	84.0	15.84	34.45	19/0.20	2.70	Thermorad	3.80	2.2
5024A1311-0	50	83.7	23.76	50.34	19/0.127	1.70	Thermorad	2.70	1.1
5026A1311-0	50	85.3	30.98	64.79	7/0.15	1.20	Thermorad	2.10	0.9
5028A1317-0	50	87.9	38.92	79.70	7/0.127	0.97	Thermorad	1.85	0.6
7524A1311-0	75	56.4	14.53	31.84	19/0.127	2.80	Thermorad	3.80	1.9
7528A1317-0	75	56.0	22.81	48.38	7/0.127	1.65	Thermorad	2.60	1.0
7530A1317-9	75	57.0	28.00	58.84	7/0.10	1.35	Thermorad	2.30	0.8
0024A0311-0	100	44.3	46.32	-	19/0.127	1.40	Thermorad	3.99	2.4

Cheminax Coaxial Cable

Building your part number

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Ordering Example: 5026A1314-0

Impedance:

Always two digits (if 100 ohms or higher, use last two digits only) 50

Conductor Size (AWG):

Always two digits 5026

Variation:

Letter assigned by Raychem (This is not a revision indicator) 5026A

Construction:

1 = Single round shield
2 = Single flat shield
3 = Double round shield
4 = 2 shield (other) 5026A1
5 = Triax-round shield
6 = Triax-other
8 = Composite shield
9 = Core only
0 = Other

Jacket:

1 = General purpose PVF2
2 = Outerspace PVF2
3 = Thermorad
4 = FEP
5 = Uncrosslinked ETFE
6 = Spec 55
7 = Flexline
8 = Zerohal
9 = None
0 = Other 5026A13

Dielectric:

1 = Rayfoam L
2 = Rayfoam H
3 = Rayolin F
4 = FEP (solid)
6 = Spec 55 (modified XL-ETFE)
0 = Other 5026A131

Conductor Type:

1 = Tin-plated copper
2 = Silver-plated copper
3 = Nickel-plated copper
4 = Silver-plated high-strength copper alloy
6 = Nickel-plated high-strength copper alloy
7 = Tin-plated copper-clad steel
8 = Silver-plated copper-clad steel
9 = Bare copper
A = CS95 5026A1314

Jacket Colour:

0 = Black
1 = Brown
2 = Red
3 = Orange
4 = Yellow
5 = Green
6 = Blue
7 = Violet
8 = Grey
9 = White
9X = Transparent white 5026A1314-0

Note: Users should independently evaluate the suitability of the product for their application. For further information please contact **IS-Rayfast**.

Cheminax Coaxial Cable

High performance alternatives to standard cables

Alternatives to RG cables

RG/U	Alternatives	Comments
4	5020A3311-0 5018D3311-0	Small, light Improved electricals
5	5018D3311-0	Small, light
8	5012E1339-0	Dimensionally similar
11	7518A1311-0	Small, light
29	5020A1311-0	Small, light
31	5012E1339-0	Dimensionally similar
55	5020A3311-0 5018D3311-0	Small, light Improved electricals
58	5021D1331-0 5020A1311-0 5018A1311-0	Dimensionally similar Small, light Improved electricals
59	7523D1331-0 7524A1311-0 7520A1311-0	Dimensionally similar Small, light Improved electricals
62	9524A1311-0	Small, light
63	2524A1311-0	Small, light
87	5012A3311-0	Small, light
89	5012A3311-0	Small, light
115	5012A3311-0	Small, light
122	5020A1311-0	Improved electricals
124	7524A1311-0	Small, light
133	9524A1311-0	Small, light
140	7524A1311-0	Small, light
141	5020A1311-0	Small, light
142	5019D3318-0 5018D3311-0	Small, light Improved electricals
144	7518A1311-0	Small, light
149	7518A1311-0	Small, light

Alternatives to RG cables (continued)

RG/U	Alternatives	Comments
159	5020A1311-0	Small, light
174	5026A1311-0 5024A1311-0	Small, light Improved electricals
178	5030A1317-0 5028A1317-0	Small, light Improved electricals
179	7530A1317-0 7528A1317-0	Small, light Improved electricals
180	9530E1014-0 9527A1318-9	Small, light Improved electricals
188	5026A1311-0 5024A1311-0	Small, light Improved electricals
210	9524A1311-0	Small, light
213	5012E1339-0	Dimensionally similar
214	5012A3311-0	Small, light
223	5019D3318-0 5018D3311-0	Small, light Improved electricals
225	5012A3311-0	Small, light
235	5012A3311-0	Small, light
279	7524A1311-0	Dimensionally similar
282	5024A1311-0	Small, light
302	7524A1311-0	Small, light
303	5020A1311-0	Small, light
304	5018A1311-0	Small, light
316	5026A1311-0 5024A1311-0	Small, light Improved electricals
393	5012A3311-0	Small, light
400	5020A3311-0 5018D3311-0	Small, light Improved electricals
403	5030A5314-0	Small, light

Note: To compliment the mechanical and electrical features of Cheminax miniature coaxial cables please refer to the electrical interconnect section of this catalogue.

Cheminax Coaxial Cable

High performance alternatives to standard cables

Alternatives to UR cables

UR	Alternatives	Comments
43	5020A1311-0	Small, light
57	7518A1311-0	Small, light
65	7518A1311-0	Small, light
67	5012E1339-0	Dimensionally similar
70	7524A1311-0	Small, light
72	5020A1311-0	Small, light
76	5020A1311-0	Small, light
84	7524A1311-0	Small, light
90	7522A1311-0	Small, light
95	5026A1311-0	Small, light
96	9524A1311-0	Dimensionally similar
102	5012E1339-0	Dimensionally similar
104	7522A1311-0	Small, light
105	7518A1311-0	Small, light
106	7222A1311-0	Small, light
107	5012E1339-0	Small, light
108	5020A1311-0	Small, light
109	5026A1311-0	Small, light
110	5030A1317-0	Small, light
111	7530A1317-0	Small, light
112	5012A3311-0	Small, light
113	7518A1311-0	Small, light
116	5026A1311-0	Small, light
117	7524A1311-0	Small, light

Alternatives to UR cables (continued)

UR	Alternatives	Comments
200	7524A1311-0	Dimensionally similar
201	7522A1311-0	Dimensionally similar
202	7522A1311-0	Dimensionally similar
203	7520A1311-0	Small, light
204	7518A1311-0	Dimensionally similar
205	7518A1311-0	Dimensionally similar
207	7524A1311-0	Small, light
208	7524A1311-0	Small, light
210	7524A1311-0	Small, light
301	5020A1311-0	Small, light
306	7524A1311-0	Small, light

Note: To compliment the mechanical and electrical features of Cheminax miniature coaxial cables please refer to the electrical interconnect section of this catalogue.