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	Jacket Material	Cable Dia. Nominal	Weight Nominal (kg/
			100 MHz	400MHz	()	(mm)		(mm)	100m)
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



Building your part number

Small, lightweight coaxial cables

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Ordering Example: 5026A1314-0
                                                         50
Impedance:
Always two digits (if 100 ohms or higher, use last two digits only)
                                                         5026
Conductor Size (AWG): -
Always two digits
                                                         5026A
Variation:
Letter assigned by Raychem (This is not a revision indicator)
                                                         5026A1
Construction:
   = Single round shield
   = Single flat shield
   = Double round shield
= 2 shield (other)
   = Triax-round shield
    = Triax-other
    = Composite shield
    = Core only
0
    = Other
                                                         5026A13
Jacket: -
                                     = Spec 55
= Flexline
    = General purpose PVF2 6
    = Outer space PVF2
   = Thermorad
                                 8
                                    = Zerohal
    = FEP
                                     = None
   = Uncross-linked ETFE
                                 0 = Other
                                                         5026A131
Dielectric:
   = Rayfoam L 4 = FEP (solid)
= Rayfoam H 6 = Spec 55 (modified XL-ETFE)
   = Rayolin F
                    0 = Other
                                                         5026A1314
Conductor Type:

1 = Tin-plated copper
2 = Silver-plated copper

    Nickel-plated copper
    Silver-plated high-strength copper alloy
    Nickel-plated high-strength copper alloy

    = Tin-plated copper-clad steel
    Silver-plated copper-clad steelBare copper
    = CS95
                                                         5026A1314-0
Jacket Colour:
    = Black
                         = Blue
    = Brown
                     7
8
                         = Violet
    = Red
                        = Grey
3
    = Orange
                         = White
    = Yellow
                     9X = Transparent white
    = Green
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Note: Users should independently evaluate the suitability of the product for their application. For further information please contact us.



High performance alternatives to standard cables

Alternatives to RG cables

RG/U	Alternatives	Comments		
4	5020A3311-0	Small, light		
4	5018D3311-0	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		
	5020A3311-0	Small, light		
55	5018D3311-0	Improved electricals		
	5021D1331-0	Dimensionally similar		
58	5020A1311-0	Small, light		
	5018A1311-0	Improved electricals		
	7523D1331-0	Dimensionally similar		
59	7524A1311-0	Small, light		
	7520A1311-0	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		
1.40	5019D3318-0	Small, light		
142	5018D3311-0	Improved electricals		
144	7518A1311-0	Small, light		
149	7518A1311-0	Small, light		

RG/U	Alternatives	Comments		
159	5020A1311-0	Small, light		
174	5026A1311-0	Small, light		
	5024A1311-0	Improved electricals		
178	5030A1317-0	Small, light		
	5028A1317-0	Improved electricals		
179	7530A1317-0	Small, light		
	7528A1317-0	Improved electricals		
180	9530E1014-0	Small, light		
	9527A1318-9	Improved electricals		
188	5026A1311-0	Small, light		
	5024A1311-0	Improved electricals		
210	9524A1311-0	Small, light		
213	5012E1339-0	Dimensionally similar		
214	5012A3311-0	Small, light		
000	5019D3318-0	Small, light		
223	5018D3311-0	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	Small, light		
	5024A1311-0	Improved electricals		
393	5012A3311-0	Small, light		
400	5020A3311-0	Small, light		
400	5018D3311-0	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.

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
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.

