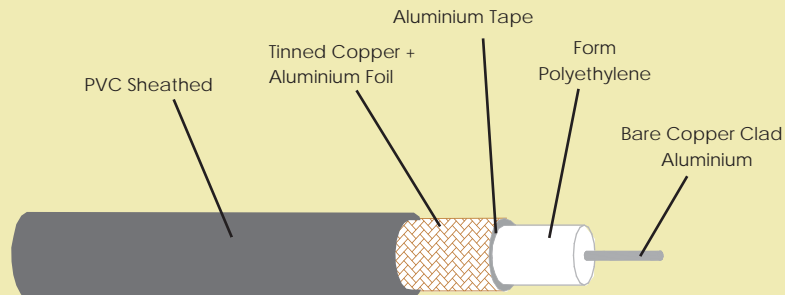


## COAXIAL CABLE

### ::: RG 8 (Wireless RF Grade) :::



| Mechanical Specification       |                              |           |                            | Electrical Specification                     |                      |           |
|--------------------------------|------------------------------|-----------|----------------------------|--|----------------------|-----------|
| Minimum bend radius            | 10 in                        | 25.4 mm   | Cut off frequency          | 16.2 GHz*                                    |                      |           |
| Bending moment                 | 0.5 ft lbs                   | 0.68 N-m  | Velocity of propagation    | 85%  |                      |           |
| Weight                         | 0.068 lbs/ft                 | 0.10 kg/m | Voltage withstand          | 2500 VDC                                     |                      |           |
| Tensile strength               | 160 lbs                      | 72.6 kg   | Peak power                 | 16kW   |                      |           |
| Flat plate crush               | 40 lb/in                     | 0.71 g/mm | DC resistance              |  |                      |           |
| Environment Specification      |                              |           |                            | Inner conductor, ohms                        | 1.39/1000            | 4.56/km   |
|                                | °F                           | °C        | Outer conductor, ohms      | 1.65/1000                                    | 5.41/km              |           |
| Installation temperature range | -40/+185                     | -40/+85   | Jacket spark               | 8000 VRMS                                    |                      |           |
| Storage temperature range      | -94/+185                     | -70/+80   | Impedance                  | 50 Ohms                                      |                      |           |
| Operating temperature range    | 40/+185                      | -40/+85   | Capacitance                | 23.9 pF/ft                                   | 78.40 pF/m           |           |
| Construction Specification     |                              |           |                            | Inductance                                   | 0.060 uH/ft          | 0.20 uH/m |
| Part Designation               | Material                     | Inches    | mm                         | Shielding effectiveness                      | >90 dB               |           |
| Inner conductor                | Solic BCCAI                  | 0.108     | 2.74                       | Phase stability                              | < 10 ppm/°C          |           |
| Dielectric                     | Foam polyethylene            | 0.285     | 7.24                       | * Consult factory for application over 6 GHz |                      |           |
| Outer conductor                | Aluminium tape               | 0.291     | 7.39                       |  |                      |           |
| Overall braids                 | Tinned copper                | 0.32      | 8.13                       |  |                      |           |
| Standard jacket                | Black polyethylene           | 0.405     | 10.29                      |  |                      |           |
| Frequency<br>( MHz )           | Attenuation<br>( dB/100 ft ) |           | Attenuation<br>( dB/100m ) |  | Avg. Power<br>( kW ) |           |
| 30                             | 0.70                         |           | 2.1                        |  | 3.43                 |           |
| 50                             | 0.90                         |           | 2.8                        |  | 2.588                |           |
| 150                            | 1.50                         |           | 4.9                        |  | 1.428                |           |
| 220                            | 1.80                         |           | 6.0                        |  | 1.195                |           |
| 450                            | 2.70                         |           | 8.8                        |  | 0.817                |           |
| 900                            | 3.80                         |           | 12.6                       |  | 0.575                |           |
| 1500                           | 5.10                         |           | 16.6                       |  | 0.437                |           |
| 1800                           | 5.60                         |           | 18.5                       |  | 0.399                |           |
| 2000                           | 6.00                         |           | 19.6                       |  | 0.375                |           |
| 2500                           | 6.70                         |           | 22.0                       |  | 0.334                |           |
| 3000                           | 7.50                         |           | 24.4                       |  | 0.305                |           |
| 4500                           | 9.50                         |           | 31.1                       |  | 0.247                |           |
| 5800                           | 11.10                        |           | 36.4                       |  | 0.217                |           |
| 6000                           | 11.40                        |           | 37.3                       |  | 0.213                |           |