

# Wideband Coaxial Cables

## RF12(1/2")

### Construction

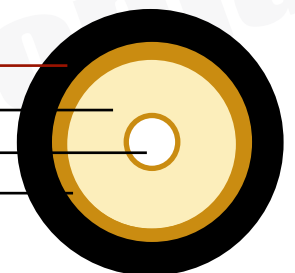
|                 |                       |           |
|-----------------|-----------------------|-----------|
| Inner conductor | Copper clad Aluminium | Φ4.83 mm  |
| Dielectric      | Foam PE               | Φ12.95 mm |
| Outer conductor | Corrugated copper     | Φ13.97 mm |
| Sheath          | PE/LSOH               | Φ15.88 mm |

### Electrical & Mechanical Characteristics

|                                |                |
|--------------------------------|----------------|
| Impedance                      | 50±3 Ohm       |
| Nominal capacitance            | 76 pF/m        |
| Velocity of propagation        | 88%            |
| Insulation resistance          | >5000 Mohm.Km  |
| Inner conductor resistance     | 1.48 Ohm/Km    |
| Outer conductor resistance     | 1.90 Ohm/Km    |
| Installation temperature range | -40°C - +60 °C |
| Operating temperature range    | -55°C - +85°C  |
| Test voltage                   | 4 KV           |
| Cable weight (approx.)         | 220 kg/km      |
| Operating Frequency Band       | 1 – 8800 MHz   |
| Screening effectiveness        | >120dB         |



PE/LSOH sheath  
Foam PE dielectric  
Copper clad Aluminum inner conductor  
Corrugated copper tube



### Attenuation

| Frequency (MHz) | Attenuation (dB/100m) | Attenuation (dB/100ft) | Frequency (MHz) | Attenuation (dB/100m) | Attenuation (dB/100ft) |
|-----------------|-----------------------|------------------------|-----------------|-----------------------|------------------------|
| 10              | 0.67                  | 0.20                   | 1800            | 10.06                 | 3.07                   |
| 100             | 2.17                  | 0.66                   | 2000            | 10.67                 | 3.25                   |
| 150             | 2.67                  | 0.81                   | 2100            | 10.96                 | 3.34                   |
| 200             | 3.10                  | 0.95                   | 2200            | 11.25                 | 3.43                   |
| 300             | 3.84                  | 1.17                   | 2300            | 11.54                 | 3.52                   |
| 450             | 4.75                  | 1.45                   | 2500            | 12.09                 | 3.69                   |
| 500             | 5.02                  | 1.53                   | 2700            | 12.63                 | 3.85                   |
| 700             | 6.01                  | 1.83                   | 3000            | 13.41                 | 4.09                   |
| 800             | 6.46                  | 1.97                   | 4000            | 15.82                 | 4.82                   |
| 900             | 6.86                  | 2.09                   | 5000            | 18.01                 | 5.49                   |
| 1000            | 7.28                  | 2.22                   | 6000            | 20.06                 | 6.12                   |
| 1500            | 9.09                  | 2.77                   | 8000            | 23.82                 | 7.26                   |
| 1700            | 9.74                  | 2.97                   | 8800            | 25.24                 | 7.70                   |

### Return Loss

|               |        |
|---------------|--------|
| 806-960 MHz   | 24.3dB |
| 1700-2000 MHz | 24.3dB |