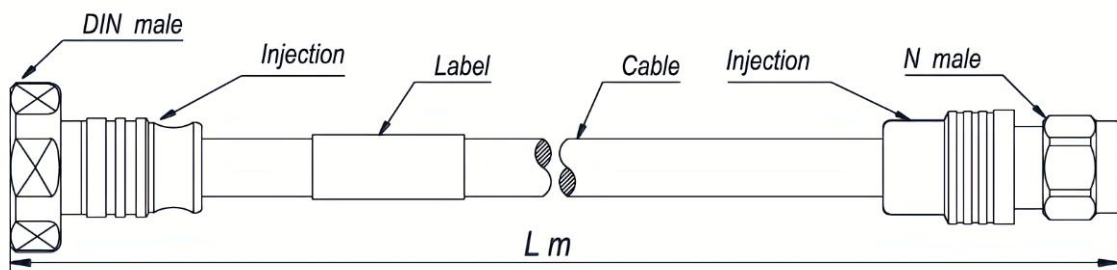




RF cable assembly, 1/4 in super-flexible coaxial cable with FRNC jacket, 7/16 DIN male to N male.



General Specifications

| | |
|-------------------------|---|
| Flexibility | Super-flexible |
| Jacket Color | Black |
| Performance Note | Attenuation guaranteed within the tolerance $\pm 10\%$ |
| Structure Note | Dimension guaranteed within the tolerance $\pm 1\%$ |
| Nominal Cable Size | 1/4 in |
| Connector 1 | 7/16 DIN male |
| Connector 2 | N male |
| Frequency Band | DC - 4 GHz |
| Insertion Loss | Cable loss + Connector loss ($0.1 \cdot \sqrt{FGHz}$) |
| Return Loss | $\leq -28\text{dB}$ @DC-1GHz $\leq -26\text{dB}$ @1.0-2.2GHz $\leq -23\text{dB}$ @2.2-3.0GHz $\leq -22\text{dB}$ @3.0-3.8GHz |
| PIM (900MHz, 3rd Order) | $\leq -160\text{dBc}$ @ $2 \times 43\text{dBm}$ |
| Impedance | 50 ohms ± 1 ohm |

Cable Specifications

| | |
|-----------------------------|------------|
| Maximum Available Frequency | 20.4 GHz |
| Cut-off Frequency | 25 GHz |
| Velocity Ratio | 82% |
| Peak Power | 8.2 kW |
| Insulation Resistance | 3000 MΩ·km |
| DC Breakdown Voltage | 1600 V |
| Nominal Capacitance | 80 pF/m |
| Nominal Inductance | 0.195 μH/m |

Cable Material

| | |
|-----------------|--------------------------------|
| Inner Conductor | Copper-Clad Aluminum Wire |
| Dielectric | Physical Foam Polyethylene |
| Outer Conductor | Helical Corrugated Copper Tube |
| Jacket | FRNC |

Attenuations

| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Average Power (kW) |
|-----------------|------------------------|-------------------------|--------------------|
| 0.5 | 0.40 | 0.12 | 6.40 |
| 1 | 0.57 | 0.17 | 6.40 |
| 1.5 | 0.70 | 0.21 | 6.40 |
| 2 | 0.81 | 0.25 | 6.40 |
| 10 | 1.81 | 0.55 | 3.97 |
| 20 | 2.57 | 0.78 | 2.80 |
| 30 | 3.16 | 0.96 | 2.28 |
| 50 | 4.10 | 1.25 | 1.76 |
| 88 | 5.15 | 1.57 | 1.32 |
| 100 | 5.52 | 1.68 | 1.13 |
| 108 | 6.07 | 1.85 | 1.01 |
| 150 | 7.18 | 2.19 | 1.00 |
| 174 | 7.74 | 2.36 | 0.93 |
| 200 | 8.33 | 2.54 | 0.87 |
| 300 | 10.31 | 3.14 | 0.70 |

| | | | |
|------|-------|-------|------|
| 400 | 11.98 | 3.65 | 0.60 |
| 450 | 12.21 | 3.72 | 0.52 |
| 500 | 13.37 | 4.08 | 0.51 |
| 512 | 13.56 | 4.13 | 0.50 |
| 600 | 14.75 | 4.50 | 0.45 |
| 700 | 16.04 | 4.89 | 0.45 |
| 800 | 17.23 | 5.25 | 0.42 |
| 824 | 17.43 | 5.31 | 0.41 |
| 900 | 17.76 | 5.41 | 0.37 |
| 960 | 18.91 | 5.76 | 0.37 |
| 1000 | 19.41 | 5.92 | 0.37 |
| 1250 | 21.78 | 6.64 | 0.30 |
| 1500 | 24.06 | 7.33 | 0.28 |
| 1700 | 25.74 | 7.85 | 0.28 |
| 1800 | 26.08 | 7.95 | 0.25 |
| 2000 | 28.22 | 8.60 | 0.25 |
| 2100 | 28.91 | 8.81 | 0.24 |
| 2200 | 29.70 | 9.05 | 0.24 |
| 2400 | 31.42 | 9.58 | 0.21 |
| 3000 | 34.89 | 10.63 | 0.19 |
| 4000 | 41.39 | 12.62 | 0.17 |
| 6000 | 52.18 | 15.90 | 0.14 |
| 8000 | 61.78 | 18.83 | 0.12 |

Return Loss / VSWR

| Frequency Band | VSWR | Return Loss (dB) | Tolerance |
|----------------|------|------------------|-----------|
| DC-1.0GHz | 1.08 | 28.3 | 5% |
| 1.0-2.2GHz | 1.12 | 24.9 | 5% |
| 2.2-3.0GHz | 1.15 | 23.1 | 5% |
| 3.0-3.8GHz | 1.17 | 22.1 | 5% |

Mechanical Specifications

| | |
|-----------------------------|--|
| Bend Protection | Molding |
| Label | Wrap Sticker |
| Bending Radius (Single) | ≥12 mm |
| Bending Radius (Repeated) | ≥25 mm |
| Number of Bending (Typical) | ≤9 |
| Tensile Strength | 680N |
| Connector Tightening Torque | ≤30N.m for 7/16 DIN Type ≤8N.m for 4.3-10 Type ≤8N.m for mini-DIN Type ≤1.5N.m for N Type ≤1.8N.m for NEX10 Type |
| Unit Packing | 1pcs in PE bag |
| Package Packing | Quality Carton |

Environmental Specifications

| | |
|--------------------------|----------------------------------|
| Installation Temperature | -20 °C to +55 °C |
| Operating Temperature | -20 °C to +85 °C |
| Storage Temperature | -25 °C to +85 °C |
| Relative Humidity | 5% - 95% |
| IP Rating | Mated IP68, 1m, 1.5hrs, 20 deg-C |

Regulatory Compliances

| | |
|---------------|-----------|
| ISO 9001:2015 | Compliant |
| ROHS | Compliant |
| China RoHS | Compliant |
| UK RoHS | Compliant |
| REACH | Compliant |
| EU/CE | Compliant |

In the effort to improve our products, we reserve the right to make changes judged to be necessary. While the information has been carefully compiled to the best of our knowledge, but nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. The information contained in this document is subject to change without notice.