

High Performance Flexible Cable

Cable Type 51

- Type 51H is used for high-power requirements -
Type 51 is used for low receive power

DC - 18.00 GHz

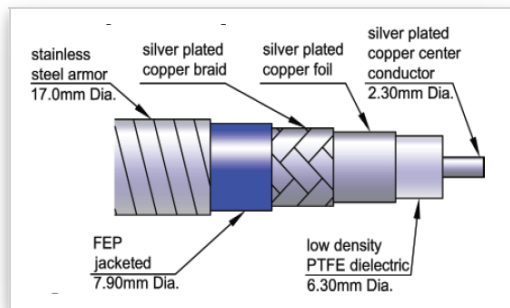
Specifications

| Cable Code | Standard | None |
|--|---|-----------------------------|
| | Armored | None |
| Frequency Range | DC - 18.00 GHz | |
| Outer Diameter [mm] | 17.00 | |
| Impedance [Ohms] (@ sea level and +25°C) | 50 ± 2 | |
| Velocity of Propagation [% , ± 2%] | 84.00 | |
| Capacitance [pF/m] | 79.00 | |
| Dielectric Strength (60 Hz) [KV rms] | 6.00 | |
| Max. Operating Voltage (60 Hz, @ sea level) [KV rms] | 1.50 | |
| Nominal Insertion Loss vs. Frequency [dB/m] | 0.50 GHz | 0.12 |
| | 2.00 GHz | 0.23 |
| | 4.00 GHz | 0.32 |
| | 8.00 GHz | 0.45 |
| | 12.40 GHz | 0.54 |
| | 18.00 GHz | 0.66 |
| Nominal CW Power vs. Frequency (@ sea level and +20°C) [Watts] | 0.50 GHz | 2760.00 |
| | 2.00 GHz | 1300.00 |
| | 4.00 GHz | 900.00 |
| | 8.00 GHz | 618.00 |
| | 12.40 GHz | 496.00 |
| | 18.00 GHz | 400.00 |
| RF Leakage @ 9.5 GHz | -90 @ 18.0 GHz dbc | |
| Operating Temperature Range | -65 to +125 | |
| Center Conductor | Material | Solid Copper, silver-plated |
| | Diameter [mm] | 2.30 |
| Dielectric | Material | low-density PTFE |
| | Diameter [mm] | 6.30 |
| | Dielectric Constant | 1.4 |
| Outer Conductor Construction | silver-plated copper foil, silver-plated copper braid | |
| Outer Jacket | FEP, Stainless Steel Armor, Silicone jacketed | |
| Weight [grams/m] | 640.00 | |
| Connector Retention Force [N] | 250.00 | |
| Minimum Bend Radius, Inside, Static [mm] | 70.00 | |
| Minimum Bend Radius, Inside, Dynamic [mm] | 350.00 | |

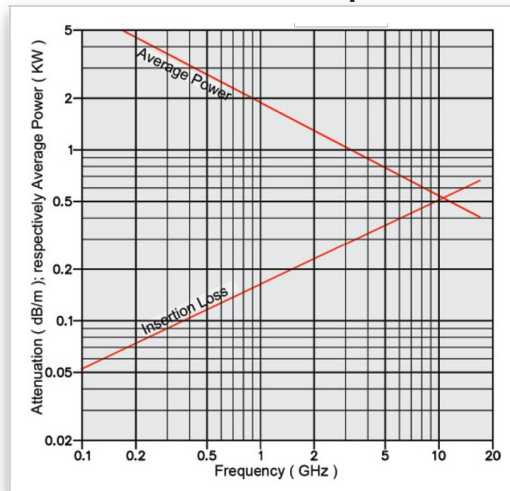
Characteristics:

- Ultra-low loss to 18.0 GHz
- The ideal receive cable (Type 51); Transmit cable (Type 51H)
- Most rugged construction due to heavy armor: Assemblies to 10 m length will use cotton woven stainless steel spring, silicone jacketed. Longer assemblies will use interlaced stainless steel spiral, polyolefin jacketed.
- Meeting the very highest quality standard as needed for crucial applications in harsh environment
- Procurement for completely terminated assemblies, fully tested. The test documentation for VSWR and Insertion Loss will be supplied with the cable assembly
- Available Connectors: 7/16, C, HN, N, SC, SMA and TNC

Cross Section View:



Attenuation & Power Graph:



Spectrum Elektrotechnik GmbH | Olschewskibogen 1 | 80935 Munich, Germany

www.spectrum-et.com | sales@spectrum-et.com | +49 (0)89 / 354 804-0 | +49 (0)89 / 354 804-90

Specifications are subject to change without notice.