



## 1-1/4" CELLFLEX® Premium Attenuation Ultraflexible Low-Loss Foam-Dielectric Coaxial Cable

**Product Description**

CELLFLEX®1-1/4" premium attenuation low loss Ultraflexible cable

Application: Main feed line, Riser-rated In-Building



1-1/4" CELLFLEX® Low-Loss Ultraflexible Foam Dielectric Coaxial Cable

**Features/Benefits**

- Ultra Low Attenuation**  
 The further reduced attenuation of CELLFLEX® premium attenuation coaxial cable results in extremely efficient signal transfer in your RF system, especially at high frequencies.
- Complete Shielding**  
 The solid outer conductor of CELLFLEX® coaxial cable creates a continuous RFI/EMI shield that minimizes system interference.
- Low VSWR**  
 Special low VSWR versions of CELLFLEX® coaxial cables contribute to low system noise.
- Outstanding Intermodulation Performance**  
 CELLFLEX® coaxial cable's solid inner and outer conductors virtually eliminate intermods. Intermodulation performance is also confirmed with state-of-the-art equipment at the RFS factory.
- High Power Rating**  
 Due to their low attenuation, outstanding heat transfer properties and temperature stabilized dielectric materials, CELLFLEX® cable provides safe long term operating life at high transmit power levels.
- Wide Range of Application**  
 Typical areas of application are: feedlines for broadcast and terrestrial microwave antennas, wireless cellular, PCS and ESMR base stations, cabling of antenna arrays, and radio equipment interconnects.

**Technical Features****Structure**

Inner conductor:	Corrugated Copper Tube	[mm (in)]	13.8 (0.55)
Dielectric:	Foam Polyethylene	[mm (in)]	31 (1.22)
Outer conductor:	Corrugated Copper	[mm (in)]	36 (1.42)
Jacket:	Polyethylene, PE, Metalhydroxite Filling	[mm (in)]	39 (1.54)

**Mechanical Properties**

Weight, approximately	[kg/m (lb/ft)]	0.79 (0.53)
Minimum bending radius, single bending	[mm (in)]	150 (6)
Minimum bending radius, repeated bending	[mm (in)]	250 (10)
Bending moment	[Nm (lb-ft)]	36 (25.6)
Max. tensile force	[N (lb)]	2900 (650)
Recommended / maximum clamp spacing	[m (ft)]	1 / 1.2 (3.25 / 4)

**Electrical Properties**

Characteristic impedance	[Ω]	50 +/- 1
Relative propagation velocity	[%]	89
Capacitance	[pF/m (pF/ft)]	75 (22.9)
Inductance	[μH/m (μH/ft)]	0.184 (0.056)
Max. operating frequency	[GHz]	3.3
Jacket spark test RMS	[V]	10000
Peak power rating	[kW]	178
RF Peak voltage rating	[V]	4200
DC-resistance inner conductor	[Ω/km (Ω/1000ft)]	1.94 (0.59)
DC-resistance outer conductor	[Ω/km (Ω/1000ft)]	0.55 (0.17)

**Recommended Temperature Range**

Storage temperature	[°C (°F)]	-70 to 85 (-94 to 185)
Installation temperature	[°C (°F)]	-25 to 60 (-13 to 140)
Operation temperature	[°C (°F)]	-50 to 85 (-58 to 185)

**Other Characteristics**

Fire Performance: Flame Retardant, LS0H

VSWR Performance: Premium for 698 - 794, 824 - 960, 1710 - 1755, 1850 - 1990, 2110 - 2155 MHz [dB (VSWR)] 24 (1.135)

Other Options: Phase stabilized and phase matched cables and assemblies are available upon request.