



CELLFLEX® 3/8" low loss flexible cable; flame retardant/ halogen free jacket

**FEATURES / BENEFITS**

• **Low Attenuation**

The low attenuation of CELLFLEX® coaxial cable results in highly efficient signal transfer in your RF system.

• **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 cables 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.

• **Meets/Exceeds:** IEC 60754-1, -2; IEC 60332-1-1; IEC 61034-1, -2; IEC 60332-3-24; EN45545-2



3/8" CELLFLEX® Low-Loss Foam Dielectric Coaxial Cable

**Technical features**

**APPLICATIONS**

<b>Applications</b>	Indoor, Wireless Communication, HF Defense, Microwave, Mobile Radio, Cable Solutions
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**STRUCTURE**

<b>Cable Type</b>		Foam-Dielectric, Corrugated
<b>Size</b>		3/8
<b>Inner Conductor Diameter</b>	mm (in)	3.1 (0.12)
<b>Inner Conductor Material</b>		Copper-Clad Aluminum Wire
<b>Dielectric Diameter</b>	mm (in)	7.2 (0.28)
<b>Dielectric Material</b>		Foam Polyethylene
<b>Outer Conductor Diameter</b>	mm (in)	9.5 (0.37)
<b>Outer Conductor Material</b>		Corrugated Copper
<b>Jacket Diameter</b>	mm (in)	11.2 (0.44)
<b>Jacket Material</b>		Black Polyethylene, Metalhydroxite Filling

**TESTING AND ENVIRONMENTAL**

<b>Fire Performance</b>		Flame Retardant, LSOH
<b>Installation Temperature</b>	°C(°F)	-25 to 60 (-13 to 140)
<b>Storage Temperature</b>	°C (°F)	-70 to 85 (-94 to 185)
<b>Operation Temperature</b>	°C(°F)	-50 to 85 (-58 to 185)



**ELECTRICAL SPECIFICATIONS**

Impedance	Ω	50 +/- 1.5
Maximum Frequency	GHz	13.5
Velocity	%	88
Capacitance	pF/m (pF/ft)	76 (23.2)
Inductance	uH/m (uH/ft)	0.19 (0.058)
Peak Power Rating	kW	15.4
RF Peak Voltage	Volts	1240
Jacket Spark	Volt RMS	5000
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	3.8 (1.16)
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	2.9 (0.88)
Return Loss (VSWR) Performance		Standard 20dB (1.222) / Premium 23/24dB (1.152/1.135) on specified frequencies
Phase Stabilized		Phase stabilized and phase matched cables and assemblies are available upon request.

**MECHANICAL SPECIFICATIONS**

Cable Weight, Nominal	kg/m (lb/ft)	0.12 (0.08)
Minimum Bending Radius, Single Bend	mm (in)	50 (2)
Minimum Bending Radius, Repeated Bends	mm (in)	95 (4)
Bending Moment	Nm (lb-ft)	1.9 (1.4)
Tensile Strength	N (lb)	530 (119)
Recommended / Maximum Clamp Spacing	m (ft)	0.5 / 1 (1.75 / 3.25)

**ATTENUATION @ 20°C (68°F) AND POWER RATING @ 40°C (104°F)**

Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
100	3.43	1.04	2.12
200	4.89	1.49	1.48
450	7.44	2.27	0.98
700	9.38	2.86	0.77
800	10.10	3.07	0.72
900	10.70	3.27	0.68
1800	15.50	4.74	0.47
2000	16.50	5.01	0.44
2200	17.30	5.28	0.42
2400	18.20	5.54	0.40
3000	20.50	6.26	0.35
3500	22.40	6.82	0.32
4000	24.10	7.35	0.30
5000	27.40	8.34	0.27
13500	48.80	14.90	0.15



External Document Links

Notes