



CELLFLEX® 1-1/4" SERIES "A" low loss ultraflexible cable

FEATURES / BENEFITS

- **It represents a light-weight transmission line solution**
The light weight of CELLFLEX® Lite coaxial cable results in reduced work-force and lifting gear.
- **It is easy to transport, handle and install**
CELLFLEX® Lite coaxial cables enable savings in shipping cost.
- **It exhibits a cost-effective alternative to copper transmission line**
CELLFLEX® Lite coaxial cable helps to reduce CAPEX spending.
- **It offers a user-friendly compatibility with RFS's existing range of accessories**
CELLFLEX® Lite coaxial cable requires less inventory additions, thus reduced OPEX.
- **It enables trouble-free installation and operation**
CELLFLEX® Lite coaxial cable avoids downtime and reduces OPEX.
- **The attenuation is comparable to the industry standard in traditional cable**
CELLFLEX® Lite coaxial cable maintains uncompromised coverage.
- **Connectors exhibit low and stable intermodulation performance**
CELLFLEX® Lite coaxial cable exceeds present PIM standards ensuring no dropped calls.
- **It is available with UV-resistant polyethylene or flame-retardant jackets**
CELLFLEX® Lite coaxial cable can be used outside and in indoor applications where restrictions apply.
- **It exceeds industry standard for return loss performance**
CELLFLEX® Lite coaxial cable means zero risk in network planning.



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

Technical features

APPLICATIONS

Applications		Wireless Communication	TV & Radio	HF Defense	Mobile Radio	Cable Solutions
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STRUCTURE

Cable Type		Foam-Dielectric, Ultraflexible
Size		1-1/4
Jacket Option		Black
Inner Conductor	mm (in)	13.8 (0.55)
Dielectric	mm (in)	31 (1.22)
Outer Conductor	mm (in)	36 (1.42)
Jacket	mm (in)	39 (1.54)

TESTING AND ENVIRONMENTAL

Fire Performance		Halogene Free
Installation Temperature	°C(°F)	-40 to 60 (-40 to 140)
Storage Temperature	°C(°F)	-70 to 85 (-94 to 185)
Operation Temperature	°C(°F)	-50 to 85 (-58 to 185)



ELECTRICAL SPECIFICATIONS

Impedance, Ohm	Ω	50 +/- 1
Maximum Frequency	GHz	3.6
Velocity, percent	%	89
Capacitance	pF/m (pF/ft)	75 (22.9)
Inductance, uH/m (uH/ft)	μH/m (μH/ft)	0.184 (0.056)
Peak Power Rating	kW	178
RF Peak Voltage	Volts	4200
Jacket Spark	Volt RMS	10000
Inner Conductor dc Resistance, Ω/km (Ω/kft)	Ω/1000 m (Ω/1000 ft)	1.94 (0.59)
Outer Conductor dc Resistance, ohm/1000 m (Ohm/1000 ft)	Ω/1000 m (Ω/1000 ft)	0.9 (0.27)
Return Loss (VSWR) Performance		Standard
Min. Return Loss (Max. VSWR)	dB (VSWR)	Contact RFS for your VSWR performance specification for your required frequency band.
Phase Stabilized		Phase stabilized and phase matched cables and assemblies are available upon request.
Temperature & Power		Standard

MECHANICAL SPECIFICATIONS

Cable Weight, Nominal	kg/m (lb/ft)	0.59 (0.4)
Minimum Bending Radius, Single Bend	mm (in)	150 (6)
Minimum Bending Radius, Repeated Bends	mm (in)	250 (10)
Bending Moment, Nm (lb-ft)	Nm (lb*ft)	22 (16.2)
Tensile Strength	N (lb)	1850 (416)
Recommended / Maximum Clamp Spacing	m (ft)	1 / 1.2 (3.25 / 4)



ATTENUATION AND POWER RATING

Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
0.5	0.07	0.02	143
1	0.10	0.03	102
1.5	0.12	0.04	82.90
2	0.14	0.04	71.40
10	0.32	0.10	31.80
20	0.46	0.14	22.40
30	0.56	0.17	18.30
50	0.73	0.22	14.10
88	0.98	0.30	10.50
100	1.04	0.32	9.88
108	1.08	0.33	9.52
150	1.28	0.39	8.03
174	1.39	0.42	7.40
200	1.49	0.46	6.90
300	1.84	0.56	5.59
400	2.14	0.65	4.80
450	2.28	0.70	4.51
500	2.41	0.74	4.27
512	2.44	0.75	4.21
600	2.66	0.81	3.86
700	2.89	0.88	3.56
750	3	0.91	3.43
800	3.10	0.95	3.32
824	3.15	0.96	3.26
894	3.30	1	3.12
900	3.31	1.01	3.11
925	3.36	1.02	3.06
960	3.43	1.04	3
1000	3.50	1.07	2.94
1250	3.96	1.21	2.60
1400	4.21	1.28	2.44
1500	4.37	1.33	2.35
1900	4.99	1.52	2.06
2000	5.13	1.56	2
2100	5.27	1.61	1.95
2200	5.41	1.65	1.90
2400	5.68	1.73	1.81
2500	5.82	1.77	1.77
2600	5.95	1.81	1.73
2700	6.07	1.85	1.69



3000	6.45	1.97	1.59
3300	6.81	2.08	1.51
3600	7.16	2.18	1.44

External Document Links

Notes