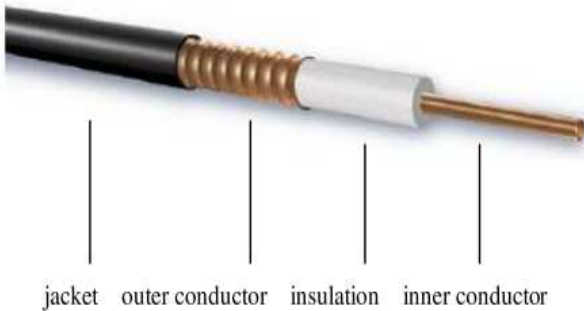


Hwa Yao Technologies Co., Ltd



1/2" Flexible RF Coaxial Cable LLC 1 / 2



SPECIFICATIONS:

Construction		
Inner conductor	Material	CCA
	Diameter (mm)	4.80±0.05
Insulation	Material	Foamed PE
	Diameter (mm)	12.15±0.2
Outer conductor	Material	Annular corrugated copper tube
	Diameter (mm)	13.9±0.15
Jacket	Material	LLDPE or fire-retardant PE
	Min.thickness (mm)	> 0.8
	Diameter (mm)	15.7±0.2
Mechanical Characteristics		
Bending radius (mm)	Single bend	50
	Repeated bend	125
Tensile strength (N)		1050
Cable weight (kg/km)		200
Recommended temperature (°C)	Storage	-70~+85
	Installation	-40~+60
	Operating	-55~+85

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- Products meet the RoHS requirement, and according to the requirements of RoHS, you can see the RoHS mark on the outside package

Note :

For fire-retardant jack-tar cable , recommended temperature :

Storage : -30°C~+80°C

Installation : -25°C~+60°C

Operating temperature : -30°C~+80°C

Electrical Characteristics		
Inner conductor DC resistance (Ω/km)		1.62
Outer conductor DC resistance (Ω/km)		2.90
Characteristic impedance (Ω)		50±1
Capacitance (p F/m)		76
Velocity (%)		88
Dielectric strength (KV)		6.0
Insulation resistance (MΩ/km)		> 1×10 ⁴
Peak power rating (KV)		40
Peak voltage (V)		1800
Attenuation and Average power (Maximum attenuation value shall be 105% of the nominal attenuation value)		
Frequency (MHz)	Attenuation (@20°C , d B/100m)	Average power (kv)
200	3.11	2.45
450	4.75	1.59
800	6.46	1.17
900	6.86	1.10
1000	7.29	1.04
1500	9.68	0.96
1800	10.10	0.75
2000	10.72	0.71
2200	11.25	0.68
2500	12.13	0.63
3000	13.41	0.58
VSWR		
800MHz~1000MHz		1.10
1700MHz~2500MHz		1.13
2500MHz~3000MHz		1.15

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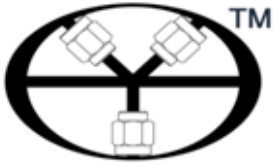
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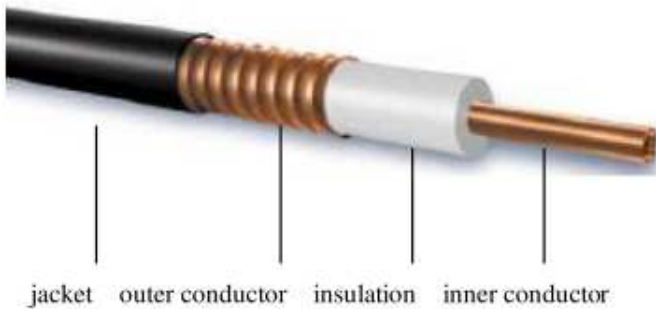
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Hwa Yao Technologies Co., Ltd



7/8" Flexible RF Coaxial Cable LLC 7/8



SPECIFICATIONS:

Construction		
Inner conductor	Material	Copper tube
	Diameter (mm)	9.0±0.10
Insulation	Material	Foamed PE
	Diameter (mm)	22.4±0.20
Outer conductor	Material	Annular corrugated copper tube
	Diameter (mm)	24.9±0.20
Jacket	Material	LLDPE or fire-retardant PE
	Min.thickness (mm)	> 1.1
	Diameter (mm)	27.5±0.25
Mechanical Characteristics		
Bending radius (mm)	Single bend	120
	Repeated bend	250
Tensile strength (N)		1400
Cable weight (kg/km)		400
Recommended temperature (°C)	Storage	-70~+85
	Installation	-40~+60
	Operating	-55~+85

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- Products meet the RoHS requirement, and according to the requirements of RoHS, you can see the RoHS mark on the outside package

Note :

For fire-retardant jack-tar cable , recommended temperature :

Storage : -30°C~+80°C

Installation : -25°C~+60°C

Operating temperature : -30°C~+80°C

Electrical Characteristics		
Inner conductor DC resistance (Ω/km)	1.20	
Outer conductor DC resistance (Ω/km)	1.26	
Characteristic impedance (Ω)	50±1	
Capacitance (p F/m)	76	
Velocity (%)	88	
Dielectric strength (KV)	10.0	
Insulation resistance (MΩ/km)	> 1×10 ⁴	
Peak power rating (KV)	90	
Peak voltage (V)	3200	
Cut-off frequency (GHz)	5.2	
Attenuation and Average power (Maximum attenuation value shall be 105% of the nominal attenuation value)		
Frequency (MHz)	Attenuation (@20°C , d B/100m)	Average power (kv)
200	1.69	6.27
450	2.65	3.73
800	3.64	2.49
900	3.86	2.34
1000	4.13	2.19
1500	5.21	2.01
1800	5.76	1.73
2000	6.12	1.64
2200	6.46	1.40
2500	6.97	1.34
3000	7.76	1.16
VSWR		
800MHz~1000MHz	1.10	
1700MHz~2500MHz	1.13	
2500MHz~3000MHz	1.15	

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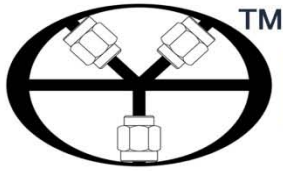
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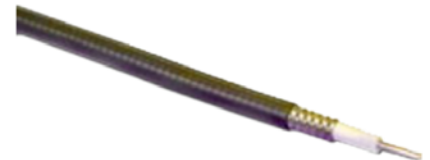
1/2" CELLFLEX® Low-Loss Foam-Dielectric Coaxial Cable

LCF 1/2

SPECIFICATIONS:

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 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.



1/2" CELLFLEX® Low-Loss Foam Dielectric Coaxial Cable

Technical Features

Structure

Inner conductor:	Copper-Clad Aluminum Wire	[mm (in)]	4.8 (0.19)
Dielectric:		[mm (in)]	11.3 (0.44)
Outer conductor:	Annularly Corrugated Copper	[mm (in)]	13.8 (0.54)
Jacket:	Polyethylene, PE	[mm (in)]	15.8 (0.62)

Mechanical Properties

Weight, approximately	[kg/m (lb/ft)]	0.22 (0.15)
Minimum bending radius, single bending	[mm (in)]	70 (3)
Minimum bending radius, repeated bending	[mm (in)]	125 (5)
Bending moment	[Nm (lb-ft)]	6.5 (4.79)
Max. tensile force	[N (lb)]	1100 (247)
Recommended / maximum clamp spacing	[m (ft)]	0.6 / 1.0 (2.0 / 3.25)

Electrical Properties

Characteristic impedance	[Ω]	50 +/- 1
Relative propagation velocity	[%]	88
Capacitance	[pF/m (pF/ft)]	76.0 (23.2)
Inductance	[μH/m (μH/ft)]	0.190 (0.058)
Max. operating frequency	[GHz]	8.8
Jacket spark test RMS	[V]	8000
Peak power rating	[kW]	38
RF Peak voltage rating	[V]	1950
DC-resistance inner conductor	[Ω/km (Ω/1000ft)]	1.57 (0.48)
DC-resistance outer conductor	[Ω/km (Ω/1000ft)]	2.30 (0.70)

Recommended Temperature Range

Storage temperature	[°C (°F)]	-70 to +85 (-94 to +185)
Installation temperature	[°C (°F)]	-40 to +60 (-40 to +140)
Operation temperature	[°C (°F)]	-50 to +85 (-58 to +185)

Other Characteristics

Fire Performance: Halogene Free

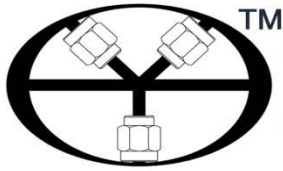
VSWR Performance: Standard [dB (VSWR)]

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

Contact RFS for your VSWR performance specification for your required frequency band.

Frequency [MHz]	Attenuation		Power [kW]
	[dB/100m]	[dB/100ft]	
0.5	0.149	0.0454	38.0
1.0	0.211	0.0643	38.0
1.5	0.258	0.0788	32.9
2.0	0.298	0.0910	28.5
10	0.67	0.204	12.7
20	0.95	0.290	8.93
30	1.17	0.356	7.27
50	1.51	0.462	5.61
88	2.02	0.616	4.20
100	2.16	0.658	3.94
108	2.24	0.684	3.78
150	2.66	0.810	3.20
174	2.87	0.875	2.96
200	3.08	0.940	2.75
300	3.81	1.16	2.23
400	4.43	1.35	1.92
450	4.71	1.44	1.80
500	4.98	1.52	1.71
512	5.04	1.54	1.69
600	5.48	1.67	1.55
700	5.95	1.81	1.43
800	6.39	1.95	1.33
824	6.49	1.98	1.31
894	6.78	2.07	1.25
900	6.80	2.07	1.25
925	6.90	2.10	1.23
960	7.04	2.15	1.21
1000	7.20	2.19	1.18
1250	8.12	2.48	1.05
1500	8.97	2.73	0.947
1700	9.6	2.93	0.884
1800	9.9	3.02	0.857
2000	10.5	3.20	0.809
2100	10.8	3.29	0.787
2200	11.1	3.38	0.767
2400	11.6	3.54	0.731
3000	13.2	4.01	0.645
3500	14.4	4.38	0.591
4000	15.5	4.72	0.548
5000	17.6	5.37	0.482
6000	19.6	5.97	0.434
7000	21.4	6.54	0.396
8000	23.2	7.07	0.366
8800	24.6	7.49	0.346

Attenuation at 20°C (68°F) cable temperature
Mean power rating at 40°C (104°F) ambient temperature



1/2" CELLFLEX® Superflexible Foam-Dielectric Coaxial Cable SCF 1/2

SPECIFICATIONS:

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 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:	Copper-Clad Aluminum Wire	[mm (in)]	3.6 (0.14)
Dielectric:		[mm (in)]	8.3 (0.33)
Outer conductor:	Corrugated Copper	[mm (in)]	12.3 (0.48)
Jacket:	Polyethylene, PE	[mm (in)]	13.7 (0.54)

Mechanical Properties

Weight, approximately		[kg/m (lb/ft)]	0.21 (0.14)
Minimum bending radius, single bending		[mm (in)]	
Minimum bending radius, repeated bending		[mm (in)]	33 (1.3)
Bending moment		[Nm (lb-ft)]	1.8 (1.33)
Max. tensile force		[N (lb)]	650 (146)
Recommended / maximum clamp spacing		[m (ft)]	0.30 / 0.30 (1.00 / 1.00)

Electrical Properties

Characteristic impedance		[Ω]	50 +/- 1
Relative propagation velocity		[%]	82
Capacitance		[pF/m (pF/ft)]	82.0 (25.0)
Inductance		[μH/m (μH/ft)]	0.207 (0.063)
Max. operating frequency		[GHz]	11.7
Jacket spark test RMS		[V]	5000
Peak power rating		[kW]	20.4
RF Peak voltage rating		[V]	1430
DC-resistance inner conductor		[Ω/km (Ω/1000ft)]	2.9 (0.88)
DC-resistance outer conductor		[Ω/km (Ω/1000ft)]	4.1 (1.25)

Recommended Temperature Range

Storage temperature		[°C (°F)]	-70 to +85 (-94 to +185)
Installation temperature		[°C (°F)]	-40 to +60 (-40 to +140)
Operation temperature		[°C (°F)]	-50 to +85 (-58 to +185)

Other Characteristics

Fire Performance: Halogene Free

VSWR Performance: Standard [dB (VSWR)] Contact RFS for your VSWR performance specification for your required frequency band.

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

Datasheet Revision

Revision: A0



Frequency [MHz]	Attenuation Table		Power [kW]
	[dB/100m]	[dB/100ft]	
0.5	0.229	0.0697	20.5
1.0	0.324	0.0986	20.5
1.5	0.397	0.121	20.5
2.0	0.458	0.140	18.8
10	1.03	0.314	8.37
20	1.46	0.446	5.90
30	1.80	0.548	4.80
50	2.33	0.710	3.70
88	3.11	0.949	2.77
100	3.33	1.01	2.59
108	3.46	1.05	2.49
150	4.10	1.25	2.10
174	4.43	1.35	1.95
200	4.76	1.45	1.81
300	5.89	1.79	1.46
400	6.85	2.09	1.26
450	7.29	2.22	1.18
500	7.71	2.35	1.12
512	7.81	2.38	1.10
600	8.50	2.59	1.01
700	9.23	2.81	0.934
800	9.92	3.02	0.869
824	10.1	3.07	0.855
894	10.5	3.21	0.818
900	10.6	3.22	0.815
925	10.7	3.27	0.803
960	11.0	3.34	0.787
1000	11.2	3.41	0.770
1250	12.7	3.86	0.682
1500	14.0	4.26	0.616
1700	15.0	4.57	0.575
1800	15.5	4.72	0.557
2000	16.4	5.01	0.525
2100	16.9	5.15	0.511
2200	17.3	5.28	0.498
2400	18.2	5.55	0.474
3000	20.7	6.30	0.417
3500	22.6	6.88	0.382
4000	24.4	7.4	0.353
5000	27.8	8.5	0.310
6000	31.0	9.4	0.278
7000	34.0	10.4	0.254
8000	36.8	11.2	0.234
9000	39.6	12.1	0.218
10000	42.3	12.9	0.204
11700	46.6	14.2	0.185

Attenuation at 20°C (68°F) cable temperature
Mean power rating at 40°C (104°F) ambient temperature