

## Low Loss Flexible Foam Dielectric Feeder

### Features



#### • Low Attenuation

The more improved attenuation of LHF coaxial cable series provides highly efficient transmission line for your RF system .

#### • Low VSWR

The low VSWR of LHF coaxial cable series should guarantees your RF system without noise.

#### • Complete Protection

The outer conductor of LHF coaxial cable series makes important contribution to minimized system interferences.

#### • High Power Rating

The HFC coaxial cable series provide not only hard durability but long period of life even in high power rating.

#### • Wide Range of Operating Frequency

Due to the wide range of operating frequency, LHF coaxial cable series can be applied to microwave antenna, broadcasting systems .

## Flexible Foam Dielectric Feeder

### Features



#### • Low Attenuation

The low attenuation of HFC coaxial cable series provides efficient transmission line for your RF system .

#### • Low VSWR

The low VSWR of HFC coaxial cable series should guarantees your RF system without noise.

#### • Complete Protection

The outer conductor of HFC coaxial cable series makes important contribution to minimized system interferences.

#### • High Power Rating

The HFC coaxial cable series provide not only hard durability but long period of life even in high power rating.

#### • Wide Range of Operating Frequency

Due to the wide range of operating frequency, HF SC coaxial cable series can be applied to microwave antenna, broadcasting systems , RF equipment interconnects, and wireless communication systems .

## Flexible Foam Dielectric Aluminum Feeder

### Features



- **Light-Weight, Cost-Efficient Transmission Line**

The HFAC aluminum coaxial cable series result in reduced work forces and costs.

- **Low Attenuation**

The low attenuation of HFAC aluminum coaxial cable series provides efficient transmission line for your RF system.

- **Low VSWR**

The low VSWR of HFAC aluminum coaxial cable series should guarantee your RF system without noise.

- **Complete Protection**

The outer conductor of HFAC aluminum coaxial cable series makes important contribution to minimized system interferences.

- **High Power Rating**

The HFAC aluminum coaxial cable series provide not only hard durability but long period of life even in high power rating.

- **Wide Range of Operating Frequency**

Due to the wide range of operating frequency, HFAC aluminum coaxial cable series can be applied to microwave antenna, broadcasting systems.

## Super Flexible Foam Dielectric Feeder

### Features



- **Low Attenuation**

The low attenuation of HFSC coaxial cable series provides efficient transmission line for your RF system.

- **Low VSWR**

The low VSWR of HFSC coaxial cable series should guarantee your RF system without noise.

- **Complete Protection**

The outer conductor of HFSC coaxial cable series makes important contribution to minimized system interferences.

- **High Power Rating**

The HFSC coaxial cable series provide not only hard durability but long period of life even in high power rating.

- **Wide Range of Operating Frequency**

Due to the wide range of operating frequency, HFSC coaxial cable series can be applied to microwave antenna, broadcasting systems.

## Feeder Cable

### LHF Series

### Low Loss Flexible Foam Dielectric Feeder



1/2"   
 LHF 12D / LHF-FR 12D



7/8"   
 LHF 22D / LHF-FR 22D



1-1/4"   
 LHF 33D / LHF-FR 33D



1-5/8"   
 LHF 42D / LHF-FR 42D

## Construction

		LHF 12D (1/2")	LHF 22D (7/8")	LHF 33D (1-1/4")	LHF 42D (1-5/8")
Inner Conductor	Material / Construction	Copper-Clad Aluminum Wire	Smooth Copper Tube	Smooth Copper Tube	Helically Corrugated Copper Tube
	Diameter (mm)	5.0	9.4	13.7	18.1
Dielectric	Material / Construction	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
	Diameter (mm)	12.5	23.0	33.6	43.5
Outer Conductor	Material / Construction	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube
	Diameter (mm)	14.2	25.2	36.4	46.5
Jacket Diameter	Standard Jacket (mm)	16.4	28.2	39.4	50.0
	Halogen-Free / Flame-Retardant Jacket (mm)	16.4	28.2	39.4	50.0

## Mechanical Characteristics

		LHF 12D (1/2")	LHF 22D (7/8")	LHF 33D (1-1/4")	LHF 42D (1-5/8")
Min. Bending Radius (mm)		125	250	380	500
Recommended Operating Temperature	Standard Jacket (°C)	-40 ~ +80	-40 ~ +80	-40 ~ +80	-40 ~ +80
	Halogen-Free / Flame-Retardant Jacket (°C)	-30 ~ +80	-30 ~ +80	-30 ~ +80	-30 ~ +80
Nominal Weight	Standard Jacket (kg/km)	244	501	915	1,068
	Halogen-Free / Flame-Retardant Jacket (kg/km)	262	529	963	1,147
Flat Plate Crush Resistance (kg/mm)		2.0	1.4	2.4	1.6
Max. Pulling Force (kg)		113	147	260	181

## Feeder Cable

## LHF Series

## Low Loss Flexible Foam Dielectric Feeder

### Electrical Characteristics

		LHF12D (1/2")	LHF22D (7/8")	LHF33D (1-1/4")	LHF42D (1-5/8")
DC Resistance ( $\Omega$ /1,000m ( $\Omega$ /1,000ft))	Inner Conductor	1.6 (0.5)	1.5 (0.5)	1.1 (0.3)	1.4 (0.4)
	Outer Conductor	1.9 (0.6)	1.9 (0.6)	1.0 (0.3)	0.6 (0.2)
Insulation Resistance (M $\Omega$ · km)		10,000	10,000	10,000	10,000
Dielectric Strength (for 1 Min.)		DC 4,000V	DC 6,000V	DC 10,000V	DC 11,000V
Velocity of Propagation (%)		89	89	89	89
Peak Power Rating (kW)		40	91	200	302
Max. Operating Frequency (GHz)		8.8	4.9	3.3	2.5
Characteristic Impedance ( $\Omega$ )		50	50	50	50
Return Loss (Typical Value) (dB)		28	28	28	28

### Attenuation(at 20 °C) & Average Power Rating(at Ambient 40°C, Inner Conductor 100°C)

Frequency (MHz)		LHF 12D (1/2")	LHF 22D (7/8")	LHF 33D (1-1/4")	LHF 42D (1-5/8")
Attenuation dB/100m (dB/100ft)	30	1.14 (0.35)	0.59 (0.18)	0.42 (0.13)	0.33 (0.10)
	100	2.12 (0.65)	1.13 (0.34)	0.79 (0.24)	0.64 (0.20)
	150	2.60 (0.79)	1.40 (0.43)	0.98 (0.30)	0.80 (0.24)
	450	4.58 (1.40)	2.52 (0.77)	1.77 (0.54)	1.48 (0.45)
	824	6.31 (1.92)	3.51 (1.07)	2.49 (0.76)	2.11 (0.64)
	894	6.55 (2.00)	3.67 (1.12)	2.61 (0.80)	2.20 (0.67)
	960	6.84 (2.08)	3.82 (1.16)	2.72 (0.83)	2.31 (0.70)
	1,000	7.00 (2.13)	3.92 (1.19)	2.79 (0.85)	2.38 (0.73)
	1,700	9.32 (2.84)	5.29 (1.61)	3.84 (1.17)	3.28 (1.00)
	1,800	9.61 (2.93)	5.47 (1.67)	3.97 (1.21)	3.40 (1.04)
	2,000	10.19 (3.11)	5.81 (1.77)	4.25 (1.30)	3.63 (1.11)
	2,400	11.10 (3.38)	6.46 (1.97)	4.73 (1.44)	4.05 (1.23)
	2,700	12.53 (3.73)	6.88 (2.10)	5.11 (1.56)	4.18 (1.27)
	3,000	12.96 (3.95)	7.37 (2.25)	5.43 (1.66)	-
	3,500	13.92 (4.24)	8.08 (2.46)	-	-
	4,000	15.27 (4.65)	8.75 (2.67)	-	-
	5,000	17.15 (5.23)	9.99 (3.04)	-	-
Average Power Rating (kW)	30	6.10	13.58	21.30	30.60
	100	3.32	7.36	11.50	16.42
	150	2.71	5.98	9.32	13.28
	450	1.55	3.38	5.23	7.37
	824	1.13	2.46	3.78	5.28
	894	1.09	2.36	3.61	5.05
	960	1.05	2.27	3.48	4.85
	1,000	1.03	2.22	3.40	4.74
	1,700	0.78	1.67	2.53	3.50
	1,800	0.76	1.62	2.45	3.39
	2,000	0.71	1.53	2.31	3.18
	2,400	0.65	1.38	2.09	2.86
	2,700	0.61	1.31	1.95	2.77
	3,000	0.58	1.22	1.84	-
	3,500	0.53	1.12	-	-
	4,000	0.50	1.04	-	-
	5,000	0.44	0.92	-	-

\* Standard Conditions : V.S.W.R 1.0 ; Ambient Temperature 20 °C

\* Specifications Subject to change without notice

## Feeder Cable

## HFC Series

## Flexible Foam Dielectric Feeder



1/2"   
 HFC 12D / HFC-FR 12D



7/8"   
 HFC 22D / HFC-FR 22D



1-1/4"   
 HFC 33D / HFC-FR 33D



1-5/8"   
 HFC 42D / HFC-FR 42D

### Construction

		HFC 12D (1/2")	HFC 22D (7/8")	HFC 33D (1-1/4")	HFC 42D (1-5/8")
Inner Conductor	Material / Construction	Copper-Clad Aluminum Wire	Smooth Copper Tube	Smooth Copper Tube	Helically Corrugated Copper Tube
	Diameter (mm)	4.8	9.0	13.1	17.2
Dielectric	Material / Construction	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
	Diameter (mm)	12.0	22.1	32.5	42.5
Outer Conductor	Material / Construction	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube
	Diameter (mm)	13.8	24.9	36.0	46.5
Jacket Diameter	Standard Jacket (mm)	16.0	27.9	39.0	50.0
	Halogen-Free / Flame-Retardant Jacket (mm)	16.0	27.9	39.0	50.0

### Mechanical Characteristics

		HFC 12D (1/2")	HFC 22D (7/8")	HFC 33D (1-1/4")	HFC 42D (1-5/8")
Min. Bending Radius (mm)		125	250	300	500
Recommended Operating Temperature	Standard Jacket (°C)	-40 ~ +80	-40 ~ +80	-40 ~ +80	-40 ~ +80
	Halogen-Free / Flame-Retardant Jacket (°C)	-30 ~ +80	-30 ~ +80	-30 ~ +80	-30 ~ +80
Nominal Weight	Standard Jacket (kg/km)	242	516	963	1,265
	Halogen-Free / Flame-Retardant Jacket (kg/km)	260	560	1,014	1,358
Flat Plate Crush Resistance (kg/mm)		2.0	1.4	2.4	2.7
Max. Pulling Force (kg)		113	147	260	250



## Feeder Cable HFC Series Flexible Foam Dielectric Feeder

### Electrical Characteristics

		HFC 12D (1/2")	HFC 22D (7/8")	HFC 33D (1-1/4")	HFC 42D (1-5/8")
DC Resistance ( $\Omega$ /1,000m ( $\Omega$ /1,000ft))	Inner Conductor	1.55 (0.47)	1.15 (0.35)	0.72 (0.22)	0.85 (0.26)
	Outer Conductor	1.9 (0.58)	1.15 (0.35)	0.45 (0.14)	0.36 (0.11)
Insulation Resistance (M $\Omega$ · km)		10,000	10,000	10,000	10,000
Dielectric Strength (for 1 Min.)		DC 4,000V	DC 6,000V	DC 9,000V	DC 11,000V
Velocity of Propagation (%)		88	88	88	88
Peak Power Rating (kW)		40	91	205	315
Max Operating Frequency (GHz)		8.8	5	3.3	2.5
Characteristic Impedance ( $\Omega$ )		50	50	50	50
Return Loss (Typical Value) (dB)		28	28	28	28

### Attenuation(at 20 °C) & Average Power Rating(at Ambient 40°C, Inner Conductor 100°C)

Frequency(MHz)		HFC 12D (1/2")	HFC 22D (7/8")	HFC 33D (1-1/4")	HFC 42D (1-5/8")
Attenuation dB/100m (dB/100ft)	30	1.17 (0.36)	0.64 (0.20)	0.44 (0.13)	0.36 (0.11)
	100	2.17 (0.66)	1.19 (0.36)	0.83 (0.25)	0.67 (0.20)
	150	2.67 (0.81)	1.47 (0.45)	1.03 (0.31)	0.84 (0.26)
	450	4.75 (1.45)	2.65 (0.81)	1.86 (0.57)	1.53 (0.47)
	824	6.49 (1.98)	3.68 (1.12)	2.62 (0.80)	2.17 (0.66)
	890	6.76 (2.06)	3.85 (1.17)	2.75 (0.84)	2.27 (0.69)
	960	7.04 (2.15)	4.01 (1.22)	2.86 (0.87)	2.38 (0.73)
	1,000	7.20 (2.19)	4.10 (1.25)	2.94 (0.90)	2.43 (0.74)
	1,700	9.61 (2.93)	5.54 (1.69)	4.01 (1.22)	3.35 (1.02)
	1,800	9.91 (3.02)	5.73 (1.75)	4.15 (1.26)	3.47 (1.06)
	2,000	10.70 (3.26)	6.09 (1.86)	4.43 (1.35)	3.71 (1.13)
	2,300	11.54 (3.52)	6.63 (2.02)	4.60 (1.40)	4.07 (1.24)
	2,700	12.61 (3.84)	7.30 (2.13)	5.11 (1.56)	4.53 (1.38)
	3,000	13.44 (4.10)	7.81 (2.38)	5.43 (1.66)	-
	3,400	14.44 (4.40)	8.52 (2.60)	-	-
	4,000	15.81 (4.82)	9.42 (2.87)	-	-
5,000	17.77 (5.42)	10.84 (3.30)	-	-	
Average Power Rating (kW)	30	6.19	13.90	21.33	29.55
	100	3.36	7.51	11.36	15.60
	150	2.74	6.09	9.15	12.52
	450	1.56	3.43	5.02	6.76
	824	1.14	2.48	3.56	4.74
	890	1.10	2.38	3.40	4.52
	960	1.05	2.28	3.26	4.32
	1,000	1.03	2.23	3.18	4.22
	1,700	0.78	1.67	2.32	3.04
	1,800	0.76	1.62	2.24	2.93
	2,000	0.72	1.52	2.10	2.74
	2,300	0.66	1.41	1.93	2.51
	2,700	0.62	1.33	1.74	2.25
	3,000	0.58	1.21	1.64	-
	3,400	0.54	1.13	-	-
	4,000	0.49	1.03	-	-
5,000	0.44	0.90	-	-	

\* Standard Conditions : V.S.W.R 1.0 ; Ambient Temperature 20 °C

\* Specifications Subject to change without notice

## Feeder Cable

### HFSC Series

#### Super Flexible Foam Dielectric Feeder



1/4"  
HFSC 6D / HFSC-FR 6D



3/8"  
HFSC 10D / HFSC-FR 10D



1/2"  
HFSC 12D / HFSC-FR 12D



7/8"  
HFSC 22D / HFSC-FR 22D

## Construction

		HFSC 6D (1/4")	HFSC 10D (3/8")	HFSC 12D (1/2")	HFSC 22D (7/8")
Inner Conductor	Material / Construction	Copper-Clad Aluminum Wire	Copper-Clad Aluminum Wire	Copper-Clad Aluminum Wire	Helically Corrugated Copper Tube
	Diameter (mm)	1.9	2.8	3.6	9.4
Dielectric	Material / Construction	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
	Diameter (mm)	4.7	7.2	8.9	23.0
Outer Conductor	Material / Construction	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube	Annularly Corrugated Copper Tube
	Diameter (mm)	6.4	9.5	12.2	25.2
Jacket Diameter	Standard Jacket (mm)	7.5	10.5	13.6	27.9
	Halogen-Free / Flame-Retardant Jacket (mm)	7.5	10.5	13.6	27.9

## Mechanical Characteristics

		HFSC 6D (1/4")	HFSC 10D (3/8")	HFSC 12D (1/2")	HFSC 22D (7/8")
Min. Bending Radius (mm)		25	25	32	125
Recommended Operating Temperature	Standard Jacket (°C)	-40 ~ +80	-40 ~ +80	-40 ~ +80	-40 ~ +80
	Halogen-Free / Flame-Retardant Jacket (°C)	-30 ~ +80	-30 ~ +80	-30 ~ +80	-30 ~ +80
Nominal Weight	Standard Jacket (kg/km)	76	117	201	471
	Halogen-Free / Flame-Retardant Jacket (kg/km)	80	123	211	494
Flat Plate Crush Resistance (kg/mm)		1.86	1.7	1.7	1.4
Max. Pulling Force (kg)		68	60	65	102

## Feeder Cable

## HFSC Series

### Super Flexible Foam Dielectric Feeder

#### Electrical Characteristics

		HFSC 6D (1/4")	HFSC 10D (3/8")	HFSC 12D (1/2")	HFSC 22D (7/8")
DC Resistance ( $\Omega$ /1,000m ( $\Omega$ /1,000ft))	Inner Conductor	9.80 (2.99)	4.20 (1.28)	2.85 (0.87)	2.80 (0.85)
	Outer Conductor	6.50 (1.98)	5.00 (1.52)	3.25 (0.99)	1.20 (0.37)
Insulation Resistance(M $\Omega$ · km)		10,000	10,000	10,000	10,000
Dielectric Strength (for 1 Min.)		DC 1,600V	DC 2,300V	DC 2,500V	DC 6,000V
Velocity of Propagation (%)		81	81	81	88
Peak Power Rating (kW)		6.4	13.2	15.6	90
Max. Operating Frequency (GHz)		20.4	13.0	10.0	5.0
Characteristic Impedance ( $\Omega$ )		50	50	50	50
Return Loss (Typical Value) (dB)		28	28	28	28

#### Attenuation (at 20°C) & Average Power Rating (at Ambient 40°C, Inner Conductor 100 °C)

Frequency (MHz)		HFSC 6D (1/4")	HFSC 10D (3/8")	HFSC 12D (1/2")	HFSC 22D (7/8")
Attenuation dB/100m (dB/100ft)	30	3.15 (0.96)	2.28 (0.69)	1.80 (0.55)	0.70 (0.21)
	100	5.82 (1.77)	4.22 (1.29)	3.33 (1.01)	1.29 (0.39)
	150	7.17 (2.19)	5.20 (1.58)	4.10 (1.25)	1.61 (0.49)
	450	12.70 (3.87)	9.22 (2.81)	7.29 (2.22)	2.85 (0.87)
	824	17.60 (5.36)	12.70 (3.87)	10.10 (3.08)	3.97 (1.21)
	894	18.40 (5.61)	13.30 (4.05)	10.50 (3.20)	4.12 (1.26)
	960	19.10 (5.82)	13.80 (4.21)	11.00 (3.35)	4.32 (1.32)
	1,000	19.50 (5.94)	14.10 (4.30)	11.20 (3.41)	4.42 (1.35)
	1,700	26.10 (7.96)	18.80 (5.73)	15.00 (4.57)	5.95 (1.81)
	1,800	26.90 (8.20)	19.40 (5.91)	15.50 (4.72)	6.13 (1.87)
	2,000	28.50 (8.69)	20.60 (6.28)	16.40 (5.00)	6.52 (1.99)
	2,400	31.60 (9.63)	22.80 (6.95)	18.20 (5.55)	7.13 (2.17)
	3,000	35.80 (10.91)	25.80 (7.86)	20.70 (6.31)	8.27 (2.52)
	4,000	42.20 (12.86)	30.40 (9.27)	24.40 (7.44)	9.80 (2.99)
	6,000	53.40 (16.28)	38.40 (11.70)	31.00 (9.45)	-
	10,000	72.60 (22.13)	52.10 (15.90)	42.30 (12.89)	-
14,000	89.40 (27.25)	-	-	-	
16,000	97.20 (29.63)	-	-	-	
Average Power Rating (kW)	30	2.08	3.44	4.87	14.32
	100	1.13	1.86	2.62	7.72
	150	0.92	1.51	2.12	6.26
	450	0.52	0.85	1.19	3.51
	824	0.38	0.61	0.85	2.53
	894	0.36	0.59	0.82	2.42
	960	0.35	0.57	0.79	2.33
	1,000	0.34	0.55	0.77	2.28
	1,700	0.26	0.41	0.57	1.70
	1,800	0.25	0.40	0.55	1.65
	2,000	0.24	0.38	0.52	1.55
	2,400	0.22	0.34	0.47	1.40
	3,000	0.19	0.30	0.41	1.23
	4,000	0.16	0.26	0.35	1.04
	6,000	0.13	0.20	0.27	-
	10,000	0.10	0.15	0.20	-
14,000	0.08	-	-	-	
16,000	0.08	-	-	-	

\* Standard Conditions : V.S.W.R 1.0 ; Ambient Temperature 20°C

\* Specifications Subject to change without notice





LHF12D (1/2")	<a href="#">PDF</a>
LHF22D (7/8")	<a href="#">PDF</a>
LHF33D (1-1/4")	<a href="#">PDF</a>
LHF42D (1-5/8")	<a href="#">PDF</a>
HFC12D (1/2")	<a href="#">PDF</a>
HFC22D (7/8")	<a href="#">PDF</a>
HFC33D (1-1/4")	<a href="#">PDF</a>
HFC42D (1-5/8")	<a href="#">PDF</a>
HFAC12D (1/2")	<a href="#">PDF</a>
HFAC22D (7/8")	<a href="#">PDF</a>
HFAC42D (1-5/8")	<a href="#">PDF</a>
HFSC6D (1/4")	<a href="#">PDF</a>
HFSC10D (3/8")	<a href="#">PDF</a>
HFSC12D (1/2")	<a href="#">PDF</a>
HFSC22D (7/8")	<a href="#">PDF</a>



## Feeder Cable

- Main feeder lines for BTS (Base Transceiver Station)
- In-building cabling system
- Various antenna feeder lines for wireless communication systems

Description	1/4"	3/8"	1/2"	7/8"	1-1/4"	1-5/8"
<b>LHF Series</b> Low Loss Flexible Foam Dielectric Feeder			LHF 12D	LHF 22D	LHF 33D	LHF 42D
<b>HFC Series</b> Flexible Foam Dielectric Feeder			HFC 12D	HFC 22D	HFC 33D	HFC 42D
<b>HFAC Series</b> Flexible Foam Dielectric Aluminum Feeder			HFAC 12D	HFAC 22D		HFAC 42D
<b>HFSC Series</b> Flexible Foam Dielectric Aluminum Feeder	HFSC 6D	HFSC 10D	HFSC 12D	HFSC 22D		