LS Cable
Leading Solution

RF Total Solution

We are at the Heart of All Human Communication

Leading Solution

**LS aims to develop into a company that provides its clients with a Leading Solution,
contributes to the overall society,
and offers a business environment where the employees can realize their dreams.**

Contents

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 (㎜)	4.8	9.0	13.1	17.2
Dielectric	Material / Construction	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
	Diameter (㎜)	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 (㎜)	13.8	24.9	36.0	46.5
Jacket Diameter	Standard Jacket (㎜)	16.0	27.9	39.0	50.0
	Halogen-Free / Flame-Retardant Jacket (㎜)	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 (㎜)		125	250	380	500
Recommended Operating Temperature	Standard Jacket (℃)	-40 ~ +80	-40 ~ +80	-40 ~ +80	-40 ~ +80
	Halogen-Free / Flame-Retardant Jacket (℃)	-30 ~ +80	-30 ~ +80	-30 ~ +80	-30 ~ +80
Nominal Weight	Standard Jacket (㎏/㎞)	242	516	963	1,265
	Halogen-Free / Flame-Retardant Jacket (㎏/㎞)	260	560	1,014	1,358
Flat Plate Crush Resistance (㎏/㎜)		2.0	1.4	2.4	2.7
Max. Pulling Force (㎏)		113	147	260	250

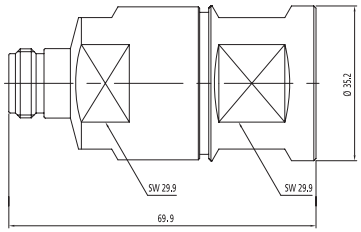
Electrical Characteristics

		HFC 12D (1/2″)	HFC 22D (7/8″)	HFC 33D (1-1/4″)	HFC 42D (1-5/8″)
DC Resistance Ω/1,000m (Ω/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 (MΩ·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 (Ω)		50	50	50	50
Return Loss (Typical Value) (dB)		28	28	28	28

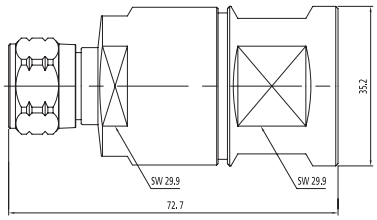
Attenuation(at 20℃) & Average Power Rating(at Ambient 40℃, Inner Conductor 100℃)

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℃
* Specifications Subject to change without notice



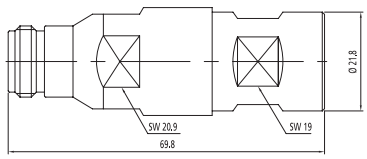
N-Female for 7/8″



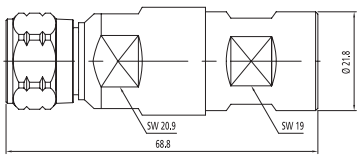
N-Male for 7/8″

Connector N Type for 7/8" LHF & HFAC & HFC

Description	Length (mm)	Max.Dia (mm)	Weight (g)	Code		
				LHF	HFAC	HFC
N-Female for 7/8″	69.9	35.2	215	CLH 22NF	CHF 22NF	CHFS 22NF
N-Male for 7/8″	72.7	35.2	215	CLH 22NF	CHF 22NM	CHFS 22NM



N-Female for 1/2″



N-Male for 1/2″

Connector N Type for 1/2" LHF & HFC & HFSC

Description	Length (mm)	Max.Dia (mm)	Weight (g)	Code		
				LHF	HFC	HFSC
N-Female for 1/2″	69.8	21.8	115	CLH 12NF	CHF 12NF	CHFS 12NF
N-Male for 1/2″	68.8	21.8	120	CLH 12NM	CHF 12NM	CHFS 12NM

Environmental Characteristics

Temperature Range	-65℃ ~ +165℃ / -85℉ ~ +329℉
Corrosion (Salt Spray Test)	IEC-68-2-11-Ka
Vibration	CECC 22000 Part. 4.6.3
Waterproof	IP68

Material Characteristics

Bodies, Cap (Coupling Nut)		Brass / Silver Plated or Su Co (Alloy of Cu/ Sn/ Zn) Plated
Back Nut		Brass / Nickel Plated
Pin	Male	Brass / Silver Plated or Su Co (Alloy of Cu/ Sn/ Zn) Plated
	Female	Beryllium - Copper / Silver Plated or Su Co (Alloy of Cu/ Sn/ Zn) Plated
Insulators		Plated PTEE (TEFLON)
Gasket		Silicon Rubber