

Coaxial Cable

CABLE CONSTRUCTION

The coaxial cable for HFC include drop cable (braiding outer conductor type) and distribution cable (aluminum tube outer conductor type). Drop cables are RG59, RG6, RG7 and RG11 types. Distribution cables are 500, 540 serials types etc. The drop cables for HFC are introduced herein.



Coaxial Drop Cable

Specification

RG6

COAXIAL DROP CABLE

Physical Dimensions

Component	Ordinary Shield (Dia. mm)	Standard Shield (Dia. mm)	Tri-Shield (Dia. mm)	Quad-Shield (Dia. mm)
Inner Conductor	1.02	1.02	1.02	1.02
Dielectric	4.80	4.57	4.57	4.57
First Shield(Tape)	5.40	4.75	4.75	4.75
Jacket	6.80	6.90	7.06	7.54
Steel Messenger Single Dual	-	1.30 1.83	1.30 1.83	1.30 1.83

Mechanical Characteristic

Minimum Breaking Strength of Messenger	Dia. 1.30mm 82Kg f Dia. 1.83mm 166Kg f
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Electrical Characteristics

Impedance (Ω)	75	
Shielding Effectiveness (\geq dB)	55MHz	68
	300MHz	70
	1000MHz	70
SRL(\geq dB)	VHF	20
	UHF	20

Attenuation(20°C, \rightarrow dB/100m)

5MHz	2.0
55MHz	5.3
211MHz	10.0
270MHz	11.0
300MHz	11.6
330MHz	12.3
400MHz	13.6
450MHz	14.4
550MHz	16.2
750MHz	19.0
870MHz	20.6
1000MHz	22.2

Coaxial Drop Cable

Specification

RG7

COAXIAL DROP CABLE

Physical Dimensions

Component	Standard Shield (Dia. mm)	Tri-Shield (Dia. mm)	Quad-Shield (Dia. mm)
Inner Conductor	1.29	1.29	1.29
Dielectric	5.72	5.72	5.72
First Shield(Tape)	5.90	5.90	5.90
Jacket	8.10	8.20	8.64
Steel Messenger Single	1.83	1.83	1.83
Dual	2.77	2.77	2.77

Mechanical Characteristics

Minimum Breaking Strength of Messenger	Dia. 1.83mm 166Kg f Dia. 2.77mm 818Kg f
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Electrical Characteristics

Impedance (Ω)	75	
Shielding Effectiveness (\geq dB)	55MHz	68
	300MHz	70
	1000MHz	70
SRL(\geq dB)	VHF	20
	UHF	20

Attenuation(20°C, \rightarrow dB/100m)

5MHz	1.5
55MHz	4.1
211MHz	7.7
270MHz	8.8
300MHz	9.3
330MHz	9.8
400MHz	10.8
450MHz	11.5
550MHz	12.8
750MHz	15.2
870MHz	16.5
1000MHz	17.8

Coaxial Drop Cable

Specification

RG11 COAXIAL DROP CABLE

Physical Dimensions

Component	Standard Shield (Dia. mm)	Tri-Shield (Dia. mm)	Quad-Shield (Dia. mm)
Inner Conductor	1.63	1.63	1.63
Dielectric	7.11	7.11	7.11
First Shield(Tape)	7.29	7.29	7.29
Jacket	10.16	10.16	10.34
Steel Messenger Single	1.83	1.83	1.83
Dual	2.77	2.77	2.77

Mechanical Characteristics

Minimum Breaking Strength of Messenger	Dia. 1.83mm 166Kgf Dia. 2.77mm 818Kgf
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Electrical Characteristics

Impedance (Ω)	75	
Shielding Effectiveness (\geq dB)	55MHz	68
	300MHz	70
	1000MHz	70
SRL (\geq dB)	VHF	20
	UHF	20

Attenuation(20°C, \geq dB/100m)

5MHz	1.3
55MHz	3.2
211MHz	6.2
270MHz	7.1
300MHz	7.5
330MHz	7.9
400MHz	8.8
450MHz	9.4
550MHz	10.4
750MHz	12.4
870MHz	13.5
1000MHz	14.7

Coaxial Drop Cable

Specification

RG59

COAXIAL DROP CABLE

Physical Dimensions

Component	Standard Shield (Dia. mm)	Tri-Shield (Dia. mm)	Quad-Shield (Dia. mm)
Inner Conductor	0.81	0.81	0.81
Dielectric	3.66	3.66	3.66
First Shield(Tape)	3.84	3.84	3.84
Jacket	6.10	6.20	6.73
Steel Messenger Single Dual	1.30	1.30	1.30
	1.83	1.83	1.83

Mechanical Characteristics

Minimum Breaking Strength of Messenger	Dia. 1.30mm 82Kg _f Dia. 1.83mm 166Kg _f
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Electrical Characteristics

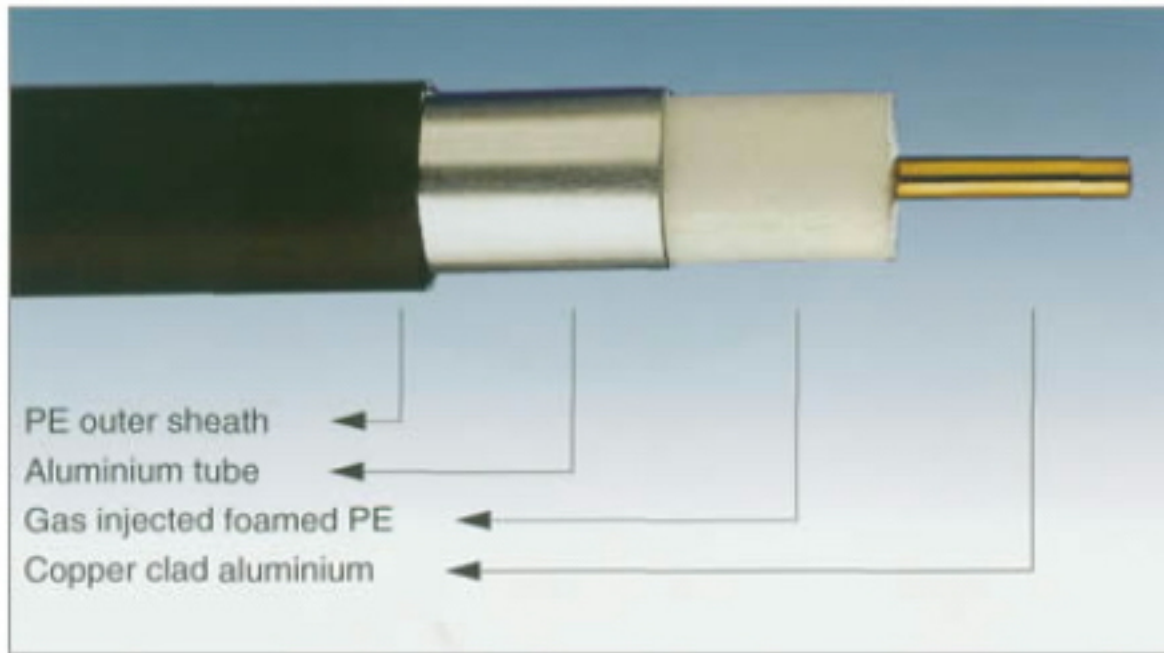
Impedance (Ω)	75	
Shielding Effectiveness (≥ dB)	55MHz	68
	300MHz	70
	1000MHz	70
SRL(≥ dB)	VHF	20
	UHF	20

Attenuation(20°C, ≧ dB/100m)

5MHz	2.7
55MHz	6.4
211MHz	12.5
270MHz	14.0
300MHz	14.6
330MHz	15.6
400MHz	17.0
450MHz	18.1
550MHz	20.2
750MHz	23.8
870MHz	25.7
1000MHz	27.8

Trunk and Distribution Cable

SPECIFICATION



Construction Specification

Standard	320 (series)	412 (series)	500 (series)	540 (series)
Inner conductor(mm)	1.80	2.26	2.78	3.15
Dielectric(mm)	7.45	9.30	11.50	13.03
Outer Conductor(mm)	8.12	10.50	12.70	13.72
Outer Sheath(mm)	10.03	12.50	14.70	15.30

Electrical Characteristics

Impedance	75±2 ohms
Nominal Capacitance	50 pF/m 15.2 pF/ft
Nominal Velocity of Propagation	88%
Screen Efficiency at 5 MHz	135dB min
Dielectric Strength	2.5kV
Dielectric Outer Sheath	5kV

Attenuation

Standard	320 series	412 series	500 series	540 series
f (MHz)	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m
5	0.85	0.66	0.52	0.46
50	2.67	2.13	1.69	1.44
100	3.84	3.04	2.42	2.09
200	5.48	4.36	3.48	3.04
300	6.69	5.39	4.32	3.71
400	7.8	6.28	5.04	4.33
450	8.27	6.69	5.37	4.59
500	8.72	7.07	5.69	4.89
550	9.34	7.44	5.99	5.12
600	9.78	7.80	6.28	5.38
650	10.18	8.15	6.56	5.65
750	10.86	8.80	7.10	6.07
850	11.77	9.42	7.61	6.51
1000	12.76	10.30	8.34	7.12