50Ohm Wideband Coaxial Cables

RF42(1-5/8″)

RF32(1-1/4″)

RF22(7/8″)

RF16(5/8″)

RF12(1/2″)

RF8(3/8″)

RF6(1/4″)

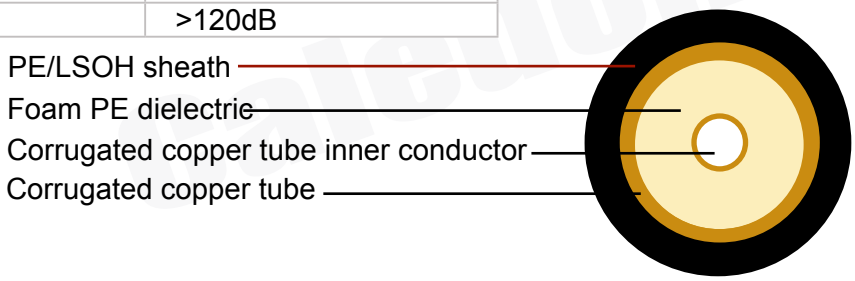
RF42(1-5/8″)

Construction

Inner conductor	Corrugated copper tube	Φ17.4 mm
Dielectric	Foam PE	Φ42.8 mm
Outer conductor	Corrugated copper	Φ46.5 mm
Sheath	PE/LSOH	Φ49.5 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76 pF/m
Velocity of propagation	88%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	0.82 Ohm/Km
Outer conductor resistance	0.43 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	11 KV
Cable weight (approx.)	1340kg/km
Operating Frequency Band	1 – 2700 MHz
Screening effectiveness	>120dB



Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	0.20	0.06	1500	3.10	0.94
100	0.67	0.20	1700	3.35	1.02
150	0.83	0.25	1800	3.47	1.06
200	0.98	0.30	1900	3.66	1.12
300	1.22	0.37	2000	3.71	1.13
450	1.53	0.47	2100	3.82	1.16
500	1.63	0.50	2200	3.93	1.20
700	1.97	0.60	2300	4.05	1.23
800	2.13	0.65	2500	4.27	1.30
900	2.28	0.69	2700	4.48	1.37
1000	2.43	0.74			

Return Loss

806-960 MHz	24.3dB
1700-2000 MHz	24.3dB

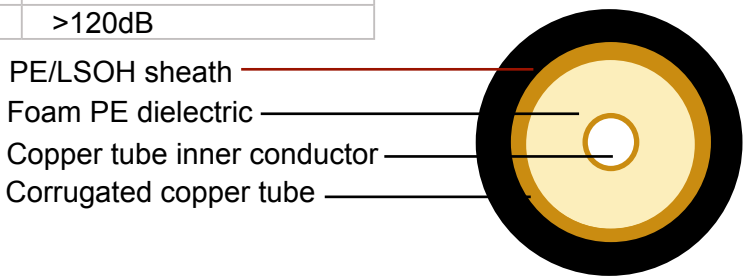
RF32(1-1/4")

Construction

Inner conductor	Copper tube	Φ13.1 mm
Dielectric	Foam PE	Φ32.8 mm
Outer conductor	Corrugated copper	Φ36.0 mm
Sheath	PE/LSOH	Φ38.6 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76 pF/m
Velocity of propagation	88%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	0.76 Ohm/Km
Outer conductor resistance	0.60 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	9 KV
Cable weight (approx.)	940 kg/km
Operating Frequency Band	1 – 3300 MHz
Screening effectiveness	>120dB



Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	0.24	0.08	1250	3.19	1.06
100	0.79	0.26	1500	3.55	1.18
150	0.98	0.33	1700	3.83	1.28
200	1.15	0.38	1800	3.96	1.32
300	1.43	0.48	2000	4.22	1.41
450	1.78	0.59	2100	4.34	1.45
500	1.89	0.63	2200	4.47	1.49
700	2.29	0.76	2300	4.59	1.53
800	2.47	0.82	2500	4.83	1.61
900	2.63	0.88	2700	5.06	1.69
1000	2.80	0.93	3000	5.40	1.80

Return Loss

806-960 MHz	24.29dB
1700-2000 MHz	24.29dB

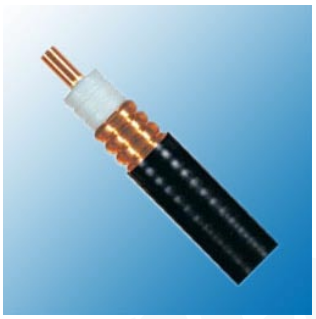
RF22(7/8")

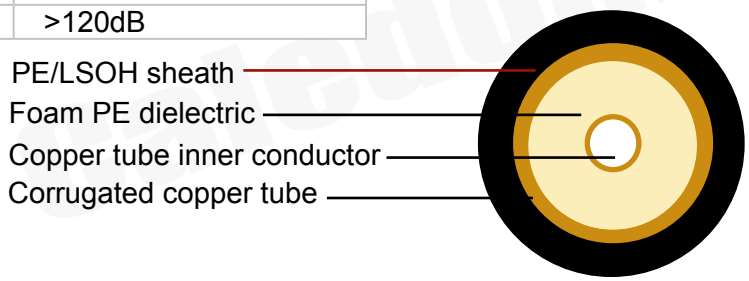
Construction

Inner conductor	Copper tube	Φ9.0 mm
Dielectric	Foam PE	Φ22.3 mm
Outer conductor	Corrugated copper tube	Φ24.9 mm
Sheath	PE/LSOH	Φ27.5 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	75 pF/m
Velocity of propagation	89%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	1.05 Ohm/Km
Outer conductor resistance	1.18 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	6 KV
Cable weight (approx.)	490 kg/km
Operating Frequency Band	1 – 5000 MHz
Screening effectiveness	>120dB





Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	0.37	0.11	1700	5.57	1.70
100	1.19	0.36	1800	5.75	1.75
150	1.48	0.45	2000	6.11	1.86
200	1.72	0.52	2100	6.29	1.92
300	2.13	0.65	2200	6.46	1.97
450	2.65	0.81	2300	6.63	2.02
500	2.81	0.86	2500	6.97	2.12
700	3.38	1.03	2700	7.29	2.22
800	3.63	1.11	3000	7.76	2.37
900	3.87	1.18	3400	8.37	2.55
1000	4.12	1.26	4000	9.24	2.82
1500	5.18	1.58	5000	10.59	3.23

Return Loss

806-960 MHz	24.3dB
1700-2000 MHz	24.3dB

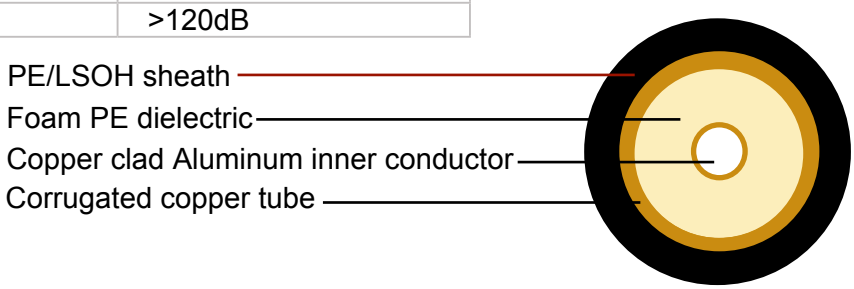
RF16(5/8")

Construction

Inner conductor	Copper clad Aluminium	Φ7.11 mm
Dielectric	Foam PE	Φ18.03 mm
Outer conductor	Corrugated copper	Φ19.81 mm
Sheath	PE/LSOH	Φ22.10 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76 pF/m
Velocity of propagation	88%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	0.72 Ohm/Km
Outer conductor resistance	1.38 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	5 KV
Cable weight (approx.)	401 kg/km
Operating Frequency Band	1 – 6100 MHz
Screening effectiveness	>120dB



Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	0.48	0.15	1700	7.29	2.22
100	1.55	0.47	1800	7.54	2.30
150	1.92	0.59	2000	8.02	2.45
200	2.24	0.68	2100	8.25	2.52
300	2.78	0.85	2200	8.48	2.59
450	3.46	1.05	2300	8.70	2.65
500	3.66	1.12	2500	9.15	2.79
700	4.41	1.34	2700	9.57	2.92
800	4.75	1.45	3000	10.20	3.11
900	5.06	1.54	4000	12.14	3.70
1000	5.38	1.64	5000	13.94	4.25
1500	6.78	2.07	6000	15.63	4.77

Return Loss

806-960 MHz	24.3dB
1700-2000 MHz	24.3dB

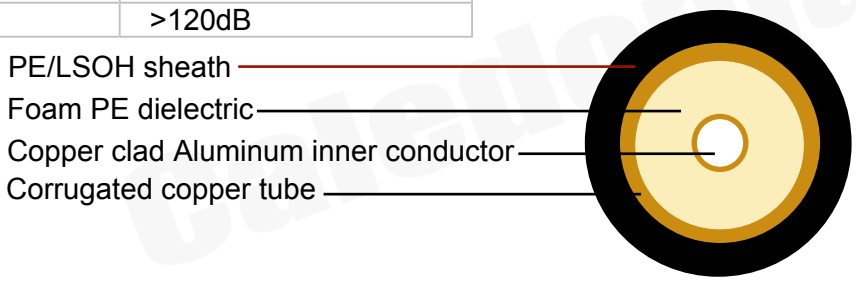
RF12(1/2")

Construction

Inner conductor	Copper clad Aluminium	Φ4.83 mm
Dielectric	Foam PE	Φ12.95 mm
Outer conductor	Corrugated copper	Φ13.97 mm
Sheath	PE/LSOH	Φ15.88 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76 pF/m
Velocity of propagation	88%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	1.48 Ohm/Km
Outer conductor resistance	1.90 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	4 KV
Cable weight (approx.)	220 kg/km
Operating Frequency Band	1 – 8800 MHz
Screening effectiveness	>120dB



Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	0.67	0.20	1800	10.06	3.07
100	2.17	0.66	2000	10.67	3.25
150	2.67	0.81	2100	10.96	3.34
200	3.10	0.95	2200	11.25	3.43
300	3.84	1.17	2300	11.54	3.52
450	4.75	1.45	2500	12.09	3.69
500	5.02	1.53	2700	12.63	3.85
700	6.01	1.83	3000	13.41	4.09
800	6.46	1.97	4000	15.82	4.82
900	6.86	2.09	5000	18.01	5.49
1000	7.28	2.22	6000	20.06	6.12
1500	9.09	2.77	8000	23.82	7.26
1700	9.74	2.97	8800	25.24	7.70

Return Loss

806-960 MHz	24.3dB
1700-2000 MHz	24.3dB

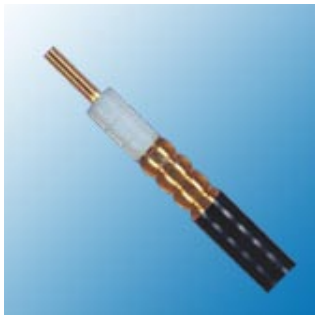
RF8(3/8″)

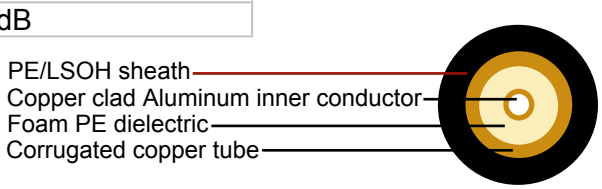
Construction

Inner conductor	Copper clad Aluminium	Φ3.05 mm
Dielectric	Foam PE	Φ8.64 mm
Outer conductor	Corrugated copper	Φ9.65 mm
Sheath	PE/LSOH	Φ11.18 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76 pF/m
Velocity of propagation	88%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	3.48 Ohm/Km
Outer conductor resistance	2.85 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	4 KV
Cable weight (approx.)	120 kg/km
Operating Frequency Band	1 – 13 GHz
Screening effectiveness	>120dB





Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	1.06	0.32	2000	16.97	5.17
100	3.42	1.04	2100	17.44	5.32
150	4.22	1.29	2200	17.91	5.46
200	4.90	1.49	2300	18.37	5.60
300	6.06	1.85	2500	19.26	5.87
450	7.51	2.29	2700	20.12	6.13
500	7.95	2.42	3000	21.38	6.52
700	9.52	2.90	4000	25.26	7.70
800	10.23	3.12	5000	28.81	8.78
900	10.87	3.31	6000	32.12	9.79
1000	11.55	3.52	8000	38.24	11.66
1500	14.45	4.41	8800	40.55	12.36
1700	15.49	4.72	10000	43.89	13.38
1800	15.99	4.88	12000	49.21	15.00

Return Loss

806-960 MHz	23dB
1700-2000 MHz	23dB

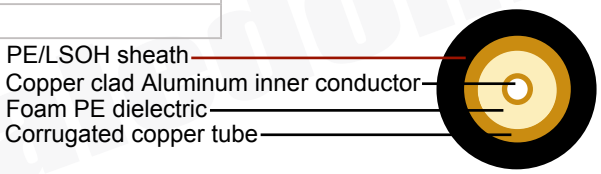
RF6(1/4")

Construction

Inner conductor	Copper clad Aluminium	Φ2.54 mm
Dielectric	Foam PE	Φ6.89 mm
Outer conductor	Corrugated copper	Φ7.87 mm
Sheath	PE/LSOH	Φ8.89 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76.8 pF/m
Velocity of propagation	86%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	5.15 Ohm/Km
Outer conductor resistance	4.00 Ohm/Km
Installation temperature range	-40°C - +60 °C
Operating temperature range	-55°C - +85°C
Test voltage	4 KV
Cable weight (approx.)	90 kg/km
Operating Frequency Band	1 – 15.8 GHz
Screening effectiveness	>120dB



Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)
10	1.25	0.38	2100	20.56	6.27
100	4.05	1.23	2200	21.10	6.43
150	4.99	1.52	2300	21.64	6.60
200	5.80	1.77	2500	22.69	6.92
300	7.17	2.19	2700	23.70	7.23
450	8.88	2.71	3000	25.17	7.67
500	9.39	2.86	4000	29.72	9.06
700	11.24	3.43	5000	33.87	10.33
800	12.08	3.68	6000	37.74	11.51
900	12.84	3.91	8000	44.89	13.69
1000	13.64	4.16	8800	47.58	14.51
1500	17.04	5.20	10000	51.48	15.70
1700	18.27	5.57	12000	57.66	17.58
1800	18.86	5.75	140000	63.55	19.38
2000	20.00	6.10	158000	68.65	20.93

Return Loss

806-960 MHz	23dB
1700-2000 MHz	23dB