50Ohm RF Coaxial Cables

ALMR100

ALMR195

A LMR200

A LMR240

ALMR300

ALMR400

ALMR500

ALMR600

3D-FB

5D-FB

7D-FB

8D-FB

10D-FB

12D-FB

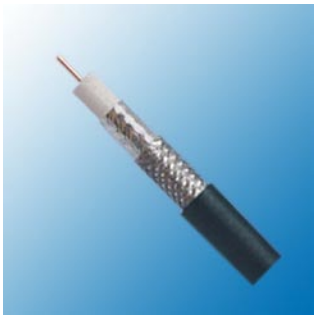
ALMR100

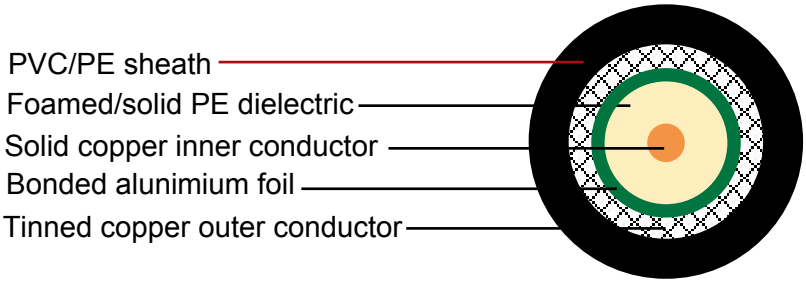
Construction

Inner conductor	Solid copper	0.46 mm
Dielectric	Foam /Solid PE	Φ1.52 mm
Shield	Bonded aluminium foil	Φ1.65 mm
Outer conductor	Tinned copper braid	Φ2.11 mm
Sheath	PVC/PE	Φ2.79 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	101.1 pF/m
Velocity of propagation	70%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	266 Ohm/Km
Outer conductor resistance	31.2 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	14 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	12.9	3.9
50	16.7	5.1
150	29.4	9.0
220	35.8	10.9
450	51.9	15.8
900	74.9	22.8
1500	98.7	30.1
1800	109.0	33.2
2000	115.5	35.2
2500	130.6	39.8
3000	143.8	43.8
5800	210.3	64.1

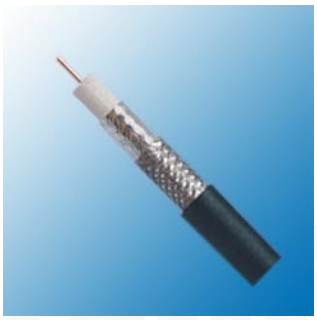
ALMR195

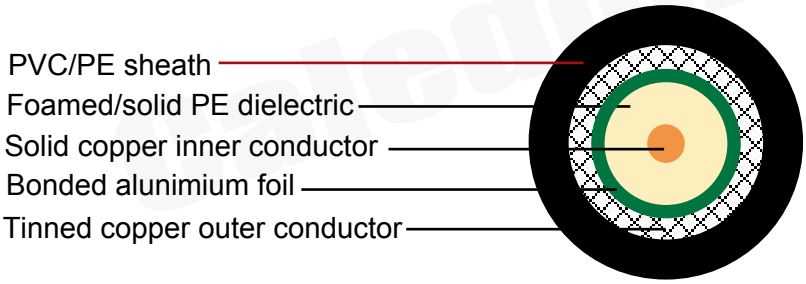
Construction

Inner conductor	Solid copper	Φ3.61 mm
Dielectric	Foam /Solid PE	Φ9.40 mm
Shield	Bonded aluminium foil	Φ9.55 mm
Outer conductor	Tinned copper braid	Φ10.3 mm
Sheath	PVC/PE	Φ12.7 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	79.7 pF/m
Velocity of propagation	80%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	24.94 Ohm/Km
Outer conductor resistance	16.08 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	25 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	6.5	2.0
50	8.4	2.6
150	14.6	4.5
220	17.7	5.4
450	25.5	7.8
900	36.5	11.1
1500	47.7	14.5
1800	52.5	16.0
2000	55.4	16.9
2500	62.4	19.0
3000	67.5	20.6
5800	93.0	28.3

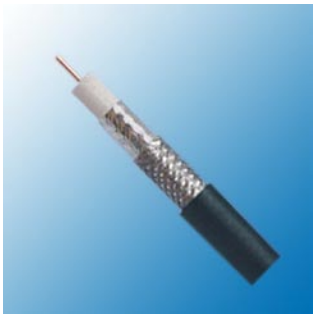
ALMR200

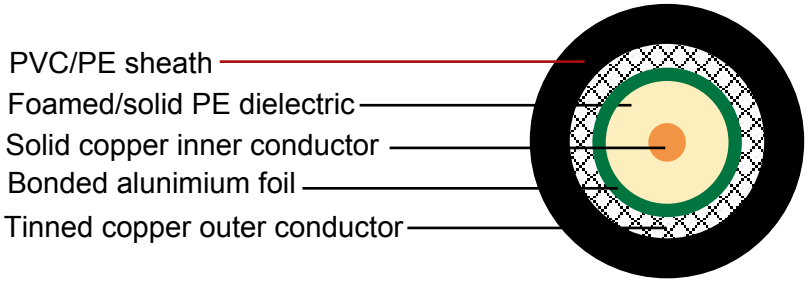
Construction

Inner conductor	Solid copper	Φ1.12 mm
Dielectric	Foam /Solid PE	Φ2.95 mm
Shield	Bonded aluminium foil	Φ3.07 mm
Outer conductor	Tinned copper braid	Φ3.66 mm
Sheath	PVC/PE	Φ4.95 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	80.3 pF/m
Velocity of propagation	83%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	17.6 Ohm/Km
Outer conductor resistance	16.1 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	27 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	5.8	1.8
50	7.5	2.3
150	13.1	4.0
220	15.9	4.8
450	22.8	6.9
900	32.6	9.9
1500	42.4	12.9
1800	46.6	14.2
2000	49.3	15.0
2500	55.4	16.9
3000	60.0	18.3
5800	86.5	26.4

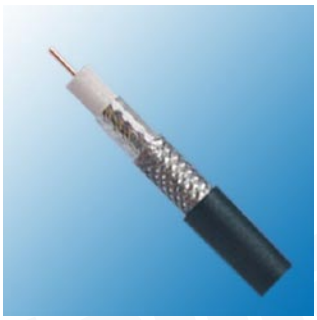
ALMR240

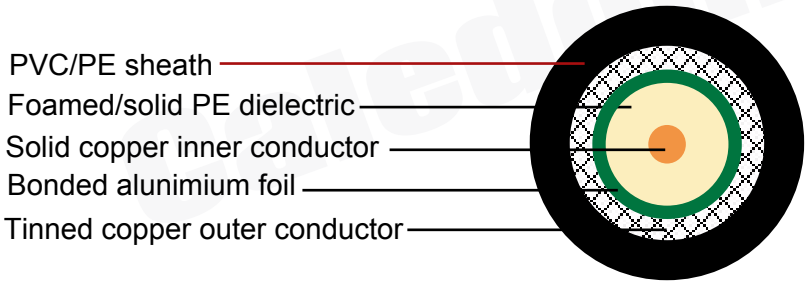
Construction

Inner conductor	Solid copper	Φ1.42 mm
Dielectric	Foam /Solid PE	Φ3.81 mm
Shield	Bonded aluminium foil	Φ3.94 mm
Outer conductor	Tinned copper braid	Φ4.50 mm
Sheath	PVC/PE	Φ6.01 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	79.4 pF/m
Velocity of propagation	84%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	10.5 Ohm/Km
Outer conductor resistance	12.76 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	30 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	4.4	1.3
50	5.7	1.7
150	9.9	3.0
220	12.0	3.7
450	17.3	5.3
900	24.8	7.6
1500	32.4	9.9
1800	35.6	10.9
2000	37.7	11.5
2500	42.4	12.9
3000	46.5	14.2
5800	66.8	20.4

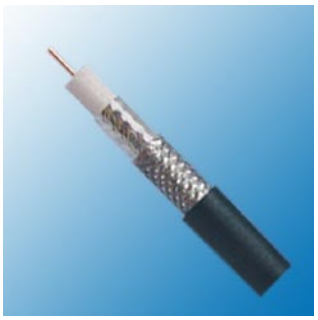
ALMR300

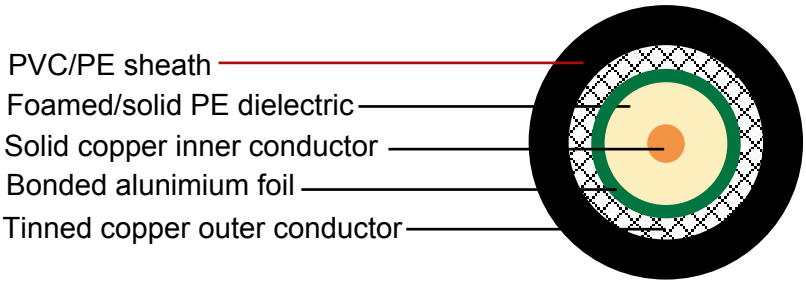
Construction

Inner conductor	Solid copper	Φ1.78 mm
Dielectric	Foam /Solid PE	Φ4.83 mm
Shield	Bonded aluminium foil	Φ4.98 mm
Outer conductor	Tinned copper braid	Φ5.72 mm
Sheath	PVC/PE	Φ7.62 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	78.8 pF/m
Velocity of propagation	85%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	7.01 Ohm/Km
Outer conductor resistance	7.26 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	38 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	3.5	1.1
50	4.5	1.4
150	7.9	2.4
220	9.6	2.9
450	13.8	4.2
900	19.9	6.1
1500	26.0	7.9
1800	28.7	8.7
2000	30.3	9.2
2500	34.2	10.4
3000	37.5	11.4
5800	54.2	16.5

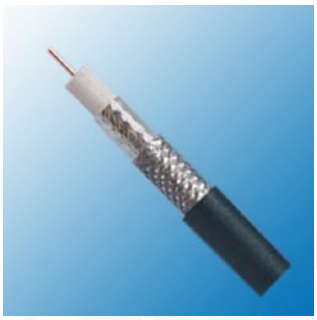
ALMR400

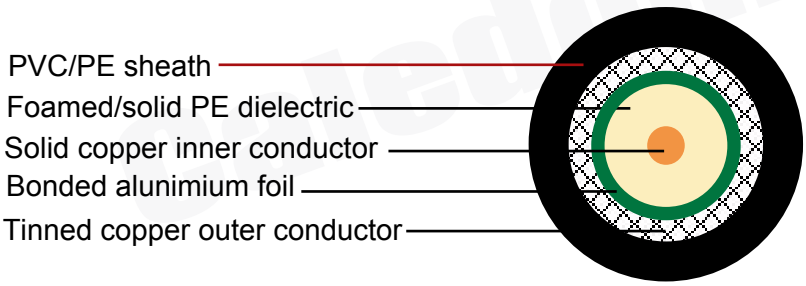
Construction

Inner conductor	Solid copper	Φ2.74 mm
Dielectric	Foam /Solid PE	Φ7.24 mm
Shield	Bonded aluminium foil	Φ7.39 mm
Outer conductor	Tinned copper braid	Φ8.13 mm
Sheath	PVC/PE	Φ10.29 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	101.1 pF/m
Velocity of propagation	85%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	2.92 Ohm/Km
Outer conductor resistance	5.41 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	51mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	2.2	0.7
50	2.9	0.9
150	5.0	1.5
220	6.1	1.9
450	8.9	2.7
900	12.8	3.9
1500	16.8	5.1
1800	18.6	5.7
2000	19.6	6.0
2500	22.2	6.8
3000	24.8	7.6
5800	35.5	10.8

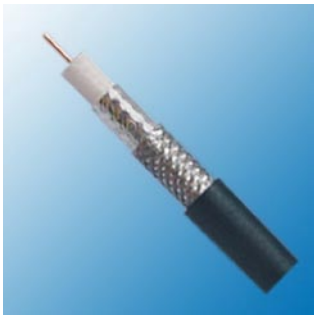
ALMR500

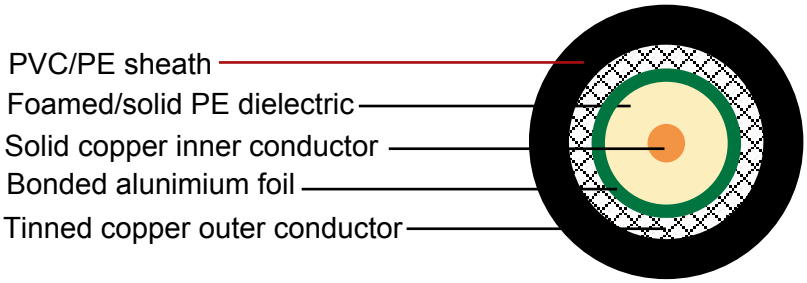
Construction

Inner conductor	Solid copper	Φ3.61 mm
Dielectric	Foam /Solid PE	Φ9.4 mm
Shield	Bonded aluminium foil	Φ9.55 mm
Outer conductor	Tinned copper braid	Φ10.3 mm
Sheath	PVC/PE	Φ12.7 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	77.1 pF/m
Velocity of propagation	86%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	2.69 Ohm/Km
Outer conductor resistance	4.2 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	64 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	1.8	0.5
50	2.3	0.7
150	4.0	1.2
220	4.9	1.5
450	7.1	2.2
900	10.3	3.1
1500	13.6	4.1
1800	15.0	4.6
2000	15.9	4.8
2500	18.0	5.5
3000	19.7	6.0
5800	29.1	8.9

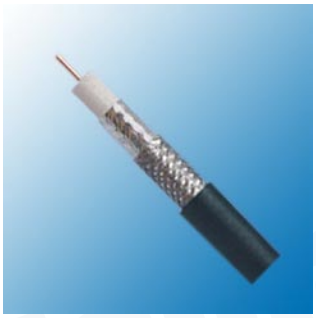
ALMR 600

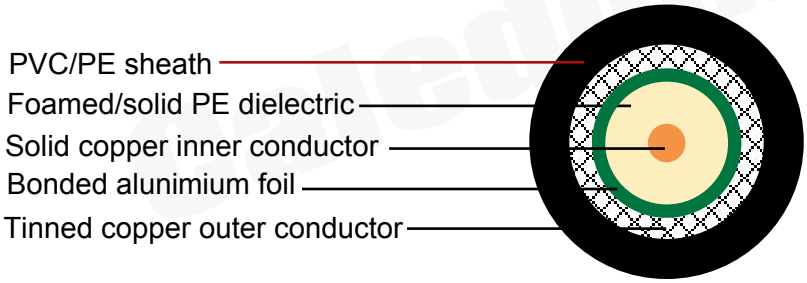
Construction

Inner conductor	Solid copper	Φ4.47 mm
Dielectric	Foam /Solid PE	Φ11.56 mm
Shield	Bonded aluminium foil	Φ11.71 mm
Outer conductor	Tinned copper braid	Φ12.50 mm
Sheath	PVC/PE	Φ14.99 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	76.8 pF/m
Velocity of propagation	87%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	1.7 Ohm/Km
Outer conductor resistance	3.9 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	75 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Max. Attenuation(dB/100ft)
30	1.4	0.4
50	1.8	0.5
150	3.2	1.0
220	3.9	1.2
450	5.6	1.7
900	8.2	2.5
1500	10.9	3.3
1800	12.1	3.7
2000	12.8	3.9
2500	14.5	4.4
3000	15.7	4.8
5800	23.8	7.3

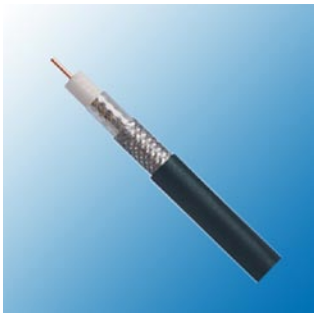
3D-FB

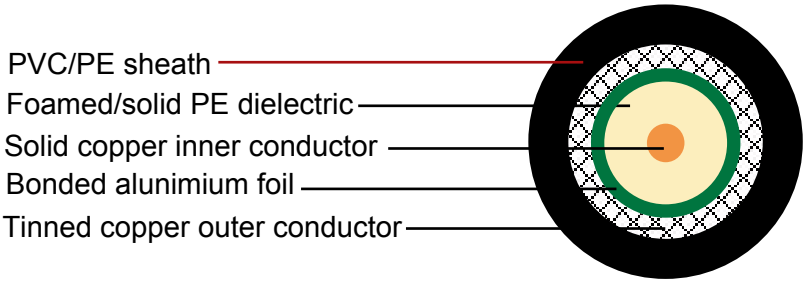
Construction

Inner conductor	Bare copper/Copper clad steel	Φ1.07 mm
Dielectric	Foam /Solid PE	Φ3.0±0.02 mm
Shield	Bonded aluminium foil	Φ3.2 mm
Outer conductor	Tinned copper braid	Φ3.6 mm
Shield coverage		85%
Sheath	PVC/PE	Φ5.4 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	82 pF/m
Velocity of propagation	81%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	19.2(65.2) Ohm/Km
Outer conductor resistance	16.3 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	27 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100	10.4	3.2
150	13.0	4.0
280	17.5	5.3
350	19.5	5.9
400	21.0	6.4
800	30.0	9.1
900	31.6	9.6
1200	37.0	11.3
1500	41.5	12.6
1800	45.6	13.9
1900	46.9	14.3
2000	48.2	14.7
2200	50.6	15.4
2500	54.1	16.5

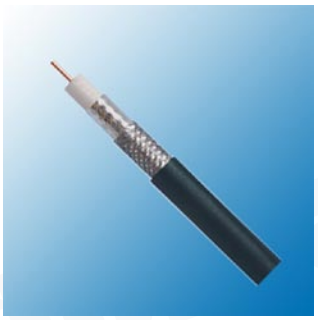
5D-FB

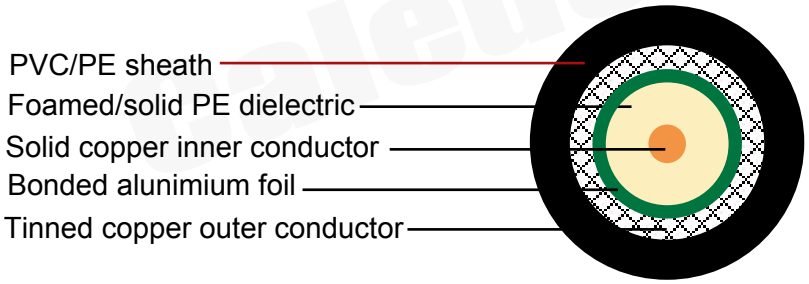
Construction

Inner conductor	Bare copper/Copper clad steel	Φ1.8 mm
Dielectric	Foam /Solid PE	Φ5.0±0.02 mm
Shield	Bonded aluminium foil	Φ5.2 mm
Outer conductor	Tinned copper braid	Φ5.7 mm
Shield coverage		85%
Sheath	PVC/PE	Φ7.5 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	82 pF/m
Velocity of propagation	82%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	6.8(10.5) Ohm/Km
Outer conductor resistance	14.1 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	38 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100	6.3	1.9
150	7.8	2.4
280	10.8	3.3
350	12.1	3.7
400	13.0	4.0
800	18.9	5.8
900	20.2	6.2
1200	23.7	7.2
1500	26.8	8.2
1800	29.7	9.1
1900	30.6	9.3
2000	31.5	9.6
2200	33.3	10.1
2500	35.8	10.9

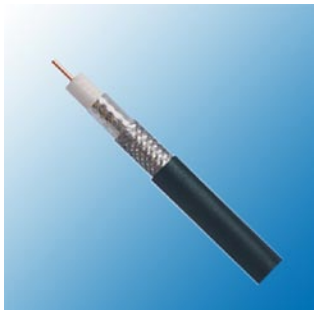
7D-FB

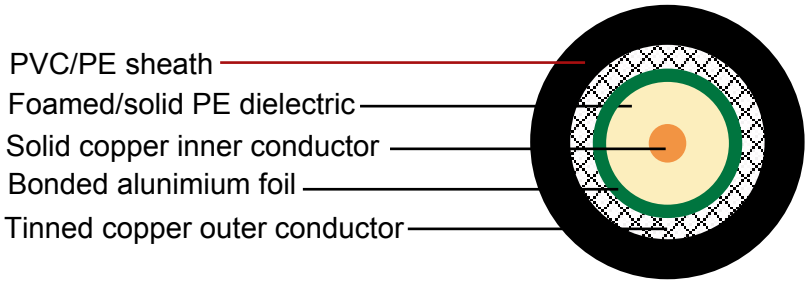
Construction

Inner conductor	Bare copper/Copper clad steel	Φ2.6 mm
Dielectric	Foam /Solid PE	Φ7.3±0.02 mm
Shield	Bonded aluminium foil	Φ7.5 mm
Outer conductor	Tinned copper braid	Φ8.0 mm
Shield coverage		85%
Sheath	PVC/PE	Φ9.8 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	82 pF/m
Velocity of propagation	82%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	3.3(5.0)) Ohm/Km
Outer conductor resistance	9.3 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	49 mm





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100	4.3	1.3
150	5.3	1.6
280	7.3	2.2
350	8.3	2.5
400	9.0	2.7
800	13.1	4.0
900	14.2	4.3
1200	16.7	5.1
1500	19.0	5.8
1800	21.2	6.5
1900	21.8	6.6
2000	22.5	6.9
2200	23.8	7.3
2500	25.7	7.8

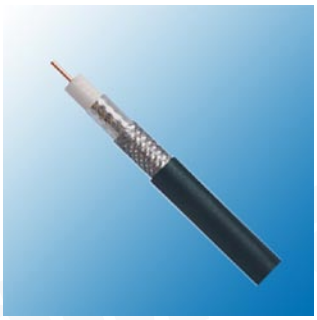
8D-FB

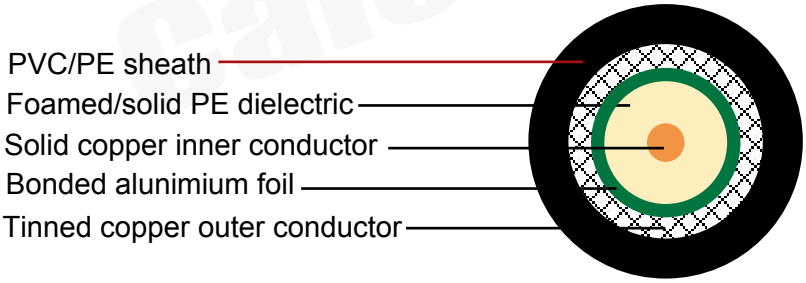
Construction

Inner conductor	Bare copper/Copper clad aluminium	Φ2.8 mm
Dielectric	Foam /Solid PE	Φ7.8±0.02 mm
Shield	Bonded aluminium foil	Φ8.0 mm
Outer conductor	Tinned copper braid(16x9x0.15mm)	Φ8.6 mm
Shield coverage		85%
Sheath	PVC/PE	Φ10.6 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	82 pF/m
Velocity of propagation	84%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	2.4(4.4)) Ohm/Km
Outer conductor resistance	9.4 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	52 mm
Screening effectiveness	≥90 dB
Return loss	≥20 dB





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100	4.1	1.2
150	5.1	1.6
280	7.1	2.2
350	8.1	2.5
400	8.7	2.7
800	12.9	3.9
900	13.8	4.2
1200	16.3	5.0
1500	18.6	5.7
1800	20.8	6.3
1900	21.5	6.6
2000	22.1	6.7
2200	23.5	7.2
2500	25.4	7.7

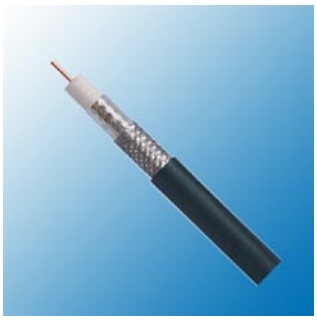
10D-FB

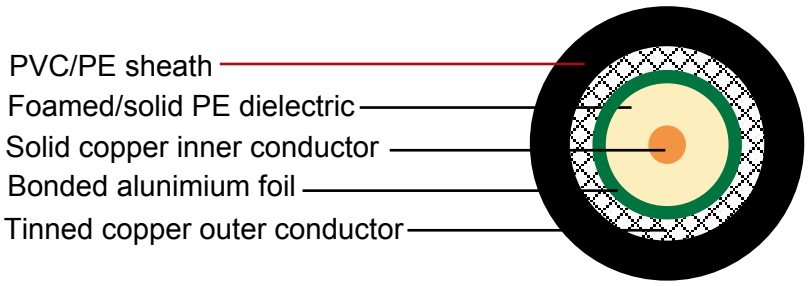
Construction

Inner conductor	Bare copper/Copper clad aluminium	Φ3.5 mm
Dielectric	Foam /Solid PE	Φ10.0±0.02 mm
Shield	Bonded aluminium foil	Φ10.2 mm
Outer conductor	Tinned copper braid(24x7x0.15mm)	Φ10.8 mm
Shield coverage		85%
Sheath	PVC/PE	Φ13.0 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	84 pF/m
Velocity of propagation	80%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	1.8(2.8)) Ohm/Km
Outer conductor resistance	6.4 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	65 mm
Screening effectiveness	≥90 dB
Return loss	≥20 dB





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100	3.2	1.0
150	4.1	1.2
280	5.6	1.7
350	6.3	1.9
400	7.0	2.1
800	10.2	3.1
900	11.0	3.4
1200	13.1	4.0
1500	15.3	4.6
1800	16.8	5.1
1900	17.4	5.3
2000	18.0	5.5
2200	18.8	5.7
2500	22.5	6.3

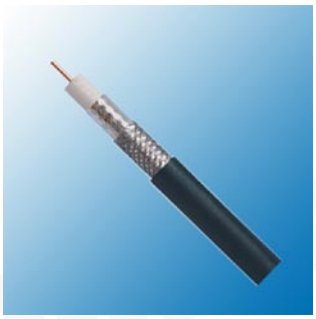
12D-FB

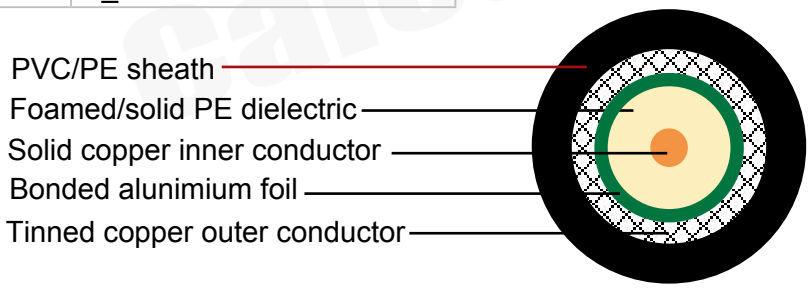
Construction

Inner conductor	Bare copper/Copper clad aluminium	Φ4.4 mm
Dielectric	Foam /Solid PE	Φ12.4±0.02 mm
Shield	Bonded aluminium foil	Φ12.6 mm
Outer conductor	Tinned copper braid(24x7x0.15mm)	Φ13.2 mm
Shield coverage		85%
Sheath	PVC/PE	Φ15.6 mm

Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	83 pF/m
Velocity of propagation	81%
Insulation resistance	>5000 Mohm.Km
Inner conductor resistance	1.2(1.8)) Ohm/Km
Outer conductor resistance	4.5 Ohm/Km
Operating temperature range	-40°C - +85 °C
Min.bending radius	78 mm
Screening effectiveness	≥90 dB
Return loss	≥20 dB





Attenuation

Frequency(MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
100	2.7	0.8
150	3.6	1.0
280	4.6	1.4
350	5.2	1.6
400	6.0	1.7
800	8.5	2.6
900	9.3	2.8
1200	10.8	3.3
1500	12.3	3.7
1800	13.7	4.2
1900	14.2	4.3
2000	14.6	4.5
2200	14.9	4.5
2500	16.6	5.1