

## COAXIAL CABLE

**TYPE** RF 7/8"-50  
RF 7/8"-50 GHF  
RF 7/8"-50 BHF

## CONSTRUCTION



Inner conductor	Copper tube	Ø 9.0 mm
Dielectric	Cellular polyethylene	Ø 22.2 mm
Outer conductor	Corrugated copper tube	Ø 24.9 mm
Sheath	See table below	Ø 27.5 mm
Marking	ΩHMAX, manufacturer's name, cable type, manufacture week, year and metre mark	

## ELECTRICAL CHARACTERISTICS at +20°C

Characteristic impedance	50 ± 1 Ω
Return loss for	
- 380 - 500	MHz
- 800 - 1000	"
- 1700 - 1900	"
- 1600 - 2000	"
- 1900 - 2200	"
Bands according to customer's specifications	
- other bands also available on request	
Attenuation	see table
Velocity factor	0.88
Capacitance	76 pF/m
Cut-off frequency	5300 MHz
Maximum operating frequency	3000 MHz
Max power rating	see table
Peak RF voltage rating	3.2 kV
Peak power rating	89 kW
DC-resistance inner conductor	1.04 Ω/km
DC-resistance outer conductor	0.97 Ω/km

## MECHANICAL CHARACTERISTICS

Weight	550 kg/km
Maximum pulling force	1800 N
Minimum bending radius	
- single bending	120 mm
- repeated bending	250 mm
Operating temperature range	-40...+70°C

## JACKETING OPTIONS

TYPE	Jacket	IEC 60754 -1/-2 halogen free, non corrosive	IEC 61034 low smoke emission	IEC 60332-3 C fire retardant	UV retardancy	Min. installation temperature
RF 7/8"-50	Black HD polyethylene	Yes	No	No	Yes	-40°C
RF 7/8"-50 GHF	Grey, halogen free fire retardant thermoplastic	Yes	Yes	Yes	No	-5°C
RF 7/8"-50 BHF	Black, halogen free fire retardant thermoplastic	Yes	Yes	Yes	Yes	-5°C

## 7/8" COAXIAL CABLE

Frequency  MHz	Attenuation ambient temperature +20°C dB/100 m		Power rating ambient +40°C inner conductor +100°C kW
	typical	max	
10	0.362	0.367	26
30	0.632	0.642	15
50	0.821	0.835	12
100	1.18	1.20	8.0
200	1.69	1.72	5.6
300	2.09	2.14	4.5
400	2.44	2.50	3.8
450	2.60	2.66	3.6
500	2.75	2.82	3.4
600	3.04	3.12	3.1
700	3.31	3.39	2.8
800	3.56	3.65	2.6
850	3.68	3.78	2.5
900	3.80	3.90	2.5
950	3.91	4.02	2.4
1000	4.03	4.14	2.3
1200	4.46	4.59	2.1
1400	4.86	5.01	1.9
1600	5.25	5.41	1.8
1800	5.61	5.79	1.7
1900	5.79	5.98	1.6
2000	5.96	6.16	1.6
2200	6.30	6.52	1.5
2400	6.62	6.86	1.4
2600	6.94	7.19	1.3
2800	7.25	7.52	1.3
3000	7.55	7.84	1.2