

# RG-Coaxial Cables



RG-Type.../U	214	215	216	217	218	223	316
Part No.	40011	40198	40199	40200	40201	40202	40203

## Cable structure

Inner conductor ø mm	7 x 0,75 Silvered copper	7 x 0,75 Copper, bare	7 x 0,4 Tinned copper	1 x 2,7 Copper, bare	1 x 4,95 Copper, bare	1 x 0,9 Silvered copper	7 x 0,17 Steel/copper, silvered
Insulation ø mm	7,24 PE	7,24 PE	7,24 PE	9,4 PE	17,3 PE	2,95 PE	1,52 PTFE
Outer conductor	2 braids 2x silvered copper	Braid Copper, bare	2 braids Copper, bare	2 braids Copper, bare	Braid Copper, bare	2 braids 2x silvered copper	Braid Silvered copper
Outer jacket	PVC	PVC	PVC	PVC	PVC	PVC	PTFE/ alt. FEP
Min. bending radius ca. mm	50	70	50	70	110	25	15
Temperature range °C	-35 to +80	-35 to +80	-35 to +80	-35 to +80	-35 to +80	-35 to +80	-55 to +200
Cu weight kg/km	119,0	148,0	107,0	187,0	348,0	42,0	8,5
Approx. outer ø mm	10,8	10,3	10,8	13,84	22,1	5,38	2,5
Approx. weight kg/km	198	300	176	300	710	60	15

## Electrical characteristics

Impedance (Ohm)	50 ± 2	50 ± 2	75 ± 3	50 ± 2	50 ± 2	50 ± 2	50 ± 2
Frequency range							
f (max) GHz	11	3	3	3	3	3	3
Propagation velocity v/c	0,66	0,66	0,66	0,66	0,66	0,66	0,66
Attenuation at 20°C (dB/100m)							
100 MHz	7,0	7,0	7,5	4,8	2,9	17,0	28,0
200 MHz	10,2	10,2	11,0	7,1	4,5	23,0	40,0
500 MHz	17,0	17,0	18,5	12,3	8,1	38,0	68,0
800 MHz	23,0	23,0	24,0	16,8	11,2	50,0	90,0
Approx. capacitance pF/m	101,0	101,0	67,0	101,0	101,0	101,0	95,0
Rel. velocity of propagation %	67	100	100	100	100	67	70
Insulation resistance							
MOhm x km min.	10 <sup>5</sup>	10 <sup>5</sup>	10 <sup>5</sup>	10 <sup>5</sup>	10 <sup>5</sup>	10 <sup>5</sup>	10 <sup>5</sup>
Loop resistance							
max. (Ohm/km)	10	10	21	5	2	36	310
Nominal peak voltage kVs	5,2	5,0	5,0	7,0	11,0	1,9	1,2
Dielectric strength							
50 Hz kVeff	10,0	10,0	10,0	10,0	15,0	5,0	2,0
Price EUR/100m, Cu 100,-							

Dimensions and specifications may be changed without prior notice. (RM01)

## Note

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers.
- The colour outer jacket at PTFE is black or transparent as per production outlet.
- RG-Coaxial types are in accordance with US-Military specifications MIL-C-17.
- RG/U: R=Radio, G=Guide, U=Utility

## Application

Coaxial cables are used in high frequency transmission, especially for transmitters and receivers, computers, radio and TV transmissions. The varied mechanical, thermal and electronic properties of Coaxial cables mean that they can be used up into the GHz levels, as per cable type.