

# RG-Coaxial Cables



Type RG.../U	214	215	216	217	218	223	316
Part no.	40011	40198	40199	40200	40201	40202	40203
<b>Cable structure</b>							
Inner conductor diameter mm	7 x 0,75	7 x 0,75	7 x 0,4	1 x 2,7	1 x 4,95	1 x 0,9	7 x 0,17
	Silvered copper	Copper, bare	Tinned copper	Copper, bare	Copper, bare	Silvered copper	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 approx. 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
Copper weight kg/km	119,0	148,0	107,0	187,0	348,0	42,0	8,5
Outer Ø approx. mm	10,8	10,3	10,8	13,84	22,1	5,38	2,5
Weight approx. kg / km	198	300	176	300	710	60	15
<b>Electrical characteristics</b>							
<b>Impedance (Ohm)</b>	<b>50 ± 2</b>	<b>50 ± 2</b>	<b>75 ± 3</b>	<b>50 ± 2</b>	<b>50 ± 2</b>	<b>50 ± 2</b>	<b>50 ± 2</b>
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	7	7,5	4,8	2,9	17	28
200 MHz	10,2	10,2	11	7,1	4,5	23	40
500 MHz	17	17	18,5	12,3	8,1	38	68
800 MHz	23	23	24	16,8	11,2	50	90
Capacitance pF/m	101	101	67	101	101	101	95
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	5	7	11	1,9	1,2
Dielectric strength							
50 Hz kVeff	10	10	10	10	15	5	2

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.