RG-Coaxial Cables



Type RG.../U	**6**	**8**	**11**	**58**	**59**	**62**
Part no.	40001	40013	40002	40003	40004	40005
Cable structure						
Inner conductor diameter mm	1 x 0,72 Steel/copper, bare	7 x 0,72 Copper, bare	7 x 0,4 Tinned copper	19 x 0,18 Tinned copper	1 x 0,6 Steel/copper, bare	1 x 0,65 Steel/copper, bare
Insulation Ø mm	4,7 PE	6,4 PE	7,3 PE	2,95 PE	3,7 PE	3,7 PE, hollow
Outer conductor	2 braids Silvered copper Copper, bare	Braid Copper, bare -	Braid Copper, bare -	Braid Tinned copper -	Braid Copper, bare -	Braid Copper, bare -
Outer jacket	PVC	PVC	PVC	PVC	PVC	PVC
Min. bending radius approx. mm	40	50	50	25	30	30
Temperature range °C	-35 to +80	-35 to +80	-35 to +80	-35 to +80	-35 to +80	-35 to +80
Copper weight kg/km	67,0	62,0	58,0	21,0	26,0	26,0
Outer Ø approx. mm	8,4	9,5	10,3	4,95	6,2	6,15
Weight approx. kg / km	115	128	140	38	57	52
Electrical characteristics						
Impedance (Ohm)	**75 ± 3**	**50 ± 2**	**75 ± 3**	**50 ± 2**	**75 ± 3**	**93 ± 5**
Frequency range f (max.) GHz	3	3	3	3	3	3
Propagation velocity v/c	0,66	0,66	0,66	0,66	0,66	0,83
Attenuation at 20 °C (dB/100m)						
100 MHz	8,8	8	7,5	17	11,5	10,5
200 MHz	13,5	10,8	11	24	16,5	15
500 MHz	21	17	18,5	39	27	24,5
800 MHz	27,5	25	24	51	35	32,5
1000 MHz	-	26,5	30	56	41	35
1350 MHz	-	30,6	-	-	-	-
1750 MHz	-	35	-	-	-	-
Capacitance pF/m	67	101	67	101	67	42,5
Rel. velocity of propagation %	67	66	67	67	67	83
Insulation resistance MOhm x km min.	10^5	10^5	10^5	10^5	10^5	10^5
Loop resistance max. (Ohm/km)	110	11	23	53	171	155
Nominal peak voltage kVs	2,8	5,1	5,2	2,5	3,5	1,1
Dielectric strength 50 Hz kVeff	7	9,5	10	5	7	3

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

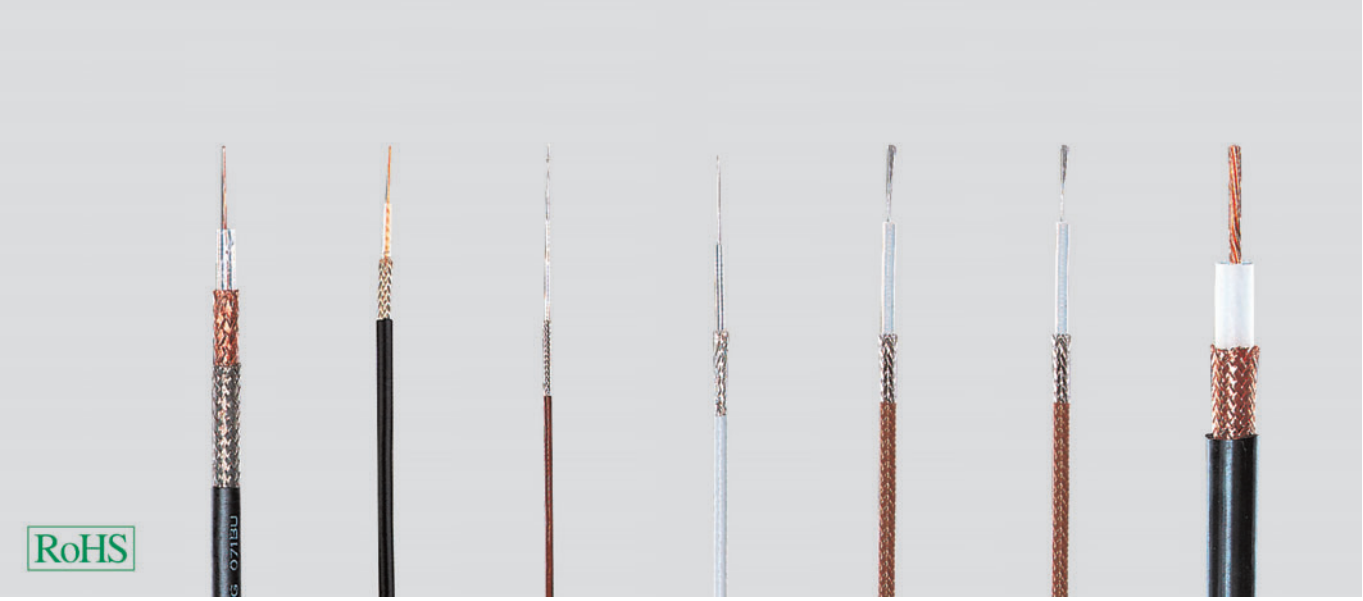
Note

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers.
- 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.

RG-Coaxial Cables



Type RG.../U	**71**	**174**	**178**	**179**	**180**	**187**	**213**
Part no.	40006	40197	40007	40008	40009	40010	40012
Cable structure							
Inner conductor diameter mm	1 x 0,65 Steel/copper, bare	7 x 0,16 Steel/copper, bare	7 x 0,1 Steel/copper, silvered	7 x 0,1 Steel/copper, silvered	7 x 0,1 Steel/copper, silvered	7 x 0,1 Steel/copper, silvered	7 x 0,75 Copper, bare
Insulation Ø mm	3,7 PE, hollow	1,52 PE	0,86 PTFE	1,6 PTFE	2,6 PTFE	1,6 PTFE	7,24 PE
Outer conductor	2 braids Copper, bare Tinned copper	Braid Tinned copper -	Braid Silvered copper -	Braid Silvered copper -	Braid Silvered copper -	Braid Silvered copper -	Braid Copper, bare -
Outer jacket	PE	PVC	FEP	FEP	FEP	PFA	PVC
Min. bending radius approx. mm	30	15	10	15	25	15	50
Temperature range °C	-50 to +70	-35 to +80	-55 to +200	-55 to +200	-55 to +200	-55 to +260	-35 to +80
Copper weight kg/km	48,0	7,0	6,4	7,3	11,0	8,5	79,0
Outer Ø approx. mm	6,2	2,8	1,8	2,54	3,7	2,65	10,3
Weight approx. kg / km	62	11	8	16	28	17	159
Electrical characteristics							
Impedance (Ohm)	**93 ± 3**	**50 ± 2**	**50 ± 2**	**75 ± 3**	**95 ± 5**	**75 ± 3**	**50 ± 2**
Frequency range f (max.) GHz	3	1	3	3	3	3	3
Propagation velocity v/c	0,83	0,66	0,7	0,7	0,7	0,7	0,66
Attenuation at 20°C (dB/100m)							
100 MHz	10,5	30	43	28	20	28	7
200 MHz	15	45	62	41	33	41	10,2
500 MHz	24,5	73	102	69	-	69	17
800 MHz	32,5	93	134	92	-	92	23
Capacitance pF/m	42,5	101	93	63	50	64	101
Rel. velocity of propagation %	83	70	70	70	70	70	100
Insulation resistance MOhm x km min.	10^5	10^5	10^5	10^5	10^5	10^5	10^5
Loop resistance max. (Ohm/km)	136	360	860	840	840	840	10
Nominal peak voltage kVs	1,5	1,1	1,1	1,3	1,6	1,3	5,2
Dielectric strength 50 Hz kVeff	3	2	2	2	2	2	10

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

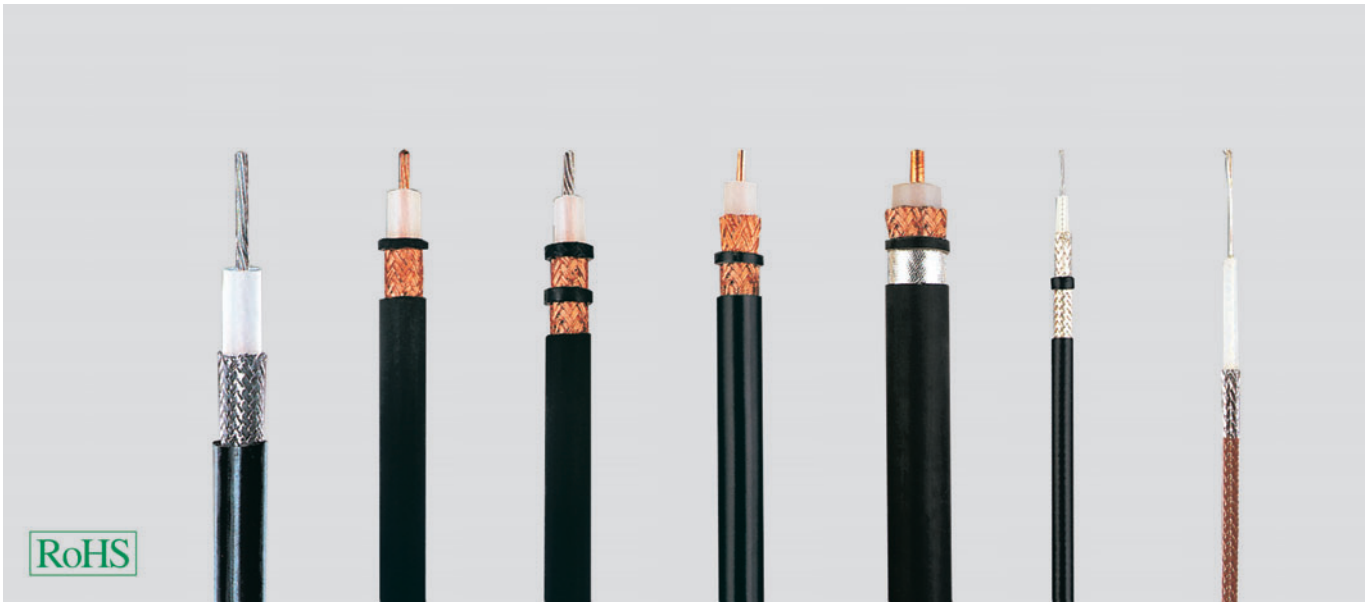
Note

- 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 at FEP and PFA outer jacket 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.

RG-Coaxial Cables



Type RG.../U	214	215	216	217	218	223	316
Part no.	40011	40198	40199	40200	40201	40202	40203
Cable structure							
Inner conductor diameter 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 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
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	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.	10^5	10^5	10^5	10^5	10^5	10^5	10^5
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.

Halogen-Free RG-Coaxial Cables



Type RG.../U	**11**	**58**	**59**	**62**	**71**	**213**	**214**
Part no.	40190	40191	40192	40193	40194	40195	40196
Cable structure							
Inner conductor diameter mm	7 x 0,4 Tinned copper	19 x 0,18 Tinned copper	1 x 0,6 Steel/copper, bare	1 x 0,65 Steel/copper, bare	1 x 0,65 Steel/copper, bare	7 x 0,75 Copper, bare	7 x 0,75 Silvered copper
Insulation Ø mm	7,3 PE	2,95 PE	3,7 PE	3,7 PE, hollow	3,7 PE, hollow	7,24 PE	7,24 PE
Outer conductor	Braid Copper, bare -	Braid Tinned copper -	Braid Copper, bare -	Braid Copper, bare -	2 braids Copper, bare Tinned copper	Braid Copper, bare -	2 braids 2x silvered copper -
Outer jacket	HM2	HM2	HM2	HM2	HM2	HM2	HM2
Min. bending radius approx. mm	50	25	30	30	30	50	50
Temperature range °C	-35 to +80	-35 to +80	-35 to +80	-35 to +80	-50 to +70	-35 to +80	-35 to +80
Copper weight kg/km	58,0	21,0	26,0	26,0	48,0	79,0	119,0
Outer Ø approx. mm	10,3	5,4	6,4	6,4	6,9	10,3	10,8
Weight approx. kg / km	144	38	57	54	64	155	203
Electrical characteristics							
Impedance (Ohm)	**75 ± 3**	**50 ± 2**	**75 ± 3**	**93 ± 5**	**93 ± 3**	**50 ± 2**	**50 ± 2**
Frequency range f (max.) GHz	3	3	3	3	3	3	11
Propagation velocity v/c	0,66	0,66	0,66	0,85	0,85	0,66	0,66
Attenuation at 20°C (dB/100m)							
3 MHz	1,3	2,9	2	2	2	1,2	1,2
10 MHz	2,4	5,3	3,8	3,7	3,7	2,3	2,3
100 MHz	7,8	17	12,2	12	12,5	7,5	7,5
200 MHz	11,3	24,4	17,6	17,3	17,3	10,9	10,9
500 MHz	18,7	39,2	27,2	24,7	24,7	17,2	17,2
800 MHz	23,4	47,8	35,2	34,6	34,6	22,6	22,6
Capacitance pF/m	68	0	68	42,5	42,5	101	101
Rel. velocity of propagation %	67	67	67	43	43	101	101
Insulation resistance MOhm x km min.	10^5	10^5	10^5	10^5	10^5	10^5	10^5
Loop resistance max. (Ohm/km)	23	53	171	155	136	10	10
Nominal peak voltage kVs	5	1,9	2,3	0,75	0,75	5	5
Dielectric strength 50 Hz kV eff.	10	5	7	3	3	10	10

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.
- H-outer jacket = halogen-free material (HM2)
- RG-Coaxial types are in accordance with US-Military specifications MIL-C-17.
- RG/U: R=Radio, G=Guide, U=Utility
- FRNC = Flame Retardant Non-Corrosive

Application

Coaxial cables are used in high frequency transmission, especially for transmitters and receivers, computers, radio and TV transmissions where no flame propagation under behaviour in fire is permitted. 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.