Pb Free

RG16H1R12-1,8/3 kV ÷ 26/45 kV
RG16H1OR12-1,8/3 kV ÷ 26/45 kV

Structure and electrical, physical, mechanical requirements:	CEI 20-13
	CEI 20-66
	IEC 60502-2
Measurement of partial discharges:	CEI 20-16
	IEC 60885-3

REACTION TO FIRE

CPR COMPLIANT
REGULATION 305/2011/EU

Standard:	EN 50575:2014+A1:2016
Class:	E_{ca}
Classification:	EN 13501-6
Flame propagation:	EN 60332-1-2
Notified Body:	0051 - IMQ
CE	2021

CE

review n° 004 date 02/10/23

RG16H1R12 /Description

- Single-core cables, insulated with HEPR rubber of G16 quality, under PVC sheath.
- Conductor: class 2, compact stranded wire, plain copper
- Semiconductor layer: extruded (only cables Uo/U ≥ 6/10 kV)
- Insulation: HEPR rubber, G16 quality, Pb free
- Semiconductor layer: extruded, cold stripping (only cables Uo/U ≥ 6/10 kV)
- Screen: plain copper tapes wrapped
- Sheath: PVC based compound, R12 quality
- Colour: red

N.B. The cable can be built in the three-pole version with helically wound cores. In this case, the initials becomes RG16H1R12X, followed by rated voltage.

RG16H1OR12 /Description

- Three-pole cables, insulated with HEPR rubber of G16 quality, under PVC sheath.
- Conductor: class 2, compact stranded wire, plain copper
- Semiconductor layer: extruded (only cables Uo/U ≥ 6/10 kV)
- Insulation: HEPR rubber, G16 quality, Pb free
- Semiconductor layer: extruded, cold stripping (only cables Uo/U ≥ 6/10 kV)
- Identification of phases: threads or colored bands
- Inner sheath: PVC based compound extruded, penetrating between the cores
- Screen: plain copper tapes wrapped
- Sheath: PVC based compound, R12 quality
- Colour: red

Special features

Resistance to UV rays.
(ISO 4892-2:2013 / IEC 60811-501:2012 / 1000h)

Functional characteristics

- Rated voltage Uo/U: 1,8/3 - 26/45 kV
- Max. operating temperature: 90°C
- Min. operating temperature: -15°C (without mechanical shocks)
- Max. short circuit temperature: 250°C

Installation conditions

- Minimum installation temperature: 0°C
- Recommended minimum bending radius: 14 times the cable diameter
- Recommended maximum tensile stress: 60 N/mm^2 of the cross-section of the copper

Use and installation method

Suitable for energy transmission between transformer rooms and big power users. For laying on air, into tube or open pass.
Can be laid underground, also if not protected, complying with art. 4.3.11 of CEI 11-17 standard.

Reference Construction Products Regulation 305/2011 EU and Standard EN 50575:
The cable is suitable for the supply of electricity in buildings and other civil engineering works.

Marking

Pb free LA TRIVENETA CAVI RG16H1(O)R12 [rated voltage] [form.] Eac [year] [traceability] (CE logo) [metric]

RG16H1R12 - 1,8/3 kV
Uo/U: 1,8/3 kV
U max: 3,6 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A			
					in air		buried*	
n° x mm²	mm	mm	mm	kg/km	trefoil	flat	trefoil	flat
1 x 10	4,0	2,0	12,8	300	87	111	99	104
1 x 16	4,8	2,0	13,6	365	114	145	126	133
1 x 25	6,0	2,0	14,8	470	149	190	162	171
1 x 35	7,0	2,0	15,9	580	181	230	193	204
1 x 50	8,1	2,0	17,0	700	219	276	227	241
1 x 70	9,7	2,0	18,6	920	275	345	278	294
1 x 95	11,4	2,0	20,3	1190	339	422	332	351
1 x 120	12,9	2,0	21,9	1440	393	487	377	399
1 x 150	14,3	2,0	23,3	1720	446	550	421	445
1 x 185	16,0	2,0	25,0	2065	516	635	477	500
1 x 240	18,3	2,0	27,1	2640	617	745	550	580
1 x 300	21,0	2,0	30,1	3310	709	855	621	650
1 x 400	23,2	2,0	32,5	4125	824	990	702	735
1 x 500	26,1	2,2	36,7	5250	954	1140	790	830
1 x 630	30,3	2,4	41,1	6760	1102	1300	885	930

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz Ω/km		Phase reactance Ω/Km		Capacity at 50Hz
n° x mm²	Ω/Km	trefoil	flat	trefoil	flat	µF/km
1 x 10	1,83	2,34	2,34	0,13	0,19	0,19
1 x 16	1,15	1,47	1,47	0,12	0,18	0,23
1 x 25	0,727	0,927	0,927	0,12	0,18	0,27
1 x 35	0,524	0,669	0,668	0,11	0,17	0,30
1 x 50	0,387	0,494	0,494	0,11	0,16	0,34
1 x 70	0,268	0,342	0,342	0,10	0,16	0,40
1 x 95	0,193	0,246	0,246	0,098	0,16	0,45
1 x 120	0,153	0,196	0,196	0,095	0,15	0,50
1 x 150	0,124	0,159	0,158	0,092	0,15	0,55
1 x 185	0,0991	0,128	0,127	0,089	0,15	0,60
1 x 240	0,0754	0,0985	0,0974	0,086	0,14	0,68
1 x 300	0,0601	0,0797	0,0781	0,084	0,14	0,75
1 x 400	0,0470	0,0638	0,0628	0,083	0,14	0,83
1 x 500	0,0366	0,0517	0,0492	0,081	0,14	0,88
1 x 630	0,0283	0,0425	0,0392	0,079	0,14	0,92

RG16H1R12 - 3,6/6 kV
Uo/U: 3,6/6 kV
U max: 7,2 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A			
					in air		buried*	
n° x mm²	mm	mm	mm	kg/km	trefoil	flat	trefoil	flat
1 x 10	4,0	3,0	14,8	365	87	105	95	100
1 x 16	4,8	3,0	15,6	435	113	136	122	128
1 x 25	6,0	3,0	16,8	550	150	180	156	165
1 x 35	7,0	3,0	17,9	660	182	220	187	197
1 x 50	8,1	3,0	19,0	795	219	261	220	233
1 x 70	9,7	3,0	20,6	1015	275	328	271	286
1 x 95	11,4	3,0	22,3	1295	337	402	324	342
1 x 120	12,9	3,0	23,9	1550	390	465	370	390
1 x 150	14,3	3,0	25,3	1840	443	525	412	435
1 x 185	16,0	3,0	27,0	2190	512	605	468	491
1 x 240	18,3	3,0	29,3	2790	608	715	540	570
1 x 300	21,0	3,0	32,3	3465	700	820	610	640
1 x 400	23,2	3,0	34,7	4280	813	950	690	725
1 x 500	26,1	3,2	38,9	5430	940	1100	780	820
1 x 630	30,3	3,2	42,7	6910	1082	1260	875	915

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz Ω/km		Phase reactance Ω/Km		Capacity at 50Hz
n° x mm²	Ω/Km	trefoil	flat	trefoil	flat	μF/km
1 x 10	1,83	2,34	2,34	0,14	0,20	0,15
1 x 16	1,15	1,47	1,47	0,14	0,19	0,17
1 x 25	0,727	0,927	0,927	0,13	0,18	0,20
1 x 35	0,524	0,669	0,668	0,12	0,18	0,23
1 x 50	0,387	0,494	0,494	0,11	0,17	0,25
1 x 70	0,268	0,342	0,342	0,11	0,17	0,29
1 x 95	0,193	0,246	0,246	0,10	0,16	0,33
1 x 120	0,153	0,196	0,196	0,10	0,16	0,37
1 x 150	0,124	0,159	0,158	0,097	0,16	0,40
1 x 185	0,0991	0,128	0,127	0,094	0,15	0,44
1 x 240	0,0754	0,0985	0,0974	0,091	0,15	0,49
1 x 300	0,0601	0,0797	0,0781	0,089	0,15	0,54
1 x 400	0,0470	0,0638	0,0618	0,087	0,15	0,60
1 x 500	0,0366	0,0517	0,0492	0,084	0,14	0,64
1 x 630	0,0283	0,0425	0,0392	0,082	0,14	0,72

RG16H1R12 - 6/10 kV
Uo/U: 6/10 kV
U max: 12 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A			
					in air		buried*	
n° x mm²	mm	mm	mm	kg/km	trefoil	flat	trefoil	flat
1 x 10	4,0	3,4	18,6	460	91	105	93	98
1 x 16	4,8	3,4	19,4	535	117	136	120	128
1 x 25	6,0	3,4	20,6	650	154	178	155	163
1 x 35	7,0	3,4	21,6	760	186	219	185	195
1 x 50	8,1	3,4	22,7	905	223	260	218	231
1 x 70	9,7	3,4	24,3	1190	279	325	270	285
1 x 95	11,4	3,4	26,0	1420	340	398	320	340
1 x 120	12,9	3,4	27,8	1695	395	460	365	385
1 x 150	14,3	3,4	29,4	2015	448	520	410	432
1 x 185	16,0	3,4	31,1	2380	516	600	464	490
1 x 240	18,3	3,4	33,9	3015	610	705	540	565
1 x 300	21,0	3,4	36,6	3705	703	810	605	635
1 x 400	23,2	3,4	39,8	4595	815	935	690	720
1 x 500	26,1	3,4	43,4	5740	945	1080	780	810
1 x 630	30,3	3,4	47,7	7280	1085	1230	875	900

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz Ω/km		Phase reactance Ω/Km		Capacity at 50Hz
n° x mm²	Ω/Km	trefoil	flat	trefoil	flat	µF/km
1 x 10	1,83	2,34	2,34	0,16	0,21	0,16
1 x 16	1,15	1,47	1,47	0,15	0,20	0,18
1 x 25	0,727	0,927	0,927	0,14	0,19	0,21
1 x 35	0,524	0,669	0,669	0,13	0,19	0,23
1 x 50	0,387	0,494	0,494	0,12	0,18	0,26
1 x 70	0,268	0,342	0,342	0,12	0,17	0,29
1 x 95	0,193	0,246	0,246	0,11	0,17	0,32
1 x 120	0,153	0,196	0,196	0,11	0,16	0,36
1 x 150	0,124	0,159	0,158	0,10	0,16	0,38
1 x 185	0,0991	0,128	0,127	0,10	0,16	0,42
1 x 240	0,0754	0,0985	0,0973	0,097	0,16	0,47
1 x 300	0,0601	0,0797	0,0780	0,095	0,15	0,52
1 x 400	0,0470	0,0638	0,0617	0,092	0,15	0,57
1 x 500	0,0366	0,0517	0,0490	0,089	0,15	0,64
1 x 630	0,0283	0,0425	0,0390	0,087	0,15	0,73

RG16H1R12 - 8,7/15 kV
Uo/U: 8,7/15 kV
U max: 17,5 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A			
					in air		buried*	
n° x mm^2	mm	mm	mm	kg/km	trefoil	flat	trefoil	flat
1 x 16	4,8	4,5	21,6	620	120	135	118	123
1 x 25	6,0	4,5	22,8	745	155	177	152	158
1 x 35	7,0	4,5	23,8	865	190	215	181	190
1 x 50	8,1	4,5	24,9	1010	225	258	213	224
1 x 70	9,7	4,5	26,5	1250	282	323	262	276
1 x 95	11,4	4,5	28,2	1540	345	393	313	330
1 x 120	12,9	4,5	30,2	1840	400	455	358	375
1 x 150	14,3	4,5	31,8	2170	450	515	396	420
1 x 185	16,0	4,5	33,7	2550	518	590	453	475
1 x 240	18,3	4,5	36,3	3190	615	700	525	550
1 x 300	21,0	4,5	39,4	3930	704	800	590	620
1 x 400	23,2	4,5	42,2	4805	816	920	670	700
1 x 500	26,1	4,5	45,8	5950	945	1060	760	785
1 x 630	30,3	4,5	49,9	7505	1088	1210	850	870

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz Ω/km		Phase reactance Ω/Km		Capacity at 50Hz
n° x mm^2	Ω/Km	trefoil	flat	trefoil	flat	µF/km
1 x 16	1,15	1,47	1,47	0,15	0,21	0,15
1 x 25	0,727	0,927	0,927	0,14	0,20	0,18
1 x 35	0,524	0,669	0,669	0,14	0,19	0,19
1 x 50	0,387	0,494	0,494	0,13	0,19	0,21
1 x 70	0,268	0,342	0,342	0,12	0,18	0,24
1 x 95	0,193	0,246	0,246	0,12	0,17	0,26
1 x 120	0,153	0,196	0,196	0,11	0,17	0,29
1 x 150	0,124	0,159	0,158	0,11	0,17	0,31
1 x 185	0,0991	0,128	0,127	0,11	0,16	0,34
1 x 240	0,0754	0,0985	0,0973	0,10	0,16	0,37
1 x 300	0,0601	0,0797	0,0780	0,099	0,16	0,42
1 x 400	0,0470	0,0638	0,0617	0,096	0,15	0,45
1 x 500	0,0366	0,0517	0,0490	0,092	0,15	0,51
1 x 630	0,0283	0,0425	0,0390	0,090	0,15	0,58

RG16H1R12 - 12/20 kV
Uo/U: 12/20 kV
U max: 24 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A			
					in air		buried*	
n° x mm^2	mm	mm	mm	kg/km	trefoil	flat	trefoil	flat
1 x 25	6,0	5,5	24,8	840	158	176	153	158
1 x 35	7,0	5,5	25,8	965	190	213	182	189
1 x 50	8,1	5,5	26,9	1120	230	255	216	225
1 x 70	9,7	5,5	28,5	1365	285	320	265	275
1 x 95	11,4	5,5	30,4	1680	348	390	315	329
1 x 120	12,9	5,5	32,6	2000	400	450	360	374
1 x 150	14,3	5,5	34,1	2320	450	510	402	416
1 x 185	16,0	5,5	35,9	2710	520	585	455	472
1 x 240	18,3	5,5	38,9	3395	615	690	528	545
1 x 300	21,0	5,5	41,6	4110	705	790	595	611
1 x 400	23,2	5,5	44,2	4980	815	910	674	690
1 x 500	26,1	5,5	48,0	6175	945	1050	762	776
1 x 630	30,3	5,5	52,1	7740	1087	1190	858	875

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz Ω/km		Phase reactance Ω/Km		Capacity at 50Hz
n° x mm^2	Ω/Km	trefoil	flat	trefoil	flat	µF/km
1 x 25	0,727	0,927	0,927	0,14	0,20	0,16
1 x 35	0,524	0,669	0,669	0,14	0,20	0,17
1 x 50	0,387	0,494	0,494	0,13	0,19	0,18
1 x 70	0,268	0,342	0,342	0,13	0,19	0,21
1 x 95	0,193	0,246	0,246	0,12	0,18	0,23
1 x 120	0,153	0,196	0,196	0,12	0,18	0,25
1 x 150	0,124	0,159	0,158	0,11	0,17	0,27
1 x 185	0,0991	0,128	0,127	0,11	0,17	0,29
1 x 240	0,0754	0,0985	0,0972	0,11	0,16	0,32
1 x 300	0,0601	0,0797	0,0779	0,10	0,16	0,35
1 x 400	0,0470	0,0638	0,0616	0,099	0,16	0,39
1 x 500	0,0366	0,0517	0,0489	0,096	0,15	0,43
1 x 630	0,0283	0,0425	0,0389	0,093	0,15	0,49

RG16H1R12 - 18/30 kV
Uo/U: 18/30 kV
U max: 36 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A			
					in air		buried*	
n° x mm^2	mm	mm	mm	kg/km	trefoil	flat	trefoil	flat
1 x 35	7,0	8,0	31,0	1310	191	212	182	188
1 x 50	8,1	8,0	32,5	1470	229	254	214	222
1 x 70	9,7	8,0	34,1	1730	285	316	263	272
1 x 95	11,4	8,0	36,0	2065	347	387	314	325
1 x 120	12,9	8,0	38,4	2425	401	445	358	370
1 x 150	14,3	8,0	39,9	2760	452	505	400	415
1 x 185	16,0	8,0	41,7	3105	520	580	453	469
1 x 240	18,3	8,0	44,3	3860	615	680	525	540
1 x 300	21,0	8,0	46,8	4585	705	775	593	606
1 x 400	23,2	8,0	49,6	5505	815	895	671	685
1 x 500	26,1	8,0	53,4	6745	943	1030	761	775
1 x 630	30,3	8,0	57,5	8345	1085	1170	860	875

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz Ω/km		Phase reactance Ω/Km		Capacity at 50Hz
n° x mm^2	Ω/Km	trefoil	flat	trefoil	flat	μF/km
1 x 35	0,524	0,669	0,669	0,15	0,20	0,14
1 x 50	0,387	0,494	0,494	0,15	0,20	0,15
1 x 70	0,268	0,342	0,342	0,14	0,20	0,16
1 x 95	0,193	0,246	0,246	0,13	0,19	0,18
1 x 120	0,153	0,196	0,196	0,13	0,18	0,19
1 x 150	0,124	0,159	0,158	0,12	0,18	0,20
1 x 185	0,0991	0,128	0,127	0,12	0,18	0,22
1 x 240	0,0754	0,0985	0,0972	0,11	0,17	0,24
1 x 300	0,0601	0,0797	0,0779	0,11	0,17	0,27
1 x 400	0,0470	0,0638	0,0616	0,11	0,16	0,29
1 x 500	0,0366	0,0517	0,0489	0,10	0,16	0,32
1 x 630	0,0283	0,0425	0,0389	0,099	0,16	0,36

RG16H1OR12 - 1,8/3 kV
Uo/U: 1,8/3 kV
U max: 3,6 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 10	4,0	2,0	22,7	895	85	93
3 x 16	4,8	2,0	24,0	1135	109	120
3 x 25	6,0	2,0	26,5	1520	145	155
3 x 35	7,0	2,0	29,0	1880	175	185
3 x 50	8,1	2,0	31,3	2330	208	216
3 x 70	9,7	2,0	35,2	3150	260	265
3 x 95	11,4	2,0	39,2	4100	318	315
3 x 120	12,9	2,0	42,8	5020	367	360
3 x 150	14,3	2,0	46,1	6040	415	400
3 x 185	16,0	2,0	49,9	7295	476	453
3 x 240	18,3	2,0	55,7	9355	555	520
3 x 300	21,0	2,0	61,5	11540	635	585
3 x 400	23,2	2,0	67,1	14650	716	651

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	μF/km
3 x 10	1,83	2,34	0,11	0,19
3 x 16	1,15	1,47	0,10	0,23
3 x 25	0,727	0,927	0,097	0,27
3 x 35	0,524	0,669	0,093	0,30
3 x 50	0,387	0,494	0,088	0,34
3 x 70	0,268	0,342	0,084	0,40
3 x 95	0,193	0,247	0,081	0,45
3 x 120	0,153	0,197	0,079	0,50
3 x 150	0,124	0,159	0,077	0,55
3 x 185	0,0991	0,129	0,076	0,60
3 x 240	0,0754	0,0990	0,074	0,68
3 x 300	0,0601	0,0807	0,072	0,75
3 x 400	0,0470	0,0651	0,071	0,83

RG16H1OR12 - 3,6/6 kV
Uo/U: 3,6/6 kV
U max: 7,2 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 10	4,0	3,0	26,6	1180	85	93
3 x 16	4,8	3,0	28,5	1480	109	120
3 x 25	6,0	3,0	31,2	1875	145	153
3 x 35	7,0	3,0	33,5	2250	175	183
3 x 50	8,1	3,0	36,2	2790	211	216
3 x 70	9,7	3,0	39,9	3610	262	263
3 x 95	11,4	3,0	43,9	4590	318	315
3 x 120	12,9	3,0	47,7	5580	370	359
3 x 150	14,3	3,0	51,0	6640	415	400
3 x 185	16,0	3,0	54,8	7940	477	451
3 x 240	18,3	3,0	60,6	10060	555	518
3 x 300	21,0	3,0	66,4	12330	635	583
3 x 400	23,2	3,0	72,0	15490	717	651

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	μF/km
3 x10	1,83	2,34	0,12	0,15
3 x 16	1,15	1,47	0,12	0,17
3 x 25	0,727	0,927	0,11	0,20
3 x 35	0,524	0,669	0,10	0,23
3 x 50	0,387	0,494	0,097	0,26
3 x 70	0,268	0,342	0,092	0,30
3 x 95	0,193	0,247	0,089	0,33
3 x 120	0,153	0,197	0,086	0,37
3 x 150	0,124	0,159	0,084	0,40
3 x 185	0,0991	0,129	0,082	0,44
3 x 240	0,0754	0,0990	0,079	0,49
3 x 300	0,0601	0,0807	0,077	0,54
3 x 400	0,0470	0,0651	0,075	0,60

RG16H1OR12 - 6/10 kV
Uo/U: 6/10 kV
U max: 12 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 10	4,0	3,4	33,2	1670	73	78
3 x 16	4,8	3,4	35,1	1975	107	112
3 x 25	6,0	3,4	37,8	2435	145	149
3 x 35	7,0	3,4	40,3	2865	175	178
3 x 50	8,1	3,4	42,6	3395	208	210
3 x 70	9,7	3,4	46,9	4350	260	257
3 x 95	11,4	3,4	50,7	5375	316	307
3 x 120	12,9	3,4	55,1	6470	365	350
3 x 150	14,3	3,4	58,4	7585	407	390
3 x 185	16,0	3,4	62,3	8990	469	440
3 x 240	18,3	3,4	69,3	11365	550	510
3 x 300	21,0	3,4	75,1	13725	630	580
3 x 400	23,2	3,4	80,8	14275	720	655

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	μF/km
3 x 10	1,83	2,34	0,14	0,16
3 x 16	1,15	1,47	0,13	0,18
3 x 25	0,727	0,927	0,12	0,21
3 x 35	0,524	0,669	0,11	0,23
3 x 50	0,387	0,494	0,11	0,26
3 x 70	0,268	0,342	0,10	0,29
3 x 95	0,193	0,247	0,097	0,32
3 x 120	0,153	0,197	0,094	0,36
3 x 150	0,124	0,159	0,091	0,38
3 x 185	0,0991	0,129	0,088	0,42
3 x 240	0,0754	0,0990	0,085	0,47
3 x 300	0,0601	0,0807	0,084	0,52
3 x 400	0,0470	0,0651	0,082	0,57

RG16H1OR12 - 8,7/15 kV
Uo/U: 8,7/15 kV
U max: 17,5 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 16	4,8	4,5	40,3	2455	98	101
3 x 25	6,0	4,5	42,8	2935	145	145
3 x 35	7,0	4,5	45,2	3375	177	173
3 x 50	8,1	4,5	47,8	3965	210	204
3 x 70	9,7	4,5	51,8	4950	262	250
3 x 95	11,4	4,5	55,9	6040	315	298
3 x 120	12,9	4,5	59,8	7450	361	339
3 x 150	14,3	4,5	63,1	8305	407	378
3 x 185	16,0	4,5	67,4	9790	470	429
3 x 240	18,3	4,5	73,4	12135	550	500
3 x 300	21,0	4,5	80,2	15025	630	565

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	μF/km
3 x 16	1,15	1,47	0,14	0,15
3 x 25	0,727	0,927	0,13	0,18
3 x 35	0,524	0,669	0,12	0,19
3 x 50	0,387	0,494	0,12	0,21
3 x 70	0,268	0,342	0,11	0,24
3 x 95	0,193	0,247	0,10	0,26
3 x 120	0,153	0,197	0,10	0,29
3 x 150	0,124	0,159	0,097	0,31
3 x 185	0,0991	0,129	0,094	0,34
3 x 240	0,0754	0,0990	0,090	0,37
3 x 300	0,0601	0,0807	0,088	0,42

RG16H1OR12 - 12/20 kV
Uo/U: 12/20 kV
U max: 24 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 16	4,8	3,4	39,5	2805	105	111
3 x 25	6,0	3,4	41,4	3055	143	145
3 x 35	7,0	3,4	44,9	3805	170	172
3 x 50	8,1	3,4	47,4	4415	205	203
3 x 70	9,7	3,4	51,5	5415	253	250
3 x 95	11,4	3,4	55,5	6545	305	296
3 x 120	12,9	3,4	60,1	7855	353	375
3 x 150	14,3	3,4	63,8	9000	393	375
3 x 185	16,0	3,4	67,9	10510	447	425
3 x 240	18,3	3,4	74,9	13005	525	490
3 x 300	21,0	3,4	80,5	15460	595	550

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	μF/km
3 x 16	1,15	1,47	0,13	0,18
3 x 25	0,727	0,927	0,12	0,21
3 x 35	0,524	0,669	0,11	0,23
3 x 50	0,387	0,494	0,11	0,26
3 x 70	0,268	0,342	0,10	0,29
3 x 95	0,193	0,247	0,097	0,32
3 x 120	0,153	0,197	0,094	0,36
3 x 150	0,124	0,159	0,091	0,38
3 x 185	0,0991	0,129	0,088	0,42
3 x 240	0,0754	0,099	0,085	0,47
3 x 300	0,0601	0,0807	0,084	0,52

RG16H1OR12 - 18/30 kV
Uo/U: 18/30 kV
U max: 36 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 25	7,0	8,0	62,0	5815	177	174
3 x 50	8,1	8,0	64,1	6165	210	205
3 x 70	9,7	8,0	67,9	7265	260	250
3 x 95	11,4	8,0	71,9	8520	315	300
3 x 120	12,9	8,0	77,0	9975	360	340
3 x 150	14,3	8,0	80,4	11285	405	380
3 x 185	16,0	8,0	84,1	12625	465	430
3 x 240	18,3	8,0	90,3	15260	545	496

(*) I valori di portata si riferiscono alle seguenti condizioni:
- Resistività termica del terreno: 1 K·m/W
- Temperatura ambiente 20°C
- profindità di posa: 0,8 m

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	µF/km
3 x 25	0,524	0,669	0,14	0,14
3 x 50	0,387	0,494	0,13	0,15
3 x 70	0,268	0,342	0,13	0,16
3 x 95	0,193	0,247	0,12	0,18
3 x 120	0,153	0,197	0,12	0,19
3 x 150	0,124	0,159	0,11	0,20
3 x 185	0,0991	0,129	0,11	0,22
3 x 240	0,0754	0,0990	0,10	0,24

RG16H1OR12 - 26/45 kV
Uo/U: 26/45 kV
U max: 52 kV

Technical characteristics

Formation	Approx. conductor Ø	Average insulation thickness	Approx. external Ø	Approx. cable weight	Current rating A	
n° x mm^2	mm	mm	mm	kg/km	in air	buried*
3 x 70	9,7	10,3	81,7	8650	255	241
3 x 95	11,4	10,3	85,6	9980	308	288
3 x 120	12,9	10,0	87,8	12395	353	327
3 x 150	14,3	9,5	89,4	13405	398	366

(*) Permissible current rating values are according to:
- ground thermal resistivity: 1,0 K·m/W
- ambient temperature 20°C
- laying depth of 0,8 m for buried cables

Electrical characteristics

Formation	Max. electrical resistance at 20°C	Conductor apparent resistance at 90°C and 50Hz	Phase reactance	Capacity at 50Hz
n° x mm^2	Ω/Km	Ω/km	Ω/Km	μF/km
3 x 70	0,268	0,342	0,14	0,15
3 x 95	0,193	0,247	0,13	0,16
3 x 120	0,153	0,196	0,13	0,17
3 x 150	0,124	0,160	0,12	0,21