

BiTinstal[®] H 0,6/1 kV

Halogen-free power cable 0,6/1 kV



Power control cables 0,6/1 kV



industrial application



internal application



external application



EN 60332-1-2



EN 60332-3-22



oxygen index



UV resistance



halogen free
EN 60754



low smoke emission
EN 61034



CPR class

Technical data:

Thermal parameters:

Operating temperature:

operation temperature: -40 °C to 90 °C

installation temperature -5 °C to 50 °C

Max core temp. during operation: 90 °C

Max core temp. during short-circuit: 250 °C

Electrical parameters:

Nominal voltage: $U_0/U = 0,6/1$ kV

Test voltage: 4 kV

Mechanical parameters:

Min. bending radius:

for single-core cables: $15 \times \varnothing$

for multi-core cables: $12 \times \varnothing$

Design:

Conductors:

solid bare copper conductors singlewires class 1 (RE) or multiwires class 2 (RM) acc. to EN 60228

Insulation:

XLPE, special cross-linked, halogen-free compound color coded (acc. to table), G - protective core (green-yellow)

Core identification:

Core arrangement:

cores twisted together

Inner sheath:

special halogen-free compound (multi-core cables only)

Outer sheath:

special halogen-free compound; colour: black

Application:

Halogen-free installation cable for power and lighting installations in facilities with increased fire protection requirements. The cable is suitable for installation in dry and damp rooms, and can be installed under, on or in plaster, as well as in brick walls and directly in concrete (fixed installation only). In underground installations cables should be placed in cable ducts or pipes. Cables classified according to **EN 50575 (CPR)**.

Tests:

Single core cables:

Flame resistance of a single cable (fire resistance):

Flame resistance of the cable bundle:

Emission of corrosive gases released during combustion:

Emission of smoke density during combustion:

Multicore cables:

Flame resistance of a single cable (fire resistance):

Flame resistance of the cable bundle:

Emission of corrosive gases during combustion:

Emission of smoke density during combustion:

EN 60332-1-2, IEC 60332-1-2, DIN- VDE 0482-332-1

EN 60332-3-22, IEC 60332-3-22 cat. A

EN 60754-2, IEC 60754-2, VDE 0482-754-2

EN 61034-2, IEC 61034-2, VDE 0482-1034-2

EN 60332-1-2, IEC 60332-1-2, DIN- VDE 0482-332-1

EN 60332-3-22, IEC 60332-3-22 cat. A

EN 60754-2, IEC 60754-2, VDE 0482-754-2

EN 61034-2, IEC 61034-2, VDE 0482-1034-2

Core insulation colours:

No. of cores	Insulation colours
BiTinstal [®] H 0,6/1 kV (without protective conductor)	
1	black (other colours available at request)
2	blue, brown
3	brown, black, grey
4	blue, brown, black, grey
5	blue, brown, black, grey, black
BiTinstal [®] H 0,6/1 kV (with protective conductor)	
1	green-yellow
3	green-yellow, blue, brown
4	green-yellow, brown, black, grey
5	green-yellow, blue, brown, black, grey

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Conductor cross-section [mm ²]	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
Max. conductor resistance at 20 °C	12,1	7,41	4,61	3,08	1,83	1,15	0,727	0,524	0,387	0,268	0,193	0,153	0,124	0,0991	0,0754	0,0601

Multi-core cables with protective conductor

Cat. no.	n x mm ²	Outer* diameter [mm]	Approximate cable weight [kg/km]
B64050	3G1,5 RE	9,8	150
B64051	3G2,5 RE	10,6	192
B64052	3G4 RE	11,6	251
B64053	3G6 RE	12,7	324
B64054	3G10 RE	14,4	467
B64055	3G16 RE	16,8	704
B64056	4G1,5 RE	10,6	178
B64057	4G2,5 RE	11,6	231
B64058	4G4 RE	12,7	306
B64059	4G6 RE	13,9	400
B64060	4G10 RE	16,1	591
B64061	4G16 RE	18,6	888
B64062	5G1,5 RE	11,3	205
B64063	5G2,5 RE	12,4	270
B64064	5G4 RE	13,6	360
B64065	5G6 RE	14,9	474
B64066	5G10 RE	17,3	704
B64067	5G16 RE	20,0	1069
B64068	5G25 RM	26,7	1700
B64069	5G35 RM	29,4	2225

Multi-core cables without protective conductor

Cat. no.	n x mm ²	Outer* diameter [mm]	Approximate cable weight [kg/km]
B64080	2x1,5 RE	9,4	132
B64081	2x2,5 RE	10,2	164
B64082	2x4,0 RE	11,1	210
B64083	2x6,0 RE	12,1	266
B64084	2x10 RE	13,7	374
B64085	2x16 RE	16,5	580
B64086	3x1,5 RE	9,8	150
B64087	3x2,5 RE	10,6	192
B64088	3x4,0 RE	11,6	251
B64089	3x6,0 RE	12,7	324
B64090	3x10 RE	14,4	467
B64091	3x16 RE	16,8	704
B64092	4x1,5 RE	10,6	178
B64093	4x2,5 RE	11,6	231
B64094	4x4,0 RE	12,7	306
B64095	4x6,0 RE	13,9	400
B64096	4x10 RE	16,1	591
B64097	4x16 RE	18,6	888
B64098	5x1,5 RE	11,3	205
B64099	5x2,5 RE	12,4	270
B64100	5x4,0 RE	13,6	360
B64101	5x6,0 RE	14,9	474
B64102	5x10 RE	17,3	704
B64103	5x16 RE	20,0	1069
B64104	5x25 RM	26,7	1700
B64105	5x35 RM	29,4	2225

Single-core cables with protective conductor

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
B64020	1G16 RE	8,8	214
B64021	1G25 RM	10,8	315
B64022	1G35 RM	11,9	415
B64023	1G50 RM	13,5	560
B64024	1G70 RM	15,0	750
B64025	1G95 RM	16,9	1020
B64026	1G120 RM	18,8	1245
B64027	1G150 RM	21,1	1590
B64028	1G185 RM	23,0	1945
B64029	1G240 RM	26,3	2480
B64030	1G300 RM	28,3	3070

Single-core cables without protective conductor

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
B64000	1x16 RE	8,8	214
B64001	1x25 RM	10,8	315
B64002	1x35 RM	11,9	415
B64003	1x50 RM	13,5	560
B64004	1x70 RM	15,0	750
B64005	1x95 RM	16,9	1020
B64006	1x120 RM	18,8	1245
B64007	1x150 RM	21,1	1590
B64008	1x185 RM	23,0	1945
B64009	1x240 RM	26,3	2480
B64010	1x300 RM	28,3	3070

RE - round, solid conductor

RM - round, multi-stranded conductor

*Outer diameter tolerance: +/- 5%

Cable Factory BITNER reserves the right to modify the specifications without prior notice

Note: on customer's request other cross sections or number of cores can be produced.