

BiT 1000®FR

Flexible, highly flame retardant control
and power supply cables, rated 0,6/1kV



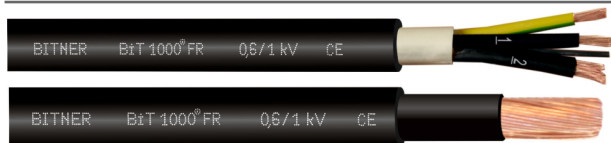
RoHS 2015/863/EU



LVD 2014/35/EU



CPR 305/2011

industrial
applicationinternal
applicationexternal
applicationunderground
installation

EN 60332-1-2



EN 60332-3



oxygen index



high flexibility



UV resistance

Technical data:

Thermal parameters:

Operating temperature:

fixed installation: -40 °C to 80 °C
flexible connections: -5 °C to 80 °C
occasional flexing: -15 °C* to 80 °C

Electrical parameters:

Operating voltage: $U_i/U_o=0,6/1kV$

Test voltage (50Hz): 4000V

Insulation resistance: 20MΩxkm

Mechanical parameters:

Min. bending radius:

flexible connections: 10xD
fixed installation: 5xD

* minimum temperature for occasional flexing with bending
radius not smaller than 15xD. Bending test at low
temperature (-15 °C acc. to EN 60811-504)

Design:

Conductors:

bare copper conductors, multi-stranded class 5 acc.
to EN 60228

Insulation:

special PVC

Core identification:

black, numbered conductors, cables with protective earth
conductor marked G (e.g. 7G1,5)

Core arrangement:

cores twisted together

Inner sheath:

special PVC for sections over 2,5mm² (single core or
paired cables without inner sheath)

Outer sheath:

special PVC, oil resistant (see table of chemical
resistance), self-extinguishing and flame retardant
(acc. to EN 60332-1-2, EN 60332-3-24, cat. C),
UV resistant, LOI>29; colour: black

Application:

BiT 1000®FR cables are designed for connections in control and signalling circuits, as power supply cables for mobile and portable devices in places exposed to vibrations. Insulation compounds and construction of BiT 1000®FR cable enable easy and fast connections and ensure their high durability. They are suitable for fixed installations and for flexible connections in industrial devices, technological lines and machines operating in dry and damp rooms, especially in applications in places with increased fire safety requirements (limited flame propagation). Cables suitable for outdoor installation - outer sheath is UV resistant. **Cables designed also for direct burial in ground.** Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66150	2x0,5	8,0	83
S66151	3G0,5	8,4	95
S66152	3x0,5	8,4	95
S66153	4G0,5	9,0	110
S66154	4x0,5	9,0	110
S66155	5G0,5	9,6	129
S66156	5x0,5	9,6	129
S66157	6G0,5	10,4	149
S66158	7G0,5	10,4	153
S66159	7x0,5	10,4	153
S66160	8G0,5	11,3	176
S66161	8x0,5	11,3	176
S66162	10G0,5	13,1	225
S66163	12G0,5	13,1	232
S66164	12x0,5	13,1	232
S66165	14G0,5	13,6	255
S66166	16G0,5	14,3	285
S66167	18G0,5	15,1	315
S66168	21G0,5	15,8	350
S66169	25G0,5	17,8	420
S66170	30G0,5	18,4	465
S66171	32G0,5	19,0	495
S66172	34G0,5	19,8	540
S66173	37G0,5	19,8	550
S66174	42G0,5	22,1	640
S66175	52G0,5	23,2	745
S66176	61G0,5	24,7	855

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66177	2x0,75	8,4	94
S66178	3G0,75	8,8	109
S66179	3x0,75	8,8	109
S66180	4G0,75	9,5	129
S66181	4x0,75	9,5	129
S66182	5G0,75	10,2	150
S66183	5x0,75	10,2	150
S66184	6G0,75	11,0	173
S66185	6x0,75	11,0	173
S66186	7G0,75	11,0	179
S66187	7x0,75	11,0	179
S66188	8G0,75	12,0	207
S66189	8x0,75	12,0	207
S66190	10G0,75	13,9	260
S66191	12G0,75	13,9	275
S66192	12x0,75	13,9	275
S66193	14G0,75	14,5	305
S66194	16G0,75	15,3	340
S66195	18G0,75	16,1	380
S66196	21G0,75	16,8	420
S66197	25G0,75	19,0	505
S66198	30G0,75	19,6	565
S66199	32G0,75	20,4	605
S66200	34G0,75	21,2	650
S66201	37G0,75	21,2	670
S66202	42G0,75	23,9	790
S66203	52G0,75	24,9	915
S66204	61G0,75	26,7	1060

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66205	2x1,0	8,7	104
S66206	3G1,0	9,2	122
S66207	3x1,0	9,2	122
S66208	4G1,0	9,8	144
S66209	4x1,0	9,8	144
S66210	5G1,0	10,6	168
S66211	5x1,0	10,6	168
S66212	6G1,0	11,4	195
S66213	7G1,0	11,4	203
S66214	7x1,0	11,4	203
S66215	8G1,0	12,5	182
S66216	10G1,0	14,5	300
S66217	10x1,0	14,5	300
S66218	12G1,0	14,5	310
S66219	12x1,0	14,5	310
S66220	14G1,0	15,2	350
S66221	16G1,0	16,0	390
S66222	18G1,0	16,8	435
S66223	21G1,0	17,6	485
S66224	25G1,0	19,9	585
S66225	30G1,0	20,6	650
S66226	32G1,0	21,4	705
S66227	34G1,0	22,4	765
S66228	37G1,0	22,4	790
S66229	42G1,0	25,1	915
S66230	52G1,0	26,4	1075
S66231	61G1,0	28,0	1235
S66232	2x1,5	9,5	127
S66233	3G1,5	10,0	150
S66234	3x1,5	10,0	150
S66235	4G1,5	10,8	181
S66236	4x1,5	10,8	181
S66237	5G1,5	11,7	213
S66238	5x1,5	11,7	213
S66239	6G1,5	12,6	248
S66240	7G1,5	12,6	255
S66241	7x1,5	12,6	255
S66242	8G1,5	13,8	300
S66243	10G1,5	16,2	380
S66244	12G1,5	16,2	405
S66245	12x1,5	16,2	405
S66246	14G1,5	16,9	455
S66247	16G1,5	17,9	510
S66248	18G1,5	18,8	570
S66249	21G1,5	19,7	640
S66250	25G1,5	22,6	780
S66251	30G1,5	23,4	875
S66252	32G1,5	24,3	940
S66253	34G1,5	25,2	1010
S66254	37G1,5	25,2	1045
S66255	42G1,5	28,7	1240
S66256	52G1,5	29,9	1445
S66257	61G1,5	32,0	1675
S66258	2x2,5	10,6	166
S66259	3G2,5	11,1	198
S66260	3x2,5	11,1	198
S66261	4G2,5	12,1	241
S66262	4x2,5	12,2	241
S66263	5G2,5	13,2	285

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66264	5x2,5	13,2	335
S66265	7G2,5	14,3	350
S66266	7x2,5	14,3	350
S66267	8G2,5	15,7	410
S66268	10G2,5	18,4	525
S66269	12G2,5	18,4	560
S66270	14G2,5	19,4	630
S66271	16G2,5	20,5	710
S66272	18G2,5	21,6	795
S66273	21G2,5	22,8	905
S66274	25G2,5	26,1	1105
S66275	30G2,5	27,1	1245
S66276	32G2,5	28,2	1340
S66277	34G2,5	29,5	1455
S66278	37G2,5	29,5	1505
S66279	42G2,5	33,3	1760
S66280	52G2,5	35,0	2080
S66281	61G2,5	37,2	2400
S66282	2x4	12,8	265
S66283	3G4	13,4	315
S66284	3x4	13,4	315
S66285	4G4	14,6	385
S66286	5G4	15,7	450
S66287	7G4	17,1	560
S66288	10G4	22,0	830
S66289	14G4	23,7	1035
S66290	2x6	14,0	335
S66291	3G6	14,7	400
S66292	4G6	16,3	500
S66293	5G6	17,5	590
S66294	7G6	18,9	730
S66295	10G6	25,1	1130
S66296	3G10	18,1	630
S66297	4G10	20,2	790
S66298	5G10	21,6	930
S66299	7G10	23,6	1170
S66300	3G16	20,5	865
S66301	4G16	22,8	1080
S66302	5G16	24,5	1285
S66303	7G16	26,8	1635
S66304	3G25	25,1	1330
S66305	4G25	27,8	1650
S66306	5G25	30,2	1985
S66307	3G35	27,3	1655
S66308	4G35	30,4	2080
S66309	5G35	33,1	2505
S66310	3G50	32,6	2345
S66311	4G50	36,4	2955
S66312	5G50	39,5	3560
S66313	3G70	36,7	3120
S66314	4G70	41,2	3960
S66315	5G70	44,8	4780
S66316	3G95	41,6	4105
S66317	4G95	46,5	5195
S66318	5G95	50,6	6300
S66319	3G120	44,6	4805
S66320	4G120	49,9	6140
S66321	4G150	56,5	7660
S66322	4G185	63,1	9225
S66323	4G240	70,2	11980

BiT 1000[®]FR

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paired cables

Cat. no.	nx2xmm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66325	2x2x0,5	10,8	133
S66326	3x2x0,5	12,0	146
S66327	4x2x0,5	12,9	175
S66328	5x2x0,5	13,9	216
S66329	6x2x0,5	14,3	228
S66330	7x2x0,5	16,0	260
S66331	8x2x0,5	16,7	285
S66332	10x2x0,5	17,9	340
S66333	12x2x0,5	19,0	390
S66334	14x2x0,5	20,2	440
S66335	16x2x0,5	21,6	505
S66336	18x2x0,5	22,8	555
S66337	20x2x0,5	23,5	600
S66338	24x2x0,5	24,2	690
S66339	2x2x0,75	11,5	150
S66340	3x2x0,75	12,7	169
S66341	4x2x0,75	13,8	204
S66342	5x2x0,75	14,8	255
S66343	6x2x0,75	15,3	270
S66344	7x2x0,75	17,1	310
S66345	8x2x0,75	17,8	340
S66346	10x2x0,75	19,1	405
S66347	12x2x0,75	20,4	470
S66348	14x2x0,75	21,7	530
S66349	16x2x0,75	23,4	625
S66350	18x2x0,75	24,4	670
S66351	20x2x0,75	25,4	745
S66352	24x2x0,75	26,1	855
S66353	2x2x1,0	11,9	168
S66354	3x2x1,0	13,3	190
S66355	4x2x1,0	14,4	231
S66356	5x2x1,0	15,5	285
S66357	6x2x1,0	16,0	305
S66358	7x2x1,0	17,9	355

Cat. no.	nx2xmm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66359	8x2x1,0	18,7	390
S66360	10x2x1,0	20,0	465
S66361	12x2x1,0	21,4	540
S66362	14x2x1,0	22,9	625
S66363	16x2x1,0	24,6	720
S66364	18x2x1,0	25,8	790
S66365	20x2x1,0	26,7	860
S66366	24x2x1,0	27,5	995
S66367	2x2x1,5	13,2	208
S66368	3x2x1,5	14,8	238
S66369	4x2x1,5	16,0	290
S66370	5x2x1,5	17,3	365
S66371	6x2x1,5	17,9	395
S66372	7x2x1,5	20,0	455
S66373	8x2x1,5	21,0	505
S66374	10x2x1,5	22,7	615
S66375	12x2x1,5	24,3	720
S66376	14x2x1,5	26,0	830
S66377	16x2x1,5	27,9	960
S66378	18x2x1,5	29,3	1050
S66379	20x2x1,5	30,3	1145
S66380	24x2x1,5	31,4	1345
S66381	2x2x2,5	15,0	270
S66382	3x2x2,5	16,8	315
S66383	4x2x2,5	18,3	395
S66384	5x2x2,5	19,7	500
S66385	6x2x2,5	20,5	540
S66386	7x2x2,5	23,2	635
S66387	8x2x2,5	24,3	710
S66388	10x2x2,5	26,3	870
S66389	12x2x2,5	28,4	1030
S66390	14x2x2,5	30,2	1175
S66391	16x2x2,5	32,6	1375

single core cables

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66500	1x1,5	5,8	51
S66501	1x2,5	6,2	65
S66502	1x4	6,8	84
S66503	1x6	7,4	107
S66504	1x10	8,7	154
S66505	1x16	9,7	215
S66506	1x25	11,4	310
S66507	1x35	12,5	405
S66508	1x50	14,7	570
S66509	1x70	16,6	775
S66510	1x95	18,7	1015
S66511	1x120	20,5	1245
S66512	1x150	22,5	1535
S66513	1x185	25,1	1875
S66514	1x240	28,1	2435
S66515	1x300	31,8	3180
S66516	1x400	35,5	4110
S66517	1x500	40,6	5165

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S66518	1G1,5	5,8	51
S66519	1G2,5	6,2	65
S66520	1G4	6,8	84
S66521	1G6	7,4	107
S66522	1G10	8,7	154
S66523	1G16	9,7	215
S66524	1G25	11,4	310
S66525	1G35	12,5	405
S66526	1G50	14,7	570
S66527	1G70	16,6	775
S66528	1G95	18,7	1015
S66529	1G120	20,5	1245
S66530	1G150	22,5	1535
S66531	1G185	25,1	1875
S66532	1G240	28,1	2435
S66533	1G300	31,8	3180
S66534	1G400	35,5	4110
S66535	1G500	40,6	5165

*Outer diameter tolerance: +/-5%

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

G - cables with green/yellow earthing conductor

x- cables without green/yellow earthing conductor

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