

BiT 500[®] (St) BLACK FR



Flexible, highly flame retardant screened control cables for outdoor applications, with number coded conductors, rated 300/500 V



Technical data:

Thermal parameters:

Operating temperature:

fixed installation: -40 °C to 80 °C
flexible connections: -5 °C to 80 °C

Electrical parameters:

Operating voltage: $U_n/U = 300/500$ V

Test voltage (50 Hz): 3000 V

Insulation resistance: 20 MΩ x km

Mechanical parameters:

Min. bending radius:

fixed installation: 6 x Ø
flexible connections: 10 x Ø

Design:

Conductors:

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

Insulation:

PVC compound

Core identification:

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

Core arrangement:

pairs twisted together or cores twisted together aluminum backed polyester tape with tinned copper drain wire

Screen:

Outer sheath:

PVC compound, 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; colour: black

Application:

Flexible control cables designed for operation in control and protective devices as well as in control circuits. Common screen improves protection of transmitted signals against external electromagnetic field. Designed especially for installation in industrial areas with increased fire safety requirements (limited flame propagation). They are suitable for fixed installations and for flexible connections in industrial devices, technological lines and machines operating in dry and damp rooms. Cables suitable for outdoor installation. Outer sheath is UV resistant. **Designed for direct burial in ground.** Insulation materials and conductor construction in BiT 500[®] (St) BLACK FR cable enable easy and fast connections and ensure their high durability. Cables classified according to EN 50575 (CPR).

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SB2400	2x0,5	7,0	66
SB2401	3G0,5	7,3	70
SB2402	3x0,5	7,3	70
SB2403	4G0,5	7,8	82
SB2404	4x0,5	7,8	82
SB2405	5G0,5	8,3	94
SB2406	5x0,5	8,3	94
SB2407	6G0,5	8,8	106
SB2408	7G0,5	8,8	110
SB2409	7x0,5	8,8	110
SB2410	8G0,5	9,7	126
SB2411	8x0,5	9,7	126
SB2412	10G0,5	11,0	154
SB2413	12G0,5	11,0	162
SB2414	12x0,5	11,0	162
SB2415	14G0,5	11,4	180
SB2416	16G0,5	12,0	200
SB2417	18G0,5	12,5	220
SB2418	19G0,5	12,5	225
SB2419	21G0,5	13,0	245
SB2420	25G0,5	14,5	290
SB2421	27G0,5	14,5	295
SB2422	30G0,5	15,0	320
SB2423	34G0,5	16,0	365
SB2424	37G0,5	16,0	375
SB2425	40G0,5	17,1	425
SB2426	42G0,5	18,3	455
SB2427	50G0,5	19,2	525

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SB2428	56G0,5	19,8	570
SB2429	61G0,5	20,3	605
SB2430	2x0,75	7,4	74
SB2431	3G0,75	7,7	82
SB2432	3x0,75	7,7	82
SB2433	4G0,75	8,3	96
SB2434	4x0,75	8,3	96
SB2435	5G0,75	8,8	112
SB2436	5x0,75	8,8	112
SB2437	6G0,75	9,4	128
SB2438	6x0,75	9,4	128
SB2439	7G0,75	9,4	132
SB2440	7x0,75	9,4	132
SB2441	8G0,75	10,4	152
SB2442	8x0,75	10,4	152
SB2443	10G0,75	11,8	188
SB2444	12G0,75	11,8	198
SB2445	12x0,75	11,8	198
SB2446	14G0,75	12,3	225
SB2447	16G0,75	12,9	250
SB2448	18G0,75	13,5	275
SB2449	19G0,75	13,5	280
SB2450	21G0,75	14,1	305
SB2451	25G0,75	15,7	365
SB2452	27G0,75	15,7	375
SB2453	30G0,75	16,2	405
SB2454	34G0,75	18,0	490
SB2455	37G0,75	18,0	505

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Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SB2456	40G0,75	18,6	540
SB2457	42G0,75	20,1	590
SB2458	50G0,75	20,9	670
SB2459	56G0,75	21,5	725
SB2460	61G0,75	22,1	75
SB2461	2x1,0	7,7	84
SB2462	3G1,0	8,1	94
SB2463	3x1,0	8,1	94
SB2464	4G1,0	8,6	110
SB2465	4x1,0	8,6	110
SB2466	5G1,0	9,2	128
SB2467	5x1,0	9,2	128
SB2468	6G1,0	9,8	148
SB2469	6x1,0	9,8	148
SB2470	7G1,0	9,8	154
SB2471	7x1,0	9,8	154
SB2472	8G1,0	10,9	178
SB2473	10G1,0	12,5	225
SB2474	10x1,0	12,5	225
SB2475	12G1,0	12,5	235
SB2476	12x1,0	12,5	235
SB2477	14G1,0	13,0	265
SB2478	16G1,0	13,6	295
SB2479	18G1,0	14,2	325
SB2480	18x1,0	14,2	325
SB2481	19G1,0	14,2	330
SB2482	21G1,0	14,9	365
SB2483	25G1,0	17,3	455
SB2484	27G1,0	17,3	470
SB2485	30G1,0	17,8	510
SB2486	34G1,0	19,2	590
SB2487	37G1,0	19,2	610
SB2488	40G1,0	19,9	655
SB2489	42G1,0	21,3	700
SB2490	50G1,0	22,2	805
SB2491	56G1,0	23,2	895
SB2492	61G1,0	23,8	955
SB2493	2x1,5	8,5	102
SB2494	3G1,5	8,9	116
SB2495	3x1,5	8,9	116
SB2496	4G1,5	9,6	140
SB2497	4x1,5	9,6	140
SB2498	5G1,5	10,3	164
SB2499	5x1,5	10,3	164
SB2500	6G1,5	11,2	192
SB2501	6x1,5	11,2	192
SB2502	7G1,5	11,2	205
SB2503	7x1,5	11,2	205
SB2504	8G1,5	12,2	235
SB2505	10G1,5	14,1	290

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SB2506	10x1,5	14,1	290
SB2507	12G1,5	14,1	310
SB2508	12x1,5	14,1	310
SB2509	14G1,5	14,7	350
SB2510	16G1,5	15,5	395
SB2511	18G1,5	16,2	435
SB2512	19G1,5	16,2	445
SB2513	21G1,5	17,6	515
SB2514	25G1,5	19,9	620
SB2515	27G1,5	19,9	640
SB2516	30G1,5	20,6	700
SB2517	34G1,5	22,0	800
SB2518	37G1,5	22,0	830
SB2519	40G1,5	23,2	915
SB2520	42G1,5	24,9	980
SB2521	50G1,5	26,5	1160
SB2522	56G1,5	27,3	1260
SB2523	61G1,5	28,0	1350
SB2524	2x2,5	9,6	130
SB2525	3G2,5	10,1	154
SB2526	3x2,5	10,1	154
SB2527	4G2,5	10,9	188
SB2528	4x2,5	10,9	188
SB2529	5G2,5	11,8	225
SB2530	5x2,5	11,8	225
SB2531	6G2,5	12,9	270
SB2532	6x2,5	12,9	270
SB2533	7G2,5	12,9	285
SB2534	7x2,5	12,9	285
SB2535	10G2,5	17,0	435
SB2536	12G2,5	17,0	465
SB2537	12x2,5	17,0	465
SB2538	14G2,5	17,8	525
SB2539	16G2,5	18,7	590
SB2540	18G2,5	19,8	670
SB2541	21G2,5	20,7	750
SB2542	25G2,5	23,7	920
SB2543	30G2,5	24,5	1040
SB2544	34G2,5	26,9	1230
SB2545	37G2,5	26,9	1280
SB2546	42G2,5	29,9	1470
SB2547	50G2,5	31,2	1690
SB2548	2x4,0	11,1	180
SB2549	3G4,0	11,7	220
SB2550	3x4,0	11,7	220
SB2551	4G4,0	12,7	275
SB2552	5G4,0	13,7	330
SB2553	7G4,0	14,8	415
SB2554	10G4,0	19,9	645
SB2555	12G4,0	19,9	700

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paired cables

Cat. no.	n x 2 x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SB2556	2x2x0,5	9,3	102
SB2557	3x2x0,5	10,2	116
SB2558	4x2x0,5	10,9	134
SB2559	5x2x0,5	11,6	160
SB2560	6x2x0,5	12,0	170
SB2561	7x2x0,5	13,2	194
SB2562	8x2x0,5	13,7	215
SB2563	10x2x0,5	14,6	250
SB2564	12x2x0,5	15,5	285
SB2565	14x2x0,5	16,3	320
SB2566	16x2x0,5	18,0	385
SB2567	18x2x0,5	18,7	415
SB2568	20x2x0,5	19,4	455
SB2569	24x2x0,5	19,9	515
SB2570	2x2x0,75	10,0	120
SB2571	3x2x0,75	11,0	136
SB2572	4x2x0,75	11,7	160
SB2573	5x2x0,75	12,5	196
SB2574	6x2x0,75	12,9	210
SB2575	7x2x0,75	14,3	240
SB2576	8x2x0,75	14,9	265
SB2577	10x2x0,75	15,8	310
SB2578	12x2x0,75	17,4	380
SB2579	14x2x0,75	18,4	425
SB2580	16x2x0,75	19,8	490
SB2581	18x2x0,75	20,5	525
SB2582	20x2x0,75	21,1	570
SB2583	24x2x0,75	21,7	650
SB2584	2x2x1,0	10,5	138
SB2585	3x2x1,0	11,5	156
SB2586	4x2x1,0	12,4	188
SB2587	5x2x1,0	13,2	230
SB2588	6x2x1,0	13,6	245

Cat. no.	n x 2 x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SB2589	7x2x1,0	15,1	280
SB2590	8x2x1,0	15,7	310
SB2591	10x2x1,0	17,4	390
SB2592	12x2x1,0	18,4	445
SB2593	14x2x1,0	19,7	510
SB2594	16x2x1,0	20,9	580
SB2595	18x2x1,0	21,8	625
SB2596	20x2x1,0	22,8	700
SB2597	24x2x1,0	23,4	800
SB2598	2x2x1,5	11,7	174
SB2599	3x2x1,5	13,0	200
SB2600	4x2x1,5	14,0	245
SB2601	5x2x1,5	15,0	300
SB2602	6x2x1,5	15,5	325
SB2603	7x2x1,5	17,8	395
SB2604	8x2x1,5	18,6	435
SB2605	10x2x1,5	20,0	525
SB2606	12x2x1,5	21,3	605
SB2607	14x2x1,5	22,9	705
SB2608	16x2x1,5	24,4	805
SB2609	18x2x1,5	25,4	870
SB2610	20x2x1,5	26,8	980
SB2611	24x2x1,5	27,5	1130
SB2612	2x2x2,5	13,5	235
SB2613	3x2x2,5	15,0	275
SB2614	4x2x2,5	16,3	335
SB2615	5x2x2,5	18,1	440
SB2616	6x2x2,5	18,7	485
SB2617	7x2x2,5	21,0	565
SB2618	8x2x2,5	21,9	625
SB2619	10x2x2,5	23,9	770
SB2620	12x2x2,5	25,4	890
SB2621	14x2x2,5	27,5	1050
SB2622	16x2x2,5	29,3	1200

*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