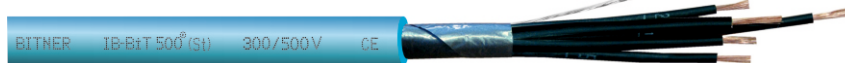


IB-BiT 500® (St)



Flexible, screened control cables, with number coded conductors for intrinsically safe circuits, rated 300/500 V



industrial application



internal application



external application



high flexibility



EN 60332-1-2



EN 60332-3-24



oxygen index



UV resistance



oil resistant
EN 60811-404



hydrocarbon resistant

Technical data:

Thermal parameters:

Operating temperature:

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

Electrical parameters:

Operating voltage: $U_0/U = 300/500$ V

Test voltage (50 Hz): 3000 V

Insulation resistance: 20 MΩ x m km

Inductance ca.: 0,6 mH/km

Mechanical parameters:

Min. bending radius:

flexible connections: 10 x Ø
fixed installation: 5 x Ø

Design:

Conductors:

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

Insulation:

PVC compound

Core identification:

black, number coded conductors

Core arrangement:

cores twisted together or pairs twisted together

Screen:

aluminium backed polyester tape with tinned copper drain wire

Outer sheath:

PVC compound, oil resistant (EN 60811-404), self-extinguishing and flame retardant (acc. to EN 60332-1-2, EN 60332-3-24, cat. C), UV resistant; colour: blue

Application:

Flexible power/control cables designed for operation intrinsically safe circuits. Common screen improves protection of transmitted signals against external electromagnetic field. They are suitable for fixed installations and for flexible connections in industrial devices, technological lines and machines operating in dry and damp rooms. Insulation materials and conductor construction in IB-BiT 500® (St) 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]
SI0000	2x0,5	5,2	40
SI0001	3x0,5	5,5	44
SI0002	4x0,5	5,9	52
SI0003	5x0,5	6,4	64
SI0004	6x0,5	7,2	76
SI0005	7x0,5	7,2	80
SI0006	8x0,5	8,1	94
SI0007	10x0,5	9,8	126
SI0008	12x0,5	9,8	134
SI0009	14x0,5	10,2	150
SI0010	16x0,5	10,7	168
SI0011	18x0,5	11,5	192
SI0012	21x0,5	12,0	215
SI0013	25x0,5	13,7	260
SI0014	30x0,5	14,1	295
SI0015	34x0,5	15,2	347
SI0016	40x0,5	16,1	400
SI0017	50x0,5	18,2	502
SI0018	61x0,5	19,3	580
SI0019	2x0,75	5,6	48
SI0043	3x0,75	5,9	54
SI0044	4x0,75	6,4	66
SI0045	5x0,75	7,2	81
SI0046	6x0,75	7,8	96
SI0047	7x0,75	7,8	102
SI0048	8x0,75	9,1	126
SI0049	10x0,75	10,6	159
SI0050	12x0,75	10,6	168

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SI0051	14x0,75	11,3	195
SI0052	16x0,75	11,9	220
SI0053	18x0,75	12,5	245
SI0054	21x0,75	13,0	275
SI0055	25x0,75	14,9	335
SI0056	30x0,75	15,4	385
SI0057	34x0,75	17,0	460
SI0058	40G0,75	17,5	512
SI0059	50G0,75	19,9	640
SI0060	2x1,0	5,9	54
SI0061	3x1,0	6,2	64
SI0020	4x1,0	7,0	80
SI0021	5x1,0	7,6	98
SI0022	6x1,0	8,2	114
SI0023	7x1,0	8,2	120
SI0024	8x1,0	9,6	148
SI0025	10x1,0	11,4	194
SI0026	12x1,0	11,4	210
SI0027	14x1,0	11,9	235
SI0028	16x1,0	12,6	265
SI0029	18x1,0	13,2	295
SI0030	21x1,0	14,0	345
SI0031	25x1,0	16,2	425
SI0032	30x1,0	16,8	480
SI0033	2x1,5	6,9	74
SI0034	3x1,5	7,3	86
SI0035	4x1,5	8,0	108
SI0036	5x1,5	9,1	138

IB-BiT 500[®] (St)

Flexible, screened control cables with number coded conductors for intrinsically safe circuits, rated 300/500 V

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SI0037	6x1,5	9,8	162
SI0038	7x1,5	9,8	172
SI0039	8x1,5	11,0	200
SI0040	10x1,5	13,1	260
SI0041	12x1,5	13,1	280
SI0042	14x1,5	13,9	325
SI0062	16x1,5	14,7	375
SI0063	18x1,5	15,4	418
SI0064	25x1,5	18,9	592

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SI0065	2x2,5	8,0	96
SI0066	3x2,5	8,5	118
SI0067	4x2,5	9,7	160
SI0068	5x2,5	10,5	192
SI0069	6x2,5	11,9	240
SI0070	7x2,5	11,9	255
SI0071	10x2,5	16,0	405
SI0072	12x2,5	16,0	437
SI0073	14x2,5	16,7	495
SI0074	16x2,5	17,6	562

Cat. no.	n x 2 x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SI0080	2x2x0,5	7,7	70
SI0081	3x2x0,5	8,6	80
SI0082	4x2x0,5	9,7	106
SI0083	5x2x0,5	10,4	130
SI0084	6x2x0,5	10,7	138
SI0085	7x2x0,5	12,2	166
SI0086	8x2x0,5	12,7	182
SI0087	10x2x0,5	13,8	220
SI0088	12x2x0,5	14,6	255
SI0089	14x2x0,5	15,5	290
SI0090	16x2x0,5	17,0	355
SI0091	18x2x0,5	17,7	380
SI0092	20x2x0,5	18,4	422
SI0093	24x2x0,5	18,9	484
SI0094	2x2x0,75	8,3	86
SI0095	3x2x0,75	9,7	106
SI0096	4x2x0,75	10,5	130
SI0097	5x2x0,75	11,5	168
SI0098	6x2x0,75	11,9	180
SI0099	7x2x0,75	13,2	205
SI0100	8x2x0,75	14,0	235
SI0101	10x2x0,75	15,0	280
SI0102	12x2x0,75	16,4	340
SI0103	14x2x0,75	17,3	390
SI0104	16x2x0,75	18,7	457
SI0105	18x2x0,75	19,5	493
SI0106	20x2x0,75	20,1	537
SI0107	24x2x0,75	20,7	619
SI0108	2x2x1,0	9,2	110

Cat. no.	n x 2 x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
SI0109	3x2x1,0	10,3	126
SI0110	4x2x1,0	11,1	154
SI0111	5x2x1,0	12,2	196
SI0112	6x2x1,0	12,6	214
SI0113	7x2x1,0	14,2	255
SI0114	8x2x1,0	14,9	280
SI0115	10x2x1,0	16,3	355
SI0116	12x2x1,0	17,4	412
SI0117	14x2x1,0	18,6	478
SI0118	16x2x1,0	19,9	545
SI0119	2x2x1,5	10,5	142
SI0120	3x2x1,5	12,0	172
SI0121	4x2x1,5	13,0	210
SI0122	5x2x1,5	14,2	270
SI0123	6x2x1,5	14,7	295
SI0124	7x2x1,5	16,8	362
SI0125	8x2x1,5	17,6	405
SI0126	10x2x1,5	19,0	492
SI0127	12x2x1,5	20,3	572
SI0128	14x2x1,5	21,7	663
SI0129	2x2x2,5	12,5	205
SI0130	3x2x2,5	14,2	245
SI0131	4x2x2,5	15,4	305
SI0132	5x2x2,5	17,0	400
SI0133	6x2x2,5	17,6	450
SI0134	7x2x2,5	20,0	530
SI0135	8x2x2,5	20,9	592
SI0136	10x2x2,5	22,6	722
SI0137	12x2x2,5	24,1	843

*Outer diameter tolerance: +/-5%

Cable Factory BITNER reserve the right to modify the specifications without prior notice
Note: on customer's request other cross sections or number of cores can be produced

Electrical parameters IB-BiT 500[®] (St)

Core cross-section [mm ²]	Max. resistance at 20 °C [Ω/km]	Core-core capacitance at 1kHz [nF/km]
0,5	39,0	130
0,75	26,0	140
1	19,5	140
1,5	13,3	140
2,5	7,98	170

Electrical parameters - paired cables IB-BiT 500[®] (St)

Core cross-section [mm ²]	Max. loop resistance at 20 °C [Ω/km]	Core-core capacitance at 1kHz [nF/km]
0,5	78,0	130
0,75	52,0	140
1	39,0	140
1,5	26,6	140
2,5	16,0	170