

IB-BiT 500[®]C



Flexible, screened control cables with number coded conductors for intrinsically safe circuits, 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: $U_0/U = 300/500$ V

Test voltage (50 Hz): 3000 V

Insulation resistance: 20 MΩ x 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, cables with protective earth conductor marked G (e.g. 7G1,5)*

Core arrangement:

cores twisted together or pairs twisted together

Screen:

tinned copper wire braid, coverage ≥85%

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 of tinned copper wire braid ensures very good protection against external electromagnetic field (screen attenuation ca. 50dB). Cables are suitable for fixed installations and for flexible connections in industrial devices, technological lines and machines operating in dry and damp rooms. High flexibility of IB-BiT 500[®]C cable simplifies installation and compounds used enable easy and fast connections and ensures their high durability. Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59660	2x0,5	5,4	44
S59661	3x0,5	5,7	48
S59662	4x0,5	6,1	58
S59663	5x0,5	6,8	72
S59664	6x0,5	7,4	84
S59665	7x0,5	7,4	88
S59666	8x0,5	8,1	110
S59667	10x0,5	9,8	145
S59668	12x0,5	9,8	155
S59669	14x0,5	10,2	170
S59670	16x0,5	10,7	190
S59671	18x0,5	11,5	220
S59672	21x0,5	12,0	240
S59673	25x0,5	13,9	295
S59674	27x0,5	13,9	300
S59675	30x0,5	14,3	325
S59676	34x0,5	15,4	370
S59677	40x0,5	16,3	425
S59678	50x0,5	18,2	525
S59679	61x0,5	19,5	610
S59680	2x0,75	5,8	52
S59681	3x0,75	6,1	58
S59682	4x0,75	6,8	74
S59683	5x0,75	7,4	88
S59684	6x0,75	8,0	112
S59685	7x0,75	8,0	118
S59686	8x0,75	9,1	142
S59687	10x0,75	10,8	180
S59688	12x0,75	10,6	190
S59689	14x0,75	11,3	220

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59690	16x0,75	11,9	245
S59691	18x0,75	12,5	275
S59692	21x0,75	13,3	305
S59693	25x0,75	15,1	370
S59694	30x0,75	16,0	425
S59695	34x0,75	17,2	490
S59696	37x0,75	17,2	505
S59697	40x0,75	17,8	540
S59698	50x0,75	20,1	670
S59699	2x1,0	6,1	57
S59700	3x1,0	6,5	69
S59701	4x1,0	7,0	84
S59702	5x1,0	8,0	111
S59703	6x1,0	8,6	129
S59704	7x1,0	8,6	138
S59705	8x1,0	9,9	165
S59706	10x1,0	11,5	215
S59707	12x1,0	11,5	230
S59708	14x1,0	12,2	260
S59709	16x1,0	12,8	290
S59710	18x1,0	13,6	330
S59711	21x1,0	14,3	365
S59712	25x1,0	16,5	455
S59713	30x1,0	17,0	505
S59714	2x1,5	7,1	88
S59715	3x1,5	7,5	99
S59716	4x1,5	8,4	122
S59717	5x1,5	9,5	156
S59718	6x1,5	10,2	182
S59719	7x1,5	10,2	192

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Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59720	8x1,5	11,0	220
S59721	10x1,5	13,3	290
S59722	12x1,5	13,3	310
S59723	14x1,5	14,1	355
S59724	16x1,5	14,9	410
S59725	18x1,5	16,0	455
S59726	25x1,5	19,1	620
S59727	2x2,5	8,4	112

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59728	3x2,5	9,3	144
S59729	4x2,5	10,1	180
S59730	5x2,5	11,0	216
S59731	6x2,5	12,1	265
S59732	7x2,5	12,1	280
S59733	10x2,5	16,2	430
S59734	12x2,5	16,2	465
S59735	14x2,5	17,0	525
S59736	16x2,5	17,9	590

Cat. no.	n x 2 x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59600	2x2x0,5	7,7	80
S59601	3x2x0,5	9,2	105
S59602	4x2x0,5	9,9	125
S59603	5x2x0,5	10,6	155
S59604	6x2x0,5	10,9	165
S59605	7x2x0,5	12,4	195
S59606	8x2x0,5	12,9	210
S59607	10x2x0,5	14,0	255
S59608	12x2x0,5	14,8	290
S59609	14x2x0,5	16,1	340
S59610	16x2x0,5	17,2	385
S59611	18x2x0,5	17,9	415
S59612	20x2x0,5	18,6	455
S59613	24x2x0,5	19,1	515
S59614	2x2x0,75	8,5	102
S59615	3x2x0,75	9,9	126
S59616	4x2x0,75	10,7	152
S59617	5x2x0,75	11,7	192
S59618	6x2x0,75	12,1	205
S59619	7x2x0,75	13,6	245
S59620	8x2x0,75	14,2	270
S59621	10x2x0,75	15,2	315
S59622	12x2x0,75	16,6	375
S59623	14x2x0,75	17,5	425
S59624	16x2x0,75	18,9	490
S59625	18x2x0,75	19,7	530
S59626	20x2x0,75	20,3	570
S59627	24x2x0,75	20,9	655
S59628	2x2x1,0	9,4	126

Cat. no.	n x 2 x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59629	3x2x1,0	10,5	146
S59630	4x2x1,0	11,5	182
S59631	5x2x1,0	12,4	225
S59632	6x2x1,0	12,8	240
S59633	7x2x1,0	14,4	285
S59634	8x2x1,0	15,1	315
S59635	10x2x1,0	16,5	385
S59636	12x2x1,0	17,6	445
S59637	14x2x1,0	18,8	510
S59638	16x2x1,0	20,1	580
S59639	2x2x1,5	10,7	162
S59640	3x2x1,5	12,2	196
S59641	4x2x1,5	13,2	240
S59642	5x2x1,5	14,4	300
S59643	6x2x1,5	14,9	325
S59644	7x2x1,5	17,0	395
S59645	8x2x1,5	17,8	435
S59646	10x2x1,5	19,2	525
S59647	12x2x1,5	20,5	605
S59648	14x2x1,5	21,9	695
S59649	2x2x2,5	12,7	230
S59650	3x2x2,5	14,4	280
S59651	4x2x2,5	16,0	355
S59652	5x2x2,5	17,3	440
S59653	6x2x2,5	17,8	480
S59654	7x2x2,5	20,2	565
S59655	8x2x2,5	21,1	625
S59656	10x2x2,5	22,8	760
S59657	12x2x2,5	24,3	880

*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[®]C

Core cross-section [mm ²]	Max. resistance at 20 °C [Ω/km]	Core-core capacitance at 1kHz [nF/km]
0,5	36,0	160
0,75	24,5	170
1	18,1	180
1,5	12,1	180
2,5	7,41	200

Electrical parameters - paired cables IB-BiT 500[®]C

Core cross-section [mm ²]	Max. loop resistance at 20 °C [Ω/km]	Core-core capacitance at 1kHz [nF/km]
0,5	72,0	160
0,75	49,0	170
1	36,2	180
1,5	24,2	180
2,5	14,82	200