

IB-BiT 500[®]CY

RoHS 2011/65/EU



LVD 2014/35/EU

CPR

CPR 305/2011

2 years warranty

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



Technical data:

Operating temperature:
 Fixed installation: -40°C to 80°C
 Flexible connections: -5°C to 80°C
Operating voltage: $U_0/U=300/500V$
Test voltage (50Hz): 3000V
Insulation resistance: 20M Ω xkm
Inductance ca.: 0,7mH/km
Min. bending radius:
 Flexible connections: 10x \varnothing
 Fixed installation: 5x \varnothing

Construction:

Conductors: bare, annealed copper conductors, multi-stranded class 5 acc. to EN 60228
Insulation: special PVC
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
Inner sheath: special PVC
Screen: tinned copper wire braid, coverage $\geq 85\%$
Outer sheath: special PVC, oil resistant (EN 60811-404), self-extinguishing and flame retardant (acc. to EN 60332-1, EN 60332-3-24, cat. C), UV resistant
Outer sheath 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 especially in industrial environment. Reciprocal connection of screen to earth ensures full electromagnetic compatibility (EMC). 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[®]CY cable simplifies installation and compounds used 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]	Cu [kg/km]
SI0150	2x0,5	7,1	79,6	37,0
SI0151	3x0,5	7,4	87,2	43,0
SI0152	4x0,5	7,8	98,4	49,0
SI0153	5x0,5	8,3	112,7	58,0
SI0154	6x0,5	9,3	134,7	66,0
SI0155	7x0,5	9,3	138,5	72,0
SI0156	8x0,5	10,0	156,8	81,0
SI0157	10x0,5	11,0	183,3	97,0
SI0158	12x0,5	11,5	203,9	110,0
SI0159	14x0,5	11,9	222,4	123,0
SI0160	16x0,5	12,4	245,2	138,0
SI0161	18x0,5	13,0	266,4	152,0
SI0162	19x0,5	13,0	270,2	158,0
SI0163	20x0,5	13,7	289,5	166,0
SI0164	21x0,5	13,7	298,5	172,0
SI0165	24x0,5	14,9	336,2	194,0
SI0166	27x0,5	15,2	358,7	213,0
SI0167	30x0,5	16,0	398,7	232,0
SI0168	37x0,5	17,1	461,1	278,0
SI0169	2x0,75	7,5	89,5	42,0
SI0170	3x0,75	7,8	100,2	52,0
SI0171	4x0,75	8,3	115,1	63,0
SI0172	5x0,75	9,3	141,4	74,0
SI0173	6x0,75	9,9	159,9	85,0
SI0174	7x0,75	9,9	163,9	94,0
SI0175	8x0,75	10,6	186,6	107,0

Cat. no.	n x mm ²	Outer diameter [mm]	Approximate cable weight [kg/km]	Cu [kg/km]
SI0176	10x0,75	12,0	224,2	128,0
SI0177	12x0,75	12,3	245,5	147,0
SI0178	14x0,75	12,8	268,8	165,0
SI0179	16x0,75	13,6	303,7	185,0
SI0180	18x0,75	14,2	331,7	205,0
SI0181	19x0,75	14,2	335,7	213,0
SI0182	20x0,75	14,7	352,1	224,0
SI0183	21x0,75	14,7	363,6	232,0
SI0184	24x0,75	16,5	425,4	264,0
SI0185	2x1,0	7,8	98,8	49,0
SI0186	3x1,0	8,1	112,6	62,0
SI0187	4x1,0	9,1	137,4	75,0
SI0188	5x1,0	9,7	158,8	89,0
SI0189	6x1,0	10,3	181,5	103,0
SI0190	7x1,0	10,3	186,2	115,0
SI0191	8x1,0	11,3	216,4	129,0
SI0192	10x1,0	12,6	256,4	158,0
SI0193	12x1,0	12,9	281,3	181,0
SI0194	14x1,0	13,6	316,0	206,0
SI0195	16x1,0	14,3	350,3	231,0
SI0196	18x1,0	14,9	384,9	256,0
SI0197	19x1,0	14,9	389,6	268,0
SI0198	20x1,0	15,9	423,1	282,0
SI0199	21x1,0	15,9	437,4	293,0
SI0200	24x1,0	17,4	494,1	333,0
SI0201	2x1,5	8,5	121,2	62,0

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Cat. no.	n x mm ²	Outer diameter [mm]	Approximate cable weight [kg/km]	Cu [kg/km]
SI0202	3x1,5	9,3	147,3	80,0
SI0203	4x1,5	9,9	171,1	99,0
SI0204	5x1,5	10,6	200,8	120,0
SI0205	6x1,5	11,6	234,6	138,0
SI0206	7x1,5	11,6	242,5	154,0
SI0207	8x1,5	12,5	277,4	175,0
SI0208	10x1,5	14,2	335,9	214,0
SI0209	12x1,5	14,6	371,3	248,0

Cat. no.	n x mm ²	Outer diameter [mm]	Approximate cable weight [kg/km]	Cu [kg/km]
SI0210	2x2,5	10,0	169,8	90,0
SI0211	3x2,5	10,5	199,0	122,0
SI0212	4x2,5	11,5	237,9	151,0
SI0213	5x2,5	12,3	280,2	184,0
SI0214	6x2,5	13,2	324,9	215,0
SI0215	7x2,5	13,2	338,3	242,0
SI0216	8x2,5	14,6	395,3	276,0
SI0217	10x2,5	16,8	487,3	339,0
SI0218	12x2,5	17,3	542,3	397,0

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[®]CY

Core cross-section mm ²	Max. resistance at 20°C [Ω/km]	Core-core capacitance at 1kHz [nF/km]
0,5	36,0	130
0,75	24,5	140
1	18,1	150
1,5	12,1	150
2,5	7,41	170