

BiT 1000®(St) FR

Flexible, screened, highly flame retardant
control cables, rated 0,6/1 kV



industrial application



internal application



external application



underground 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

Electrical parameters:

Operating voltage: $U_0/U=0,6/1\text{ kV}$

Test voltage (50Hz): 4000V

Insulation resistance: $20\text{ M}\Omega\text{ x km}$

Mechanical parameters:

Min. bending radius:

flexible connections: $12\text{ x } \varnothing$

fixed installation: $6\text{ x } \varnothing$

Design:

Conductors:

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

special PVC

Insulation:

Core identification:

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

Core arrangement:

Inner sheath:

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

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, IEC 60332-3 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]
BS0930	2x0,5	8,4	85
BS0931	3G0,5	8,8	95
BS0932	3x0,5	8,8	95
BS0933	4G0,5	9,4	110
BS0934	4x0,5	9,4	110
BS0935	5G0,5	10,0	130
BS0936	5x0,5	10,0	130
BS0937	6G0,5	10,8	149
BS0938	7G0,5	10,8	154
BS0939	7x0,5	10,8	154
BS0940	8G0,5	11,7	177
BS0941	8x0,5	11,7	177
BS0942	10G0,5	13,5	221
BS0943	12G0,5	13,5	230
BS0944	12x0,5	13,5	230
BS0945	14G0,5	14,0	255
BS0946	16G0,5	14,7	285
BS0947	18G0,5	15,5	315
BS0948	19G0,5	15,5	320
BS0949	21G0,5	16,2	350
BS0950	25G0,5	18,2	415
BS0951	27G0,5	18,2	425
BS0952	30G0,5	18,8	460
BS0953	34G0,5	20,2	535
BS0954	37G0,5	20,2	545
BS0955	40G0,5	20,9	585
BS0956	42G0,5	22,7	640
BS0957	52G0,5	23,6	740
BS0958	61G0,5	25,1	850

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
BS0959	2x0,75	8,6	93
BS0960	3G0,75	9,0	105
BS0961	3x0,75	9,0	105
BS0962	4G0,75	9,7	126
BS0963	4x0,75	9,7	126
BS0964	5G0,75	10,4	148
BS0965	5x0,75	10,4	148
BS0966	6G0,75	11,2	171
BS0967	6x0,75	11,2	171
BS0968	7G0,75	11,2	177
BS0969	7x0,75	11,2	177
BS0970	8G0,75	12,4	206
BS0971	8x0,75	12,4	206
BS0972	10G0,75	14,3	255
BS0973	12G0,75	14,3	270
BS0974	12x0,75	14,3	270
BS0975	14G0,75	14,9	300
BS0976	16G0,75	15,7	340
BS0977	18G0,75	16,5	375
BS0978	19G0,75	16,5	380
BS0979	21G0,75	17,2	420
BS0980	25G0,75	19,4	500
BS0981	27G0,75	19,4	510
BS0982	30G0,75	20,0	555
BS0983	34G0,75	21,6	645
BS0984	37G0,75	21,6	665
BS0985	40G0,75	22,5	725
BS0986	42G0,75	24,3	775
BS0987	52G0,75	25,5	915
BS0988	61G0,75	27,1	1050

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Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
BS0989	2x1,0	8,9	104
BS0990	3G1,0	9,3	118
BS0991	3x1,0	9,3	118
BS0992	4G1,0	10,0	142
BS0993	4x1,0	10,0	142
BS0994	5G1,0	11,0	167
BS0995	5x1,0	11,0	167
BS0996	6G1,0	11,6	196
BS0997	6x1,0	11,6	196
BS0998	7G1,0	11,6	203
BS0999	7x1,0	11,6	203
BS1000	8G1,0	12,9	235
BS1001	10G1,0	14,9	295
BS1002	10x1,0	14,9	295
BS1003	12G1,0	14,9	310
BS1004	12x1,0	14,9	310
BS1005	14G1,0	15,6	345
BS1006	16G1,0	16,4	390
BS1007	18G1,0	17,2	430
BS1008	18x1,0	17,2	430
BS1009	19G1,0	17,2	440
BS1010	21G1,0	18,0	485
BS1011	25G1,0	20,3	580
BS1012	27G1,0	20,3	590
BS1013	30G1,0	21,0	645
BS1014	34G1,0	22,8	760
BS1015	37G1,0	22,8	780
BS1016	40G1,0	23,6	845
BS1017	42G1,0	25,7	915
BS1018	52G1,0	26,8	1070
BS1019	61G1,0	28,6	1240
BS1020	2x1,5	9,7	125
BS1021	3G1,5	10,2	144
BS1022	3x1,5	10,2	144
BS1023	4G1,5	11,2	175
BS1024	4x1,5	11,2	175
BS1025	5G1,5	12,1	210
BS1026	5x1,5	12,1	210
BS1027	6G1,5	13,0	246
BS1028	6x1,5	13,0	246
BS1029	7G1,5	13,0	255
BS1030	7x1,5	13,0	255

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
BS1031	8G1,5	14,2	295
BS1032	10G1,5	16,6	375
BS1033	10x1,5	16,6	375
BS1034	12G1,5	16,6	395
BS1035	12x1,5	16,6	395
BS1036	14G1,5	17,3	445
BS1037	16G1,5	18,3	500
BS1038	18G1,5	19,2	560
BS1039	19G1,5	19,2	570
BS1040	21G1,5	20,1	630
BS1041	25G1,5	23,0	765
BS1042	27G1,5	23,0	790
BS1043	30G1,5	23,8	860
BS1044	34G1,5	25,8	1010
BS1045	37G1,5	25,8	1045
BS1046	40G1,5	26,7	1125
BS1047	42G1,5	29,1	1220
BS1048	52G1,5	30,3	1430
BS1049	61G1,5	32,4	1660
BS1050	2x2,5	10,8	159
BS1051	3G2,5	11,3	185
BS1052	3x2,5	11,3	185
BS1053	4G2,5	12,3	231
BS1054	4x2,5	12,3	231
BS1055	5G2,5	13,6	275
BS1056	5x2,5	13,6	275
BS1057	6G2,5	14,7	325
BS1058	6x2,5	14,7	325
BS1059	7G2,5	14,7	340
BS1060	7x2,5	14,7	340
BS1061	10G2,5	18,8	505
BS1062	12G2,5	18,8	540
BS1063	12x2,5	18,8	540
BS1064	14G2,5	19,8	615
BS1065	16G2,5	20,9	695
BS1066	18G2,5	22,0	775
BS1067	21G2,5	23,2	890
BS1068	25G2,5	26,5	1080
BS1069	30G2,5	27,5	1220
BS1070	34G2,5	29,9	1430
BS1071	37G2,5	29,9	1485
BS1072	42G2,5	33,7	1730

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Power control cables 0,6/1kV

paired cables

Cat. no.	nx2xmm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
BS1080	2x2x0,5	11,2	145
BS1081	3x2x0,5	12,4	159
BS1082	4x2x0,5	13,3	188
BS1083	5x2x0,5	14,3	230
BS1084	6x2x0,5	14,7	242
BS1085	7x2x0,5	16,4	275
BS1086	8x2x0,5	17,1	300
BS1087	10x2x0,5	18,3	355
BS1088	12x2x0,5	19,4	405
BS1089	14x2x0,5	20,6	460
BS1090	16x2x0,5	22,2	535
BS1091	18x2x0,5	23,2	575
BS1092	20x2x0,5	23,9	620
BS1093	24x2x0,5	24,6	710
BS1094	2x2x0,75	11,9	193
BS1095	3x2x0,75	13,1	182
BS1096	4x2x0,75	14,2	218
BS1097	5x2x0,75	15,2	265
BS1098	6x2x0,75	15,7	285
BS1099	7x2x0,75	17,5	325
BS1100	8x2x0,75	18,2	360
BS1101	10x2x0,75	19,5	420
BS1102	12x2x0,75	20,8	485
BS1103	14x2x0,75	22,3	560
BS1104	16x2x0,75	23,8	645
BS1105	18x2x0,75	24,8	690
BS1106	20x2x0,75	25,8	765
BS1107	24x2x0,75	26,5	875
BS1108	2x2x1,0	12,3	183
BS1109	3x2x1,0	13,7	205
BS1110	4x2x1,0	14,8	247
BS1111	5x2x1,0	15,9	305
BS1112	6x2x1,0	16,4	320

Cat. no.	nx2xmm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
BS1113	7x2x1,0	18,3	370
BS1114	8x2x1,0	19,1	410
BS1115	10x2x1,0	20,4	485
BS1116	12x2x1,0	21,8	560
BS1117	14x2x1,0	23,3	645
BS1118	16x2x1,0	25,2	755
BS1119	18x2x1,0	26,2	810
BS1120	20x2x1,0	27,1	885
BS1121	24x2x1,0	27,9	1020
BS1122	2x2x1,5	13,6	223
BS1123	3x2x1,5	15,2	255
BS1124	4x2x1,5	16,4	305
BS1125	5x2x1,5	17,7	385
BS1126	6x2x1,5	18,3	410
BS1127	7x2x1,5	20,4	475
BS1128	8x2x1,5	21,4	525
BS1129	10x2x1,5	23,1	640
BS1130	12x2x1,5	24,7	740
BS1131	14x2x1,5	26,4	855
BS1132	16x2x1,5	28,5	1000
BS1133	18x2x1,5	29,7	1075
BS1134	20x2x1,5	30,7	1175
BS1135	24x2x1,5	31,8	1375
BS1136	2x2x2,5	15,4	290
BS1137	3x2x2,5	17,2	335
BS1138	4x2x2,5	18,7	410
BS1139	5x2x2,5	20,1	520
BS1140	6x2x2,5	20,9	560
BS1141	7x2x2,5	23,6	660
BS1142	8x2x2,5	24,7	730
BS1143	10x2x2,5	26,7	890
BS1144	12x2x2,5	28,8	1055
BS1145	14x2x2,5	30,6	1200
BS1146	16x2x2,5	33,0	1400

*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