



Industrial application



Internal application



EN 60332-1-2



EN 60332-3



oxygen index



high flexibility

Technical data:

Thermal parameters:

Operating temperature:

fixed installation: -40 °C to 80 °C
 flexible connections: -5 °C to 80 °C
 occasional flexing: -15 °C* to 80 °C

Electrical parameters:

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

Test voltage (50Hz): 3000V

Mechanical parameters:

Insulation resistance: 20M Ω xkm

Min. bending radius:

flexible connections: 7,5 \times \varnothing
 fixed installation: 4 \times \varnothing

*minimum temperature for occasional flexing with bending radius not smaller than 15 \times D.

Bending test at low temperature (-15 °C acc. to EN 60811-504).

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S58855	2x0,5	5,0	36
S58856	3G0,5	5,3	43
S58857	3x0,5	5,3	43
S58858	4G0,5	5,8	51
S58859	4x0,5	5,8	51
S58860	5G0,5	6,3	62
S58861	5x0,5	6,3	62
S58862	6G0,5	7,0	75
S58863	7G0,5	7,0	79
S58864	7x0,5	7,0	79
S58865	8G0,5	7,7	93
S58866	8x0,5	7,7	93
S58867	10G0,5	9,4	126
S58868	12G0,5	9,4	135
S58869	12x0,5	9,4	135
S58870	14G0,5	9,8	150
S58871	16G0,5	10,4	168
S58872	18G0,5	10,9	186
S58873	19G0,5	10,9	189
S58874	21G0,5	11,6	213
S58875	25G0,5	13,1	255
S58876	27G0,5	13,1	264
S58877	30G0,5	13,8	294
S58878	34G0,5	14,8	335
S58879	37G0,5	14,8	350
S58880	40G0,5	15,3	375
S58881	42G0,5	16,9	420
S58882	50G0,5	17,6	475
S58883	56G0,5	18,4	525
S58884	61G0,5	18,9	560

Design:

Conductors:

bare, 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

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 cat. C); colour: grey

Application:

Flexible control cables designed for operation in control and protective devices as well as in control circuits. Also for power supply to low power portable and mobile devices. 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. High flexibility of BIT 500[®]FR cable enables 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]
S58885	2x0,75	5,4	45
S58886	3G0,75	5,7	54
S58887	3x0,75	5,7	54
S58888	4G0,75	6,3	64
S58889	4x0,75	6,3	64
S58890	5G0,75	7,0	82
S58891	5x0,75	7,0	82
S58892	6G0,75	7,6	96
S58893	6x0,75	7,6	96
S58894	7G0,75	7,6	100
S58895	7x0,75	7,6	100
S58896	8G0,75	8,4	120
S58897	8x0,75	8,4	120
S58898	10G0,75	10,2	160
S58899	12G0,75	10,2	170
S58900	12x0,75	10,2	170
S58901	14G0,75	10,7	190
S58902	16G0,75	11,5	220
S58903	18G0,75	12,1	245
S58904	19G0,75	12,1	250
S58905	21G0,75	12,7	275
S58906	25G0,75	14,5	335
S58907	27G0,75	14,5	345
S58908	30G0,75	15,0	380
S58909	34G0,75	16,6	450
S58910	37G0,75	16,6	465
S58911	40G0,75	17,2	500
S58912	42G0,75	18,7	550
S58913	50G0,75	19,5	625
S58914	56G0,75	20,1	680

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S58915	61G0,75	20,7	730
S58916	2x1,0	5,7	52
S58917	3G1,0	6,1	64
S58918	3x1,0	6,1	64
S58919	4G1,0	6,8	80
S58920	4x1,0	6,8	80
S58921	5G1,0	7,4	96
S58922	5x1,0	7,4	96
S58923	6G1,0	8,0	114
S58924	6x1,0	8,0	114
S58925	7G1,0	8,0	120
S58926	7x1,0	8,0	120
S58927	8G1,0	9,3	150
S58928	10G1,0	10,9	190
S58929	10x1,0	10,9	190
S58930	12G1,0	10,9	205
S58931	12x1,0	10,9	205
S58932	14G1,0	11,6	235
S58933	16G1,0	12,2	265
S58934	18G1,0	12,8	295
S58935	18x1,0	12,8	295
S58936	19G1,0	12,8	300
S58937	21G1,0	13,7	335
S58938	25G1,0	15,5	405
S58939	27G1,0	15,5	415
S58940	30G1,0	16,4	470
S58941	34G1,0	17,6	540
S58942	37G1,0	17,6	560
S58943	40G1,0	18,5	610
S58944	42G1,0	19,9	660
S58945	50G1,0	20,8	755
S58946	56G1,0	21,6	835
S58947	61G1,0	22,2	895
S58948	2x1,5	6,7	72
S58949	3G1,5	7,1	88
S58950	3x1,5	7,1	88
S58951	4G1,5	7,8	109
S58952	4x1,5	7,8	109
S58953	5G1,5	8,5	131
S58954	5x1,5	8,5	131
S58955	6G1,5	9,6	163
S58956	6x1,5	9,6	163
S58957	7G1,5	9,6	172
S58958	7x1,5	9,6	172
S58959	8G1,5	10,6	205
S58960	10G1,5	12,7	265
S58961	10x1,5	12,7	265
S58962	12G1,5	12,7	285

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S58963	12x1,5	12,7	285
S58964	14G1,5	13,5	330
S58965	16G1,5	14,3	370
S58966	18G1,5	15,0	410
S58967	19G1,5	15,0	420
S58968	21G1,5	16,2	483
S58969	25G1,5	18,5	590
S58970	27G1,5	18,5	610
S58971	30G1,5	19,2	670
S58972	34G1,5	20,6	765
S58973	37G1,5	20,6	790
S58974	40G1,5	21,6	860
S58975	42G1,5	23,3	924
S58976	50G1,5	24,7	1090
S58977	56G1,5	25,5	1190
S58978	61G1,5	26,2	1270
S58979	2x2,5	7,8	102
S58980	3G2,5	8,3	128
S58981	3x2,5	8,3	128
S58982	4G2,5	9,5	168
S58983	4x2,5	9,5	168
S58984	5G2,5	10,4	200
S58985	5x2,5	10,4	200
S58986	6x2,5	11,5	245
S58987	6G2,5	11,5	245
S58988	7G2,5	11,5	260
S58989	7x2,5	11,5	260
S58990	10G2,5	15,2	395
S58991	12G2,5	15,2	425
S58992	12x2,5	15,2	425
S58993	14G2,5	16,4	495
S58994	16G2,5	17,3	560
S58995	18G2,5	18,4	635
S58996	21G2,5	19,3	715
S58997	25G2,5	22,1	870
S58998	30G2,5	22,9	985
S58999	34G2,5	25,1	1160
S59000	37G2,5	25,1	1210
S59001	42G2,5	28,1	1400
S59002	50G2,5	29,4	1620
S59003	2x4,0	9,3	152
S59004	3G4,0	10,3	202
S59005	3x4,0	10,3	202
S59006	4G4,0	11,3	255
S59007	5G4,0	12,6	310
S59008	7G4,0	13,7	395
S59009	10G4,0	18,7	615
S59010	12G4,0	18,7	675

*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

paired cables

Cat. no.	nx2xmm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59011	2x2x0,5	7,3	65
S59012	3x2x0,5	8,2	70
S59013	4x2x0,5	9,3	98
S59014	5x2x0,5	10,0	120
S59015	6x2x0,5	10,4	130
S59016	7x2x0,5	11,8	156
S59017	8x2x0,5	12,3	172
S59018	10x2x0,5	13,2	205
S59019	12x2x0,5	14,3	245
S59020	14x2x0,5	15,1	275
S59021	16x2x0,5	16,6	335
S59022	18x2x0,5	17,3	360
S59023	20x2x0,5	17,8	395
S59024	24x2x0,5	18,5	455
S59025	2x2x0,75	8,0	78
S59026	3x2x0,75	9,4	100
S59027	4x2x0,75	10,1	122
S59028	5x2x0,75	10,9	152
S59029	6x2x0,75	11,5	170
S59030	7x2x0,75	12,9	196
S59031	8x2x0,75	13,7	225
S59032	10x2x0,75	14,6	270
S59033	12x2x0,75	16,0	325
S59034	14x2x0,75	17,0	370
S59035	16x2x0,75	18,4	435
S59036	18x2x0,75	19,1	470
S59037	20x2x0,75	19,7	515
S59038	24x2x0,75	20,3	595
S59039	2x2x1,0	8,5	92
S59040	3x2x1,0	9,9	116
S59041	4x2x1,0	10,8	145
S59042	5x2x1,0	11,8	184
S59043	6x2x1,0	12,2	202

Cat. no.	nx2xmm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
S59044	7x2x1,0	13,9	240
S59045	8x2x1,0	14,5	270
S59046	10x2x1,0	15,6	320
S59047	12x2x1,0	17,0	390
S59048	14x2x1,0	18,3	450
S59049	16x2x1,0	19,5	515
S59050	18x2x1,0	20,4	560
S59051	20x2x1,0	21,0	615
S59052	24x2x1,0	21,8	725
S59053	2x2x1,5	10,1	132
S59054	3x2x1,5	11,6	167
S59055	4x2x1,5	12,6	198
S59056	5x2x1,5	13,8	258
S59057	6x2x1,5	14,3	280
S59058	7x2x1,5	16,4	340
S59059	8x2x1,5	17,2	380
S59060	10x2x1,5	18,6	465
S59061	12x2x1,5	19,9	550
S59062	14x2x1,5	21,1	625
S59063	16x2x1,5	22,8	725
S59064	18x2x1,5	23,8	780
S59065	20x2x1,5	25,0	885
S59066	24x2x1,5	25,7	1030
S59067	2x2x2,5	12,1	195
S59068	3x2x2,5	13,8	235
S59069	4x2x2,5	15,1	305
S59070	5x2x2,5	16,7	385
S59071	6x2x2,5	17,3	425
S59072	7x2x2,5	19,6	505
S59073	8x2x2,5	20,5	560
S59074	10x2x2,5	22,3	695
S59075	12x2x2,5	23,8	810
S59076	14x2x2,5	25,7	950
S59077	16x2x2,5	27,5	1096

*Outer diameter tolerance: +/-5%

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Note: On customer's request other cross sections or number of cores can be produced