



Fire resistant and flame retardant halogen-free power cable. Unbraided

BI 0,6/1kV

MGT/XLPE/PO

Operating temperature : 90°C
Operating Voltage : 0,6/1kV

Application

Unarmoured fire resistant cable for fixed installation in ships where cable protection is required. Control, alarm, power, emergency and critical systems. Can be installed and operated both indoors and outdoors.

Standards applied

IEC 60092-353	- Design
IEC 60228 class 2	- Conductor
IEC 60092-351	- Insulation
IEC 60092-359	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-21	- Fire Resistant
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Annealed stranded copper, IEC 60228 class 2, stranded circular copper SCC (single core cables 1,5 ... 300 mm ² , multicore cables 1,5 ... 35 mm ²), sector shaped copper SSC (3 and 4 core cables above 35 mm ²)
Insulation	B	Mica-tape + HFXLPE, IEC 60092-351 (HFXLPE)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	I	Flame retardant halogen-free thermoplastic compound, SHF1
Marking text		E.g. "meter" "year" DRAKA 01 BI 0,6/1KV 3 x 2,5/2,5 mm ² IEC 60331-21 IEC 60332-3-22 ShipLine
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel, DRAKA 02 = Draka Kabel BV Amsterdam, DRAKA 03 = Draka Kabel BV Emmen
Outer sheath colour		Green

Core identification power cables

Single core	Black
Two cores	Blue - Brown
Three cores	Brown - Black - Grey
Four cores	Blue - Brown - Black - Grey
Five cores	Blue - Brown - Black - Grey - Black
Seven cores and above	White with black numbers
Two cores + earth (3G)	Yellow/green - Blue - Brown
Three cores + earth (4G)	Yellow/green - Brown - Black - Grey
Four cores + earth (5G)	Yellow/green - Blue - Brown - Black - Grey



Range and dimensions

Number of elements	Cross section core, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	1.5	1.6	0.7	1	8.5 ± 0.5	80	28
3G	1.5	1.6	0.7	1.1	9.5 ± 0.5	105	42
3	1.5	1.6	0.7	1.1	9.5 ± 0.5	105	42
4G	1.5	1.6	0.7	1.1	10.5 ± 0.8	130	56
4	1.5	1.6	0.7	1.1	10.5 ± 0.8	130	56
5	1.5	1.6	0.7	1.1	11 ± 0.8	170	70
7	1.5	1.6	0.7	1.2	12.5 ± 0.8	210	98
12	1.5	1.6	0.7	1.3	16.5 ± 0.8	340	168
27	1.5	1.6	0.7	1.6	23.5 ± 1	710	377
2	2.5	2	0.7	1.1	9.5 ± 0.5	110	46
3G	2.5	2	0.7	1.1	10.5 ± 0.8	145	69
3	2.5	2	0.7	1.1	10.5 ± 0.8	140	69
4G	2.5	2	0.7	1.1	11.5 ± 0.8	180	92
4	2.5	2	0.7	1.1	11.5 ± 0.8	180	92
7	2.5	2	0.7	1.2	13.5 ± 0.8	290	161
3	4	2.55	0.7	1.2	12 ± 0.8	205	111
3	6	3.15	0.7	1.2	13 ± 0.8	275	171
3	10	4.05	0.7	1.2	15 ± 0.8	400	272
4	10	4.05	0.7	1.3	16.5 ± 0.8	520	363
3	16	5.15	0.7	1.3	17.5 ± 0.8	600	437
3	70	-	1.1	1.8	27.5 ± 1	2210	1794

Ordering information

Part number	Description	EAN No. DNK	EL No.	KDN Part number	EAN no. KDN
839515	BI 0,6/1KV 2X 1,5 mm2	7021528395150	1059820	-	-
839516	BI 0,6/1KV 3G 1,5 mm2	7021528395167	1059830	-	-
839518	BI 0,6/1kv 3X 1.5mm ²	7021528395181	1059840	-	-
839519	BI 0,6/1KV 4G 1,5 mm2	7021528395198	1059860	-	-
839521	BI 0,6/1kv 4X 1.5mm ²	7021528395211	-	-	-
839524	BI 0,6/1KV 5X 1,5 mm2	7021528395242	1059890	-	-
839525	BI 0,6/1KV 7X 1,5 mm2	7021528395259	1059990	-	-
839527	BI 0,6/1kv 12X 1.5mm ²	7021528395273	1059903	-	-
839531	BI 0,6/1kv 27X 1.5mm ²	7021528395310	-	-	-
839533	BI 0,6/1KV 2X 2,5 mm2	7021528395334	1059821	-	-
839534	BI 0,6/1KV 3G 2,5 mm2	7021528395341	1059831	-	-
839536	BI 0,6/1kv 3X 2.5mm ²	7021528395365	1059841	-	-
839537	BI 0,6/1KV 4G 2,5 mm2	7021528395372	1059861	-	-
839539	BI 0,6/1KV 4X 2,5 mm2	7021528395396	1059871	-	-
839542	BI 0,6/1KV 7X 2,5 mm2	7021528395426	1059901	-	-
839551	BI 0,6/1kv 3X 4mm ²	7021528395518	1059842	-	-
839557	BI 0,6/1KV 3X 6 mm2	7021528395570	1059843	-	-
839563	BI 0,6/1KV 3X 10 mm2	7021528395631	1059844	-	-
839564	BI 0,6/1KV 4X 10 mm2	7021528395648	-	-	-
839569	BI 0,6/1KV 3X 16 mm2	7021528395693	1059845	-	-
839593	BI 0,6/1KV 3X 70mm2	7021528395938	-	-	-



Electrical values power cables

Number of elements	Cross section core, mm ²	Cross section screen, mm ²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Current rating IEC 60092-352, Ampere	Short circuit rating 1 second, Ampere
2	1.5	-	SCC	12.1	15.428	0.105	0.126	17	210
3G	1.5	-	SCC	12.1	15.428	0.105	0.126	17	210
3	1.5	-	SCC	12.1	15.428	0.105	0.126	14	210
4G	1.5	-	SCC	12.1	15.428	0.105	0.126	14	210
4	1.5	-	SCC	12.1	15.428	0.105	0.126	14	210
5	1.5	-	SCC	12.1	15.428	0.105	0.126	20	210
7	1.5	-	SCC	12.1	15.428	0.105	0.126	20	210
12	1.5	-	SCC	12.1	15.428	0.105	0.126	20	210
27	1.5	-	SCC	12.1	15.428	0.105	0.126	20	210
2	2.5	-	SCC	7.41	9.448	0.098	0.117	24	350
3G	2.5	-	SCC	7.41	9.448	0.098	0.117	24	350
3	2.5	-	SCC	7.41	9.448	0.098	0.117	20	350
4G	2.5	-	SCC	7.41	9.448	0.098	0.117	20	350
4	2.5	-	SCC	7.41	9.448	0.098	0.117	20	350
7	2.5	-	SCC	7.41	9.448	0.098	0.117	28	350
3	4	-	SCC	4.61	5.878	0.091	0.110	27	560
3	6	-	SCC	3.08	3.927	0.086	0.104	34	840
3	10	-	SCC	1.83	2.333	0.081	0.098	47	1400
4	10	-	SCC	1.83	2.333	0.081	0.098	47	1400
3	16	-	SCC	1.15	1.466	0.077	0.093	63	2240
3	70	-	SSC	0.268	0.342	0.074	0.088	160	9800

Ambient temperature correction factors

Ambient Temp °C	25	30	35	40	45	50	55	60	65	70	75
Rating factor	1.22	1.17	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61	0.50

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	6 x D	50 N /mm ²	-10°C