



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

BXOI 0,6/1kV

MGT/XLPE/TCWB/PO

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

Application

Armoured 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	X	No inner covering. (Additional tapes may be applied)
Armour/screen	O	Tinned copper wire braid
Tape over armour/screen		Additional tape may be applied
Outer sheath	I	Flame retardant halogen-free thermoplastic compound, SHF1
Marking text		E.g. "meter" "year" DRAKA 01 BXOI 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	Cross section screen, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	35	4	7.6	0.9	0.2	1.2	13 ± 0.8	480	367
1	50	6	9.5	1.0	0.3	1.3	16.5 ± 0.8	770	597
1	95	6	12.6	1.1	0.3	1.4	19.5 ± 0.8	1190	973
1	150	10	15.9	1.4	0.3	1.6	23.5 ± 1	1840	1525
1	185	10	18.3	1.6	0.3	1.6	26.5 ± 1	2290	1963
1	240	10	19.8	1.7	0.3	1.7	28.5 ± 1	2720	2303
2	1.5	2.5	1.6	0.7	0.2	1.1	10 ± 0.8	135	72
3	1.5	2.5	1.6	0.7	0.2	1.1	10.5 ± 0.8	160	86
4	1.5	2.5	1.6	0.7	0.2	1.2	11.5 ± 0.8	195	108
5	1.5	4	1.6	0.7	0.2	1.2	12.5 ± 0.8	240	129
7	1.5	6	1.6	0.7	0.3	1.2	13.5 ± 0.8	310	187
12	1.5	6	1.6	0.7	0.3	1.4	18 ± 0.8	470	274
19	1.5	6	1.6	0.7	0.3	1.5	21 ± 1	650	387
27	1.5	10	1.6	0.7	0.3	1.6	24.5 ± 1	870	526
2	2.5	2.5	2	0.7	0.2	1.1	10.5 ± 0.8	170	98
3	2.5	2.5	2	0.7	0.2	1.1	11 ± 0.8	205	121
7	2.5	6	2	0.7	0.3	1.3	15 ± 0.8	400	251
3	4	4	2.55	0.7	0.2	1.2	12.5 ± 0.8	275	170
3	6	6	3.15	0.7	0.3	1.3	14.5 ± 0.8	380	261
3	10	10	4.05	0.7	0.3	1.3	16.5 ± 0.8	550	398
3	16	16	5.15	0.7	0.5	1.4	19.5 ± 0.8	840	654
3	25	16	6.4	0.9	0.4	1.6	23 ± 1	1150	913
3	35	16	7.6	0.9	0.4	1.7	26.5 ± 1	1490	1169
3	50	25	-	1.0	0.6	1.8	27 ± 1	1930	1563
3	70	35	-	1.1	0.6	1.9	30 ± 1.5	2690	2238
3	95	50	-	1.1	0.6	2.1	35.5 ± 1.5	3720	3125

Ordering information

Part number	Description	EAN No. DNK	EL No.	KDN Part number	EAN no. KDN
839402	BXOI 0.6/1kV 1X 35/4mm ²	7021528394023	-	-	-
839403	BXOI 0.6/1kV 1X 50/6mm ²	7021528394030	-	-	-
839405	BXOI 0.6/1kV 1X 95/6mm ²	7021528394054	-	-	-
839407	BXOI 0.6/1kV 1X 150/10mm ²	7021528394078	-	-	-
839408	BXOI 0.6/1kV 1X 185/10mm ²	7021528394085	-	-	-
839409	BXOI 0.6/1kV 1X 240/10mm ²	7021528394092	-	-	-
839415	BXOI 0,6/1KV 2X 1,5/2,5 mm2	7021528394153	1059720	-	-
839418	BXOI 0,6/1KV 3X 1,5/2,5 mm2	7021528394184	1059740	-	-
839421	BXOI 0.6/1kV 4X 1,5/2.5mm ²	7021528394214	-	-	-
839424	BXOI 0.6/1kV 5X 1.5/4mm ²	7021528394245	1059790	-	-
839425	BXOI 0,6/1KV 7X 1,5/6 mm2	7021528394252	1059800	-	-
839427	BXOI 0.6/1kV 12X 1.5/6mm ²	7021528394276	1059803	-	-
839429	BXOI 0,6/1KV 19X 1,5/6mm2	7021528394290	-	-	-
839431	BXOI 0.6/1kV 27X 1,5/10mm ²	7021528394313	-	-	-
839433	BXOI 0.6/1kV 2X 2.5/2.5mm ²	7021528394337	1059721	-	-
839436	BXOI 0.6/1kV 3X 2.5/2.5mm ²	7021528394368	1059741	-	-
839442	BXOI 0,6/1KV 7X 2,5/6 mm2	7021528394429	1059801	-	-
839451	BXOI 0.6/1kV 3X 4/4mm ²	7021528394511	1059742	-	-
839457	BXOI 0.6/1kV 3X 6/6mm ²	7021528394573	1059743	-	-
839463	BXOI 0,6/1KV 3X 10/10 mm2	7021528394634	1059744	-	-
839469	BXOI 0.6/1kV 3X 16/16mm ²	7021528394696	1059745	-	-
839475	BXOI 0,6/1KV 3X 25/16 mm2	7021528394757	-	-	-



Part number	Description	EAN No. DNK	EL No.	KDN Part number	EAN no. KDN
839481	BXOI 0.6/1kV 3X 35/16mm ²	7021528394818	-	-	-
839487	BXOI 0.6/1kV 3X 50/25mm ²	7021528394870	-	-	-
839493	BXOI 0.6/1kV 3X 70/35mm ²	7021528394931	-	-	-
839498	BXOI 0.6/1kV 3X 95/50mm ²	7021528394986	-	-	-

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
1	35	4	SCC	0.524	0.668	0.094	0.112	145	4900
1	50	6	SCC	0.387	0.493	0.093	0.112	180	7000
1	95	6	SCC	0.193	0.246	0.086	0.104	275	13300
1	150	10	SCC	0.124	0.158	0.084	0.101	365	21000
1	185	10	SCC	0.0991	0.1264	0.083	0.099	415	25900
1	240	10	SCC	0.0754	0.0961	0.082	0.098	490	33600
2	1.5	2.5	SCC	12.1	15.428	0.105	0.126	17	210
3	1.5	2.5	SCC	12.1	15.428	0.105	0.126	14	210
4	1.5	2.5	SCC	12.1	15.428	0.105	0.126	14	210
5	1.5	4	SCC	12.1	15.428	0.105	0.126	20	210
7	1.5	6	SCC	12.1	15.428	0.105	0.126	20	210
12	1.5	6	SCC	12.1	15.428	0.105	0.126	20	210
19	1.5	6	SCC	12.1	15.428	0.105	0.126	20	210
27	1.5	10	SCC	12.1	15.428	0.105	0.126	20	210
2	2.5	2.5	SCC	7.41	9.448	0.098	0.117	24	350
3	2.5	2.5	SCC	7.41	9.448	0.098	0.117	20	350
7	2.5	6	SCC	7.41	9.448	0.098	0.117	28	350
3	4	4	SCC	4.61	5.878	0.091	0.110	27	560
3	6	6	SCC	3.08	3.927	0.086	0.104	34	840
3	10	10	SCC	1.83	2.333	0.081	0.098	47	1400
3	16	16	SCC	1.15	1.466	0.077	0.093	63	2240
3	25	16	SCC	0.727	0.927	0.077	0.093	84	3500
3	35	16	SCC	0.524	0.668	0.075	0.089	100	4900
3	50	25	SSC	0.387	0.493	0.075	0.090	125	7000
3	70	35	SSC	0.268	0.342	0.074	0.088	160	9800
3	95	50	SSC	0.193	0.246	0.072	0.086	195	13300

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