

Hydraulic and Turbine oils resistant, power cable BFOV 0,6/1(1,2)kV

Fire resistant, flame retardant halogen-free power cable. Resistant to turbine and hydraulic oils.

BFOV 0,6/1(1,2)kV

MGT/EPR/EPR/TCWB/HNBR



Operating temperature : 90°C
Operating Voltage : 0,6/1(1,2)kV

Application

Fixed installation for power, control and lighting in both EX- and safe areas, emergency and critical systems where requirement for fire resistance exists.

Especially resistant to the following hydraulic oils:
HydraWay HVXA 46, Nyco Turboncoil 600, Nyco Turboncoil 610, Mobil Glygoyle 11 and Turbway 32.

Standards applied

IEC 60092-353	- Design
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60332-1-2	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-1, -2, -21	- Fire Resistant
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	B	Mica-tape + EP-rubber, IEC 60092-360 (EPR)
Lay up / Shielding		Cores laid up in concentric layers
Inner covering	F	Flame retardant and halogen-free thermoplastic compound
Tape over inner covering		PET tape
Armour/screen	O	Tinned annealed copper wire braid
Tape over armour/screen		PET tape
Outer sheath	V	Flame retardant, halogen-free and oil resistant thermoset compound (Therban), SHF2 (IEC 60092-360)
Marking text		E.g. meter "year" DRAKA NORSK KABEL BFOV 0.6/1kV 3 x 4/6mm ² FLEX - FLAME IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22
Outer sheath colour		Black

*) IEC 60331-1 for cables with an overall diameter exceeding 20 mm and IEC 60331-2 for cables with an overall diameter not exceeding 20 mm

**) IEC 60331-21 also at enhanced temperature 1000°C for 180 minutes



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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
G / X in cable description	G = One of the cores are yellow/green - X = no yellow/green core

Range and dimensions

Number of elements	Cross section core, mm ²	Cross section screen, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	1.5	4	1.6	1.0	1.1	10 ± 0.8	0.3	1.2	13 ± 0.8	285	79
2	2.5	6	2.0	1.0	1.1	11 ± 0.8	0.3	1.3	14.5 ± 0.8	360	129
2	6	6	3.15	1.0	1.1	13 ± 0.8	0.3	1.4	17 ± 0.8	540	209
3	1.5	6	1.6	1.0	1.1	10.5 ± 0.8	0.3	1.3	14.5 ± 0.8	350	125
3	2.5	6	2.0	1.0	1.1	11.5 ± 0.8	0.3	1.3	15 ± 0.8	420	165
3	4	6	2.55	1.0	1.1	13 ± 0.8	0.3	1.3	16.5 ± 0.8	500	209
3	6	6	3.15	1.0	1.1	14 ± 0.8	0.3	1.4	18 ± 0.8	620	280
3	16	16	5.15	1.0	1.1	18.5 ± 0.8	0.4	1.5	23 ± 1	1170	660

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
20117367		BFOV 0.6/1kV 2X 1.5/4mm ²	BLACK	-	7021528873122	-
	886453	BFOV 0.6/1kV 2X 2.5/6mm ²	BLACK	-	7021528864533	-
	886705	BFOV 0.6/1kV 2X 6/6mm ²	BLACK	-	7021528867053	-
20117363		BFOV 0.6/1kV 3X 1.5/6mm ²	BLACK	-	7021528866674	-
20117365		BFOV 0.6/1kV 3X 2.5/6mm ²	BLACK	-	7021528873115	-
	886666	BFOV 0.6/1kV 3X 4/6mm ²	BLACK	-	7021528866667	-
	886668	BFOV 0.6/1kV 3X 6/6mm ²	BLACK	-	7021528866681	-
	886744	BFOV 0.6/1kV 3X 16/16mm ²	BLACK	-	7021528867442	-

Other no. of cores and cross sectional area are available on request.

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 Table B.4, Ampere	Short circuit rating 1 second, Ampere
2	1.6	4	STCC	12.2	15.6	0.115	0.138	16	210
2	2.5	6	STCC	7.56	9.64	0.107	0.129	26	350
2	6	6	STCC	3.11	3.97	0.094	0.112	44	840
3	1.5	6	STCC	12.2	15.6	0.115	0.138	16	210
3	2.5	6	STCC	7.56	9.64	0.107	0.129	21	350
3	4	6	STCC	4.7	5.99	0.100	0.120	28	560

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 Table B.4, Ampere	Short circuit rating 1 second, Ampere
3	6	6	STCC	3.11	3.97	0.094	0.112	36	840
3	16	16	STCC	1.16	1.48	0.107	0.129	67	2240

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

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	-20°C



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