

Halogen-free, mud resistant, fire resistant power cable, BFOU 0,6/1(1,2)kV, P5/P12, double braided



Fire resistant, flame retardant halogen-free power cable. Mud resistant. Double braided.

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

MGT/EPR/EPR/TCWB/EVA

NEK TS 606 CodeP5/P12

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

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

Application

Fixed installation for power, control and lighting in both EX (Zone 0, 1 & 2)- and safe areas, emergency and critical systems where requirement for fire resistance exists. For installation in areas exposed to MUD and drilling/cleaning fluids. Meets the MUD resistance requirement in NEK TS 606:2009.

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 + rubberized Polyamide tape
Armour/screen	O	Two layers of tinned copper wire braid (double braid)
Tape over armour/screen		PET tape + rubberized Polyamide tape
Outer sheath	U	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
Marking text		E.g. "meter" "year" DRAKA 01 BFOU 0,6/1kV P5/P12 3 x 25/16 mm ² FLEX - FLAME IEC 60331-1*) or IEC 60331-2*) IEC 60331-21**) IEC 60332-3-22
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel
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

Core identification - to HD308S2 - and IEC 60445 Ed 5.0 2010-08

Range and dimensions

Number of elements	Cross section core, mm ²	Electrical Cross section braid, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Mechanical cross-section of the braid, mm ²	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
2	150	75	18.1	1.8	1.8	44 ± 2	0.4	90.5	2.5	52 ± 2.5	5390	3622
3	150	75	15.90	1.8	1.4	46.5 ± 2	0.4	86	2.6	54.5 ± 2.5	7510	4992
4	150	75	15.90	1.8	1.6	52 ± 2.5	0.5	99	2.8	61 ± 3	9470	6451
3	185	95	17.70	2.0	1.6	51 ± 2.5	0.5	127.2	2.8	60.5 ± 3	9350	6295
4	185	95	17.7	2.0	1.8	57.5 ± 2.5	0.6	122.1	2.9	68 ± 3	11620	7750
2	240	120	20.2	2.2	1.8	54 ± 2.5	0.6	142.5	2.9	64 ± 3	9110	5845
3	240	120	20.2	2.2	1.8	58 ± 2.5	0.6	142.5	3	68.5 ± 3	11870	8042

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	800317	BFOU 0.6/1kV 2X 150/75 P5/P12	BLACK	-	7021528003178	-
20109444		BFOU 0.6/1kV 3X 150/75 P5/P12	BLACK	Yes	7021528003024	1043652
20117948		BFOU 0.6/1kV 4X 150/75 P5/P12	BLACK	-	7021528003093	-
20110765		BFOU 0.6/1kV 3X 185/95 P5/P12	BLACK	-	7021528003925	-
20118466		BFOU 0.6/1kV 4X 185/95 P5/P12	BLACK	-	7021528003918	-
	800315	BFOU 0.6/1kV 2X 240/120 P5/P12	BLACK	-	7021528003154	-
	800314	BFOU 0.6/1kV 3X 240/120 P5/P12	BLACK	-	7021528003147	-

Electrical values power cables

Number of elements	Cross section core, mm ²	Electrical Cross section braid, mm ²	Conductor type	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	150	75	KGTFR	0.126	0.161	0.072	0.088	331	21000
3	150	75	KGTFR	0.126	0.161	0.073	0.088	272	21000
4	150	75	KGTFR	0.126	0.161	0.073	0.088	272	21000
3	185	95	KGTFR	0.1	0.128	0.073	0.088	311	25900
4	185	95	KGTFR	0.1	0.128	0.073	0.088	311	25900
2	240	120	KGTFR	0.0762	0.0972	0.074	0.089	444	33600
3	240	120	KGTFR	0.0762	0.0972	0.074	0.089	365	33600

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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