

ARCTIC GRADE Fire resistant power cable, BFOU 0,6/1(1,2)kV, P5/P12, double braided



Fire resistant, flame retardant halogen-free power cable. Oil & Mud resistant. Cold bend / Cold impact resistant. Double braided.

**BFOU 0,6/1(1,2)kV
MGT/EPR/EPR/TCWB/EVA**

NEK TS 606 CodeP5/P12 Arctic Grade

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

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 OIL & MUD resistance requirement in NEK 606. Meets the cold bend / cold impact requirement in CSA 22.2 0.3-01 and IEC 60092-350 Clause 8.9 & Annex E at -40°C/-35°C.

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
CSA 22.2 0.3-01 (-40°C/-35°C) / IEC 60092-350 Annex E (-40°C/-35°C)	- Cold Bend / Cold Impact

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	Two layers of tinned copper wire braid (double braid)
Tape over armour/screen		Rubberized Polyamide tape
Outer sheath	U	Flame retardant, halogen-free, mud and cold bend / cold impact resistant thermoset compound, SHF2 (IEC 60092-360)
Marking text		E.g. "meter" "year" DRAKA 01 BFOU 0.6/1kV P5/P12 3 x 50/25mm ² FLEX - FLAME IEC 60092-353 IEC 60331-1*) or IEC 60331-2*) IEC 60331-21 IEC 60332-3-22 ARCTIC GRADE Cold bend (-40 deg. C) / Cold impact (-35 deg. C)
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



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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: Edition 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)
3	150	75	15.90	1.8	1.4	46.5 ± 2	0.4	86	2.6	54.5 ± 2.5	7480	4992
4	150	75	15.90	1.8	1.6	52 ± 2.5	0.5	99	2.8	61 ± 3	9440	6451
3	185	95	17.70	2.0	1.6	51 ± 2.5	0.5	127.2	2.8	60.5 ± 3	9310	6295
4	185	95	17.7	2.0	1.8	57.5 ± 2.5	0.4	54.3	2.9	68 ± 3	11590	7750
3	240	120	19.1	2.2	2.0	56.0 ± 2.0	0.7	138.5	3.0	65.0 ± 3.0	11830	8042

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	810302	BFOU 0.6/1kV 3X150/75 P5/P12 Cold	BLACK	-	7021528103021	-
	810309	BFOU 0.6/1kV 4X150/75 P5/P12 Cold	BLACK	-	7021528103090	-
	810392	BFOU 0.6/1kV 3X185/95 P5/P12 Cold	BLACK	-	7021528103922	-
	810391	BFOU 0.6/1kV 4X185/95 P5/P12 Cold	BLACK	-	7021528103915	-
	810314	BFOU 0.6/1kV 3X240/120 P5/P12Cold	BLACK	-	7021528103144	-

Electrical values power cables

Number of elements	Cross section core, mm ²	Electrical Cross section braid, 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	150	75	STCC	0.126	0.161	0.073	0.088	272	21000
4	150	75	STCC	0.126	0.161	0.073	0.088	272	21000
3	185	95	STCC	0.1	0.128	0.073	0.088	311	25900
4	185	95	STCC	0.1	0.128	0.073	0.088	311	25900
3	240	120	STCC	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	-40°C



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