

## ARCTIC GRADE power cable RFOU 0,6/1(1,2)kV, P1/P8, double braided



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

# RFOU 0,6/1(1,2)kV

EPR/EPR/TCWB/EVA

NEK TS 606 CodeP1/P8

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, general purposes. 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 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke
CSA 22.2 0.3-01 (-40°C/-35°C)	- Cold Bend /
/ IEC 60092-352 Annex E (-40°C/-35°C)	- Cold Impact

### Construction

	Code Letter	
<b>Conductor</b>		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
<b>Insulation</b>	<b>R</b>	EP-rubber, IEC 60092-360 (EPR)
<b>Lay up / Shielding</b>		Cores laid up in concentric layers
<b>Inner covering</b>	<b>F</b>	Flame retardant and halogen-free thermoset compound
<b>Tape over inner covering</b>		PET tape + rubberized Polyamide tape
<b>Armour/screen</b>	<b>O</b>	Two layers of tinned copper wire braid (double braid)
<b>Tape over armour/screen</b>		PET tape + rubberized Polyamide tape
<b>Outer sheath</b>	<b>U</b>	Flame retardant, halogen-free, mud and cold bend / cold impact resistant thermoset compound, SHF2 (IEC 60092-360)
<b>Marking text</b>		E.g. "meter" "year" DRAKA 01 RFOU 0,6/1kV P1/P8 3 x150/70 mm <sup>2</sup> IEC 60092-353 IEC 60332-3-22 ARCTIC GRADE Cold bend (-40 deg. C) / Cold impact (-35 deg. C)
<b>Manufacturing unit</b>		DRAKA 01 = Draka Norsk Kabel,
<b>Outer sheath colour</b>		Black



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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 <sup>2</sup>	Electrical Cross section braid, mm <sup>2</sup>	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)
3	150	75	15.9	1.8	1.6	46 ± 2	0.4	2.6	54 ± 2.5	7440	4981
4	150	75	15.9	1.8	2	51.5 ± 2.5	0.5	2.8	61 ± 3	9450	6444
3	185	95	17.70	2.0	1.6	50.5 ± 2.5	0.5	2.7	59.5 ± 2.5	9200	6283
4	185	95	17.7	2.0	2	57 ± 2.5	0.5	3	67 ± 3	11390	7837
3	240	120	20.15	2.2	1.8	57.5 ± 2.5	0.6	3	68 ± 3	11760	8046

## Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	810102	RFOU 0.6/1kV 3X150/75 P1/P8 Cold	BLACK	-	7021528101027	-
	810103	RFOU 0.6/1kV 4X150/75 P1/P8 Cold	BLACK	-	7021528101034	-
	810106	RFOU 0.6/1kV 3X185/95 P1/P8 Cold	BLACK	-	7021528101065	-
	810107	RFOU 0.6/1kV 4X185/95 P1/P8 Cold	BLACK	-	7021528101072	-
	810112	RFOU 0.6/1kV 3X240/120 P1/P8 Cold	BLACK	-	7021528101126	-

## Electrical values power cables

Number of elements	Cross section core, mm <sup>2</sup>	Electrical Cross section braid, mm <sup>2</sup>	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	0.072	0.087	272	21000
4	150	75	STCC	0.126	0.161	0.072	0.087	272	21000
3	185	95	STCC	0.1	0.128	0.072	0.086	311	25900
4	185	95	STCC	0.1	0.161	0.072	0.086	311	25900
3	240	120	STCC	0.0762	0.0972	0.072	0.086	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 <sup>2</sup>	-40°C



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