

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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