

# FRNC power cable (N)A2XCH



**Application:** Low-smoke, zero-halogen flame retardant power cable. For fixed installation indoor, outdoor installation as well as in concrete and for direct burial in ground, but not in water.

## Construction and technical data:

|   |  |
|---|--|
| <b>Standard:</b>  | VDE 0276-604 (with ref. to)              |
| <b>Conductor material:</b>                              | aluminium                                |
| <b>Conductor construction:</b>                          | Class 2 = stranded                       |
| <b>Insulation:</b>                                      | XLPE                                     |
| <b>Material inner sheath:</b>                           | halogen-free                             |
| <b>Concentric conductor:</b>                            | Cu                                       |
| <b>Sheathing material:</b>                              | FRNC-compound HM4                        |
| <b>Colour of outer sheath:</b>                          | black                                    |
| <b>Flame-retardant:</b>                                 | VDE 0482-266-2-4/IEC 60332-3-24 (Cat. C) |
| <b>Smoke density:</b>                                   | DIN EN 61034/IEC 61034                   |
| <b>Halogen-free:</b>                                    | DIN EN 50267/IEC 60754                   |
| <b>UV-resistant:</b>                                    | yes                                      |
| <b>Max. temperature at conductor, °C:</b>               | 90 °C                                    |
| <b>Max. short circuit temperature at conductor, °C:</b> | 250 °C                                   |
| <b>Permitted outer cable temperature, fixed, °C:</b>    | -40 - +90 °C                             |
| <b>Permitted outer cable temperature, moved, °C:</b>    | -5 - +90 °C                              |
| <b>Bending radius, fixed installation, multicore:</b>   | 12 x Ø                                   |
| <b>Bending radius, fixed installation, singlecore:</b>  | 15 x Ø                                   |



*The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.*

## Core identification

| Number of cores | colours                         |
|-----------------|---------------------------------|
| 1               | black                           |
| 2               | blue, brown                     |
| 3               | brown, black, grey              |
| 4               | blue, brown, black, grey        |
| 5               | blue, brown, black, grey, black |

(N)A2XCH 0.6/1 kV

**Nominal voltage U<sub>o</sub>:** 0.6 kV

**Nominal voltage U:** 1 kV

**Maximum permitted operating voltage in three-phase systems:** 1.2 kV

**Test voltage:** 4 kV

| part no. | part name  |    | RI [Ohm/km] | I <sub>bl</sub> [A] | I <sub>be</sub> [A] | Ø [mm] | F <sub>zv</sub> [N] | Al   | Cu   | G [kg] |
|----------|------------|----|-------------|---------------------|---------------------|--------|---------------------|------|------|--------|
| 090506   | 01X120/25  | RM | 0.253       | 308                 | 303                 | 20.6   | 3600                | 348  | 283  | 735    |
| 090507   | 01X185/35  | RM | 0.164       | 401                 | 340                 | 24.9   | 5500                | 537  | 394  | 1075   |
| 090508   | 04X70/35   | SM | 0.443       | 194                 | 197                 | 34.1   | 8400                | 812  | 394  | 1721   |
| 090509   | 04X150/70  | SM | 0.206       | 316                 | 302                 | 47.8   | 18000               | 1740 | 780  | 3857   |
| 090410   | 04X185/95  | SM | 0.164       | 365                 | 342                 | 50.5   | 22200               | 2146 | 1055 | 3387   |
| 090315   | 04X240/120 | SM | 0.125       | 430                 | 397                 | 57.1   | 28800               | 2784 | 1330 | 5023   |

|                 |  |
|-----------------|--|
| RI              | Conductor resistance                   |
| I <sub>bl</sub> | Ampacity in air (30 °C)                |
| I <sub>be</sub> | Ampacity in ground (20 °C)             |
| Ø               | outer diameter approx.                 |
| F <sub>zv</sub> | Tensile strength (during installation) |
| Al              | Aluminium weight (GER)                 |
| Cu              | Copper weight (GER)                    |
| G               | net weight per 1000                    |