

FRNC power cable N2XCH acc. to VDE 0276-604



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|---|--|
| CPR-performance: | on request |
| Conductor material: | bare copper |
| Conductor class: | class 1, from 25 sqmm class 2 |
| Insulation: | XLPE 2XI1 |
| Concentric conductor: | Cu |
| Sheathing material: | FRNC-compound HM4 |
| Flame-retardant: | VDE 0482-266-2-4/IEC 60332-3-24 (Kat. C) |
| Smoke density: | DIN EN 61034/IEC 61034 |
| Halogen-free: | DIN EN 50267/IEC 60754 |
| Maximum permitted conductor temperature: | 90 °C |
| Permitted outer cable temperature, fixed: | -30 - +70 °C |
| Permitted outer cable temperature, in motion/ during installation: | -5 - +70 °C |
| Bending radius, fixed installation: | 15 x DA |
| Nominal voltage U₀: | 600 V |
| Nominal voltage U: | 1 kV |
| Maximum permitted operating voltage in three-phase systems: | 1,2 kV |
| Test voltage: | 4 kV |
| Core identification: | colours acc. to VDE 0293 (HD308) |

Application: Zero-halogen, low-smoke power cable with improved flame-retardance. For fixed installation indoors, in air as well as in concrete, but not for direct burial in the ground or application in water.



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.

Table: Technical characteristics N2XCH

| p/n | part name | | R _i [Ω/km] | W _i [mm] | I _{bl} [A] | I _k [kA] | R _{bv} [mm] | D _A [mm] | F _{zv} [N] | Cu [kg/km] | G [kg/km] |
|--------|----------------------|-----|--------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|---------------|--------------|
| 012738 | N2XCH 01X300/16 SW | RMv | 0,0601 | 1,8 | 654 | 42,9 | | | 15000 | 3062 | 3398 |
| 014367 | N2XCH 01X500/16 SW | RMv | | | | | | 36,2 | | 4982 | 5034 |
| 013122 | (N)2XCH 01X500/35 SW | RMv | 0,0366 | 2,2 | 825 | 71,5 | 600 | 40 | 25000 | 5194 | 6854 |
| 011128 | N2XCH 02X1,5/1,5 SW | RE | 12,1 | 0,7 | 25 | 0,21 | 144 | 12 | 150 | 52 | 250 |
| 011129 | N2XCH 02X2,5/2,5 SW | RE | 7,41 | 0,7 | 33 | 0,36 | 144 | 12 | 250 | 80 | 280 |
| 011508 | N2XCH 02X4/4 SW | RE | 4,61 | 0,7 | 43 | 0,57 | 168 | 14 | 400 | 123 | 320 |
| 012528 | N2XCH 02X6/6 SW | RE | 3,08 | 0,7 | 54 | 0,86 | 180 | 15 | 600 | 182 | 410 |

| p/n | part name | | R _i [Ω/km] | W _i [mm] | I _{bl} [A] | I _k [kA] | R _{bv} [mm] | D _A [mm] | F _{zv} [N] | Cu [kg/km] | G [kg/km] |
|--------|---------------------|-----|--------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|---------------|--------------|
| 012529 | N2XCH 02X10/10 SW | RE | 1,83 | 0,7 | 75 | 1,43 | 204 | 17 | 1000 | 312 | 550 |
| 012530 | N2XCH 02X16/16 SW | RE | 1,15 | 0,7 | 100 | 2,29 | 228 | 19 | 1600 | 489 | 780 |
| 011130 | N2XCH 03X1,5/1,5 SW | RE | 12,1 | 0,7 | 25 | 0,21 | 228 | 12 | 225 | 66 | 250 |
| 011131 | N2XCH 03X2,5/2,5 SW | RE | 7,41 | 0,7 | 33 | 0,36 | 156 | 13 | 375 | 104 | 320 |
| 011132 | N2XCH 03X4/4 SW | RE | 4,61 | 0,7 | 43 | 0,57 | 168 | 14 | 600 | 161 | 400 |
| 011133 | N2XCH 03X6/6 SW | RE | 3,08 | 0,7 | 54 | 0,86 | 192 | 16 | 900 | 240 | 500 |
| 011134 | N2XCH 03X10/10 SW | RE | 1,83 | 0,7 | 75 | 1,43 | 216 | 18 | 1500 | 408 | 750 |
| 011135 | N2XCH 03X16/16 SW | RE | 1,15 | 0,7 | 100 | 2,29 | 252 | 21 | 2400 | 643 | 1000 |
| 011136 | N2XCH 03X25/16 SW | RM | 0,727 | 0,9 | 136 | 3,58 | 288 | 24 | 3750 | 902 | 1600 |
| 011137 | N2XCH 03X35/16 SW | SM | 0,524 | 0,9 | 165 | 5,01 | 324 | 27 | 5250 | 1190 | 1900 |
| 011138 | N2XCH 03X50/25 SW | SMv | 0,387 | 1 | 201 | 7,15 | 360 | 30 | 7500 | 1723 | 2400 |
| 012063 | N2XCH 03X70/35 SW | SMv | 0,268 | 1,1 | 255 | 10,01 | 408 | 34 | 10500 | 2410 | 2615 |
| 013018 | N2XCH 03X95/50 SW | SMv | 0,193 | 1,1 | 314 | 13,59 | 457 | 38,1 | 14250 | 3296 | 3636 |
| 013019 | N2XCH 03X120/70 SW | SMv | 0,153 | 1,2 | 364 | 17,16 | 510 | 42,5 | 18000 | 4236 | 4606 |
| 013020 | N2XCH 03X150/70 SW | SMv | 0,124 | 1,4 | 416 | 21,45 | 564 | 47 | 22500 | 5100 | 5552 |
| 012064 | N2XCH 03X185/95 SW | SMv | 0,0991 | 1,6 | 480 | 26,46 | 600 | 50 | 27750 | 6383 | 6680 |
| 013021 | N2XCH 03X240/120 SW | SMv | 0,0754 | 1,7 | 565 | 34,32 | 685 | 57,1 | 36000 | 8242 | 8964 |
| 011139 | N2XCH 04X1,5/1,5 SW | RE | 12,1 | 0,7 | 25 | 0,21 | 156 | 13 | 300 | 81 | 235 |
| 011140 | N2XCH 04X2,5/2,5 SW | RE | 7,41 | 0,7 | 33 | 0,36 | 168 | 14 | 500 | 128 | 302 |
| 011141 | N2XCH 04X4/4 SW | RE | 4,61 | 0,7 | 43 | 0,57 | 180 | 15 | 800 | 200 | 411 |
| 011142 | N2XCH 04X6/6 SW | RE | 3,08 | 0,7 | 54 | 0,86 | 204 | 17 | 1200 | 297 | 527 |
| 011029 | N2XCH 04X10/10 SW | RE | 1,83 | 0,7 | 10 | 1,43 | 228 | 19 | 2000 | 504 | 762 |
| 011143 | N2XCH 04X16/16 SW | RE | 1,15 | 0,7 | 100 | 2,29 | 264 | 22 | 3200 | 796 | 1139 |
| 011144 | N2XCH 04X25/16 SW | RM | 0,727 | 0,9 | 136 | 3,58 | 324 | 27 | 5000 | 1142 | 1634 |
| 011145 | N2XCH 04X35/16 SW | SM | 0,524 | 0,9 | 165 | 5,01 | 348 | 29 | 7000 | 1526 | 2080 |
| 011146 | N2XCH 04X50/25 SW | SMv | 0,387 | 1 | 201 | 7,15 | 396 | 33 | 10000 | 2203 | 2790 |
| 011147 | N2XCH 04X70/35 SW | SMv | 0,268 | 1,1 | 255 | 10,01 | 492 | 41 | 14000 | 3082 | 3550 |
| 011148 | N2XCH 04X95/50 SW | SMv | 0,193 | 1,1 | 314 | 13,59 | 552 | 46 | 19000 | 4208 | 4800 |
| 011149 | N2XCH 04X120/70 SW | SMv | 0,153 | 1,2 | 364 | 17,16 | 600 | 50 | 24000 | 5388 | 6556 |
| 011150 | N2XCH 04X150/70 SW | SMv | 0,124 | 1,4 | 416 | 21,45 | 660 | 55 | 30000 | 6540 | 7904 |
| 011151 | N2XCH 04X185/95 SW | SMv | 0,0991 | 1,6 | 480 | 26,46 | 744 | 62 | 37000 | 8159 | 9950 |
| 011152 | N2XCH 04X240/120 SW | SMv | 0,0754 | 1,7 | 565 | 34,32 | 816 | 68 | 48000 | 10546 | 12912 |
| 012215 | N2XCH 05X1,5/1,5 SW | RE | 12,1 | 0,7 | 25 | 0,21 | 168 | 14 | 375 | 95 | 283 |
| 011153 | N2XCH 07X1,5/2,5 SW | RE | 12,1 | 0,7 | 24 | 0,21 | 192 | 16 | 525 | 133 | 380 |
| 011154 | N2XCH 07X2,5/2,5 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 216 | 18 | 875 | 200 | 480 |
| 011155 | N2XCH 07X4/4 SW | RE | 4,61 | 0,7 | 42 | 0,57 | 228 | 19 | 1400 | 315 | 650 |
| 011156 | N2XCH 07X6/6 SW | RE | 3,08 | 0,7 | 53 | 0,86 | 240 | 20 | 2100 | 470 | 850 |
| 011979 | N2XCH 10X2,5/4 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 216 | 18 | 1250 | 286 | 550 |
| 011157 | N2XCH 12X1,5/2,5 SW | RE | 12,1 | 0,7 | 24 | 0,21 | 240 | 20 | 900 | 205 | 550 |
| 011158 | N2XCH 12X2,5/4 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 252 | 21 | 1500 | 334 | 750 |
| 013889 | N2XCH 12X4/6 SW | RE | | | | | | 20,5 | | 528 | 775 |
| 012458 | N2XCH 14X1,5/2,5 SW | RE | 12,1 | 0,7 | 24 | 0,21 | 211 | 17,6 | 1050 | 234 | 486 |
| 013884 | N2XCH 19X2,5/6 SW | RE | | | | | | 21,7 | | 523 | 838 |
| 011980 | N2XCH 21X2,5/10 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 276 | 23 | 2625 | 624 | 1050 |
| 011159 | N2XCH 24X1,5/6 SW | RE | 12,1 | 0,7 | 24 | 0,21 | 300 | 25 | 1800 | 413 | 950 |
| 011973 | N2XCH 24X2,5/10 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 312 | 26 | 3000 | 696 | 1106 |
| 011160 | N2XCH 30X1,5/6 SW | RE | 12,1 | 0,7 | 24 | 0,21 | 324 | 27 | 2250 | 499 | 1100 |
| 011858 | N2XCH 30X2,5/6 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 336 | 28 | 3750 | 840 | 1500 |
| 011161 | N2XCH 30X2,5/10 SW | RE | 7,41 | 0,7 | 32 | 0,36 | 360 | 30 | 3750 | 840 | 1500 |

RI Conductor resistance

Wi Insulation wall thickness

Ibl Ampacity in air (30 °C)

Ik Short-circuit current (1 s)

Rbv Bending radius, fixed installation

DA Outer diameter approx.

Fzv Tensile strength (during installation)

Cu Copper weight (GER)

G weight