



#### Code

**N2XCH , YXCZ1 CU/XLPE/SC/HFFR**

#### Voltage Rating

**0.6/1 kV**

#### Standards

**TS HD 604 S1-KISIM 5G , VDE 0276**

**IEC 60228**

**EN 61034**

**EN 50267**

**EN 60332-3**

**Conductor**

**Smoke Density**

**Halogen Free**

**Flame Retardant (Cat C)**

#### Reaction to Fire Classification ( CPR )

**EN 60332-1-2**

**Flame Retardant**

#### Conductor

**Soli Copper Conductor (Class 1)**

**Stranded Copper Conductor (Class 2)**

#### Insulation

**XLPE (Cross-linked Polyethylene)**

#### Filler

**Halogen Free Filler**

#### Armour

**Copper Wire and Copper Tape**

#### Sheath

**Halogen Free Sheath**

#### Technical Data

|                                   |          |                                     |
|-----------------------------------|----------|-------------------------------------|
| <b>Max. Operating Temperature</b> | <b>:</b> | <b>90°C</b>                         |
| <b>Short Circuit Temperature</b>  | <b>:</b> | <b>250°C (max.5 sec)</b>            |
| <b>Bending Radius</b>             | <b>:</b> | <b>15D ( D : Overall Diameter )</b> |
| <b>Test Voltage</b>               | <b>:</b> | <b>3,5 kV</b>                       |

#### Application:

**These are cables with low dielectric losses used in energy networks in refineries, mines, hotels, schools, tunnels high constructions hospitals, power plant, data processing centers, business centers where there is a risk of fire.**

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 1x1,5/1,5                                   | 8,1                      | 101,0                 | 1000                   | 12,1 - 12,1                    | 33                        | 27             |
| 1x2,5/2,5                                   | 8,4                      | 124,5                 | 1000                   | 7,41 - 7,41                    | 43                        | 36             |
| 1x4/4                                       | 8,9                      | 155,0                 | 1000                   | 4,61 - 4,61                    | 55                        | 47             |
| 1x6/6                                       | 9,4                      | 197,7                 | 1000                   | 3,08 - 3,08                    | 68                        | 59             |
| 1x10/10                                     | 10,9                     | 283,3                 | 1000                   | 1,83 - 1,83                    | 91                        | 81             |
| 1x16/10                                     | 11,9                     | 352,5                 | 1000                   | 1,15 - 1,83                    | 117                       | 109            |
| 1x16/16                                     | 12,7                     | 407,0                 | 1000                   | 1,15 - 1,15                    | 117                       | 109            |
| 1x25/16                                     | 14,4                     | 528,3                 | 1000                   | 0,727 - 1,15                   | 150                       | 146            |
| 1x35/16                                     | 15,6                     | 630,8                 | 1000                   | 0,524 - 1,5                    | 179                       | 179            |
| 1x50/25                                     | 17,4                     | 837,9                 | 1000                   | 0,387 - 0,727                  | 211                       | 218            |
| 1x70/35                                     | 19,3                     | 1139,0                | 1000                   | 0,268 - 0,524                  | 257                       | 275            |
| 1x95/50                                     | 21,6                     | 1515,7                | 1000                   | 0,193 - 0,387                  | 304                       | 336            |
| 1x120/70                                    | 23,9                     | 1952,9                | 1000                   | 0,153 - 0,268                  | 341                       | 388            |
| 1x150/70                                    | 26,0                     | 2283,0                | 1000                   | 0,124 - 0,268                  | 377                       | 438            |
| 1x185/95                                    | 28,7                     | 2902,8                | 1000                   | 0,0991 - 0,193                 | 418                       | 501            |
| 1x240/120                                   | 32,0                     | 3695,7                | 500                    | 0,0754 - 0,153                 | 469                       | 508            |
| 1x500/50                                    | 41,2                     | 5743,3                | 500                    | 0,0366 - 0,387                 | 623                       | 825            |

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 2x1,5/1,5                                   | 10,8                     | 174,1                 | 1000                   | 12,1 - 12,1                    | 31                        | 25             |
| 2x2,5/2,5                                   | 11,6                     | 218,3                 | 1000                   | 7,41 - 7,41                    | 40                        | 33             |
| 2x4/4                                       | 12,5                     | 281,0                 | 1000                   | 4,61 - 4,61                    | 52                        | 43             |
| 2x6/6                                       | 13,5                     | 359,3                 | 1000                   | 3,08 - 3,08                    | 65                        | 54             |
| 2x10/10                                     | 16,4                     | 531,5                 | 1000                   | 1,83 - 1,83                    | 87                        | 75             |
| 2x16/10                                     | 18,6                     | 704,4                 | 1000                   | 1,15 - 1,83                    | 113                       | 100            |
| 2x16/16                                     | 19,4                     | 777,7                 | 1000                   | 1,15 - 1,15                    | 113                       | 100            |
| 2x25/16                                     | 22,8                     | 1074,4                | 1000                   | 0,727 - 1,15                   | 146                       | 136            |
| 2x35/16                                     | 25,2                     | 1342,0                | 1000                   | 0,524 - 1,15                   | 176                       | 165            |
| 2x50/25                                     | 28,6                     | 1794,6                | 500                    | 0,387 - 0,727                  | 208                       | 201            |
| 2x70/35                                     | 32,8                     | 2466,8                | 500                    | 0,268 - 0,524                  | 256                       | 255            |
| 2x95/50                                     | 37,0                     | 3250,8                | 500                    | 0,193 - 0,387                  | 307                       | 314            |
| 2x120/70                                    | 41,2                     | 4098,3                | 500                    | 0,153 - 0,268                  | 349                       | 364            |
| 2x150/70                                    | 45,9                     | 5020,4                | 500                    | 0,124 - 0,268                  | 391                       | 416            |
| 2x185/95                                    | 50,8                     | 6247,0                | 500                    | 0,0991 - 0,193                 | 442                       | 480            |
| 2x240/120                                   | 57,3                     | 8019,6                | 500                    | 0,0754 - 0,153                 | 509                       | 565            |

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 3x1,5/1,5                                   | 11,2                     | 194,3                 | 1000                   | 12,1 - 12,1                    | 31                        | 25             |
| 3x2,5/2,5                                   | 12,1                     | 247,5                 | 1000                   | 7,41 - 7,41                    | 40                        | 33             |
| 3x4/4                                       | 13,1                     | 331,1                 | 1000                   | 4,61 - 4,61                    | 52                        | 43             |
| 3x6/6                                       | 14,2                     | 427,8                 | 1000                   | 3,08 - 3,08                    | 65                        | 54             |
| 3x10/10                                     | 17,3                     | 639,0                 | 1000                   | 1,83 - 1,83                    | 87                        | 75             |
| 3x16/10                                     | 19,7                     | 866,3                 | 1000                   | 1,15 - 1,83                    | 113                       | 100            |
| 3x16/16                                     | 19,8                     | 932,0                 | 1000                   | 1,15 - 1,15                    | 113                       | 100            |
| 3x25/16                                     | 24,1                     | 1311,5                | 1000                   | 0,727 - 1,15                   | 146                       | 136            |
| 3x25/25                                     | 24,2                     | 1382,6                | 1000                   | 0,727 - 0,727                  | 146                       | 136            |
| 3x35/16                                     | 26,7                     | 1663,2                | 1000                   | 0,524 - 1,15                   | 176                       | 165            |
| 3x35/35                                     | 26,8                     | 1830,7                | 1000                   | 0,524 - 0,524                  | 176                       | 165            |
| 3x50/25                                     | 30,4                     | 2249,0                | 500                    | 0,387 - 0,727                  | 208                       | 201            |
| 3x70/35                                     | 34,9                     | 3098,3                | 500                    | 0,268 - 0,524                  | 256                       | 255            |
| 3x95/50                                     | 39,5                     | 4094,7                | 500                    | 0,193 - 0,387                  | 307                       | 314            |
| 3x120/70                                    | 43,9                     | 5185,8                | 500                    | 0,153 - 0,268                  | 349                       | 364            |
| 3x150/70                                    | 48,9                     | 6323,5                | 250                    | 0,124 - 0,268                  | 391                       | 416            |
| 3x185/95                                    | 54,2                     | 7881,0                | 250                    | 0,0991 - 0,193                 | 442                       | 480            |
| 3x240/120                                   | 61,2                     | 10157,3               | 250                    | 0,0754 - 0,153                 | 509                       | 565            |
| 3x300/150                                   | 67,2                     | 12814,5               | 250                    | 0,0601 - 0,124                 | 569                       | 643            |
| 3x400/185                                   | 76,6                     | 16224,0               | 250                    | 0,0470 - 0,0991                | 637                       | 737            |

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 4x1,5/1,5                                   | 12,0                     | 226,9                 | 1000                   | 12,1 - 12,1                    | 31                        | 25             |
| 4x2,5/2,5                                   | 12,9                     | 291,6                 | 1000                   | 7,41 - 7,41                    | 40                        | 33             |
| 4x2,5/10                                    | 13,1                     | 357,3                 | 1000                   | 7,41 - 1,83                    | 40                        | 33             |
| 4x4/4                                       | 14,1                     | 392,7                 | 1000                   | 4,61 - 4,61                    | 52                        | 43             |
| 4x4/10                                      | 14,4                     | 445,0                 | 1000                   | 4,61 - 1,83                    | 52                        | 43             |
| 4x6/6                                       | 15,3                     | 510,9                 | 1000                   | 3,08 - 3,08                    | 65                        | 54             |
| 4x6/10                                      | 15,5                     | 545,1                 | 1000                   | 3,08 - 1,83                    | 65                        | 54             |
| 4x10/10                                     | 18,7                     | 758,7                 | 1000                   | 1,83 - 1,83                    | 87                        | 75             |
| 4x16/10                                     | 21,4                     | 1060,2                | 1000                   | 1,15 - 1,83                    | 113                       | 100            |
| 4x16/16                                     | 22,3                     | 1140,2                | 1000                   | 1,15 - 1,15                    | 113                       | 100            |
| 4x25/16                                     | 26,3                     | 1626,2                | 1000                   | 0,727 - 1,15                   | 146                       | 136            |
| 4x35/16                                     | 29,2                     | 2078,7                | 1000                   | 0,524 - 1,15                   | 176                       | 165            |
| 4x50/25                                     | 33,4                     | 2847,2                | 500                    | 0,387 - 0,727                  | 208                       | 201            |
| 4x50/35                                     | 33,8                     | 2923,3                | 500                    | 0,387 - 0,524                  | 208                       | 201            |
| 4x70/35                                     | 38,3                     | 3871,6                | 500                    | 0,268 - 0,524                  | 256                       | 255            |
| 4x95/50                                     | 43,4                     | 5157,4                | 500                    | 0,193 - 0,387                  | 307                       | 314            |
| 4x120/70                                    | 48,7                     | 6497,5                | 250                    | 0,153 - 0,268                  | 349                       | 364            |
| 4x150/70                                    | 53,9                     | 7958,8                | 250                    | 0,124 - 0,268                  | 391                       | 416            |
| 4x185/95                                    | 60,2                     | 9936,7                | 250                    | 0,0991 - 0,193                 | 442                       | 480            |
| 4x240/120                                   | 67,4                     | 12726,3               | 250                    | 0,0754 - 0,153                 | 509                       | 565            |
| 4x300/150                                   | 74,6                     | 16120,9               | 250                    | 0,0601 - 0,124                 | 569                       | 643            |
| 4x400/185                                   | 84,6                     | 20287,2               | 250                    | 0,0470 - 0,0991                | 637                       | 737            |

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 5x1,5/1,5                                   | 12,7                     | 292,8                 | 1000                   | 12,1 - 12,1                    | 31                        | 25             |
| 5x2,5/2,5                                   | 13,8                     | 385,6                 | 1000                   | 7,41 - 7,41                    | 40                        | 33             |
| 5x4/4                                       | 15,1                     | 507,1                 | 1000                   | 4,61 - 4,61                    | 52                        | 43             |
| 5x6/6                                       | 16,5                     | 659,7                 | 1000                   | 3,08 - 3,08                    | 65                        | 54             |
| 5x10/10                                     | 20,3                     | 994,8                 | 1000                   | 1,83 - 1,83                    | 87                        | 75             |
| 5x16/10                                     | 23,3                     | 1400,4                | 1000                   | 1,15 - 1,83                    | 113                       | 100            |
| 5x25/16                                     | 28,6                     | 2153,6                | 1000                   | 0,727 - 1,15                   | 146                       | 136            |
| 5x35/16                                     | 31,8                     | 2759,5                | 500                    | 0,524 - 1,15                   | 176                       | 165            |
| 5x50/25                                     | 36,9                     | 3775,6                | 500                    | 0,387 - 0,727                  | 208                       | 201            |
| 5x70/35                                     | 42,0                     | 5098,9                | 500                    | 0,268 - 0,524                  | 256                       | 255            |
| 5x95/50                                     | 48,0                     | 6834,3                | 250                    | 0,193 - 0,387                  | 307                       | 314            |
| 5x120/70                                    | 53,5                     | 8514,8                | 250                    | 0,153 - 0,268                  | 349                       | 364            |
| 5x150/70                                    | 59,6                     | 10576,6               | 250                    | 0,124 - 0,268                  | 391                       | 416            |
| 5x185/95                                    | 66,1                     | 13139,6               | 250                    | 0,0991 - 0,193                 | 442                       | 480            |
| 5x240/120                                   | 74,6                     | 16886,4               | 250                    | 0,0754 - 0,153                 | 509                       | 565            |
| 5x300/150                                   | 82,0                     | 21319,0               | 250                    | 0,0601 - 0,124                 | 569                       | 643            |
| 5x400/185                                   | 93,1                     | 26911,8               | 250                    | 0,0470 - 0,0991                | 637                       | 737            |

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 3x16+10/10                                  | 20,8                     | 980,3                 | 500                    | 1,15 - 1,83 - 1,83             | 113                       | 100            |
| 3x25+16/16                                  | 25,3                     | 1493,9                | 500                    | 0,727 - 1,15 - 1,15            | 146                       | 136            |
| 3x35+16/16                                  | 27,4                     | 1814,5                | 500                    | 0,524 - 1,15 - 1,15            | 176                       | 165            |
| 3x50+25/25                                  | 31,6                     | 2506,2                | 500                    | 0,387 - 0,727 - 0,727          | 208                       | 201            |
| 3x70+35/35                                  | 36,1                     | 3438,3                | 500                    | 0,268 - 0,524 - 0,524          | 256                       | 255            |
| 3x95+50/50                                  | 41,1                     | 4588,8                | 500                    | 0,193 - 0,387 - 0,387          | 307                       | 314            |
| 3x120+70/70                                 | 46,4                     | 5885,0                | 250                    | 0,153 - 0,268 - 0,268          | 349                       | 364            |
| 3x150+70/70                                 | 50,3                     | 6956,1                | 250                    | 0,124 - 0,268 - 0,268          | 391                       | 416            |
| 3x185+95/95                                 | 56,4                     | 8828,0                | 250                    | 0,0991 - 0,193 - 0,193         | 442                       | 480            |
| 3x240+120/120                               | 63,1                     | 11205,5               | 250                    | 0,0754 - 0,153 - 0,153         | 509                       | 565            |
| 3x300+150/150                               | 69,5                     | 14112,9               | 250                    | 0,0601 - 0,124 - 0,124         | 569                       | 643            |
| 3x400+185/185                               | 78,9                     | 17783,8               | 250                    | 0,0470 - 0,0991 - 0,0991       | 637                       | 737            |

| Nominal Cross Section<br>(mm <sup>2</sup> ) | Overall Diameter<br>(mm) | Net Weight<br>(kg/km) | Delivery Length<br>(m) | Resistance at 20°C<br>(ohm/km) | Current Carrying Capacity |                |
|---------------------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|---------------------------|----------------|
|                                             |                          |                       |                        |                                | In Ground at 20°C         | In Air at 30°C |
| 6x1,5/2,5                                   | 13,6                     | 315,3                 | 1000                   | 12,1 - 7,41                    | -                         | -              |
| 6x4/4                                       | 16,2                     | 527,8                 | 1000                   | 4,61 - 4,61                    | -                         | -              |
| 7x1,5/2,5                                   | 13,7                     | 320,7                 | 1000                   | 12,1 - 7,41                    | 16,0                      | 12,5           |
| 7x2,5/2,5                                   | 14,9                     | 408,7                 | 1000                   | 7,41 - 7,41                    | 21,5                      | 17,0           |
| 7x4/4                                       | 16,4                     | 555,2                 | 1000                   | 4,61 - 4,61                    | 27,5                      | 22,0           |
| 10x1,5/1,5                                  | 15,4                     | 403,9                 | 1000                   | 12,1 - 12,1                    | 13,5                      | 10,5           |
| 10x1,5/2,5                                  | 15,4                     | 413,0                 | 1000                   | 12,1 - 7,41                    | 13,5                      | 10,5           |
| 10x1,5/4                                    | 15,4                     | 426,6                 | 1000                   | 12,1 - 4,61                    | 13,5                      | 10,5           |
| 10x1,5/6                                    | 15,4                     | 444,7                 | 1000                   | 12,1 - 3,08                    | 13,5                      | 10,5           |
| 10x2,5/4                                    | 16,9                     | 554,3                 | 1000                   | 7,41 - 4,61                    | 18,0                      | 14,5           |
| 12x1,5/2,5                                  | 16,4                     | 468,3                 | 1000                   | 12,1 - 7,41                    | -                         | -              |
| 12x1,5/4                                    | 16,4                     | 481,9                 | 1000                   | 12,1 - 4,61                    | -                         | -              |
| 12x2,5/4                                    | 18,0                     | 638,3                 | 1000                   | 7,41 - 4,61                    | -                         | -              |
| 12x2,5/10                                   | 18,2                     | 691,2                 | 1000                   | 7,41 - 1,83                    | -                         | -              |
| 14x1,5/2,5                                  | 17,3                     | 523,5                 | 1000                   | 12,1 - 7,41                    | 12,0                      | 9,5            |
| 14x1,5/4                                    | 17,3                     | 557,0                 | 1000                   | 12,1 - 4,61                    | 12,0                      | 9,5            |
| 19x1,5/4                                    | 19,3                     | 690,7                 | 1000                   | 12,1 - 4,61                    | 11,0                      | 9,0            |
| 30x1,5/6                                    | 23,0                     | 987,9                 | 1000                   | 12,1 - 3,08                    | -                         | -              |

**Note :**

Current carrying capacities are valid at 30°C ambient temperature