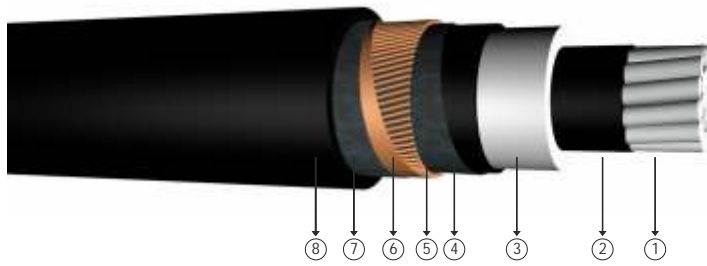




# 6/10 kV XLPE insulated, longitudinally sealed, single core cables with aluminium conductor



Code: NA2XS(F)2Y

Standards: VDE 0276 - 620

### Technical Data

Max. operating temperature : 90 °C  
 Max. short circuit temperature : 250 °C (max. 5 sec.)  
 Rated voltage : 6/10 kV  
 Min. bending radius : 15 x D  
 D : Cable outer diameter

### Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the movement of the water inside the cable.

### Construction

- 1** Stranded aluminium conductor    **3** XLPE insulation    **5** Semi conductive swelling tape    **7** Swellable tape
- 2** Inner semi conductive layer    **4** Outer semi conductive layer    **6** Copper screen    **8** PE outer jacket

| DIMENSION AND WEIGHTS |                           |                     | ELECTRICAL PROPERTIES |                                      |                                      |                      |          |                       |                               |     |                 |     |
|-----------------------|---------------------------|---------------------|-----------------------|--------------------------------------|--------------------------------------|----------------------|----------|-----------------------|-------------------------------|-----|-----------------|-----|
| Nominal Cross Section | Overall Diameter (approx) | Net Weight (approx) | Delivery Length       | DC Conductor Resistance at 20 °C Max | DC Conductor Resistance at 90 °C Max | Operation Inductance |          | Operation Capacitance | Current Carrying Capacity (A) |     |                 |     |
| mm <sup>2</sup>       | mm                        | kg/km               | m                     | ohm/km                               | ohm/km                               | *** mH/km            | ** mH/km | µF/km                 | In ground at 20 °C            |     | In air at 30 °C |     |
|                       |                           |                     |                       |                                      |                                      |                      |          |                       | ***                           | **  | ***             | **  |
| 1x35/16               | 24,1                      | 565                 | 1000                  | 0,868                                | 1,1110                               | 0,667                | 0,406    | 0,223                 | -                             | -   | -               | -   |
| 1x50/16               | 25,3                      | 623                 | 1000                  | 0,641                                | 0,8205                               | 0,642                | 0,387    | 0,248                 | 194                           | 171 | 215             | 181 |
| 1x70/16               | 27,0                      | 719                 | 1000                  | 0,443                                | 0,5670                               | 0,611                | 0,366    | 0,285                 | 236                           | 209 | 269             | 226 |
| 1x95/16               | 28,2                      | 803                 | 1000                  | 0,320                                | 0,4096                               | 0,586                | 0,350    | 0,320                 | 281                           | 249 | 327             | 275 |
| 1x120/16              | 29,7                      | 903                 | 1000                  | 0,253                                | 0,3238                               | 0,568                | 0,338    | 0,350                 | 318                           | 283 | 377             | 317 |
| 1x150/25              | 31,0                      | 1084                | 1000                  | 0,206                                | 0,2637                               | 0,551                | 0,329    | 0,382                 | 350                           | 316 | 424             | 359 |
| 1x185/25              | 32,8                      | 1227                | 1000                  | 0,164                                | 0,2099                               | 0,534                | 0,319    | 0,415                 | 393                           | 358 | 485             | 412 |
| 1x240/25              | 35,3                      | 1434                | 1000                  | 0,125                                | 0,1600                               | 0,515                | 0,309    | 0,462                 | 453                           | 416 | 573             | 489 |
| 1x300/25              | 37,7                      | 1661                | 1000                  | 0,100                                | 0,1280                               | 0,498                | 0,301    | 0,507                 | 507                           | 469 | 652             | 559 |
| 1x400/35              | 40,5                      | 2041                | 1000                  | 0,0778                               | 0,1009                               | 0,478                | 0,291    | 0,573                 | 559                           | 532 | 741             | 651 |
| 1x500/35              | 43,8                      | 2402                | 1000                  | 0,0605                               | 0,0774                               | 0,462                | 0,284    | 0,631                 | 622                           | 599 | 838             | 744 |
| 1x630/35              | 47,8                      | 2900                | 1000                  | 0,0469                               | 0,0600                               | 0,446                | 0,276    | 0,699                 | 697                           | 679 | 957             | 851 |

Note : Current carrying capacities are valid under the following conditions:  
 In ground : 20 °C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7  
 In air : 30 °C, load factor 1.0  
 \*\*\* : Flat formation, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm  
 \*\* : Trefoil formation  
 Number of system : 1