

TECHNICAL SPECIFICATION

For Longitudinally and Radially Sealed Single Core Cables type NA2XS(FL)2Y / XRUHAKXS 1x150RM/25 mm² Uo/U(Um) = 12/20(24) kV acc. to DIN VDE 0276-620:2010 / G-141664 /

CONSTRUCTION

- Round, stranded and compacted conductor -Class 2
- ☐ Extruded semi-conductive conductor screen
- ☐ Insulation XLPE
- □ Extruded semi-conductive insulation screen
- ☐ Semi-conductive swelling tape(s)
- ☐ Metallic screen
- ☐ Semi-conductive swelling tape(s)
- □ Longitudinally aluminium foil
- Outer sheath



APPLICATION

- □ Laying in ground
- □ Laying in air
- Laying in ducts

TEMPERATURE

Conductor

- ☐ Continuous operation 90 °C 250 °C (duration max 5 s)
- Metallic screen

 □ Short circuit 350 °C

 (duration max 5 s)

The picture is informative only – not in scale

| | DESCRIPTION | UNIT | DETAILS /1 | |
|-----------------------|--------------------------------------------------|-----------------|---------------------------------------------|--|
| CONSTRUCTION DATA | | | | |
| Condu | <u>ctor</u> | | | |
| | Material | - | Aluminium | |
| | Nominal cross sectional area | mm ² | 150 | |
| | Number of wires | No | acc. to EN 60228 | |
| | Conductor diameter | mm | acc. to EN 60228 | |
| | Longitudinally sealed | - | No | |
| | Wrapping over conductor – Material | - | No | |
| Conductor screen / 2 | | | | |
| | Material | - | semi-cond. polyethylene | |
| | Minimum at point radial thickness | mm | 0.30 | |
| Insulation /2 | | | | |
| | Material | - | XLPE | |
| | Minimum average / min. at point radial thickness | mm | 5.5 / 4.85 | |
| | Diameter over insulation | mm | 26.4 (requirement 25.8 ÷ 28.5 mm) | |
| Insulation screen / 2 | | | | |
| | Туре | - | FULL BONDED | |
| | Material | - | semi-cond. polyethylene | |
| | Maximum / minimum at point radial thickness | mm | 0.60 / 0.30 | |
| Metallic screen | | | | |
| | Wrapping under Metallic Screen – Material | - | semi - cond. swelling tape(s) | |
| | Metallic screen - Material | - | copper (wires and tape – equalizing spiral) | |
| | Diameter over metallic screen | mm | 30 | |
| | Cross sectional area | mm ² | 25 | |
| | Wrapping over Metallic Screen - Material | - | semi - cond. swelling tape(s) | |
| Radial sealing | | | | |
| | Material | - | Al tape with PE copolymer | |
| | Diameter over radial sealing (D _e) | mm | 30.8 | |

^{/1} - Diameters are calculated values and subject to manufacturing tolerances

^{/2} - Triple extrusion processes, Dry curing and cooling.

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|--------------------------------------------------------------|------------|----------------------------------------------------------------------|--|--|
| DESCRIPTION | UNIT | DETAILS /1 | | |
| Sheath | | | | |
| — | - | HDPE – colour BLACK | | |
| □ Nominal / min. at point radial thickness | mm | 2.5 / 2.03 | | |
| ☐ Diameter over sheath - completed cable (D _k) | mm | ≈ 35.4 | | |
| Weight of complete cable (approx.) | kg/km | ≈ 1 350 | | |
| ELECTRICAL DATA at 50Hz | | | | |
| SHORT CIRCUIT CURRENTS | | | | |
| Max Short Circuit Capacity: | | | | |
| □ conductor: $90 \rightarrow 250 ^{\circ}\text{C}$ | kA / 1 sec | 14.1 | | |
| □ metallic screen: \rightarrow 350 °C | kA / 1 sec | 5.3 | | |
| AMPACITY (In) /3 BOTH-ENDS BONDING (BE) | | | | |
| GROUND | | | | |
| ☐ flat formation | A | 352 | | |
| □ trefoil formation | A | 319 | | |
| AIR | | | | |
| ☐ flat formation | A | 432 | | |
| □ trefoil formation | A | 366 | | |
| MECHANICAL DATA | | | | |
| Recommended min. bending radius for laying | m | 25 * <mark>D_e</mark> * 10 ⁻³ | | |
| Recommended permissible bending radius at final installation | m | 22 * <mark>D_e</mark> * 10 ⁻³ | | |
| Maximum Cable Pulling Force: ^{/4} | kN | 30 * (No * cross sectional) conductor area * 10 ⁻³ | | |
| Lowest recommended temperature during laying: | oC | ≥ minus 20 | | |
| DELIVERY DATA | | | | |
| Maximum length per TF KABLE drum / Diameter (Type) of | m/m | 1000 / 2.0 (<mark>20A)</mark> | | |
| wooden drum | | 1500 / 2.2 (<mark>22</mark>) | | |
| | | 2000 / 2.4 (<mark>24</mark>) | | |

Prepared by: Bogusława Składanowska – 2020-07-08

GROUND:

20 °C ☐ Ground temperature ☐ Laying depth☐ Ground thermal resistivity☐ Loading☐ 0.7 m1.0 K·m/W / 2.5 K·m/W 0.7

AIR (shaded cables):

Air temperature

Loading 30 °C 1.0

 $^{^{/3}}$ - Current rating guideline

 $^{^{/4}}$ - Cable pulling forces by its conductor