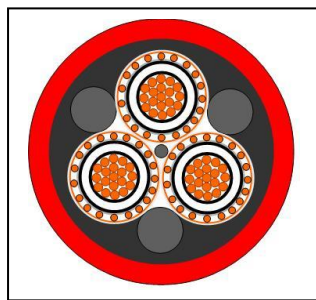


**TECHNICAL SPECIFICATION**  
**for Three Core Cables**  
**type N2XSEY 3x150RM/25 mm<sup>2</sup> U<sub>0</sub>/U(U<sub>m</sub>) = 6/10(12)kV**  
**acc. to DIN VDE 0276-620**  
**/G-118138/**

**CONSTRUCTION**

- Round, stranded and compacted conductor - Class 2
- Extruded semi-conductive conductor screen
- Insulation XLPE
- Extruded semi-conductive insulation screen
- Semi-conductive tape(s)
- Metallic screen
- Three-core's assembly with fillers
- Filling sheath
- Outer sheath


**APPLICATION**

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

**TEMPERATURE**
**Conductor**

- Continuous operation - **90 °C**
- Short circuit - **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 <sup>1/</sup>                            |
|---|-----------------|--|
| <b>CONSTRUCTION DATA</b>  |                 |  |
| <b>Conductor</b>  |                 |  |
| <input type="checkbox"/> Material   | -               | <b>Copper</b>                                    |
| <input type="checkbox"/> Nominal cross sectional area                               | mm <sup>2</sup> | <b>150</b>                                       |
| <input type="checkbox"/> Number of wires  | No              | acc. to EN 60228                                 |
| <input type="checkbox"/> Conductor diameter   | mm              | acc. to EN 60228                                 |
| <b>Conductor screen <sup>2/</sup></b>   |                 |  |
| <input type="checkbox"/> Material   | -               | semi-cond. polyethylene                          |
| <input type="checkbox"/> Minimum at point radial thickness                          | mm              | 0.30   |
| <b>Insulation <sup>2/</sup></b>   |                 |  |
| <input type="checkbox"/> Material   | -               | <b>XLPE</b>                                      |
| <input type="checkbox"/> <b>Minimum average</b> / minimum at point radial thickness | mm              | <b>3.4 / 2.96</b>                                |
| <input type="checkbox"/> <b>Diameter over insulation</b>                            | mm              | <b>22.4</b>                                      |
| <b>Insulation screen <sup>2/</sup></b>  |                 |  |
| <input type="checkbox"/> Type   | -               | <b>FULL BONDED</b>                               |
| <input type="checkbox"/> Material   | -               | semi-cond. polyethylene                          |
| <input type="checkbox"/> Maximum / minimum at point radial thickness                | mm              | 0.60 / 0.30                                      |
| <b>Metallic screen</b>  |                 |  |
| <input type="checkbox"/> Wrapping under Metallic Screen – Material                  | -               | semi - cond. tape(s)                             |
| <input type="checkbox"/> Metallic screen - Material                                 | -               | copper (wires and equalizing tape) for each core |
| <input type="checkbox"/> Diameter over metallic screen                              | mm              | 25.6   |
| <input type="checkbox"/> Cross sectional area                                       | mm <sup>2</sup> | <b>25 (25 / 3 - for each core )</b>              |
| <b>Three-cores assembly with fillers</b>  |                 |  |
| <input type="checkbox"/> Fillers material   | -               | PVC  |
| <input type="checkbox"/> Diameter above three-core's assembly                       | mm              | ≈ 55.2   |

<sup>1/</sup> - Diameters are calculated values and subject to manufacturing tolerances

<sup>2/</sup> - Triple extrusion processes, Dry curing and cooling.

| DESCRIPTION  | UNIT       | DETAILS <sup>1</sup>  |
|--|------------|---|
| <b>Filling sheath</b>  |            |   |
| <input type="checkbox"/> Material  | -          | <b>Rubber – colour NATURAL</b>                                  |
| <input type="checkbox"/> Approximate radial thickness                                    | mm         | 1.0   |
| <input type="checkbox"/> Diameter over sheath  | mm         | ≈ 58.2  |
| <b>Outer sheath</b>  |            |   |
| <input type="checkbox"/> Material  | -          | <b>PVC – colour RED</b>   |
| <input type="checkbox"/> <b>Nominal</b> / minimum at point radial thickness              | mm         | <b>2.8 / 2.45</b>   |
| <input type="checkbox"/> Diameter over sheath - completed cable ( <b>D<sub>e</sub></b> ) | mm         | ≈ 63.9  |
| Weight of complete cable (approx.)   | kg / km    | ≈ 7490  |
| <b>ELECTRICAL DATA at 50Hz</b>   |            |   |
| <b>SHORT CIRCUIT CURRENTS</b>  |            |   |
| Max Short Circuit Capacity   |            |   |
| <input type="checkbox"/> conductor : <b>90 → 250 °C</b>                                  | kA / 1 sec | <b>21.45</b>  |
| <input type="checkbox"/> metallic screen: <b>→ 350 °C</b>                                | kA / 1 sec | <b>5.3</b>  |
| <b>AMPACITY (In)<sup>13</sup></b>  |            |   |
| <b>GROUND</b>  | A          | <b>399</b>  |
| <b>AIR</b>   | A          | <b>420</b>  |
| <b>MECHANICAL DATA</b>   |            |   |
| Recommended min. bending radius for laying   | m          | <b>15 * D<sub>e</sub> * 10<sup>-3</sup></b>                     |
| Recommended permissible bending radius at final installation                             | m          | <b>12 * D<sub>e</sub> * 10<sup>-3</sup></b>                     |
| Maximum Cable Pulling Force: <sup>14</sup>   | kN         | <b>50 * (No*cross sectional) conductor area*10<sup>-3</sup></b> |
| Lowest recommended temperature during laying:  | °C         | <b>≥ minus 5</b>  |
| <b>DELIVERY DATA</b>   |            |   |
| Length per drum / Diameter ( <b>Type</b> ) of wooden drum                                | m / m      | <b>500 / 2.4 (24)</b>   |

Prepared by: Agnieszka Kabacińska – 2019-03-13

<sup>13</sup> - Current rating guideline (acc. to DIN VDE 0276-620 :2010 Table 9 and 10 )

**GROUND :**

- Ground temperature           20 °C
- Laying depth                    0.7 m
- Ground thermal resistivity   1.0 K·m / W / 2.5 K·m / W
- Load Factor                     0.7

**AIR (SHADED cables) :**

- Air temperature                30 °C
- Load Factor                     1.0

<sup>14</sup> - Cable pulling forces by its conductor