N2XSEY 3 x ... 6/10kV XLPE-insulated, Cu-conductor, PVC-sheath





Technical data

- Three core XLPE-insulated power cables to DIN VDE 0276 and IEC 60502
- Temperature range during installation up to -5°C
- Operating temperature max. +90°C
- Short circuit temperature core +250°C screen +350°C (duration) (short circuit duration max. 5 s)
- Nominal voltages U₀/U 6/10 kV
- Operating voltages max. 12 kV
- Test voltages 15 kV
- Test voltages d.c. 48 kV
- Minimum bending radius 15x cable Ø
- Tests
 - acc. to DIN VDE 0276 and IEC 60502

Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.2, multi-wire, BS 6360 cl.2, IEC 60228 cl.2
- Inner semi-conducting coating
 Core insulation of cross-linked polyethylene (XLPE)
- Outer extrusion of semi-conducting coating spliced with the XLPE-insulation
- Conductive wrapping
- Screen: Braiding of copper wires with one or two tapes applied helically
- 3 cores stranded
- Extruded sheath over three cores
- Outer sheath of PVC compound type DMV6 to HD 620 S2
- Sheath colour red

Properties

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers **Tests**
- self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Installation notes

To guarantee an optimum on operating reliability the extruded semi-conductive layer is spliced with the insulation for long duration. For this reason we recommend a peeling tool for installation.

Note

- rm = round conductor, multi-wire
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- <u>For laying in earth</u>: For ground thermal resistivity of 1 Kxm/W, laying depth 0,7 m, ground temperature 20°C, EVU load grade 0,7.
- <u>For laying in air</u>: Air temperature 30°C, EVU load grade 1,0.
- Conversion factors for laying in earth especially for laying in bundle form and other requirements are noted in DIN VDE 0298 part 2 and 0276 part 1000.
- Conversion factors for laying in air
- Air temperature/Conversion factor 15°C/1,12; 20°C/1,08; 25°C/1,04; 30°C/1,0; 35°C/0,96; 35°C/0,96; 40°C/ 0,91; 45°C/0,87; 50°C/0,82;

Application

Suitable for installation in indoors and in cable ducts, outdoors with protected laying, as well as for laying on racks for industrial and switching systems and power plants. Limited use when buried in the earth if the PVC outer sheath could be damaged by high mechanical stress. The inner conducting layer between the conductor and the XLPE insulation and the firmly bonded outer conducting layer on the XLPE insulation assures a construction free of partial discharges with high operational reliability.

Part no.	No.cores x cross-sec. mm²	Insulation thickness mm	Screen cross-sec. mm²	Sheath thickness Nominal value mm	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
34339	3 x 25 rm / 16	3,4	16	2,5	43,0	1046,0	2850,0	4
34340	3 x 35 rm / 16	3,4	16	2,5	48,0	1210,0	3300,0	2
34341	3 x 50 rm / 16	3,4	16	2,5	50,0	1671,0	3750,0	1
34342	3 x 70 rm / 16	3,4	16	2,6	54,0	2250,0	4650,0	2/0
34343	3 x 95 rm / 16	3,4	16	2,8	58,0	2995,0	5700,0	3/0
34344	3 x 120 rm / 16	3,4	16	2,9	61,0	3715,0	6700,0	4/0
34345	3 x 150 rm / 25	3,4	25	3,0	65,0	4638,0	7900,0	300 kcmil
34346	3 x 185 rm / 25	3,4	25	3,1	68,0	5645,0	9200,0	350 kcmil
34347	3 x 240 rm / 25	3,4	25	3,3	74,0	7274,0	11450,0	500 kcmil
34348	3 x 300 rm / 25	3,4	25	3,3	79,0	9160,0	14450,0	600 kcmil

Dimensions and specifications may be changed without prior notice. (RQ03)



