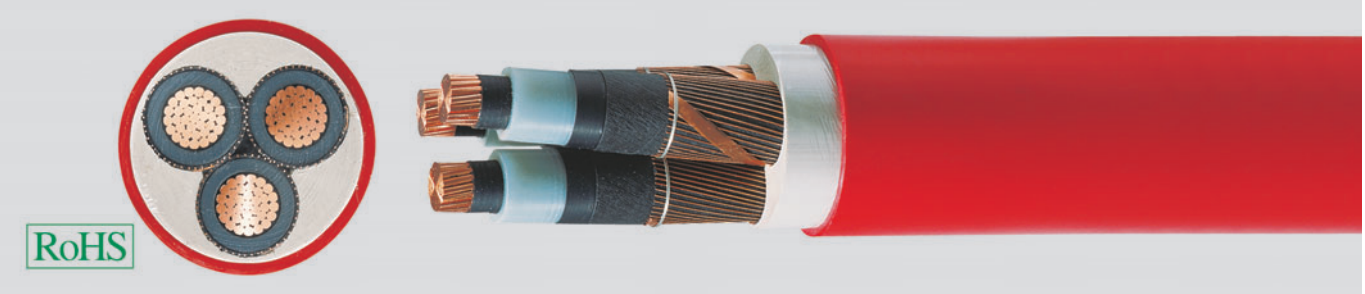
N2XSEY 3 x ... 6/10kV XLPE-insulated, Cu-conductor, PVC-jacket



Technical data

- Three core XLPE-insulated power cables to 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 up to 5 sec.)
- **Nominal voltages** U_0/U 6/10 kV
- **Operating voltages**
  max. 12 kV
- **Test voltages** 15 kV
- **Test voltages d.c.** 48 kV
- **Power rating**
  to DIN VDE 0298 part 2
- **Minimum bending radius**
  during installation 15x cable ø
- **Tests**
  according to
  DIN VDE 0276 und IEC 60502

Cable structure

- Circular bare Cu-conductor of stranded wires to DIN VDE 0295 cl. 2 and IEC 60228 cl. 2
- Inner semi-conducting coating
- Core insulation of cross-linked Polyethylene (XLPE), PE-compound DIX8 to HD 620.1
- 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
- PVC outer jacket, compound DMV6 to HD 405.1 and HD 620/1
- Jacket colour red

Properties

- self-extinguishing and flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers
- **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

- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- For laying in earth: For ground thermal resistivity of 1 K m/W, laying depth 0,7 m, ground temperature 20 °C, EVU load grade 0,7.
- For laying in air: 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 din 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;

Power rating and electrical characteristics

Cross-sec. mm²	Power ratings		Conductor resistance 20° C	Operating capacity	Effective resistance 90° C	Inductance per core
	laying in earth¹)	laying in air²)	Ohm / km	µF / km	Ohm / km	mH / km
3 x 25 rm/16	151	147	0,727	0,203	0,928	0,399
3 x 35 rm/16	181	178	0,524	0,225	0,669	0,378
3 x 50 rm/16	213	213	0,387	0,249	0,494	0,359
3 x 70 rm/16	261	265	0,268	0,283	0,343	0,338
3 x 95 rm/16	312	322	0,193	0,315	0,247	0,323
3 x 120 rm/16	355	370	0,153	0,345	0,197	0,311
3 x 150 rm/25	399	420	0,124	0,374	0,160	0,302
3 x 185 rm/25	451	481	0,0991	0,406	0,129	0,293
3 x 240 rm/25	523	566	0,0754	0,456	0,0991	0,282
3 x 300 rm/25	590	648	0,0601	0,495	0,0803	0,274

Application

Suitable for installation in indoors and in cable ducts, outdoors 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 jacket 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	Jacket thickness Nominal value mm	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. 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	1670,0	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	65,0	4635,0	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)