

# N2XSY 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated

Cu-conductor, single core, screened, PVC-jacket



## Technical data

- XLPE-insulated power cables to DIN VDE 0276 part 620, HD 620 S1 and IEC 60502
- **Temperature range** during installation up to  $-5^{\circ}\text{C}$
- **Operating temperature** max.  $90^{\circ}\text{C}$
- **Short circuit temperature**  $250^{\circ}\text{C}$  (short circuit duration up to 5 sec.)
- **Nominal voltages**  
 $U_0/U$  6/10 kV, 12/20 kV, 18/30 kV
- **Operating voltages**  
for 6/10 kV = max. 12 kV  
12/20 kV = max. 24 kV  
18/30 kV = max. 36 kV
- **Test voltages**  
for 6/10 kV = 15 kV  
12/20 kV = 30 kV  
18/30 kV = 45 kV
- **Minimum bending radius**  
max.  $15 \times$  cable  $\varnothing$

Power ratings table see page T 35 f

## Cable structure

- Circular bare Cu-conductor of stranded wires to HD 385
- 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 insulation
- Tape of conductive material
- Screen of copper wires and one or two copper tape(s) applied helically
- Inner covering or tape lapping
- PVC outer jacket, compound DMV6 to HD 620.1, jacket colour red

## 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.

## Application

Suitable for installation mostly for power supply stations, in indoors and in cable ducts, outdoors, underground and in water as well as for installation on cable trays for industries, switch-boards and power stations. Due to the good laying characteristic, this can also be laid easily in difficult line guideways. See DIN VDE 0298 part 1. To avoid the influence of the outer interferences, an adherent semi-conductive layer is extruded between the conductor and the VPE insulation and also a concentric copper conductor which guarantees the field-limitation and the resistance to the partial discharges  $\leq 2 \text{ pC}$  by a measuring volt of  $2 U_0$ .

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Part No.	No. cores x cross-sec. n x mm <sup>2</sup>	Insulation thickness mm	PVC-jacket thickness mm	Outer $\varnothing$		Cop. weight kg/km	Weight ca. kg/km	AWG-no.*)
				min. mm	max. mm			
<b>N2XSY 6/10 kV</b>								
32400	1 x 35 rm/16	3,4	2,5	23	28	518	905	2
32401	1 x 50 rm/16	3,4	2,5	24	29	662	1080	1
32402	1 x 70 rm/16	3,4	2,5	26	31	860	1310	2/0
32403	1 x 95 rm/16	3,4	2,5	27	32	1094	1580	3/0
32404	1 x 120 rm/16	3,4	2,5	29	34	1334	1860	4/0
32405	1 x 150 rm/16*	3,4	2,5	30	35	1723	2040	300 kcmil
32406	1 x 150 rm/25	3,4	2,5	30	35	1725	2210	300 kcmil
32407	1 x 185 rm/16*	3,4	2,5	32	37	1958	2450	350 kcmil
32408	1 x 185 rm/25	3,4	2,5	32	37	2059	2580	350 kcmil
32409	1 x 240 rm/16*	3,4	2,5	34	39	2486	3000	500 kcmil
32410	1 x 240 rm/25	3,4	2,5	34	39	2587	3130	500 kcmil
32411	1 x 300 rm/25	3,4	2,5	36	41	3163	3780	600 kcmil
32412	1 x 400 rm/35	3,4	2,5	40	45	4234	4670	750 kcmil
32413	1 x 500 rm/35	3,4	2,5	43	48	5194	5750	1000 kcmil
<b>N2XSY 12/20 kV</b>								
32414	1 x 35 rm/16	5,5	2,5	27	32	518	1110	2
32415	1 x 50 rm/16	5,5	2,5	28	33	662	1250	1
32416	1 x 70 rm/16	5,5	2,5	30	35	854	1510	2/0
32417	1 x 95 rm/16	5,5	2,5	31	36	1094	1780	3/0
32418	1 x 120 rm/16	5,5	2,5	33	38	1334	2070	4/0
32419	1 x 150 rm/16*	5,5	2,5	34	39	1622	2310	300 kcmil
32420	1 x 150 rm/25	5,5	2,5	34	39	1723	2420	300 kcmil
32421	1 x 185 rm/16*	5,5	2,5	36	41	1958	2650	350 kcmil
32422	1 x 185 rm/25	5,5	2,5	36	41	2059	2810	350 kcmil
32423	1 x 240 rm/16*	5,5	2,5	39	44	2486	3260	500 kcmil
32424	1 x 240 rm/25	5,5	2,5	39	44	2587	3360	500 kcmil
32425	1 x 300 rm/25	5,5	2,5	41	46	3163	4020	600 kcmil
32426	1 x 400 rm/35	5,5	2,5	44	49	4234	4930	750 kcmil
32427	1 x 500 rm/35	5,5	2,5	47	52	5194	6050	1000 kcmil
<b>N2XSY 18/30 kV</b>								
32428	1 x 50 rm/16	8,0	2,5	33	38	662	1480	1
32429	1 x 70 rm/16	8,0	2,5	35	40	854	1730	2/0
32430	1 x 95 rm/16	8,0	2,5	36	41	1094	2060	3/0
32431	1 x 120 rm/16	8,0	2,5	38	43	1334	2330	4/0
32432	1 x 150 rm/25	8,0	2,5	39	44	1723	2720	300 kcmil
32433	1 x 185 rm/25	8,0	2,5	41	46	2059	3100	350 kcmil
32434	1 x 240 rm/25	8,0	2,5	43	48	2587	3730	500 kcmil
32435	1 x 300 rm/25	8,0	2,5	46	51	3163	4000	600 kcmil
32436	1 x 400 rm/35	8,0	2,5	49	54	4234	5330	750 kcmil
32437	1 x 500 rm/35	8,0	2,5	52	57	5194	6480	1000 kcmil

\* For cables laying in earth a screen-cross section of 16 mm<sup>2</sup> is permitted. Further types and dimensions on request.