

# N2XSY

6/10 kV, 12/20 kV, 18/30 kV, Copper conductor, XLPE insulated, PVC sheath



## TECHNICAL DATA

Medium voltage cable acc. to DIN VDE 0276-620, HD 620 S2, IEC 60502

Temperature range	during installation -5°C
Permissible operating temperature of the conductor	+90°C
Short circuit temperature at the conductor	+250°C (Short circuit temperature max. 5 s)
Nominal voltage	see table
Operating voltage	see table
Test voltage	see table
Minimum bending radius	15x Outer-Ø

## CABLE STRUCTURE

- Copper conductor bare, stranded acc. to DIN VDE 0295 Class 2 / IEC 60228 Class 2
- Inner conductive layer
- Core insulation: XLPE acc. to HD 620 S2 (compound type DIX8)
- Outer conductive layer
- Conductive wrapping
- Screen: braiding of copper wires with one or two counter helix conductors
- Wrapping
- Outer sheath: PVC acc. to HD 620 S2 (compound type DMV6)
- Sheath colour: red

## PROPERTIES

### 6/10 kV

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Operating voltage <sup>1)</sup> max. kV	Test voltage kV	Outer-Ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
32400	1 x 35 rm / 16	2	12	21	23.0 - 28.0	518.0	905.0
32401	1 x 50 rm / 16	1	12	21	24.0 - 29.0	662.0	1080.0
32402	1 x 70 rm / 16	2/0	12	21	26.0 - 31.0	854.0	1310.0
32403	1 x 95 rm / 16	3/0	12	21	26.0 - 32.0	1094.0	1580.0
32404	1 x 120 rm / 16	4/0	12	21	28.0 - 34.0	1334.0	1860.0
32405	1 x 150 rm / 16	300 kcmil	12	21	29.0 - 35.0	1622.0	2040.0
32406	1 x 150 rm / 25	300 kcmil	12	21	29.0 - 35.0	1723.0	2210.0
32407	1 x 185 rm / 16	350 kcmil	12	21	31.0 - 37.0	1958.0	2450.0
32408	1 x 185 rm / 25	350 kcmil	12	21	31.0 - 37.0	2059.0	2580.0
32409	1 x 240 rm / 16	500 kcmil	12	21	33.0 - 39.0	2486.0	3000.0
32410	1 x 240 rm / 25	500 kcmil	12	21	33.0 - 39.0	2587.0	3130.0
32411	1 x 300 rm / 25	600 kcmil	12	21	36.0 - 41.0	3163.0	3780.0
32412	1 x 400 rm / 35	750 kcmil	12	21	40.0 - 45.0	4234.0	4670.0
32413	1 x 500 rm / 35	1000 kcmil	12	21	43.0 - 48.0	5194.0	5750.0
33099	1 x 630 rm / 35	1250 kcmil	12	21	44.0 - 49.0	6442.0	7180.0

- direct burial
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

## TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

## APPLICATION

Suitable for installation mostly for power supply stations, indoors, in cable ducts, outdoors with protected laying, underground and in water as well as for installation on cable trays for industries, switchboards and power stations. Due to the good laying characteristic, this can also be laid easily in difficult line guideways. 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.

## NOTES

- rm = round, stranded conductor
- the conductor is metrically (mm<sup>2</sup>) constructed, AWG numbers are approximated, and are for reference only
- for maximum operational reliability, the core insulation and the outer conductive layer are simultaneously extruded and permanently welded together. For installation, a peeling tool is recommended.
- Part no. 32405, 32407, 32409, 32419, 32421, 32423: approved exclusively for direct burial

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## 12/20 kV

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Operating voltage <sup>1)</sup> max. kV	Test voltage kV	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
32414	1 x 35 rm / 16	2	24	42	27.0 - 32.0	518.0	1110.0
32415	1 x 50 rm / 16	1	24	42	28.0 - 33.0	662.0	1250.0
32416	1 x 70 rm / 16	2/0	24	42	30.0 - 35.0	854.0	1510.0
32417	1 x 95 rm / 16	3/0	24	42	31.0 - 36.0	1094.0	1780.0
32418	1 x 120 rm / 16	4/0	24	42	32.0 - 38.0	1334.0	2070.0
32419	1 x 150 rm / 16	300 kcmil	24	42	33.0 - 39.0	1622.0	2310.0
32420	1 x 150 rm / 25	300 kcmil	24	42	33.0 - 39.0	1723.0	2420.0
32421	1 x 185 rm / 16	350 kcmil	24	42	35.0 - 41.0	1958.0	2650.0
32422	1 x 185 rm / 25	350 kcmil	24	42	35.0 - 41.0	2059.0	2810.0
32423	1 x 240 rm / 16	500 kcmil	24	42	38.0 - 44.0	2486.0	3260.0
32424	1 x 240 rm / 25	500 kcmil	24	42	38.0 - 44.0	2587.0	3360.0
32425	1 x 300 rm / 25	600 kcmil	24	42	40.0 - 46.0	3163.0	4020.0
32426	1 x 400 rm / 35	750 kcmil	24	42	43.0 - 49.0	4234.0	4930.0
32427	1 x 500 rm / 35	1000 kcmil	24	42	46.0 - 52.0	5194.0	6050.0
33096	1 x 630 rm / 35	1250 kcmil	24	42	47.0 - 53.0	6442.0	7510.0

## 18/30 kV

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Operating voltage <sup>1)</sup> max. kV	Test voltage kV	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
32428	1 x 50 rm / 16	1	36	63	32.0 - 38.0	662.0	1480.0
32429	1 x 70 rm / 16	2/0	36	63	34.0 - 40.0	854.0	1730.0
32430	1 x 95 rm / 16	3/0	36	63	35.0 - 41.0	1094.0	2060.0
32431	1 x 120 rm / 16	4/0	36	63	37.0 - 43.0	1334.0	2330.0
32432	1 x 150 rm / 25	300 kcmil	36	63	38.0 - 44.0	1723.0	2720.0
32433	1 x 185 rm / 25	350 kcmil	36	63	40.0 - 46.0	2059.0	3100.0
32434	1 x 240 rm / 25	500 kcmil	36	63	42.0 - 48.0	2587.0	3730.0
32435	1 x 300 rm / 25	600 kcmil	36	63	45.0 - 51.0	3163.0	4000.0
32436	1 x 400 rm / 35	750 kcmil	36	63	48.0 - 54.0	4234.0	5330.0
32437	1 x 500 rm / 35	1000 kcmil	36	63	51.0 - 57.0	5194.0	6480.0
33098	1 x 630 rm / 35	1250 kcmil	36	63	52.0 - 59.0	6442.0	7970.0

1) max. permissible operating voltage three-phase alternating current (AC) conductor/conductor