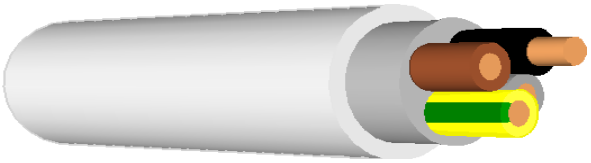
NYM 300/500V

DIN VDE 0250-204

PVC-sheathed cables for power installation





CONSTRUCTION	
Conductors:	annealed copper solid class 1, or circular stranded conductor class 2 acc. to EN 60228
Insulation:	special PVC compound type TI1
Inner covering:	not vulcanized rubber compound
Sheath:	special PVC compound type TM1

CHARACTERISTIC		
Colour of sheath:	grey RAL 7035	
Core identification:		
NYM-J		**NYM-O**
single-core:	green-yellow	black or brown or grey
2-core:		blue, brown
3-core:	green-yellow, blue, brown	brown, black, grey
3-core*:		blue, brown, black
4-core:	green-yellow, brown, black, grey	blue, brown, black, grey
4-core*:	green/yellow, blue, brown, black	
5-core:	green-yellow, blue, brown, black, grey	blue, brown, black, grey, black
7-core and more:	green/yellow , other cores black with white numbering	black with white numbering
* For certain applications only.		
Maximum conductor operating temperature:	+70°C	
Lowest ambient temperature for fixed installation:	-30°C	
Lowest installation temperature:	-5°C	
Maximum short-circuit conductor temperature:	+160°C	
Minimum bending radius:	6 x D,	D – overall diameter
Test voltage:	2000V	

FIRE PERFORMANCE	
▪ **Flame retardant:**	IEC 60332-1-2

APPLICATIONS	
For fixed installation. Usable in the open, in dry, damp and wet environments in the open and concealed, as well as in masonry and in concrete, not suitable for imbedding in solidified - or compressed concrete. Outdoor usage is only possible, as long as the cable is protected against direct sunlight.	
Standard length cable packing	100 m coils or 500 m on drums. Other forms of packing and delivery are available on request.

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APPROVALS

VDE, SIQ, GOST

Number and cross-sectional area of conductor	Minimum number of wires in conductor	Nominal thickness of insulation	Nominal thickness of sheath	Approximate overall diameter	Approximate net weight of cables	Maximum conductor resistance at temperature 20°C	Minimum insulation resistance at 70°C
n x mm²	**n**	**mm**	**mm**	**mm**	**kg/km**	**Ω/km**	**MΩ. km**
1x1,5	1	0,6	1,4	5,2	43	12,1	0,010
1x2,5	1	0,7	1,4	5,7	57	7,41	0,0094
1x4	1	0,8	1,4	6,4	77	4,61	0,0087
1x6	1	0,8	1,4	6,9	99	3,08	0,0074
1x10	1	1	1,4	8,1	148	1,83	0,0072
1x16	6	1	1,4	9,2	212	1,15	0,0053
1x25*	6	1,2	1,4	10,7	312	0,727	0,0051
2x1,5	1	0,6	1,4	7,9	103	12,1	0,010
2x2,5	1	0,7	1,4	9,1	142	7,41	0,0094
2x4	1	0,8	1,4	10,2	191	4,61	0,0087
2x6	1	0,8	1,4	11,2	247	3,08	0,0074
2x10	1	1	1,6	14	395	1,83	0,0072
2x16	6	1	1,6	16,6	584	1,15	0,0053
2x25	6	1,2	1,6	20	877	0,727	0,0051
2x35	6	1,2	1,8	22,5	1152	0,524	0,0045
3x1,5	1	0,6	1,4	8,3	120	12,1	0,010
3x2,5	1	0,7	1,4	9,5	169	7,41	0,0094
3x4	1	0,8	1,4	11	238	4,61	0,0087
3x6	1	0,8	1,6	12,2	315	3,08	0,0074
3x10	1	1	1,6	14,8	489	1,83	0,0072
3x16	6	1	1,6	17,6	730	1,15	0,0053
3x25	6	1,2	1,8	21,7	1123	0,727	0,0051
3x35	6	1,2	1,8	23,9	1461	0,524	0,0045

*(N)YM - based on VDE 0250-204

NYM 300/500V

DIN VDE 0250-204

Number and cross-sectional area of conductor	Minimum number of wires in conductor	Nominal thickness of insulation	Nominal thickness of sheath	Approximate overall diameter	Approximate net weight of cables	Maximum conductor resistance at temperature 20°C	Minimum insulation resistance at 70°C
n x mm²	**n**	**mm**	**mm**	**mm**	**kg/km**	**Ω/km**	**MΩ. km**
4x1,5	1	0,6	1,4	8,9	142	12,1	0,010
4x2,5	1	0,7	1,4	10,3	203	7,41	0,0094
4x4	1	0,8	1,6	12,3	300	4,61	0,0087
4x6	1	0,8	1,6	13,5	393	3,08	0,0074
4x10	1	1	1,6	16,2	604	1,83	0,0072
4x16	6	1	1,6	19,3	907	1,15	0,0053
4x25	6	1,2	1,8	23,8	1398	0,727	0,0051
4x35	6	1,2	1,8	26,4	1828	0,524	0,0045
5x1,5	1	0,6	1,4	9,6	169	12,1	0,010
5x2,5	1	0,7	1,4	11,1	244	7,41	0,0094
5x4	1	0,8	1,6	13,3	362	4,61	0,0087
5x6	1	0,8	1,6	14,6	478	3,08	0,0074
5x10	1	1	1,6	17,9	751	1,83	0,0072
5x16	6	1	1,8	21,6	1138	1,15	0,0053
5x25	6	1,2	1,8	26,2	1727	0,727	0,0051
5x35	6	1,2	1,8	29,1	2263	0,524	0,0045
7x1,5	1	0,6	1,4	10,7	219	12,1	0,010
7x2,5	1	0,7	1,6	12,6	322	7,41	0,0094
10x1,5*	1	0,6	1,4	12,4	282	12,1	0,010
10x2,5*	1	0,7	1,6	15,2	433	7,41	0,0094
12x1,5*	1	0,6	1,4	12,8	317	12,1	0,010
12x2,5*	1	0,7	1,6	15,6	489	7,41	0,0094

*(N)YM - based on VDE 0250-204

NYM 300/500V

DIN VDE 0250-204

Current ratings acc. to DIN VDE 0298 Part 4

Operating temperature at conductor 70°C; ambient air temperature 30°C

								
Installation: - in thermally insulated walls - in insulating tubes	Multicore sheathed cables in insulating tubes, in a thermally insulated walls		Multicore sheathed cables in insulating tubes on a wall		Single or multicore sheathed cables on a wall		Multicore sheathed cables with a space of minimum 0,3 x diameter d to wall	
Number of loaded cores	2	3 [1)]	2	3 [1)]	2	3 [1)]	2	3 [1)]
Cross-section, mm^2	Current ratings in Ampere (A)							
1,5	15,5	13,0	16,5	15,0	19,5	17,5	22	18,5
2,5	18,5	17,5	23	20	27	24	30	25
4	25	23	30	27	36	32	40	34
6	32	29	38	34	46	41	51	43
10	43	39	52	46	63	57	70	60
16	57	52	69	62	85	76	94	80
25	75	68	90	80	112	96	119	101
35	92	83	111	99	138	119	148	126

Conversion factors for ambient temperature over 30°C

Ambient temperature, °C	30	35	40	45	50	55	60	65
Conversion factors	1,00	0,94	0,87	0,79	0,71	0,61	0,50	0,35

[1)] Conversion factors for multicore cable (≥5 cores)

Number of loaded cores	Conversion factors
5	0,75
7	0,65
10	0,55

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