

NYM-J (Eca)

NYM-O (Eca)

Structure and electrical, physical, mechanical requirements: VDE 0250 Part 204

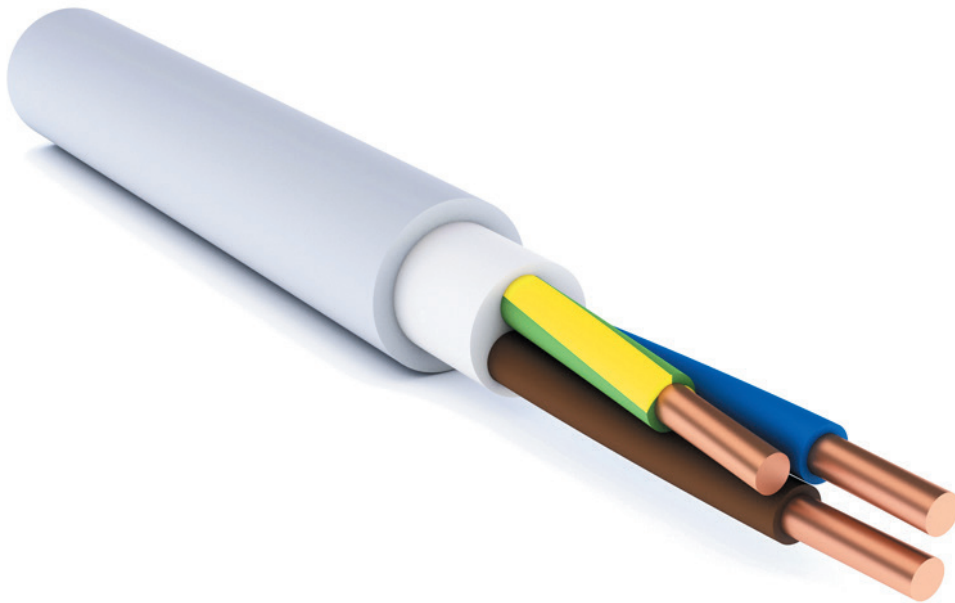
Low Voltage Directive:	2014/35/EU
RoHS Directive:	2011/65/EU

REACTION TO FIRE

CPR COMPLIANT

REGULATION 305/2011/EU

Standard:	EN 50575:2014+A1:2016
Class:	E _{ca}
Classification:	EN 13501-6
Flame propagation:	EN 60332-1-2
Notified Body:	0051 - IMQ
CE	2017



Description

- Conductor:
 - plain copper, solid, class 1 (cross-section $\leq 10 \text{ mm}^2$)
 - plain copper, stranded wire, class 2 (cross-section $\geq 16 \text{ mm}^2$)
- Insulation: PVC
- Filler: thermoplastic
- Sheath: PVC
- Colour: grey


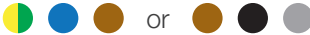

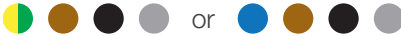

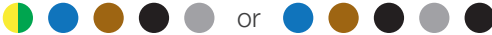

Functional characteristics

- Rated voltage U_0/U : 300/500 V
- Max. operating temperature: 70°C
- Min. operating temperature: -10°C (without mechanical shocks)
- Max. short circuit temperature: 160°C

Installation conditions

- Minimum installation temperature: 5°C
- Recommended minimum bending radius: 6 times the cable diameter
- Recommended maximum tensile stress: 50 N/mm² of the cross-section of the copper

Colours of the cores

- TWO-CORE 
- THREE-CORE  or 
- FOUR-CORE  or 
- FIVE-CORE  or 

The cores in multiple cables for signal and control are black, numbered, with or without GREEN/YELLOW

Use and installation method

For use in industrial electrical systems. Can be laid outdoor in humid, dry or rainy environments, and indoor in brickwork and concrete structures. It is not permitted under compressed, solidified reinforced concrete. Outdoor use is only permitted with protection from solar radiation. It must not be laid underground.

Reference Construction Products Regulation 305/2011 EU and Standard EN 50575:

The cable is suitable for the supply of electricity in buildings and other civil engineering works.

Single-core

NYM-J with conductor green/yellow NYM-O without conductor green/yellow

Formation	Approx. conductor \varnothing	Average insulation thickness	Average sheath thickness	Max. external \varnothing	Max. electrical resistance at 20°C	Approx. cable weight	Current rating A	
							in air at 30°C	in pipe in air at 30°C
$n^\circ \times \text{mm}^2$	mm	mm	mm	mm	Ω/km	kg/km		
1 x 1,5	1,4	0,6	1,4	6,2	12,1	44	17,5	15
1 x 2,5	1,8	0,7	1,4	7,0	7,41	60	24	20
1 x 4	2,3	0,8	1,4	7,7	4,61	78	32	27
1 x 6	2,8	0,8	1,4	8,2	3,08	100	41	34
1 x 10	3,5	1,0	1,4	9,6	1,83	150	57	46
1 x 16	4,8	1,0	1,4	11,0	1,15	220	76	62

Multi-core

NYM-J with conductor green/yellow NYM-O without conductor green/yellow

Formation	Approx. conductor Ø	Average insulation thickness	Average sheath thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Current rating A	
							in air at 30°C	in pipe in air at 30°C
n° x mm ²	mm	mm	mm	mm	Ω/km	kg/km		
2 x 1,5	1,4	0,6	1,4	9,4	12,1	105	17,5	15
2 x 4	2,3	0,8	1,4	12,3	4,61	195	32	27
3 x 1,5	1,4	0,6	1,4	9,9	12,1	120	17,5	15
3 x 2,5	1,8	0,7	1,4	11,4	7,41	165	24	20
3 x 4	2,3	0,8	1,4	13,0	4,61	235	32	27
3 x 6	2,8	0,8	1,6	14,7	3,08	320	41	34
3 x 10	3,5	1,0	1,6	17,7	1,83	500	57	46
3 x 16	4,8	1,0	1,6	21,0	1,15	735	76	62
4 x 1,5	1,4	0,6	1,4	10,7	12,1	150	17,5	15
4 x 2,5	1,8	0,7	1,4	12,3	7,41	205	24	20
4 x 4	2,3	0,8	1,6	14,6	4,61	295	32	27
4 x 6	2,8	0,8	1,6	16,1	3,08	390	41	34
4 x 10	3,5	1,0	1,6	19,5	1,83	620	57	46
4 x 16	4,8	1,0	1,6	23,0	1,15	910	76	62
4 x 25	6,0	1,2	1,8	28,3	0,727	1430	96	80
4 x 35	7,0	1,2	1,8	31,1	0,524	1860	119	99
5 x 1,5	1,4	0,6	1,4	11,5	12,1	165	17,5	15
5 x 2,5	1,8	0,7	1,4	13,3	7,41	240	24	20
5 x 4	2,3	0,8	1,6	16,0	4,61	360	32	27
5 x 6	2,8	0,8	1,6	17,5	3,08	475	41	34
5 x 10	3,5	1,0	1,6	21,3	1,83	750	57	46
5 x 16	4,8	1,0	1,8	25,6	1,15	1135	76	62
5 x 25	6,0	1,2	1,8	31,1	0,727	1735	96	80
5 x 35	7,0	1,2	1,8	34,3	0,524	2285	119	99
7 x 1,5	1,4	0,6	1,4	12,6	12,1	220	12	10,5
7 x 2,5	1,8	0,7	1,6	15,2	7,41	330	17	14