VG-YMvKasmb 0.6/1kV

Armoured, XLPE-insulated installation cable with flame retardant PVC sheath

Application

Power and control cable for general use in low voltage installations up to 1 kV, suitable for all applications indicated in NEN 1010. Suitable for direct burial and also suited for above ground installations, where extra mechanical protection of the cable is required. The cable can be applied in unfavorable conditions, like an increased ambient temperature, and in cable bundles. The multicore versions are mainly used as auxiliary current cables and also for measurement and control purposes.

Construction

Conductor	: Stranded plain annealed copper, round (class 2) 3 and 4 core cables and > 35 mm²: sector
Insulation	: Cross-linked polyethylene (XLPE)
Assembly	: Cores cabled together, filled to make a round shape; sector shaped cores wrapped with polyester foil
Inner sheath	: Polyvinyl chloride (PVC)
Armouring/earth conductor	: Galvanized steel wires and plain copper wires surrounded by an open counter-wound spiral of steel tape (single core cables: armouring of plain copper wires and a counter spiral of copper foil)
Outer sheath	: Polyvinyl chloride (PVC) flame retardant (mb)
Marking text	: E.g. “VG-YMvKasmb 0.6/1kV 2x10mm² 2016 KEMA-KEUR CE”
Rated voltage	: 0.6/1kV
Test voltage	: 3.5kV

Core identification

2 cores	: Brown, blue
3 cores	: Brown, black, grey
4 cores	: Brown, black, grey, blue
5 cores	: Brown, black, grey, black, blue

Standards Applied

NEN-EN-IEC 60332¬-3-24 (cat. C)	Flame retardant
NENEN IEC 603321	Self-extinguishing

T : +31 (0)168 468 100
E : sales@incore-cables.com
I : www.incore-cables.com

incore cables® your way to energy

VG-YMvKasmb 0.6/1kV

Outer Sheath Colours

Available colours : Grey*

*other colours available on request

Installation recommendations

Minimum Bending Radius : 7xD
Max. operating temperature : 90°C (temporary overload permissible until +130°C)
Max. operating temperature, fixed : -40 / 80°C
Temperature, moved/during installation : 0 / 90°C

Range and Dimensions

Article Code	Number of cores Size Cross-section in mm²	Earth screen (mm²)	Nominal diameter over insulation (mm)	Nominal diameter over Inner sheath (mm)	Nominal overall diameter (mm)	Maximum tensile strength (N)	Approx. weight (kg/km)
O0302C010BNNGR4	2 x 10	10	5.3	12.7	18.8	2825	760
O0302C016BNNGR4	2 x 16	16	6.4	14.8	20.9	3490	975
O0302C025BNNGR4	2 x 25	16	8.1	18.2	24.3	4720	1330
O0302C035BNNGR4	2 x 35	16	9.3	20.7	26.4	5575	1660
O0302C050BNNGR4	2 x 50	25	10.7	23.7	29.5	6960	2080
O0302C070BNNGR4	2 x 70	35	12.7	27.7	33.7	9085	2760
O0303C010BBAGR4	3 x 10	10	5.3	13.5	19.6	3070	860
O0303C010BBAGR4	3 x 10 var	10	5.3	13.5	19.6	3070	860
O0303C016BBAGR4	3 x 16	16	6.4	15.8	21.9	3835	1135
O0303C025BBAGR4	3 x 25	16	8.1	19.5	25.6	5240	1570
O0303C035BBAGR4	3 x 35 sv	16	7.8 – 12.4	18.6	24.7	4880	1630
O0303C050BBAGR4	3 x 50 sv	25	8.9 – 14.3	20.9	27.0	5830	2060
O0303C070BBAGR4	3 x 70 sv	35	10.5 – 16.9	24.8	31.4	7885	2810
O0303C095BBAGR4	3 x 95 sv	50	12.1 – 19.7	28.2	34.6	9575	3700
O0303C120BBAGR4	3 x 120 sv	60	13.5 – 21.9	31.6	38.4	10000	4570
O0303C150BBAGR4	3 x 150 sv	75	15.2 – 24.7	34.7	41.9	10000	5550
O0303C185BBAGR4	3 x 185 sv	95	17.1 – 27.7	38.6	47.3	10000	7310
O0303C240BBAGR4	3 x 240 sv	120	19.3 – 31.4	44.3	53.4	10000	9285
O0303C300BBAGR4	3 x 300 sv	150	21.2 – 34	47.7	57.2	10000	11325
O0304C010BBCGR4	4 x 10	10	5.3	14.9	21.0	3525	1000
O0304C016BBCGR4	4 x 16	16	6.4	17.5	23.6	4455	1340
O0304C025BBCGR4	4 x 25	16	8.1	21.7	27.8	6180	1890
O0304C035BBCGR4	4 x 35 sv	16	8.75 – 11.7	21.4	27.5	6050	2030
O0304C050BBCGR4	4 x 50 sv	25	9.7 – 13	24.5	30.9	7635	2635
O0304C070BBCGR4	4 x 70 sv	35	11.5 – 15.5	28.6	35.4	10000	3595
O0304C095BBCGR4	4 x 95 sv	50	13.3 – 18	32.2	39.0	10000	4745
O0304C120BBCGR4	4 x 120 sv	60	14.8 – 20	35.4	42.6	10000	5860
O0304C150BBCGR4	4 x 150 sv	75	16.8 – 22.6	39.6	47.1	10000	7130
O0304C185BBCGR4	4 x 185 sv	95	18.9 – 25.4	44.4	53.5	10000	9340
O0304C240BBCGR4	4 x 240 sv	120	21.3 – 28.7	50.2	59.7	10000	11925
O0304C300BBCGR4	4 x 300 sv	150	23.8 – 32.2	54.9	64.8	10000	14560
O0305C010BBGGR4	5 x 10	10	5.3	16.5	22.6	4085	1160
O0305C016BBGGR4	5 x 16	16	6.4	19.3	25.4	5160	1565

T : +31 (0)168 468 100
E : sales@incore-cables.com
I : www.incore-cables.com

incore cables®
your way to energy

VG-YMvKasmb 0.6/1kV

Electrical characteristics

Number of cores Size cross-section in mm²	Conductor resistance at 20°C, DC (ohm/km)	Conductor resistance at 90 °C, 50 Hz (oh m/km)	Maximum current rating[1] (A)	Working selfinductance (mH/km)	Approx. working capacitance (nF/km)
2 x 10	1.83	2.33	73	0.28	207
2 x 16	1.15	1.47	95	0.27	236
2 x 25	0.727	0.927	121	0.26	250
2 x 35	0.524	0.669	146	0.26	265
2 x 50	0.387	0.494	173	0.24	282
2 x 70	0.268	0.343	213	0.2	298
3 x 10	1.83	2.33	61	0.28	230
3 x 10 var	1.83	2.33	61	0.28	230
3 x 16	1.15	1.47	79	0.27	266
3 x 25	0.727	0.927	101	0.26	294
3 x 35 sv	0.524	0.669	122	0.23	296
3 x 50 sv	0.387	0.494	144	0.23	310
3 x 70 sv	0.268	0.343	178	0.2	359
3 x 95 sv	0.193	0.248	211	0.19	403
3 x 120 sv	0.153	0.198	240	0.18	427
3 x 150 sv	0.124	0.162	271	0.17	448
3 x 185 sv	0.0991	0.131	304	0.17	461
3 x 240 sv	0.0754	0.102	351	0.17	478
3 x 300 sv	0.0601	0.0831	396	0.17	500
4 x 10	1.83	2.33	61	0.32	229
4 x 16	1.15	1.47	79	0.31	264
4 x 25	0.727	0.927	101	0.3	291
4 x 35 sv	0.524	0.669	122	0.32	286
4 x 50 sv	0.387	0.494	144	0.27	308
4 x 70 sv	0.268	0.343	178	0.23	357
4 x 95 sv	0.193	0.248	211	0.22	391
4 x 120 sv	0.153	0.198	240	0.21	417
4 x 150 sv	1.83	0.162	271	0.2	436
4 x 185 sv	1.15	0.131	304	0.2	450
4 x 240 sv	0.727	0.102	351	0.2	462
4 x 300 sv	0.524	0.0831	-	0.2	480
5 x 10	0.387	2.33	61	0.32	234
5 x 16	0.268	1.47	79	0.31	269

1) The maximum current rating applies to one cable directly in the ground, at a soil temperature of 20 °C and a soil thermal resistivity for 2.5 Km/W, in accordance with NEN 1010:2007. For 2 cores loaded cables table A.52-4 column 7 is applicable and for 3 cores loaded cables table A.52-6 column 7 is applicable. For 4 and 5 cores cables the maximum current is given for 3 cores loaded. Correction factors for other circumstances are given in table A.52-16 and A.52-19. The correction factor for a soil thermal resistivity of 1 Km/W amounts 1.5.

T : +31 (0)168 468 100
E : sales@incore-cables.com
I : www.incore-cables.com

incore cables®
your way to energy