

# VG-YLKmb 0.6/1 kV

Armoured installation cable with a lead sheath as inner protection



## Application

Is applied in situations where protection against aggressive substances is required. Suitable for direct burial, for low voltage installations up to 1 kV. The lead sheath offers excellent protection against aggressive substances, such as organic solvents and fuels and is very corrosion-proof. Lead cannot withstand concentrated Nitric Acid and organic acids. Steel wire armouring offers an excellent mechanical protection.

## Construction

<b>Conductor</b>	: Plain solid annealed copper, round
<b>Insulation</b>	: Cross-linked polyethylene (XLPE)
<b>Assembly</b>	: 2 up to 8 cores: cores cabled together, filled to make a round shape ≥ 10 cores: wrapped with polyester foil
<b>Inner sheath</b>	: Polyvinyl chloride (PVC)
<b>Chemical protection</b>	: Lead, with one or more earth leads of tinned copper wires underneath
<b>Sheath</b>	: Polyvinyl chloride (PVC)
<b>Armouring</b>	: Galvanized steel wires, counter spiral of galvanized steel tape
<b>Outer sheath</b>	: Polyvinyl chloride (PVC) flame retardant (mb)
<b>Marking text</b>	: E.g. "VO-YLKmb 0.6/1kV 2x1.5mm <sup>2</sup> 2016 KEMA-KEUR CE"
<b>Rated voltage</b>	: 0.6/1kV
<b>Test voltage</b>	: 3.5kV

## Core identification

<b>2 cores</b>	: Brown, blue
<b>3 cores</b>	: Brown, black, grey
<b>4 cores</b>	: Brown, black, grey, blue

## Standards Applied

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

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## 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 mm <sup>2</sup>	Earth screen (mm <sup>2</sup> )	Nominal diameter over insulation (mm)	Nominal diameter over Inner sheath (mm)	Nominal overall diameter (mm)	Maximum tensile strength (N)	Approx. weight (kg/km)
O0502C010BWWGR4	2 x 10	16	5.4	12.7	25.4	1935	1835
O0502C016BWWGR4	2 x 16	21	6.4	14.8	27.5	2265	2205
O0502C025BWWGR4	2 x 25	24	8.1	18.2	31.0	2880	2765
O0502C035BWWGR4	2 x 35	31	9.3	20.7	33.9	3445	3365
O0502C050BWWGR4	2 x 50	33	10.2	23.7	37.3	4170	4060
O0502C095BWWGR4	2 x 95	36	13.3 – 18	31.6	44.7	5990	6500
O0502C150BWWGR4	2 x 150	47	18.3	39.3	57.0	9745	9970
O0503C010BBAGR4	3 x 10	16	5.4	13.5	26.2	2055	1995
O0503C016BBAGR4	3 x 16	22	6.4	15.8	28.6	2450	2435
O0503C025BBAGR4	3 x 25	25	8.1	19.5	32.5	3165	3170
O0503C035BBAGR4	3 x 35 sv	29	7.8 – 12.4	18.6	31.8	3030	3230
O0503C050BBAGR4	3 x 50 sv	31	8.9 – 14.3	20.9	34.1	3485	3790
O0503C070BBAGR4	3 x 70 sv	34	10.5 – 16.9	24.8	38.6	4465	4865
O0503C095BBAGR4	3 x 95 sv	41	12.1 – 19.7	28.2	42.8	5495	6115
O0503C120BBAGR4	3 x 120 sv	45	13.5 – 21.9	31.6	46.8	6570	7350
O0503C150BBAGR4	3 x 150 sv	59	15.2 – 24.7	34.7	51.7	8015	9240
O0503C185BBAGR4	3 x 185 sv	64	17.1 – 27.7	38.6	56.9	9710	11225
O0503C240BBAGR4	3 x 240 sv	72	19.3 – 31.4	44.3	63.4	10000	13855
O0504C010BBCGR4	4 x 10	17	5.4	13.0	26.4	2090	2115
O0504C016BBCGR4	4 x 16	23	6.4	17.5	30.3	2750	2725
O0504C025BBCGR4	4 x 25	27	8.1	21.7	35.1	3695	3745
O0504C035BBCGR4	4 x 35 sv	32	8.75 – 11.7	21.4	35.0	3675	3915
O0504C050BBCGR4	4 x 50 sv	34	9.7 – 13	24.5	38.3	4400	4710
O0504C070BBCGR4	4 x 70 sv	38	11.5 – 15.5	28.6	43.0	5545	6030
O0504C095BBCGR4	4 x 95 sv	46	13.3 – 18	32.2	47.6	6795	7695
O0504C120BBCGR4	4 x 120 sv	58	14.8 – 20	35.4	52.9	8395	9830
O0504C150BBCGR4	4 x 150 sv	66	16.8 – 22.6	39.6	57.9	10000	11655
O0504C185BBCGR4	4 x 185 sv	73	18.9 – 25.4	44.4	63.7	10000	14145
O0504C240BBCGR4	4 x 240 sv	81	21.3 – 28.7	50.2	70.3	10000	17465

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## Electrical characteristics

Number of cores Size cross- section in mm <sup>2</sup>	Conductor resistance at 20°C, DC (ohm/km)	Conductor resistance at 90 °C, 50 Hz (oh m/km)	Maximum current rating <sup>1</sup> (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	0.23	282
2 x 95	0.193	0.248	252	0.23	393
2 x 150	0.124	0.162	324	0.23	398
3 x 10	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	475
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	0.23	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	0.124	0.162	271	0.2	436
4 x 185 sv	0.0991	0.131	304	0.2	450
4 x 240 sv	0.0754	0.102	351	0.2	462
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	0.23	282

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.

### NOTICE

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