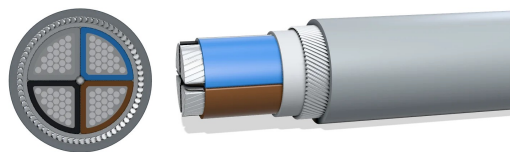


Application

VG-YMvKas AL/AL is a Dutch armoured installation and distribution power cable for 0.6/1 kV, for fixed installation indoors, in cable ducts and trays and for direct burial where both mechanical and electrical protection are required. The sector-shaped aluminium conductors are insulated with cross-linked polyethylene (XLPE), laid up and bedded with a flame-retardant polyvinyl chloride (PVC) inner sheath, and protected by a layer of round ALUMINIUM wires (armour); a grey flame-retardant PVC outer sheath completes the cable. The prefix VG denotes the wire armour ("gewapend"); AL/AL denotes the aluminium conductor combined with aluminium-wire armour, which also serves as the earth conductor. With a Cca reaction-to-fire classification the cable is intended for use in buildings and civil works subject to the Construction Products Regulation (CPR). VG distinguishes this round-wire-armoured cable from the braided VO-YMvKas and the tape-armoured VD-YMvKas.



CONSTRUCTION

Conductor	Aluminium, sector-shaped stranded (svs), class 2 acc. to IEC 60228.
Insulation	Cross-linked polyethylene (XLPE).
Bedding / inner sheath	Flame-retardant polyvinyl chloride (PVC/ST, HD 604 S1), grey.
Armour	Round aluminium wires (aluminium wire armour, AWA).
Outer sheath	Flame-retardant polyvinyl chloride (PVC/ST, HD 604 S1), grey.
Core identification	Coloured cores acc. to NEN / HD 308 S2, without a green/yellow core. Earth via the aluminium wire armour.

ELECTRICAL & THERMAL PROPERTIES

Reaction to fire (CPR)	Class Cca-s2,d2,a3 acc. to EN 50575 (EN 13501-6); a key classification for use in buildings under the Construction Products Regulation.
Rated voltage Uo/U	0.6/1 kV.
Test voltage	3.5 kV.
Standard	Reaction to fire EN 50575 (CPR); construction acc. to HD 604 S1 (:1994/A2:2002/A3:2005); conductor acc. to IEC 60228; TUV.
Flame-retardant	Acc. to IEC/EN 60332-1-2 (consistent with the Cca class).
Max. conductor temperature	+90 °C (XLPE).
Max. short-circuit temperature	+250 °C (max. 5 s).
Permitted operating temperature, fixed	-30 °C to +90 °C (min. +0 °C during installation).
Min. bending radius, fixed	12 × outer diameter.

DIMENSIONS & TECHNICAL DATA

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
3 × 35	0.868	25.6	767
4 × 35	0.868	28.2	935
3 × 50	0.641	28.6	968
4 × 50	0.641	32.2	1222
3 × 70	0.443	32.2	1252
4 × 70	0.443	36	1580
3 × 95	0.32	35.8	1570
4 × 95	0.32	40.2	1978
3 × 120	0.253	38.6	1873
4 × 120	0.253	44	2412
3 × 150	0.206	42.8	2292
4 × 150	0.206	48.2	2902
3 × 185	0.164	46.8	2740
4 × 185	0.164	54.4	3729
3 × 240	0.125	53	3629
4 × 240	0.125	60.4	4663
3 × 300	0.1	58.2	4415
4 × 300	0.1	66	5670

Outer diameters and weights are the nominal manufacturer values of the leading reference source (sector-shaped aluminium conductors, aluminium-wire armour); conductor resistances are the IEC 60228 class 1/2 aluminium nominal values. All values are indicative and non-binding.