



## Technical data

- **Temperature range**  
flexing -25°C to +80°C  
fixed installation -40°C to +80°C
- Permissible **operating temperature**  
at conductor +80°C
- **Nominal voltage**  $U_0/U$  0,6/1 kV
- **Operating voltage**  
three-phase and one-phase a.c.  
 $U_0/U$  0,7/1,2 kV  
direct current system  
 $U_0/U$  0,9/1,8 kV
- **Test voltage** 3000 V
- **Insulation resistance**  
min. 20 MΩm x km
- **Tensile strength**  
statical load:  
total cross-section x15 N/mm<sup>2</sup>
- **Minimum bending radius**  
fixed installation 4x cable Ø  
flexing 10x cable Ø  
without forced operation 15x cable Ø

## Cable construction

- Tinned copper conductor, fine wire  
stranded to DIN VDE 0295 cl. 5, BS 6360  
cl. 5 and IEC 60228 cl. 5
- Rubber insulation 3GI3 (EPR), to  
DIN VDE 0207 part 20
- Green-yellow earth-core for 3-cores and  
above
- Core identification: one green-yellow earth  
core and others black cores with  
continuous white numbering to  
DIN VDE 0293-308. The basic-line prohibits  
confusion to recognise the individual cores.
- Cores stranded (multi cores)
- Rubber inner sheath, GM1b,  
rubber-compound to DIN VDE 0207 part 21
- Outer jacket, rubber-compound 5GM5 to  
DIN VDE 0207 part 21
- Colour yellow
- Imprint on outer sheath:  
VDE-code, type, number of cores and  
cross-section

## Properties

- Ozone resistance
- High insulation resistance
- Resistant against hot penetration
- Low abrasion
- High notch resistant
- **Resistant against**  
oils, fats and chemicals
- **Test of oil resistant** to DIN VDE 0472  
part 803, test method A
- **Behaviour in fire**  
according to DIN VDE 0482 part 265-2-1/  
EN 50265-2-1/ IEC 60332-1 (equivalent  
DIN VDE 0472 part 804 test method B)
- The code identification of a single core  
jacketed of an insulated wire is black. For  
application as a protective core, the ends  
are to be identified with green-yellow and  
the middle conductor with light blue.

## Note

- G = with green-yellow earth core;  
x = without green-yellow earth core.
- AWG sizes are approximate equivalent  
values. The actual cross-section is in mm<sup>2</sup>.

## Application

Are suited as a connecting cable for very high mechanical stress in underground mining and tools for use in industries and outdoor use. They are also used for mining industry, surface mining, stone-pits, on building sites, outdoors as well as indoors. Suitable for fixed installation on plaster in dry, damp and wet areas. A long duration of life is guaranteed under extreme operating conditions. Not suitable for drumming and use in all types of machinery, such as robots, handling units and energy transfer units, where constant mobility is essential. The insulation of a plastic-rubber compound on EPR basis improves the resistance to ozone in order to avoid the formation of cracks due to ozone and insulation damages in switch-boards.

CE= The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
38001	1 x 16	11,5	154,0	336,0	6
38002	1 x 25	14,5	240,0	473,0	4
38003	1 x 35	15,5	336,0	635,0	2
38004	1 x 50	18,0	480,0	866,0	1
38005	1 x 70	20,5	672,0	1145,0	2/0
38006	1 x 95	23,0	912,0	1475,0	3/0
38007	1 x 120	25,0	1152,0	1832,0	4/0
38008	1 x 150	28,0	1440,0	2000,0	300 kcmil
38009	1 x 185	30,0	1776,0	2450,0	350 kcmil
38010	1 x 240	33,0	2304,0	3190,0	500 kcmil
38011	2 x 2,5	13,2	48,0	205,0	14
38012	3 G 1,5	12,5	43,0	173,0	16
38013	3 G 2,5	14,0	72,0	247,0	14
38014	3 G 4	16,8	115,0	336,0	12
38015	3 G 6	18,1	173,0	520,0	10
38016	4 G 1,5	13,0	58,0	210,0	16
38017	4 G 2,5	16,0	96,0	305,0	14
38018	4 G 4	18,0	154,0	415,0	12
38019	4 G 6	19,5	230,0	641,0	10
38020	4 G 10	24,0	384,0	1113,0	8
38021	4 G 16	28,5	614,0	1412,0	6
38022	4 G 25	35,0	960,0	2095,0	4
38023	4 G 35	37,0	1344,0	2777,0	2

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
38024	4 G 50	44,5	1920,0	3817,0	1
38025	4 G 70	47,0	2688,0	5071,0	2/0
38026	4 G 95	54,0	3648,0	6636,0	3/0
38027	4 G 120	60,0	4608,0	7000,0	4/0
38028	5 G 1,5	14,1	72,0	252,0	16
38029	5 G 2,5	17,2	120,0	362,0	14
38030	5 G 4	19,0	192,0	509,0	12
38031	5 G 6	21,5	288,0	798,0	10
38035	5 G 10	25,0	480,0	1120,0	8
38036	5 G 16	31,0	768,0	1680,0	6
38037	5 G 25	36,5	1200,0	2430,0	4
38038	7 G 1,5	17,5	101,0	470,0	16
38032	7 G 2,5	18,5	168,0	546,0	14
38039	10 G 1,5	19,8	144,0	560,0	16
38033	12 G 2,5	24,0	288,0	851,0	14
38040	18 G 2,5	28,7	432,0	1230,0	14
38034	19 G 2,5	29,2	466,0	1260,0	14

Dimensions and specifications may be changed without prior notice.