



Technical data

- Rubber sheath cable to DIN VDE 0250 part 812
- **Temperature range**
flexing -25°C to +80°C
fixed installation -40°C to +80°C
- Permissible **operating temperature** at conductor +90°C
- **Nominal voltage** U₀/U 0,6/1 kV
- **Operating voltage** in three-phase and one-phase a.c.
U₀/U 0,7/1,2 kV
Direct current system
U₀/U 0,9/1,8 kV
- **Test voltage** 3000 V
- **Insulation resistance**
min. 20 MOhm x km
- **Tensile strength**
statical load: total cross-section x15 N/mm²
- **Minimum bending radius**
fixed installation 4x cable Ø
flexing 10x cable Ø
without forced operation 15x cable Ø

Cable structure

- Tinned copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of rubber (EPR) compound type 3GI3 to DIN VDE 0207 part 20
- Core identification to DIN VDE 0293-308
- up to 5 cores coloured
- from 6 cores, black with continuous white numbering
- GN-YE conductor, 3 cores and above
- Cores stranded in layers with optimal lay-length
- Inner sheath of rubber compound type GM1b to DIN VDE 0207 part 21
- Outer sheath of rubber compound type 5GM5 to DIN VDE 0207 part 21
- Sheath colour yellow

Properties

- Ozone resistance
- High insulation resistance
- Resistant against hot penetration
- Low abrasion
- High notch resistant
- The code identification of a single core sheathed of an insulated wire is black.

Resistant against

- oils
- fats and chemicals

Tests

- Behaviour in fire to DIN VDE 0482-332-1-2
DIN EN 60332-2-1, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Oil resistant to DIN EN 60811-404

Note

- G = with green-yellow conductor
x = without green-yellow conductor
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

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.

☞ The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Part no.	No. cores x cross-sec. mm ²	Outer Ø max. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
38001	1 x 16	13,5	154,0	336,0	6
38002	1 x 25	16,5	240,0	473,0	4
38003	1 x 35	18,0	336,0	635,0	2
38004	1 x 50	20,0	480,0	866,0	1
38005	1 x 70	22,0	672,0	1145,0	2/0
38006	1 x 95	25,0	912,0	1475,0	3/0
38007	1 x 120	27,5	1152,0	1832,0	4/0
38008	1 x 150	30,0	1440,0	2000,0	300 kcmil
38009	1 x 185	34,0	1776,0	2450,0	350 kcmil
38010	1 x 240	37,0	2304,0	3190,0	500 kcmil
38011	2 x 2,5	16,0	48,0	205,0	14
38012	3 G 1,5	15,0	43,0	173,0	16
38013	3 G 2,5	16,5	72,0	247,0	14
38014	3 G 4	20,0	115,0	336,0	12
38015	3 G 6	22,0	173,0	520,0	10
38016	4 G 1,5	16,0	58,0	210,0	16
38017	4 G 2,5	19,0	96,0	305,0	14
38018	4 G 4	21,5	154,0	415,0	12
38019	4 G 6	23,0	230,0	641,0	10
38020	4 G 10	27,5	384,0	1113,0	8
38021	4 G 16	37,0	614,0	1412,0	6
38022	4 G 25	39,0	960,0	2095,0	4

Part no.	No. cores x cross-sec. mm ²	Outer Ø max. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
38023	4 G 35	42,5	1344,0	2777,0	2
38024	4 G 50	49,0	1920,0	3817,0	1
38025	4 G 70	53,5	2688,0	5071,0	2/0
38026	4 G 95	61,5	3648,0	6636,0	3/0
38027	4 G 120	68,0	4608,0	7000,0	4/0
38028	5 G 1,5	17,0	72,0	252,0	16
38029	5 G 2,5	20,0	120,0	362,0	14
38030	5 G 4	23,0	192,0	509,0	12
38031	5 G 6	26,5	288,0	798,0	10
38035	5 G 10	30,0	480,0	1120,0	8
38036	5 G 16	34,0	768,0	1680,0	6
38037	5 G 25	42,0	1200,0	2430,0	4
38038	7 G 1,5	19,5	101,0	470,0	16
38032	7 G 2,5	21,5	168,0	546,0	14
38039	10 G 1,5	22,0	144,0	560,0	16
38033	12 G 2,5	28,0	288,0	851,0	14
38040	18 G 2,5	33,0	432,0	1230,0	14
38034	19 G 2,5	33,5	466,0	1260,0	14

Dimensions and specifications may be changed without prior notice. (RF01)