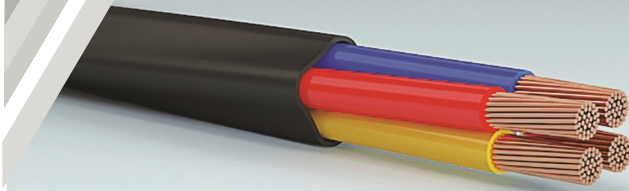


POWER



VVG

Power cable with copper core, with polyvinylchloride insulation and polyvinylchloride sheath

VVG-FR

The same as cable VVG, but with flame retardant polyvinylchloride sheath

VVG-RR-LS

The same as cable VVG, but with flame retardant and fire retardant Insulation polyvinylchloride insulation

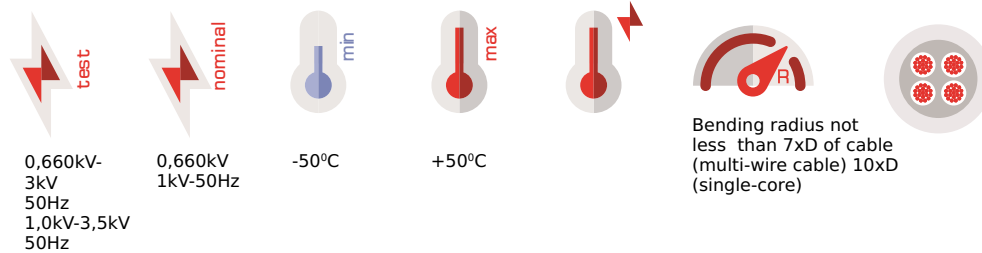
STANDARD GOST 16442-80 31996-2012

FOREIGN ANALOGUE

BBГ GOST 16442-80 | NYU- стандарт DIN VDE0276 Part 603

APPLICATION

For transmission and distribution of electric power at stationary devices with rated voltage 0,660kV and 1 kV frequency 50Hz. For stretching in the air where there is no danger of mechanical damage of the cable, also for laying into channels without influence of stretching forces. While laying the cables together, they are flame retardant



- Installation temperature: -15°C.
- Conductive lobe for long-term allowable heating temperature +70°C
- The conductor is resistant to 98% relative air humidity under +35°C conditions
- The max. allowable core heating temperature in short circuit with duration of not more than 4 seconds must not be above 160°C

CONSTRUCTION

The copper cores with cross section 1,5-6mm² inclusive are produced with 1 class flexibility, 10-240mm² are produced with twisted multi-core 2 class flexibility according to standard 22483-2012. Number of cores in the cable 1,2,3,4,5.

THE CONSTRUCTION LENGTH OF THE CABLES

Cross section of Main wire:

1.5-6mm²- 450 m
25-70 mm²- 300 m
95-240 mm²-200 m

PACKING On wooden drum or bundles (coils).

LABELING

Label attached to wooden drum or bundle, or in case of request of the customer with inscription on top: "JSC Sakcable" cable brand, manufacture year. Labeling of conductive cores with colors or figures 0,1,2,3,4 with inscription on the top of insulated cores

SERVICE LIFETIME

not less than 30 years

WARRANTY PERIOD

5 years after entering into exploitation, In the proper installation and working conditions

WVG

| Part Name | Conductor resistance [Ω/km] | Ampacity (in air) [A] | Thickness of insulation [mm] | Thickness of sheath [mm] | Outer diameter [mm] | Bending radius [mm] | Copper Weight [kg/km] | Weight [kg/km] |
|-------------------------|-----------------------------|-----------------------|------------------------------|--------------------------|---------------------|---------------------|-----------------------|----------------|
| 1 x 1,5 re | 12,1 | 22 | 0,6 | 1,2 | 5 | 50 | 13,4 | 39,43 |
| 1 x 2,5 re | 7,41 | 30 | 0,6 | 1,2 | 5,4 | 54 | 22,3 | 50,82 |
| 1 x 4 re | 4,61 | 39 | 0,7 | 1,2 | 6,08 | 61 | 35,6 | 70,09 |
| 1 x 6 re | 3,08 | 50 | 0,7 | 1,2 | 6,6 | 66 | 53,35 | 92,07 |
| 1 x 10 rm | 1,83 | 68 | 0,9 | 1,2 | 8,2 | 82 | 88,9 | 149,07 |
| 1 x 16 rm | 1,15 | 89 | 0,9 | 1,5 | 9,8 | 98 | 142,3 | 225,39 |
| 1 x 25 rm | 0,727 | 121 | 1,1 | 1,5 | 11,4 | 114 | 222,25 | 332,77 |
| 1 x35 rm | 0,524 | 147 | 1,1 | 1,5 | 12,6 | 126 | 311,2 | 431 |
| 1 x 50 rm | 0,387 | 179 | 1,3 | 1,5 | 14,3 | 143 | 444,5 | 573,95 |
| 1 x 70 rm | 0,268 | 226 | 1,4 | 1,5 | 16,2 | 162 | 622,3 | 788,85 |
| 1 x95 rm | 0,193 | 280 | 1,5 | 1,5 | 18,3 | 183 | 844,6 | 1053,6 |
| 1 x 120 rm | 0,153 | 326 | 1,5 | 1,7 | 20 | 200 | 1066,8 | 1315,66 |
| 1 x 150 rm | 0,124 | 373 | 1,6 | 1,7 | 22 | 220 | 1333,5 | 1593,02 |
| 1 x 185 rm | 0,0991 | 431 | 1,7 | 1,9 | 24,3 | 243 | 1644,7 | 1978,55 |
| 1 x 240 rm | 0,0754 | 512 | 1,9 | 1,9 | 26,8 | 268 | 2133,6 | 2554,22 |
| 3 x 1,5 re | 12,1 | 21 | 0,6 | 1,5 | 8,5 | 64 | 41,4 | 106,86 |
| 3 x 2,5 re | 7,41 | 28 | 0,6 | 1,5 | 9,4 | 71 | 68,9 | 141,02 |
| 3 x 4 re | 4,61 | 37 | 0,7 | 1,5 | 10,8 | 81 | 110 | 200,04 |
| 3 x 6 re | 3,08 | 49 | 0,7 | 1,5 | 11,3 | 85 | 164,85 | 263,23 |
| 3 x 10 rm | 1,83 | 66 | 0,9 | 1,5 | 15,5 | 116 | 274,7 | 441,13 |
| 3 x 16 rm | 1,15 | 87 | 0,9 | 1,5 | 17,6 | 132 | 439,7 | 633,69 |
| 3 x 25 rm | 0,727 | 115 | 1,1 | 1,7 | 21,4 | 161 | 686,75 | 976,37 |
| 3 x35 rm | 0,524 | 141 | 1,1 | 1,7 | 23,95 | 180 | 961,6 | 1275,54 |
| 3 x 50 rm | 0,387 | 177 | 1,3 | 1,9 | 28 | 210 | 1373,5 | 1737,89 |
| 3 x 70 rm | 0,268 | 226 | 1,4 | 1,9 | 32 | 240 | 1922,9 | 2398,4 |
| 3 x95 rm | 0,193 | 274 | 1,5 | 2,1 | 36,9 | 277 | 2609,8 | 3249,04 |
| 3 x 120 rm | 0,153 | 321 | 1,5 | 2,3 | 40 | 300 | 3296,4 | 4040,68 |
| 3 x 150 rm | 0,124 | 370 | 1,6 | 2,3 | 44,5 | 334 | 4120,5 | 4896,83 |
| 3 x 185 rm | 0,0991 | 421 | 1,7 | 2,5 | 49,1 | 368 | 5082,1 | 6064,71 |
| 3 x 240 rm | 0,0754 | 499 | 1,9 | 2,5 | 54,5 | 409 | 6592,8 | 7839,68 |
| 4 x 1,5 re | 12,1 | 20 | 0,6 | 1,5 | 9,6 | 72 | 55,2 | 130,24 |
| 4 x 2,5 re | 7,41 | 26 | 0,6 | 1,5 | 10,55 | 79 | 91,87 | 174,51 |
| 4 x 4 re | 4,61 | 34 | 0,7 | 1,5 | 12,15 | 91 | 146,67 | 251,85 |
| 4 x 6 re | 3,08 | 46 | 0,7 | 1,5 | 13,3 | 100 | 219,8 | 339,56 |
| 4 x 10 rm | 1,83 | 61 | 0,9 | 1,5 | 17,5 | 131 | 366,26 | 565,16 |
| 4 x 16 rm | 1,15 | 80 | 0,9 | 1,7 | 20,2 | 152 | 586,27 | 837,61 |
| 4 x 25 rm | 0,727 | 107 | 1,1 | 1,7 | 24 | 180 | 915,67 | 1264,77 |
| 4 x35 rm | 0,524 | 131 | 1,1 | 1,9 | 27,2 | 204 | 1282,14 | 1685,67 |
| 4 x 50 rm | 0,387 | 165 | 1,3 | 1,9 | 31,4 | 236 | 1831,3 | 2263,02 |
| 4 x 70 rm | 0,268 | 210 | 1,4 | 2,1 | 36,3 | 272 | 2563,87 | 3170,75 |
| 4 x95 rm | 0,193 | 255 | 1,5 | 2,1 | 41,4 | 311 | 3479,75 | 4252,7 |
| 4 x 120 rm | 0,153 | 299 | 1,5 | 2,3 | 44,8 | 336 | 4395,21 | 5291,94 |
| 4 x 150 rm | 0,124 | 344 | 1,6 | 2,3 | 49,8 | 374 | 5494,02 | 6424,36 |
| 4 x 185 rm | 0,0991 | 392 | 1,7 | 2,5 | 54,9 | 412 | 6776,16 | 7960,31 |
| 4 x 240 rm | 0,0754 | 464 | 1,9 | 2,5 | 60,7 | 455 | 8790,43 | 10310,6 |
| 5 x 1,5 re | 12,1 | 20 | 0,6 | 1,5 | 10,4 | 78 | 69,01 | 154,19 |
| 5 x 2,5 re | 7,41 | 26 | 0,6 | 1,5 | 11,4 | 86 | 114,85 | 208,65 |
| 5 x 4 re | 4,61 | 34 | 0,7 | 1,5 | 13,2 | 99 | 183,34 | 303,81 |
| 5 x 6 re | 3,08 | 46 | 0,7 | 1,5 | 14,5 | 109 | 274,75 | 412,27 |
| 5 x 10 rm | 1,83 | 61 | 0,9 | 1,5 | 19,2 | 144 | 457,84 | 690,46 |
| 5 x 16 rm | 1,15 | 80 | 0,9 | 1,7 | 22,3 | 167 | 732,85 | 1025,74 |
| 5 x 25 rm | 0,727 | 107 | 1,1 | 1,9 | 26,9 | 202 | 1144,59 | 1581,31 |
| 5 x35 rm | 0,524 | 131 | 1,1 | 1,9 | 30 | 225 | 1602,68 | 2074,7 |
| 5 x 50 rm | 0,387 | 165 | 1,3 | 1,9 | 34,5 | 259 | 2289,18 | 2791,33 |
| 5 x 70 rm | 0,268 | 210 | 1,4 | 2,1 | 39,9 | 299 | 3204,85 | 3915,26 |
| 5 x95 rm | 0,193 | 255 | 1,5 | 2,1 | 45,75 | 343 | 4349,69 | 5261,11 |
| 5 x 120 rm | 0,153 | 299 | 1,5 | 2,3 | 49,4 | 371 | 5494,02 | 6548,91 |
| 5 x 150 rm | 0,124 | 344 | 1,6 | 2,5 | 55,5 | 416 | 6867,53 | 8012,32 |
| 5 x 185 rm | 0,0991 | 392 | 1,7 | 2,5 | 60,8 | 456 | 8470,21 | 9863,51 |
| 3 x 2,5 re + 1 x 1,5 re | 7,41/12,1 | 28 | 0,6/0,6 | 1,5 | 10,55 | 79 | 82,7 | 165,13 |
| 3 x 4 re + 1 x 2,5 re | 4,61/7,41 | 37 | 0,7/0,6 | 1,5 | 12,15 | 91 | 132,97 | 235,85 |
| 3 x 6 re + 1 x 4 re | 3,08/4,61 | 49 | 0,7/0,7 | 1,5 | 13,2 | 99 | 201,52 | 319,89 |
| 3 x 10 rm + 1 x 6 re | 1,83/3,08 | 66 | 0,9/0,7 | 1,5 | 17,3 | 130 | 329,65 | 508,49 |
| 3 x 16 rm + 1 x 10 rm | 1,15/1,83 | 87 | 0,9/0,9 | 1,7 | 20 | 150 | 531,27 | 780,97 |

Uninsulated

Self-supporting

Mounting

Power

Control

VVG

| Part Name | Conductor resistance [Ω/km] | Ampacity (in air) [A] | Thickness of insulation [mm] | Thickness of sheath [mm] | Outer diameter [mm] | Bending radius [mm] | Copper Weight [kg/km] | Weight [kg/km] |
|------------------------|-----------------------------|-----------------------|------------------------------|--------------------------|---------------------|---------------------|-----------------------|----------------|
| 3 x 25 rm + 1 x1 6 rm | 0,727/1,15 | 115 | 1,1 /0,9 | 1,7 | 24 | 180 | 833,32 | 1166,46 |
| 3 x 35 rm + 1 x1 6 rm | 0,524/1,15 | 141 | 1,1/ 0,9 | 1,9 | 26,8 | 201 | 1108,2 | 1478,16 |
| 3 x 50 rm + 1 x25 rm | 0,387/0,727 | 177 | 1,3/ 1,1 | 1,9 | 30,3 | 227 | 1602,42 | 2024,78 |
| 3 x 70 rm + 1 x35 rm | 0,268/0,524 | 226 | 1,4 /1,2 | 2,1 | 35,3 | 265 | 2443,4 | 2815,33 |
| 3 x 95 rm + 1 x50 rm | 0,193/0,387 | 274 | 1,5/ 1,4 | 2,1 | 40,3 | 302 | 3067,64 | 3771,97 |
| 3 x 120 rm + 1 x70 rm | 0,153/0,268 | 321 | 1,5/ 1,4 | 2,3 | 43 | 323 | 3939,36 | 4775,97 |
| 3 x 150 rm + 1 x70 rm | 0,124/0,268 | 370 | 1,6/1,5 | 2,3 | 47,3 | 355 | 4761,47 | 5618,48 |
| 3 x 185 rm + 1 x95 rm | 0,0991/0,193 | 421 | 1,7/1,6 | 2,5 | 52,8 | 396 | 5951,9 | 7067,86 |
| 3 x 240 rm + 1 x120 rm | 0,0754/0,153 | 499 | 1,9/1,5 | 2,5 | 58,2 | 437 | 8051,6 | 9087,7 |

i re - Single-core
rm - Multi-core