



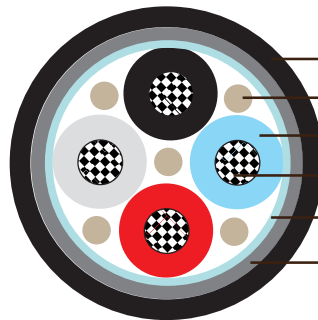
Water Blocked P17 BU 0.6/1 kV

Applications

These cables are partially water blocked, fire resistant, flame retardant, low smoke and halogen free, used for control, power and lighting systems.

Standards

- IEC 60092-353
- IEC 60092-351
- IEC 60092-359
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-2
- NEK 606:2004
- VG 95218 part 29



- Polyurethane Outer Sheath
- Water Blocking Fillers
- Mica Tape + HFEPR Insulation
- Stranded Copper Conductor
- Water Blocking tape
- SHF2 Inner Sheath

Construction

- **Conductors:** Tinned annealed stranded copper to IEC 60228 class 2.
- **Filler:** Water blocking fillers, if required.
- **Insulation:** Mica tape + Halogen free EPR.
- **Water Blocking Elements:** Water blocking tape and strings for providing longitudinal water tightness.
- **Inner Sheath:** Halogen free thermosetting compound, SHF2, coloured black.
- **Outer Sheath:** Polyurethane for providing transversal water tightness, PE is optional, but can not meet low smoke standard.

Electrical Characteristics

| | | | | | | | | | |
|---------------------------------------|-----------------|------|------|-----|------|------|------|-------|-------|
| Nominal Cross Section Area | mm ² | 1.5 | 2.5 | 4 | 6 | 10 | 16 | 25 | 35 |
| Nominal Conductor Diameter | mm | 1.6 | 2.1 | 2.6 | 3.2 | 4 | 5.1 | 6.5 | 7.4 |
| Maximum DC Resistant@20°C | Ω/km | 12.2 | 7.56 | 4.7 | 3.11 | 1.84 | 1.16 | 0.734 | 0.529 |
| Continuous Current Rating@45°C 1 Core | A | 23 | 30 | 40 | 52 | 72 | 96 | 127 | 157 |





| | | | | | | | | | |
|---|-----------------|-------|-------|-------|-------|-------|-------|--------|--------|
| Continuous Current Rating@45°C 2 Core | A | 20 | 26 | 34 | 44 | 61 | 82 | 108 | 133 |
| Continuous Current Rating@45°C 3&4 Core | A | 16 | 21 | 28 | 36 | 50 | 67 | 89 | 110 |
| Short Circuit Current 1s | A | 210 | 360 | 570 | 860 | 1430 | 2290 | 3580 | 5010 |
| Operating Voltage | KV | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 |
| Nominal Cross Section Area | mm ² | 50 | 70 | 95 | 120 | 150 | 185 | 240 | 300 |
| Nominal Conductor Diameter | mm | 8.7 | 10.3 | 12.2 | 13.8 | 15.1 | 17.0 | 19.6 | 21.9 |
| Maximum DC Resistant@20°C | Ω/km | 0.391 | 0.27 | 0.195 | 0.154 | 0.126 | 0.1 | 0.0762 | 0.0607 |
| Continuous Current Rating@45°C 1 Core | A | 196 | 242 | 293 | 339 | 389 | 444 | 522 | 601 |
| Continuous Current Rating@45°C 2 Core | A | 167 | 206 | 249 | 288 | 331 | 444 | 444 | 511 |
| Continuous Current Rating@45°C 3&4 Core | A | 137 | 169 | 205 | 237 | 272 | 311 | 365 | 421 |
| Short Circuit Current 1s | A | 7150 | 10020 | 13590 | 17170 | 21460 | 26470 | 34340 | 42930 |
| Operating Voltage | KV | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 | 0.6/1 |

Note: For more than 4-cores, the current ratings may be calculated from the following formula ($I_N = I_1 / \sqrt[3]{N}$), I_1 = Current rating for 1-core, N = Number of cores.

Ambient Temperature Correction Factors

| | | | | | | | | | | |
|--|-----|------|-----|------|------|------|------|------|------|------|
| Ambient Temperature Correction Factors | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| Rating Factor | 1.1 | 1.05 | 1.0 | 0.94 | 0.88 | 0.82 | 0.74 | 0.67 | 0.58 | 0.47 |

Mechanical and Thermal Properties

- **Bending Radius:** 8×OD (during installation); 6×OD (fixed installed)
- **Temperature Range:** -20°C ~ +90°C

Dimensions and Weight

| Construction No. of cores×Cross section(mm ²) | Nominal Insulation Thickness mm | Nominal Inner Sheath Thickness mm | Nominal Outer Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|---|---------------------------------|-----------------------------------|-----------------------------------|-----------------------------|----------------------|
| 1×1.5 | 1.0 | 1.0 | 1.0 | 8.4±2 | 68 |
| 1×2.5 | 1.0 | 1.0 | 1.0 | 8.8±2 | 79 |
| 1×4 | 1.0 | 1.0 | 1.0 | 9.4±2 | 100 |
| 1×6 | 1.0 | 1.0 | 1.0 | 9.9±2 | 126 |
| 1×10 | 1.0 | 1.1 | 1.0 | 10.8±2 | 179 |
| 1×16 | 1.0 | 1.1 | 1.0 | 12.2±2 | 252 |
| 1×25 | 1.2 | 1.2 | 1.2 | 14.4±2 | 378 |





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| Construction No. of cores×Cross section(mm ²) | Nominal Insulation Thickness mm | Nominal Inner Sheath Thickness mm | Nominal Outer Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|---------------------------------------|---|---|-----------------------------------|-------------------------|
| 1×35 | 1.2 | 1.2 | 1.2 | 15.5±2 | 478 |
| 1×50 | 1.4 | 1.3 | 1.2 | 17.1±2 | 630 |
| 1×70 | 1.4 | 1.4 | 1.2 | 19.0±2 | 845 |
| 1×95 | 1.6 | 1.5 | 1.4 | 21.8±2 | 1150 |
| 1×120 | 1.6 | 1.5 | 1.4 | 23.4±2 | 1412 |
| 1×150 | 1.8 | 1.6 | 1.4 | 25.5±2 | 1717 |
| 1×185 | 2.0 | 1.7 | 1.4 | 28.0±2 | 2174 |
| 1×240 | 2.2 | 1.8 | 1.6 | 31.6±2 | 2788 |
| 1×300 | 2.4 | 1.9 | 1.6 | 34.3±2 | 3502 |
| 2×1.5 | 1.0 | 1.1 | 1.0 | 12.3±2 | 163 |
| 2×2.5 | 1.0 | 1.2 | 1.0 | 13.0±2 | 200 |
| 2×4 | 1.0 | 1.2 | 1.0 | 14.3±2 | 263 |
| 2×6 | 1.0 | 1.3 | 1.0 | 15.4±2 | 326 |
| 2×10 | 1.0 | 1.3 | 1.0 | 17.6±2 | 467 |
| 2×16 | 1.0 | 1.4 | 1.0 | 20.2±2 | 667 |
| 2×25 | 1.2 | 1.6 | 1.2 | 24.4±2 | 1019 |
| 2×35 | 1.2 | 1.7 | 1.2 | 26.4±2 | 1276 |
| 2×50 | 1.4 | 1.8 | 1.2 | 29.8±2 | 1696 |
| 2×70 | 1.4 | 1.9 | 1.2 | 35.0±2 | 2452 |
| 2×95 | 1.6 | 2.1 | 1.4 | 40.4±2 | 3313 |
| 2×120 | 1.6 | 2.3 | 1.4 | 44.0±2 | 4069 |
| 2×150 | 1.8 | 2.4 | 1.4 | 48.2±2 | 4961 |
| 2×185 | 2.0 | 2.6 | 1.4 | 53.0±2 | 6137 |
| 2×240 | 2.2 | 2.8 | 1.6 | 60.0±2 | 7949 |
| 2×300 | 2.4 | 3.1 | 1.6 | 66.2±2 | 9865 |
| 3×1.5 | 1.0 | 1.2 | 1.0 | 12.9±2 | 189 |
| 3×2.5 | 1.0 | 1.2 | 1.0 | 13.9±2 | 242 |
| 3×4 | 1.0 | 1.2 | 1.0 | 15.1±2 | 310 |
| 3×6 | 1.0 | 1.3 | 1.0 | 16.2±2 | 394 |
| 3×10 | 1.0 | 1.4 | 1.0 | 18.5±2 | 578 |
| 3×16 | 1.0 | 1.5 | 1.0 | 21.3±2 | 835 |
| 3×25 | 1.2 | 1.6 | 1.2 | 25.9±2 | 1281 |
| 3×35 | 1.2 | 1.7 | 1.2 | 28.0±2 | 1622 |
| 3×50 | 1.4 | 1.9 | 1.2 | 31.9±2 | 2179 |
| 3×70 | 1.4 | 2.0 | 1.2 | 35.6±2 | 2914 |
| 3×95 | 1.6 | 2.2 | 1.4 | 41.3±2 | 3990 |
| 3×120 | 1.6 | 2.4 | 1.4 | 44.8±2 | 4919 |
| 3×150 | 1.8 | 2.5 | 1.4 | 49.1±2 | 5969 |
| 3×185 | 2.0 | 2.7 | 1.4 | 54.6±2 | 7576 |
| 3×240 | 2.2 | 3.0 | 1.6 | 61.2±2 | 9786 |





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| Construction No. of cores×Cross section(mm ²) | Nominal Insulation Thickness mm | Nominal Inner Sheath Thickness mm | Nominal Outer Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|---------------------------------------|---|---|-----------------------------------|-------------------------|
| 3×300 | 2.4 | 3.2 | 1.6 | 70.8±2 | 12894 |
| 4×1.5 | 1.0 | 1.2 | 1.0 | 14.1±2 | 236 |
| 4×2.5 | 1.0 | 1.2 | 1.0 | 15.0±2 | 289 |
| 4×4 | 1.0 | 1.3 | 1.0 | 16.5±2 | 383 |
| 4×6 | 1.0 | 1.4 | 1.0 | 17.8±2 | 515 |
| 4×10 | 1.0 | 1.4 | 1.0 | 20.4±2 | 730 |
| 4×16 | 1.0 | 1.5 | 1.0 | 23.5±2 | 1055 |
| 4×25 | 1.2 | 1.7 | 1.2 | 28.5±2 | 1628 |
| 4×35 | 1.2 | 1.8 | 1.2 | 30.9±2 | 2069 |
| 4×50 | 1.4 | 2.0 | 1.2 | 35.2±2 | 2777 |
| 4×70 | 1.4 | 2.2 | 1.2 | 39.3±2 | 3722 |
| 4×95 | 1.6 | 2.4 | 1.4 | 45.6±2 | 5093 |
| 4×120 | 1.6 | 2.6 | 1.4 | 49.3±2 | 6263 |
| 4×150 | 1.8 | 2.8 | 1.4 | 57.4±2 | 8421 |
| 4×185 | 2.0 | 3.0 | 1.4 | 63.1±2 | 10427 |
| 4×240 | 2.2 | 3.3 | 1.6 | 71.6±2 | 13566 |
| 4×300 | 2.4 | 3.5 | 1.6 | 78.7±2 | 16795 |
| 5×1.5 | 1.0 | 1.3 | 1.0 | 16.3±2 | 278 |
| 6×1.5 | 1.0 | 1.3 | 1.0 | 17.6±2 | 320 |
| 7×1.5 | 1.0 | 1.3 | 1.0 | 17.6±2 | 336 |
| 8×1.5 | 1.0 | 1.4 | 1.0 | 20.4±2 | 446 |
| 9×1.5 | 1.0 | 1.5 | 1.0 | 21.9±2 | 462 |
| 10×1.5 | 1.0 | 1.5 | 1.0 | 22.2±2 | 520 |
| 12×1.5 | 1.0 | 1.5 | 1.0 | 22.9±2 | 557 |
| 14×1.5 | 1.0 | 1.6 | 1.0 | 23.9±2 | 662 |
| 16×1.5 | 1.0 | 1.6 | 1.0 | 25.3±2 | 725 |
| 19×1.5 | 1.0 | 1.6 | 1.0 | 26.6±2 | 830 |
| 20×1.5 | 1.0 | 1.7 | 1.0 | 28.1±2 | 924 |
| 23×1.5 | 1.0 | 1.8 | 1.0 | 30.4±2 | 1082 |
| 24×1.5 | 1.0 | 1.8 | 1.0 | 31.2±2 | 1087 |
| 27×1.5 | 1.0 | 1.8 | 1.0 | 31.9±2 | 1134 |
| 30×1.5 | 1.0 | 1.9 | 1.0 | 33.1±2 | 1313 |
| 33×1.5 | 1.0 | 1.9 | 1.0 | 34.3±2 | 1402 |
| 37×1.5 | 1.0 | 2.0 | 1.0 | 35.8±2 | 1517 |
| 44×1.5 | 1.0 | 2.2 | 1.0 | 40.4±2 | 1853 |
| 5×2.5 | 1.0 | 1.3 | 1.0 | 16.5±2 | 357 |
| 6×2.5 | 1.0 | 1.4 | 1.0 | 19.0±2 | 415 |
| 7×2.5 | 1.0 | 1.4 | 1.0 | 19.0±2 | 441 |
| 8×2.5 | 1.0 | 1.5 | 1.0 | 22.0±2 | 562 |
| 9×2.5 | 1.0 | 1.5 | 1.0 | 23.5±2 | 588 |





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| Construction No. of cores×Cross section(mm ²) | Nominal Insulation Thickness mm | Nominal Inner Sheath Thickness mm | Nominal Outer Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|---------------------------------------|---|---|-----------------------------------|-------------------------|
| 10×2.5 | 1.0 | 1.5 | 1.0 | 23.8±2 | 651 |
| 12×2.5 | 1.0 | 1.6 | 1.0 | 24.7±2 | 714 |
| 14×2.5 | 1.0 | 1.6 | 1.0 | 25.9±2 | 851 |
| 16×2.5 | 1.0 | 1.7 | 1.0 | 27.4±2 | 940 |
| 19×2.5 | 1.0 | 1.7 | 1.0 | 28.8±2 | 1050 |
| 20×2.5 | 1.0 | 1.8 | 1.0 | 30.4±2 | 1197 |
| 23×2.5 | 1.0 | 1.9 | 1.0 | 32.9±2 | 1391 |
| 24×2.5 | 1.0 | 1.9 | 1.0 | 33.8±2 | 1407 |
| 27×2.5 | 1.0 | 1.9 | 1.0 | 34.5±2 | 1465 |
| 30×2.5 | 1.0 | 2.0 | 1.0 | 35.9±2 | 1701 |
| 33×2.5 | 1.0 | 2.0 | 1.0 | 37.2±2 | 1822 |
| 37×2.5 | 1.0 | 2.1 | 1.0 | 38.8±2 | 1958 |
| 44×2.5 | 1.0 | 2.3 | 1.0 | 43.8±2 | 2410 |



Standard



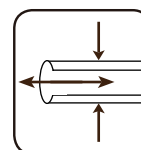
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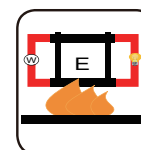
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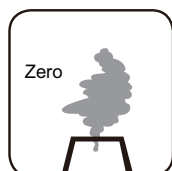
Standard



Water Tightness
VG 95218-29



Circuit Integrity
IEC 60331-21



Halogen Free
IEC60754-1



Low Corrosivity
IEC60754-2



Low Smoke Emission
IEC 61034-1&2



Flame Retardancy
IEC60332-1



Reduced Fire Propagation
IEC60332-3-22

