



GKW-RW/S 300/500V Thin Wall Multicore

Applications

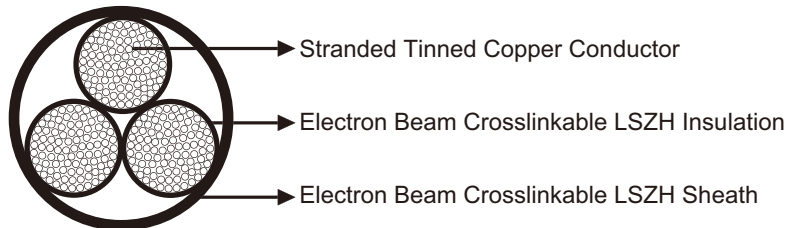
Multi core power and control cable designed for protected, fixed installation inside and outside railway vehicles for connecting fixed and moving parts in direct current and alternating voltage technology, especially converter technology.



Standard

- BS 6853 -Ia
- DIN 5510-2 1-4
- NFF 16-101 F0

Construction



- **Conductors:** Circular Class 5 stranded tinned copper to IEC60228/VDE 0295.
- **Insulation:** Electron beam crosslinkable LSZH compound.
- **Sheath:** Electron beam crosslinkable LSZH compound.

Electrical Characteristics at 20°C

| | | | | | | |
|---------------------------------|-----------------|---------|------|------|------|------|
| Nominal Conductor Cross Section | mm ² | 0.5 | 0.75 | 1 | 1.5 | 2.5 |
| Maximum Conductor Resistance | Ω/km | 40.1 | 26.7 | 20.0 | 13.7 | 8.21 |
| Voltage Rating | KV | 0.3/0.5 | | | | |

Mechanical and Thermal Properties

Minimum Bending Radius: 4xOD (Static); 6xOD (Flexing)
 Temperature Range: -60°C ~+120°C (Static); -40°C ~+90°C (Flexing)
 Short Circuit Temperature: +280°C





↳ Dimensions and Weight

| No. of cores& Nominal Conductor Cross Sectional Area No.×mm ² | Number and Nominal Diameter of Strands No./mm | Nominal Insulation Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|---|---------------------------------|-----------------------------|----------------------|
| 2×0.5 | 16/0.20 | 0.18 | 4.5 | 29 |
| 3×0.5 | 16/0.20 | 0.18 | 4.6 | 36 |
| 4×0.5 | 16/0.20 | 0.18 | 5.0 | 44 |
| 5×0.5 | 16/0.20 | 0.18 | 5.4 | 52 |
| 6×0.5 | 16/0.20 | 0.18 | 5.9 | 59 |
| 7×0.5 | 16/0.20 | 0.18 | 6.4 | 71 |
| 8×0.5 | 16/0.20 | 0.18 | 6.8 | 81 |
| 9×0.5 | 16/0.20 | 0.18 | 7.1 | 81 |
| 10×0.5 | 16/0.20 | 0.18 | 7.3 | 88 |
| 12×0.5 | 16/0.20 | 0.18 | 7.5 | 101 |
| 14×0.5 | 16/0.20 | 0.18 | 7.9 | 115 |
| 16×0.5 | 16/0.20 | 0.18 | 8.3 | 128 |
| 18×0.5 | 16/0.20 | 0.18 | 8.8 | 144 |
| 19×0.5 | 16/0.20 | 0.18 | 8.8 | 148 |
| 20×0.5 | 16/0.20 | 0.18 | 9.3 | 161 |
| 24×0.5 | 16/0.20 | 0.18 | 10.2 | 181 |
| 27×0.5 | 16/0.20 | 0.18 | 10.6 | 200 |
| 36×0.5 | 16/0.20 | 0.18 | 11.9 | 261 |
| 48×0.5 | 16/0.20 | 0.18 | 13.5 | 337 |
| 2×0.75 | 24/0.20 | 0.18 | 4.8 | 37 |
| 3×0.75 | 24/0.20 | 0.18 | 5.1 | 48 |
| 4×0.75 | 24/0.20 | 0.18 | 5.6 | 58 |
| 5×0.75 | 24/0.20 | 0.18 | 6.1 | 69 |
| 6×0.75 | 24/0.20 | 0.18 | 6.7 | 81 |
| 7×0.75 | 24/0.20 | 0.18 | 7.1 | 93 |
| 8×0.75 | 24/0.20 | 0.18 | 7.7 | 108 |
| 9×0.75 | 24/0.20 | 0.18 | 8.1 | 108 |
| 10×0.75 | 24/0.20 | 0.18 | 8.3 | 118 |
| 12×0.75 | 24/0.20 | 0.18 | 8.6 | 137 |
| 14×0.75 | 24/0.20 | 0.18 | 9.0 | 156 |
| 16×0.75 | 24/0.20 | 0.18 | 9.5 | 175 |
| 18×0.75 | 24/0.20 | 0.18 | 10.0 | 198 |
| 19×0.75 | 24/0.20 | 0.18 | 10.1 | 202 |
| 20×0.75 | 24/0.20 | 0.18 | 10.5 | 219 |
| 24×0.75 | 24/0.20 | 0.18 | 11.7 | 248 |
| 27×0.75 | 24/0.20 | 0.18 | 12.2 | 275 |
| 36×0.75 | 24/0.20 | 0.18 | 13.7 | 362 |
| 48×0.75 | 24/0.20 | 0.18 | 15.5 | 468 |
| 2×1.0 | 32/0.20 | 0.18 | 5.2 | 45 |
| 3×1.0 | 32/0.20 | 0.18 | 5.5 | 59 |
| 4×1.0 | 32/0.20 | 0.18 | 6.2 | 73 |





| No. of cores & Nominal Conductor Cross Sectional Area No. × mm ² | Number and Nominal Diameter of Strands No/mm | Nominal Insulation Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|---|--|---------------------------------|-----------------------------|----------------------|
| 5×1.0 | 32/0.20 | 0.18 | 6.7 | 87 |
| 6×1.0 | 32/0.20 | 0.18 | 7.3 | 102 |
| 7×1.0 | 32/0.20 | 0.18 | 7.9 | 119 |
| 8×1.0 | 32/0.20 | 0.18 | 8.4 | 135 |
| 9×1.0 | 32/0.20 | 0.18 | 8.9 | 137 |
| 10×1.0 | 32/0.20 | 0.18 | 9.1 | 150 |
| 12×1.0 | 32/0.20 | 0.18 | 9.4 | 174 |
| 14×1.0 | 32/0.20 | 0.18 | 9.9 | 199 |
| 16×1.0 | 32/0.20 | 0.18 | 10.4 | 223 |
| 18×1.0 | 32/0.20 | 0.18 | 11.0 | 254 |
| 19×1.0 | 32/0.20 | 0.18 | 11.1 | 259 |
| 20×1.0 | 32/0.20 | 0.18 | 11.7 | 282 |
| 24×1.0 | 32/0.20 | 0.18 | 12.9 | 319 |
| 27×1.0 | 32/0.20 | 0.18 | 13.4 | 354 |
| 36×1.0 | 32/0.20 | 0.18 | 15.1 | 467 |
| 48×1.0 | 32/0.20 | 0.18 | 17.2 | 607 |
| 2×1.5 | 30/0.25 | 0.22 | 6.0 | 59 |
| 3×1.5 | 30/0.25 | 0.22 | 6.4 | 81 |
| 4×1.5 | 30/0.25 | 0.22 | 7.1 | 99 |
| 5×1.5 | 30/0.25 | 0.22 | 7.7 | 123 |
| 6×1.5 | 30/0.25 | 0.22 | 8.5 | 143 |
| 7×1.5 | 30/0.25 | 0.22 | 9.1 | 163 |
| 8×1.5 | 30/0.25 | 0.22 | 9.8 | 188 |
| 9×1.5 | 30/0.25 | 0.22 | 10.5 | 189 |
| 10×1.5 | 30/0.25 | 0.22 | 10.7 | 215 |
| 12×1.5 | 30/0.25 | 0.22 | 11.1 | 244 |
| 14×1.5 | 30/0.25 | 0.22 | 11.7 | 279 |
| 16×1.5 | 30/0.25 | 0.22 | 12.3 | 326 |
| 18×1.5 | 30/0.25 | 0.22 | 13.0 | 358 |
| 19×1.5 | 30/0.25 | 0.22 | 13.1 | 366 |
| 20×1.5 | 30/0.25 | 0.22 | 13.7 | 396 |
| 24×1.5 | 30/0.25 | 0.22 | 15.3 | 450 |
| 27×1.5 | 30/0.25 | 0.22 | 15.9 | 501 |
| 36×1.5 | 30/0.25 | 0.22 | 17.9 | 663 |
| 37×1.5 | 30/0.25 | 0.22 | 18.5 | 719 |
| 48×1.5 | 30/0.25 | 0.22 | 20.5 | 864 |
| 2×2.5 | 50/0.25 | 0.28 | 7.1 | 89 |
| 3×2.5 | 50/0.25 | 0.28 | 7.4 | 117 |
| 4×2.5 | 50/0.25 | 0.28 | 8.3 | 150 |
| 5×2.5 | 50/0.25 | 0.28 | 9.1 | 182 |
| 6×2.5 | 50/0.25 | 0.28 | 9.9 | 209 |
| 7×2.5 | 50/0.25 | 0.28 | 10.8 | 246 |
| 8×2.5 | 50/0.25 | 0.28 | 11.7 | 285 |
| 9×2.5 | 50/0.25 | 0.28 | 12.5 | 286 |





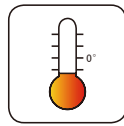
| No. of cores& Nominal Conductor Cross Sectional Area No.×mm ² | Number and Nominal Diameter of Strands No/mm | Nominal Insulation Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|--|---------------------------------|-----------------------------|----------------------|
| 10×2.5 | 50/0.25 | 0.28 | 12.7 | 318 |
| 12×2.5 | 50/0.25 | 0.28 | 13.1 | 372 |
| 14×2.5 | 50/0.25 | 0.28 | 13.9 | 428 |
| 16×2.5 | 50/0.25 | 0.28 | 14.7 | 483 |
| 18×2.5 | 50/0.25 | 0.28 | 15.2 | 538 |
| 19×2.5 | 50/0.25 | 0.28 | 15.5 | 565 |
| 20×2.5 | 50/0.25 | 0.28 | 16.4 | 612 |
| 24×2.5 | 50/0.25 | 0.28 | 18.3 | 695 |
| 27×2.5 | 50/0.25 | 0.28 | 18.9 | 776 |
| 36×2.5 | 50/0.25 | 0.28 | 21.3 | 1030 |
| 48×2.5 | 50/0.25 | 0.28 | 24.5 | 1347 |



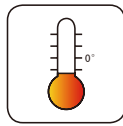
Impact Resistant



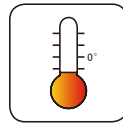
Highly Flexible



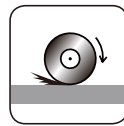
Cold Resistant



Soldering Heat Resistant



Low Temperature Resistant



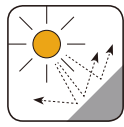
Abrasion Resistant



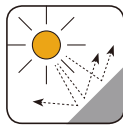
IRM 903 Fuel Oil Resistant



IRM 902 Mineral Oil Resistant



UV Resistant



Ozone Resistant



Acid and Alkali Resistant



Corona Resistant



Fire Retardant
NF C32-070-2.2(C1)
IEC 60332-3/EN50266



Flame Retardant
NF C32-070-2.1(C2)
IEC 60332-1/EN 50265-2-1



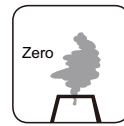
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



Low Smoke Emission
IEC 61034/NFC20-902
EN 50268/NF C32-073



Low Toxicity



Zero Halogen
IEC 60754-1/NF C20-454
EN 50267-2-1

