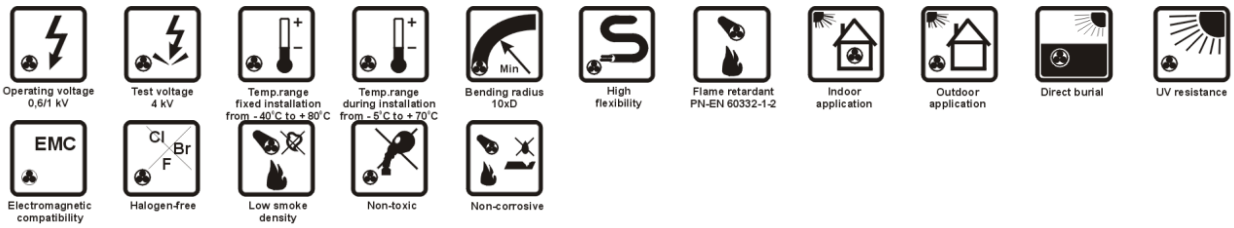
TECHNOKABEL®

CE RoHS

ISO 9001:2008

# HSLCH-JZ 0,6/1 kV, HSLCH-OZ 0,6/1 kV
# HSLCH-JB 0,6/1 kV, HSLCH-OB 0,6/1 kV

## CONTROL AND POWER SUPPLY FLEXIBLE CABLES




## APPLICATIONS

**HSLCH-JZ 0,6/1 kV, HSLCH-OZ 0,6/1 kV, HSLCH-JB 0,6/1 kV** and **HSLCH-OB 0,6/1 kV** are flexible, overall shielded cables intended for control, protection and monitoring systems or power supply, all in power engineering. The cables are also intended for wiring industrial plants, such as production lines, air-conditioning equipment etc.

The overall shield protects the cables against external electromagnetic interferences and prevents emission of interferences produced in the cables.

Halogen free cables, applied when higher safety in case of fire is required. The cables are flame retardant, their smoke emission in fire is low and released gases are not corrosive.

The cables are designed to offer high flexibility combined with tensile strength.

The cables are suitable for indoor and outdoor installations in dry and wet locations, also for direct earth burial.

Sheathing black halogen free material is resistant to UV radiation.

Cable outer sheath is oil-resistant.

## CONSTRUCTION

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 5 per PN-EN 60228,
- insulation made of halogen free compound (HFFR), identification colour code:
  **HSLCH-OZ 0,6/1 kV** - black and white conductor number printed on it,
  **HSLCH-OB 0,6/1 kV** - colours in accordance with PN-HD 308 standard,
  green-yellow protective conductor located in the outer layer in **HSLCH-JZ 0,6/1 kV** and **HSLCH-JB 0,6/1 kV** cable,
- insulated conductors laid-up in layers,
- cable core wrapped in polyester tape,
- tinned copper wire braid shield of effective density coverage,
- black cable sheath made of halogen free compound (HFFR).

TECHNOKABEL®

CE RoHS

ISO 9001:2008

# HSLCH-JZ 0,6/1 kV, HSLCH-OZ 0,6/1 kV
# HSLCH-JB 0,6/1 kV, HSLCH-OB 0,6/1 kV

## CHARACTERISTICS

| Conductor cross-section | $mm^2$ | **0.5** | **0.75** | **1.0** | **1.5** | **2.5** | **4.0** |
|---|---|---|---|---|---|---|---|
| DC conductor resistance at 20°C, maximum | Ω/km | 39.0 | 26.0 | 19.5 | 13.3 | 7.98 | 4.95 |
| Conductor cross-section | $mm^2$ | **6.0** | **10** | **16** | **25** | **35** | **50** |
| DC conductor resistance at 20°C, maximum | Ω/km | 3.30 | 1.91 | 1.21 | 0.780 | 0.554 | 0.386 |

| | |
|---|---|
| Operating voltage Uo/U | 0.6/1 kV |
| Voltage test | 4 kV rms |
| Insulation resistance, minimum | 20 MΩ·km |
| Conductor temperature limit | |
| in work conditions | + 70°C |
| at short-circuit | + 160°C |
| Operating temperature range | |
| for fixed installation | from - 40 to + 80°C |
| for movable installation | from - 5 to + 70°C |
| Minimum bending radius | 10 x cable diameter |

| | |
|---|---|
| Corrosivity of emitted gases per | PN-EN 60754-1, PN-EN 60754-2, IEC 60754-2 |
| pH appr. | 6.8 |
| conductivity appr. | 0.4 µS/mm |
| Smoke density | PN-EN 61034-2, IEC 61034-2 |
| light transmittance, minimum | 70 % |
| Cable combustibility | flame retardant |
| Combustibility tests | PN-EN 60332-1-2, IEC 60332-1-2 |
| Reference standards | WT-TK-50 |

**CE = the cable meets requirements of the low voltage directive 2014/35/EU**

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|---|---|---|---|---|
| | $mm^2$ | mm | kg/km | kg/km |
| HSLCH-JZ 0,6/1 kV | | | | |
| 1798 001 | 2x0,5 | 8.1 | 19.3 | 79 |
| 1798 002 | 3x0,5 | 8.4 | 24.6 | 91 |
| 1798 003 | 4x0,5 | 9.0 | 30.6 | 106 |
| 1798 004 | 5x0,5 | 9.7 | 40.4 | 128 |
| 1798 005 | 6x0,5 | 10.4 | 47.8 | 148 |
| 1798 006 | 7x0,5 | 10.4 | 52.6 | 150 |
| 1798 007 | 8x0,5 | 11.1 | 58.4 | 169 |
| 1798008 | 10x0,5 | 12.6 | 72.4 | 199 |
| 1798 009 | 12x0,5 | 13.0 | 82.5 | 220 |
| 1798 010 | 14x0,5 | 13.5 | 93.4 | 243 |
| 1798 011 | 16x0,5 | 14.2 | 104.8 | 271 |
| 1798 012 | 18x0,5 | 14.9 | 116.2 | 299 |
| 1798 013 | 20x0,5 | 15.5 | 127.4 | 327 |
| 1798 014 | 21x0,5 | 15.5 | 132.2 | 329 |
| 1798 015 | 27x0,5 | 17.5 | 173.3 | 405 |
| 1798 016 | 30x0,5 | 18.1 | 189.5 | 438 |
| 1798 017 | 36x0,5 | 19.4 | 222.3 | 511 |
| 1798 018 | 40x0,5 | 20.1 | 243.7 | 551 |
| 1798 019 | 44x0,5 | 21.6 | 267.6 | 598 |
| 1798 020 | 48x0,5 | 22.2 | 288.0 | 649 |
| 1798 021 | 52x0,5 | 22.8 | 309.1 | 690 |
| 1798 022 | 56x0,5 | 23.6 | 352.3 | 758 |
| 1798 023 | 61x0,5 | 24.3 | 379.2 | 807 |
| | | | | |
| 1798 024 | 2x0,75 | 8.4 | 24.6 | 87 |
| 1798 025 | 3x0,75 | 8.8 | 32.6 | 103 |
| 1798 026 | 4x0,75 | 9.4 | 41.0 | 120 |
| 1798 027 | 5x0,75 | 10.2 | 53.7 | 146 |
| 1798 028 | 6x0,75 | 10.9 | 62.7 | 168 |
| 1798 029 | 7x0,75 | 10.9 | 69.9 | 172 |
| 1798 030 | 8x0,75 | 11.7 | 79.3 | 196 |
| 1798 031 | 10x0,75 | 13.3 | 97.7 | 231 |
| 1798 032 | 12x0,75 | 13.7 | 113.5 | 258 |
| 1798 033 | 14x0,75 | 14.3 | 129.1 | 286 |
| 1798 034 | 16x0,75 | 15.0 | 145.3 | 319 |
| 1798 035 | 18x0,75 | 15.8 | 161.7 | 354 |
| 1798 036 | 20x0,75 | 16.6 | 184.9 | 396 |
| 1798 037 | 21x0,75 | 16.6 | 192.1 | 399 |
| 1798 038 | 27x0,75 | 18.6 | 241.5 | 484 |
| 1798 039 | 30x0,75 | 19.3 | 265.2 | 525 |
| 1798 040 | 36x0,75 | 20.7 | 312.8 | 615 |

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|---|---|---|---|---|
| | $mm^2$ | mm | kg/km | kg/km |
| 1798 041 | 40x0,75 | 21.4 | 343.8 | 664 |
| 1798 042 | 44x0,75 | 23.5 | 399.8 | 756 |
| 1798 043 | 48x0,75 | 23.9 | 430.4 | 806 |
| 1798 044 | 52x0,75 | 24.5 | 461.7 | 858 |
| 1798 045 | 56x0,75 | 25.4 | 493.4 | 928 |
| 1798 046 | 61x0,75 | 26.1 | 532.3 | 988 |
| | | | | |
| 1798 047 | 2x1,0 | 8.8 | 30.2 | 97 |
| 1798 048 | 3x1,0 | 9.2 | 40.6 | 115 |
| 1798 049 | 4x1,0 | 10.0 | 55.5 | 140 |
| 1798 050 | 5x1,0 | 10.7 | 67.0 | 166 |
| 1798 051 | 6x1,0 | 11.5 | 79.3 | 192 |
| 1798 052 | 7x1,0 | 11.5 | 88.9 | 198 |
| 1798 053 | 8x1,0 | 12.3 | 99.9 | 224 |
| 1798 054 | 10x1,0 | 14.1 | 123.7 | 266 |
| 1798 055 | 12x1,0 | 14.5 | 144.0 | 298 |
| 1798 056 | 14x1,0 | 15.1 | 164.7 | 332 |
| 1798 057 | 16x1,0 | 15.9 | 186.0 | 373 |
| 1798 058 | 18x1,0 | 16.8 | 214.3 | 420 |
| 1798 059 | 20x1,0 | 17.5 | 235.7 | 462 |
| 1798 060 | 21x1,0 | 17.5 | 245.3 | 466 |
| 1798 061 | 27x1,0 | 19.7 | 309.7 | 569 |
| 1798 062 | 30x1,0 | 20.4 | 340.7 | 619 |
| 1798 063 | 36x1,0 | 22.1 | 402.9 | 738 |
| 1798 064 | 40x1,0 | 22.9 | 443.8 | 799 |
| 1798 065 | 44x1,0 | 25.1 | 511.4 | 906 |
| 1798 066 | 48x1,0 | 25.5 | 551.4 | 965 |
| 1798 067 | 52x1,0 | 26.2 | 592.8 | 1030 |
| 1798 068 | 56x1,0 | 26.9 | 634.1 | 1099 |
| 1798 069 | 61x1,0 | 28.1 | 712.1 | 1215 |
| | | | | |
| 1798 070 | 2x1,5 | 9.3 | 40.8 | 111 |
| 1798 071 | 3x1,5 | 9.9 | 60.1 | 139 |
| 1798 072 | 4x1,5 | 10.6 | 76.6 | 166 |
| 1798 073 | 5x1,5 | 11.4 | 92.7 | 198 |
| 1798 074 | 6x1,5 | 12.3 | 109.5 | 231 |
| 1798 075 | 7x1,5 | 12.3 | 123.9 | 240 |
| 1798 076 | 8x1,5 | 13.2 | 140.6 | 274 |
| 1798 077 | 10x1,5 | 15.1 | 174.3 | 325 |
| 1798 078 | 12x1,5 | 15.6 | 204.4 | 368 |
| 1798 079 | 14x1,5 | 16.4 | 241.9 | 420 |
| 1798 080 | 16x1,5 | 17.2 | 273.2 | 471 |

TECHNOKABEL S.A., ul. Nasielska 55, 04-343 Warszawa, Poland
Export Department: tel +(48) 22 516 97 67, fax +(48) 22 516 97 87
www.technokabel.com.pl
export@technokabel.com.pl

TECHNOKABEL®

CE RoHS

ISO 9001:2008

# HSLCH-JZ 0,6/1 kV, HSLCH-OZ 0,6/1 kV
# HSLCH-JB 0,6/1 kV, HSLCH-OB 0,6/1 kV

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|---|---|---|---|---|
| | $mm^2$ | mm | kg/km | kg/km |
| 1798 081 | 18x1,5 | 18.1 | 304.7 | 524 |
| 1798 082 | 20x1,5 | 19.0 | 336.3 | 578 |
| 1798 083 | 21x1,5 | 19.0 | 350.7 | 586 |
| 1798 084 | 27x1,5 | 21.4 | 444.6 | 719 |
| 1798 085 | 30x1,5 | 22.3 | 489.9 | 793 |
| 1798 086 | 36x1,5 | 24.2 | 604.4 | 958 |
| 1798 087 | 40x1,5 | 25.3 | 665.8 | 1053 |
| 1798 088 | 44x1,5 | 27.5 | 758.0 | 1172 |
| 1798 089 | 48x1,5 | 28.1 | 817.7 | 1266 |
| 1798 090 | 52x1,5 | 28.9 | 879.5 | 1352 |
| 1798 091 | 56x1,5 | 29.7 | 941.4 | 1444 |
| 1798 092 | 61x1,5 | 30.5 | 1017.5 | 1544 |
| | | | | |
| 1798 093 | 2x2,5 | 10.7 | 67.0 | 147 |
| 1798 094 | 3x2,5 | 11.2 | 92.2 | 180 |
| 1798 095 | 4x2,5 | 12.1 | 118.6 | 217 |
| 1798 096 | 5x2,5 | 13.1 | 145.2 | 263 |
| 1798 097 | 6x2,5 | 14.2 | 172.0 | 310 |
| 1798 098 | 7x2,5 | 14.2 | 196.0 | 323 |
| 1798 099 | 8x2,5 | 15.2 | 222.6 | 369 |
| 1798 100 | 10x2,5 | 17.8 | 284.6 | 451 |
| 1798 101 | 12x2,5 | 18.3 | 334.1 | 512 |
| 1798 102 | 14x2,5 | 19.2 | 384.9 | 578 |
| 1798 103 | 16x2,5 | 20.2 | 436.0 | 652 |
| 1798 104 | 18x2,5 | 21.3 | 487.4 | 727 |
| 1798 105 | 20x2,5 | 22.5 | 538.6 | 816 |
| 1798 106 | 21x2,5 | 22.5 | 562.6 | 826 |
| 1798 107 | 27x2,5 | 25.9 | 740.2 | 1054 |
| 1798 108 | 30x2,5 | 26.8 | 816.1 | 1149 |
| 1798 109 | 36x2,5 | 29.2 | 996.3 | 1399 |
| 1798 110 | 40x2,5 | 30.3 | 1098.2 | 1519 |
| 1798 111 | 44x2,5 | 32.9 | 1206.9 | 1674 |
| 1798 112 | 48x2,5 | 33.5 | 1306.0 | 1794 |
| 1798 113 | 52x2,5 | 34.6 | 1406.8 | 1935 |
| 1798 114 | 56x2,5 | 35.6 | 1508.1 | 2069 |
| 1798 115 | 61x2,5 | 36.8 | 1664.9 | 2241 |
| | | | | |
| 1798 116 | 2x4 | 11.7 | 98.5 | 187 |
| 1798 117 | 3x4 | 12.3 | 138.3 | 236 |
| 1798 118 | 4x4 | 13.3 | 179.3 | 289 |
| 1798 119 | 5x4 | 14.5 | 220.8 | 354 |
| 1798 120 | 7x4 | 15.6 | 300.4 | 441 |
| | | | | |
| 1798 121 | 2x6 | 12.8 | 139.6 | 235 |
| 1798 122 | 3x6 | 13.5 | 199.0 | 303 |
| 1798 123 | 4x6 | 14.7 | 259.7 | 377 |
| 1798 124 | 5x6 | 16.1 | 327.4 | 471 |
| 1798 125 | 7x6 | 17.5 | 446.9 | 596 |
| HSLCH-OZ 0,6/1 kV | | | | |
| 1799 001 | 2x0,5 | 8.1 | 19.3 | 79 |
| 1799 002 | 3x0,5 | 8.4 | 24.6 | 91 |
| 1799 003 | 4x0,5 | 9.0 | 30.6 | 106 |
| 1799 004 | 5x0,5 | 9.7 | 40.4 | 128 |
| 1799 005 | 7x0,5 | 10.4 | 52.6 | 150 |
| | | | | |
| 1799 006 | 2x0,75 | 8.4 | 24.6 | 87 |
| 1799 007 | 3x0,75 | 8.8 | 32.6 | 103 |
| 1799 008 | 4x0,75 | 9.4 | 41.0 | 120 |
| 1799 009 | 5x0,75 | 10.2 | 53.7 | 146 |
| 1799 010 | 7x0,75 | 10.9 | 69.9 | 172 |
| | | | | |
| 1799 011 | 2x1 | 8.8 | 30.2 | 97 |
| 1799 012 | 3x1 | 9.2 | 40.6 | 115 |

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|---|---|---|---|---|
| | $mm^2$ | mm | kg/km | kg/km |
| 1799 013 | 4x1 | 10.0 | 55.5 | 140 |
| 1799 014 | 5x1 | 10.7 | 67.0 | 166 |
| 1799 015 | 7x1 | 11.5 | 88.9 | 198 |
| | | | | |
| 1799 016 | 2x1,5 | 9.3 | 40.8 | 111 |
| 1799 017 | 3x1,5 | 9.9 | 60.1 | 139 |
| 1799 018 | 4x1,5 | 10.6 | 76.6 | 166 |
| 1799 019 | 5x1,5 | 11.4 | 92.7 | 198 |
| 1799 020 | 7x1,5 | 12.3 | 123.9 | 240 |
| | | | | |
| 1799 021 | 2x2,5 | 10.7 | 67.0 | 147 |
| 1799 022 | 3x2,5 | 11.2 | 92.2 | 180 |
| 1799 023 | 4x2,5 | 12.1 | 118.6 | 217 |
| 1799 024 | 5x2,5 | 13.1 | 145.2 | 263 |
| 1799 025 | 7x2,5 | 14.2 | 196.0 | 323 |
| | | | | |
| 1799 026 | 2x4 | 11.7 | 98.5 | 187 |
| 1799 027 | 3x4 | 12.3 | 138.3 | 236 |
| 1799 028 | 4x4 | 13.3 | 179.3 | 289 |
| 1799 029 | 5x4 | 14.5 | 220.8 | 354 |
| 1799 030 | 7x4 | 15.6 | 300.4 | 441 |
| | | | | |
| 1799 031 | 2x6 | 12.8 | 139.6 | 235 |
| 1799 032 | 3x6 | 13.5 | 199.0 | 303 |
| 1799 033 | 4x6 | 14.7 | 259.7 | 377 |
| 1799 034 | 5x6 | 16.1 | 327.4 | 471 |
| 1799 035 | 7x6 | 17.5 | 446.9 | 596 |
| HSLCH-JB 0,6/1 kV | | | | |
| 1800 001 | 3x0,5 | 8.4 | 24.6 | 91 |
| 1800 002 | 5x0,5 | 9.7 | 40.4 | 128 |
| 1800 003 | 3x0,75 | 8.8 | 32.6 | 103 |
| 1800 004 | 5x0,75 | 10.2 | 53.7 | 146 |
| 1800 005 | 3x1,0 | 9.2 | 40.6 | 115 |
| 1800 006 | 5x1,0 | 10.7 | 67.0 | 166 |
| 1800 007 | 3x1,5 | 9.9 | 60.1 | 139 |
| 1800 008 | 5x1,5 | 11.4 | 92.7 | 198 |
| 1800 009 | 3x2,5 | 11.2 | 92.2 | 180 |
| 1800 010 | 5x2,5 | 13.1 | 145.2 | 263 |
| 1800 011 | 3x4 | 12.3 | 138.3 | 236 |
| 1800 012 | 5x4 | 14.5 | 220.8 | 354 |
| 1800 013 | 3x6 | 13.5 | 199.0 | 303 |
| 1800 014 | 5x6 | 16.1 | 327.4 | 471 |
| HSLCH-OB 0,6/1 kV | | | | |
| 1801 001 | 2x0,5 | 8.1 | 19.3 | 79 |
| 1801 002 | 4x0,5 | 9.0 | 30.6 | 106 |
| 1801 003 | 2x0,75 | 8.4 | 24.6 | 87 |
| 1801 004 | 4x0,75 | 9.4 | 41.0 | 120 |
| 1801 005 | 2x1,0 | 8.8 | 30.2 | 97 |
| 1801 006 | 4x1,0 | 10.0 | 55.5 | 140 |
| 1801 007 | 2x1,5 | 9.3 | 40.8 | 111 |
| 1801 008 | 4x1,5 | 10.6 | 76.6 | 166 |
| 1801 009 | 2x2,5 | 10.7 | 67.0 | 147 |
| 1801 010 | 4x2,5 | 12.1 | 118.6 | 217 |
| 1801 011 | 2x4 | 11.7 | 98.5 | 187 |
| 1801 012 | 4x4 | 13.3 | 179.3 | 289 |
| 1801 013 | 2x6 | 12.8 | 139.6 | 235 |
| 1801 014 | 4x6 | 14.7 | 259.7 | 377 |

**Other cross-sections and conductor counts available on request.**
**TECHNOKABEL S.A. reserves the right to change specifications without prior notice.**

TECHNOKABEL S.A., ul. Nasielska 55, 04-343 Warszawa, Poland
Export Department: tel +(48) 22 516 97 67, fax +(48) 22 516 97 87
www.technokabel.com.pl
export@technokabel.com.pl