

R 200 C

Continuously flexible TPE/PUR control cable with numbered cores and overall copper screen



Construction:

| | |
|--------------------------------------|--|
| Conductor: | bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6 |
| Insulation: | TPE |
| Colour code from 2 conductors | black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores |
| Stranding: | specially adjusted layering with non-woven tape over each layer |
| Inner sheath: | SABIX® |
| Wrapping: | non-woven tape |
| Screen: | tinned copper braiding |
| Wrapping: | non-woven tape |
| Sheath material: | PUR, TPU acc. to DIN VDE 0282 part 10 + HD 22.10 with mat surface |
| Sheath colour: | grey (RAL 7000) |

Technical data:

| | |
|--|--|
| Nominal voltage: | U ₀ /U 300/500 V |
| Testing voltage U: | 2000 V acc. to DIN VDE 0281 part 2 + HD 21.2 core/screen 2000 V |
| Min. bending radius <i>continuously flexible:</i> | 7,5 x d |
| Radiation resistance: | 5 x 10 ⁷ cJ/kg |
| Temperature range <i>fixed laying:</i> <i>flexible application:</i> | -50/+90 °C -40/+90 °C |
| Halogen-free: | acc. to DIN VDE 0472 part 815 + IEC 60754-1 |
| Oil resistance: | very good - TPU acc. to DIN VDE 0282 part 10 + HD 22.10 |
| Chem. resistance: | good against acids, alkalines, solvents, hydraulic liquids etc.. |
| Continuous flexibility: | very good |
| Weather resistance: | very good |
| Absence of harmful substances: | acc. to RoHS directive of the European Union see page N/14 |

Outstanding features:

- **labs uncritical**
(labs = enamel moisturing interfering substances)
- **flexible at low temperatures**
- **halogen-free**
- **travel > 10 m is possible**
- **good EMC characteristics**
- **high abrasion resistance**
- **min. bending radius**
- **small outer diameter**

Also available as hybrid cable for example

3G1,0 + 16 x 0,34 mm²

3G1,0 + 8 x 0,34 mm²

1G0,5 + 4 x 0,34 mm²

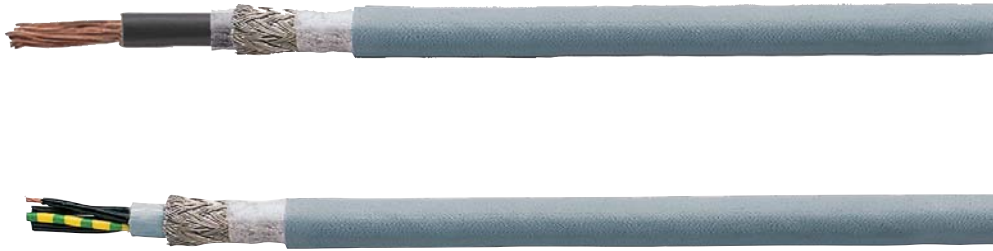
Peak operating voltage of data conductors: max. 500 V

| no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 2 x 0,50 | 0,16 | 6,8 | 38,4 | 51 |
| 3 x 0,50 | 0,16 | 7,0 | 43,6 | 58 |
| 4 x 0,50 | 0,16 | 7,4 | 51,1 | 67 |
| 5 x 0,50 | 0,16 | 7,9 | 61,5 | 77 |
| 7 x 0,50 | 0,16 | 9,0 | 74,1 | 101 |
| 12 x 0,50 | 0,16 | 10,6 | 108,2 | 151 |
| 18 x 0,50 | 0,16 | 12,2 | 143,0 | 203 |
| 25 x 0,50 | 0,16 | 14,8 | 217,0 | 299 |
| 36 x 0,50 | 0,16 | 16,4 | 275,3 | 379 |
| 52 x 0,50 | 0,16 | 19,2 | 379,7 | 524 |
| 65 x 0,50 | 0,16 | 21,7 | 451,5 | 647 |

| no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 2 x 0,75 | 0,16 | 7,3 | 46,3 | 59 |
| 3 x 0,75 | 0,16 | 7,6 | 54,1 | 70 |
| 4 x 0,75 | 0,16 | 8,0 | 64,0 | 82 |
| 5 x 0,75 | 0,16 | 8,8 | 74,3 | 98 |
| 7 x 0,75 | 0,16 | 9,8 | 92,3 | 123 |
| 12 x 0,75 | 0,16 | 11,9 | 142,4 | 192 |
| 18 x 0,75 | 0,16 | 14,2 | 215,3 | 294 |
| 25 x 0,75 | 0,16 | 16,6 | 289,7 | 386 |
| 36 x 0,75 | 0,16 | 18,7 | 387,7 | 520 |
| 52 x 0,75 | 0,16 | 21,9 | 514,3 | 722 |
| 65 x 0,75 | 0,16 | 24,5 | 639,8 | 868 |

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| no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 2 x 1,00 | 0,16 | 7,7 | 56,5 | 68 |
| 3 x 1,00 | 0,16 | 8,0 | 66,4 | 82 |
| 4 x 1,00 | 0,16 | 8,5 | 77,3 | 97 |
| 5 x 1,00 | 0,16 | 9,3 | 89,0 | 114 |
| 7 x 1,00 | 0,16 | 10,7 | 117,9 | 159 |
| 12 x 1,00 | 0,16 | 12,8 | 174,9 | 239 |
| 18 x 1,00 | 0,16 | 15,2 | 270,2 | 353 |
| 25 x 1,00 | 0,16 | 18,4 | 367,5 | 481 |
| 36 x 1,00 | 0,16 | 20,3 | 478,7 | 633 |
| 52 x 1,00 | 0,16 | 23,8 | 668,9 | 884 |
| 65 x 1,00 | 0,16 | 26,8 | 805,7 | 1081 |
| 1 x 1,50 | 0,16 | 4,6 | 24,8 | 35 |
| 2 x 1,50 | 0,16 | 8,3 | 66,8 | 82 |
| 3 x 1,50 | 0,16 | 8,8 | 81,5 | 104 |
| 4 x 1,50 | 0,16 | 9,4 | 101,2 | 125 |
| 5 x 1,50 | 0,16 | 10,1 | 122,2 | 145 |
| 7 x 1,50 | 0,16 | 11,9 | 156,8 | 206 |
| 12 x 1,50 | 0,16 | 14,7 | 269,7 | 341 |
| 18 x 1,50 | 0,16 | 16,9 | 369,2 | 465 |
| 25 x 1,50 | 0,16 | 20,4 | 493,4 | 633 |
| 36 x 1,50 | 0,16 | 23,0 | 660,3 | 856 |
| 52 x 1,50 | 0,16 | 26,9 | 931,0 | 1056 |
| 65 x 1,50 | 0,16 | 29,9 | 1132,8 | 1450 |
| 1 x 2,50 | 0,16 | 5,3 | 38,0 | 49 |
| 2 x 2,50 | 0,16 | 9,9 | 98,2 | 117 |
| 3 x 2,50 | 0,16 | 10,6 | 122,8 | 159 |
| 4 x 2,50 | 0,16 | 11,5 | 150,1 | 197 |
| 5 x 2,50 | 0,16 | 12,6 | 179,6 | 236 |
| 7 x 2,50 | 0,16 | 15,0 | 265,2 | 335 |
| 12 x 2,50 | 0,16 | 18,5 | 417,1 | 525 |
| 18 x 2,50 | 0,16 | 21,8 | 571,4 | 739 |
| 25 x 2,50 | 0,16 | 26,0 | 780,8 | 1004 |
| 36 x 2,50 | 0,16 | 28,7 | 1058,0 | 1341 |
| 52 x 2,50 | 0,16 | 33,0 | 1479,3 | 1817 |
| 1 x 4,00 | 0,16 | 6,0 | 54,4 | 68 |

| no. of cores x cross section n x mm ² | largest single wire ø mm | outer-ø ± 5% mm | copper figure kg/km | cable weight ≈ kg/km |
|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| 2 x 4,00 | 0,16 | 11,9 | 132,8 | 179 |
| 3 x 4,00 | 0,16 | 12,1 | 172,9 | 224 |
| 4 x 4,00 | 0,16 | 13,7 | 216,5 | 287 |
| 5 x 4,00 | 0,16 | 15,0 | 289,2 | 357 |
| 7 x 4,00 | 0,16 | 18,0 | 396,3 | 486 |
| 1 x 6,00 | 0,21 | 6,6 | 75,3 | 90 |
| 2 x 6,00 | 0,21 | 13,7 | 182,6 | 251 |
| 3 x 6,00 | 0,21 | 14,6 | 258,8 | 334 |
| 4 x 6,00 | 0,21 | 15,9 | 328,3 | 414 |
| 5 x 6,00 | 0,21 | 17,2 | 398,4 | 485 |
| 7 x 6,00 | 0,21 | 20,6 | 537,3 | 615 |
| 1 x 10,0 | 0,21 | 7,7 | 117,5 | 135 |
| 3 x 10,0 | 0,21 | 17,4 | 392,9 | 502 |
| 4 x 10,0 | 0,21 | 18,7 | 507,4 | 624 |
| 5 x 10,0 | 0,21 | 20,5 | 615,5 | 731 |
| 1 x 16,0 | 0,21 | 9,1 | 179,9 | 206 |
| 3 x 16,0 | 0,21 | 20,7 | 598,4 | 724 |
| 4 x 16,0 | 0,21 | 22,5 | 758,2 | 915 |
| 5 x 16,0 | 0,21 | 24,7 | 947,1 | 1101 |
| 1 x 25,0 | 0,21 | 10,7 | 287,7 | 306 |
| 3 x 25,0 | 0,21 | 23,9 | 898,2 | 1047 |
| 4 x 25,0 | 0,21 | 25,8 | 1148,0 | 1312 |
| 5 x 25,0 | 0,21 | 29,1 | 1400,1 | 1610 |
| 1 x 35,0 | 0,21 | 12,5 | 390,6 | 408 |
| 4 x 35,0 | 0,21 | 30,1 | 1546,4 | 1765 |
| 5 x 35,0 | 0,21 | 33,1 | 1915,1 | 2119 |
| 1 x 50,0 | 0,31 | 14,9 | 577,2 | 601 |
| 4 x 50,0 | 0,31 | 35,5 | 2165,3 | 2471 |
| 1 x 70,0 | 0,31 | 17,7 | 783,1 | 826 |
| 1 x 95,0 | 0,31 | 21,5 | 1051,2 | 1122 |
| 1 x 120,0 | 0,31 | 22,7 | 1293,1 | 1356 |
| 1 x 150,0 | 0,31 | 26,2 | 1611,0 | 1712 |
| 1 x 185,0 | 0,41 | 27,9 | 1952,4 | 2059 |
| 1 x 240,0 | 0,41 | 31,3 | 2507,0 | 2617 |

Other dimensions and colours are possible on request.