

SABIX® R flex Continuously flexible SABIX® Rail cable with numbered cores

BRÖCKSKES · D-VIERSEN · SABIX R flex 5G0,75 mm² CE



Marking for SABIX R flex 66701105:

SAB BRÖCKSKES · D-VIERSEN · SABIX R flex 5G0,75 mm² CE

A
54

Construction:

| | |
|-------------------------|---|
| Conductor: | bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6 |
| Insulation: | special Polymer |
| Colour code: | black cores with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 cores. Twisted pairs type without green-yellow earth wire |
| Stranding: | in layers resp. pairwise |
| Wrapping: | PP foil |
| Screen: | tinned copper braiding (if existing) |
| Sheath material: | SABIX® Ultra |
| Sheath colour: | black (RAL 9005) |

Outstanding features:

- halogen-free
- continuously flexible
- good EMC characteristics*
- no flame propagation
- flame retardant and self-extinguishing
- good ozone and UV resistance
- good oil and fuel resistance
- good acid and alkalines resistance
- fulfils fire protection requirements R15 (EL1A) and R16 (EL1B) acc. to EN 45545-2 for hazard levels HL1-2

* (screened version) Copper braiding should be connected circularly to optimize the EMC characteristics

Technical data:

| | | |
|---------------------------------------|---|----------|
| Nominal voltage: | U ₀ /U 300/500 V | |
| Testing voltage: | 2000 V | |
| Min. bending radius | unshielded | shielded |
| <i>fixed laying:</i> | 4 x d | 5 x d |
| <i>flexible application:</i> | 6 x d | 10 x d |
| <i>continuously flexible:</i> | 12 x d | 15 x d |
| Temperature range | | |
| <i>fixed laying:</i> | -50/+90 °C | |
| <i>flexible application:</i> | -40/+90 °C | |
| Halogen-free: | acc. to DIN EN 50306-1 + DIN EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to DIN EN 50267-2-1. pH-value is > 4,3 acc. to DIN EN 50267-2-2. Conductivity is < 10,0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0,1% acc. to DIN EN 60684-2. | |
| Fire performance: | No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2. | |
| Toxicity: | acc. to DIN EN 50305 | |
| Smoke density: | acc. to DIN EN 61034 | |
| Oil and fuel resistance: | acc. to DIN EN 50264-1 | |
| Flexibility: | very good | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union see page N/17 | |



Suitable for flexible and protected installation in the interior for door control or in protecting tubes for outdoor laying at the bogie, railway machines or as connection cable between the waggons. Appropriate for light and medium mechanical stress.

| item no. | 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 |
|------------------------------------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| multi-core cable unscreened | | | | | |
| 66700002 | 2 x 0,50 | 0,16 | 4,6 | 9,6 | 31 |
| 66700004 | 4 x 0,50 | 0,16 | 5,4 | 19,2 | 47 |
| 66700007 | 7 x 0,50 | 0,16 | 6,9 | 33,6 | 76 |
| 66700012 | 12 x 0,50 | 0,16 | 8,4 | 57,6 | 113 |
| 66700018 | 18 x 0,50 | 0,16 | 9,9 | 86,4 | 160 |
| 66700032 | 32 x 0,50 | 0,16 | 12,8 | 153,6 | 267 |
| 66700103 | 3 x 0,75 | 0,16 | 5,6 | 21,6 | 51 |
| 66700105 | 5 x 0,75 | 0,16 | 6,7 | 36,0 | 75 |
| 66700125 | 25 x 0,75 | 0,16 | 13,8 | 180,0 | 303 |
| 66700202 | 2 x 1,00 | 0,16 | 5,7 | 19,2 | 49 |
| 66700273 | 73 x 1,00 | 0,16 | 23,0 | 700,8 | 989 |
| 66700303 | 3 x 1,50 | 0,16 | 6,6 | 43,2 | 81 |
| 66700307 | 7 x 1,50 | 0,16 | 9,4 | 100,8 | 167 |
| 66700318 | 18 x 1,50 | 0,16 | 13,7 | 259,2 | 376 |

Other dimensions and colours are possible on request.

| item no. | 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 |
|----------------------------------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| multi-pair cable screened | | | | | |
| 66703002 | 2 x 2 x 0,50 | 0,16 | 7,0 | 36,9 | 69 |
| 66703003 | 3 x 2 x 0,50 | 0,16 | 8,0 | 49,4 | 90 |
| 66703004 | 4 x 2 x 0,50 | 0,16 | 10,0 | 65,3 | 121 |
| 66703006 | 6 x 2 x 0,50 | 0,16 | 10,4 | 103,4 | 161 |
| 66703008 | 8 x 2 x 0,50 | 0,16 | 12,5 | 129,4 | 229 |
| 66703012 | 12 x 2 x 0,50 | 0,16 | 14,3 | 177,1 | 278 |
| 66703103 | 3 x 2 x 0,75 | 0,16 | 8,9 | 69,2 | 113 |
| 66703108 | 8 x 2 x 0,75 | 0,16 | 14,6 | 177,6 | 306 |
| 66703202 | 2 x 2 x 1,00 | 0,16 | 8,9 | 64,4 | 111 |
| 66703203 | 3 x 2 x 1,00 | 0,16 | 9,5 | 83,9 | 135 |
| 66703206 | 6 x 2 x 1,00 | 0,16 | 12,6 | 168,0 | 249 |
| 66703208 | 8 x 2 x 1,00 | 0,16 | 15,1 | 220,8 | 357 |
| 66703302 | 2 x 2 x 1,50 | 0,16 | 10,3 | 103,2 | 157 |
| 66703304 | 4 x 2 x 1,50 | 0,16 | 12,7 | 168,1 | 243 |
| 66703306 | 6 x 2 x 1,50 | 0,16 | 14,3 | 234,7 | 345 |

Other dimensions and colours are possible on request.

| item no. | 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 |
|----------------------------------|--|--------------------------------|-----------------------|---------------------------|----------------------------|
| multi-core cable screened | | | | | |
| 66701002 | 2 x 0,50 | 0,16 | 5,3 | 24,8 | 46 |
| 66701003 | 3 x 0,50 | 0,16 | 5,5 | 29,8 | 51 |
| 66701005 | 5 x 0,50 | 0,16 | 6,5 | 40,3 | 71 |
| 66701007 | 7 x 0,50 | 0,16 | 7,4 | 53,8 | 91 |
| 66701018 | 18 x 0,50 | 0,16 | 10,8 | 132,5 | 200 |
| 66701032 | 32 x 0,50 | 0,16 | 13,7 | 214,5 | 317 |
| 66701103 | 3 x 0,75 | 0,16 | 6,1 | 37,7 | 62 |
| 66701104 | 4 x 0,75 | 0,16 | 6,7 | 46,2 | 76 |
| 66701105 | 5 x 0,75 | 0,16 | 7,2 | 55,9 | 90 |
| 66701125 | 25 x 0,75 | 0,16 | 14,5 | 242,3 | 351 |
| 66701204 | 4 x 1,00 | 0,16 | 6,9 | 56,0 | 87 |
| 66701207 | 7 x 1,00 | 0,16 | 8,7 | 90,1 | 137 |
| 66701212 | 12 x 1,00 | 0,16 | 11,0 | 161,6 | 224 |
| 66701303 | 3 x 1,50 | 0,16 | 7,1 | 61,0 | 92 |
| 66701304 | 4 x 1,50 | 0,16 | 7,6 | 78,0 | 111 |
| 66701305 | 5 x 1,50 | 0,16 | 8,5 | 94,8 | 137 |
| 66701318 | 18 x 1,50 | 0,16 | 14,4 | 321,3 | 417 |
| 66701404 | 4 x 2,50 | 0,16 | 9,7 | 122,5 | 174 |
| 66701405 | 5 x 2,50 | 0,16 | 11,0 | 166,4 | 235 |
| 66701407 | 7 x 2,50 | 0,16 | 13,2 | 288,3 | 324 |
| 66701412 | 12 x 2,50 | 0,16 | 15,7 | 356,2 | 465 |
| 66701504 | 4 x 4,00 | 0,16 | 11,4 | 200,6 | 260 |
| 66701604 | 4 x 6,00 | 0,21 | 13,9 | 291,6 | 380 |
| 66701704 | 4 x 10,00 | 0,21 | 16,8 | 483,2 | 605 |
| 66701804 | 4 x 16,00 | 0,21 | 20,2 | 730,4 | 885 |
| 66701904 | 4 x 25,00 | 0,21 | 24,1 | 1113,6 | 1293 |

Other dimensions and colours are possible on request.