

# Halogen-free Cables

## SABIX® D 305 FRNC

Flexible data cable with improved fire performance and extended temperature range



D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm<sup>2</sup> CE



Marking for SABIX® D 305 FRNC 63053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm<sup>2</sup> CE

### Construction:

|                         |   |
|-------------------------|---|
| <b>Conductor:</b>       | bare copper strands<br>with reference to VDE 0812 |
| <b>Insulation:</b>      | SABIX®  |
| <b>Color code:</b>      | DIN 47100, see below                              |
| <b>Stranding:</b>       | in layers   |
| <b>Jacket material:</b> | SABIX®  |
| <b>Jacket color:</b>    | grayish tan (RAL 7015)                            |

### Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- easy stripping
- low capacitance
- flexible

### Technical data:

|                                       |  |
|---------------------------------------|--|
| <b>Peak operating voltage:</b>        | < 24 AWG = max. 350 V<br>≥ 24 AWG = max. 500 V   |
| <b>Testing voltage:</b>               | conductor/conductor: 1500 V  |
| <b>Min. bending radius:</b>           | <i>fixed installation:</i> 5 x O.D.<br><i>free movement:</i> 10 x O.D.   |
| <b>Temperature range:</b>             | <i>static:</i> -40/+85°C<br><i>flexible:</i> -30/+85°C   |
| <b>Halogen-free:</b>                  | acc. to IEC 60754-1 + VDE 0482-754-1   |
| <b>Burning characteristics:</b>       | no flame propagation<br>acc. to IEC 60332-3-24 + VDE 0482-332-3-24<br>resp. IEC 60332-3-25 + VDE 0482-332-3-25<br>cat. C resp. D<br>Flame retardant and self-extinguishing<br>acc. to IEC 60332-1-2 + VDE 0482-332-1-2 |
| <b>Corrosivity:</b>                   | in compliance with<br>IEC 60754-2 + VDE 0482-754-2 -<br>no development of corrosive conflagration gases  |
| <b>Smoke density:</b>                 | acc. to IEC 61034 + VDE 0482-1034  |
| <b>Flexibility:</b>                   | good   |
| <b>Approvals:</b>                     | CE, EAC, RoHS  |
| <b>Absence of harmful substances:</b> | acc. to RoHS directive of the European Union<br>see page O/30  |

| item no.  | no. of conductors | nominal outer-ø |           | cable weight<br>≈lbs/mft |
|---|-------------------|-----------------|-----------|--------------------------|
|   |                   | inch<br>±5%     | mm<br>±5% |                          |
| <b>▶ 26 AWG (≈ 18/38) · 0.14 mm<sup>2</sup></b> |                   |                 |           |                          |
| 63050214  | 2                 | 0.130           | 3.3       | 11                       |
| 63050314  | 3                 | 0.138           | 3.5       | 12                       |
| 63050414  | 4                 | 0.146           | 3.7       | 13                       |
| 63050514  | 5                 | 0.154           | 3.9       | 15                       |
| 63050714  | 7                 | 0.169           | 4.3       | 19                       |
| 63050814  | 8                 | 0.205           | 5.2       | 24                       |
| 63051214  | 12                | 0.217           | 5.5       | 28                       |
| 63051414  | 14                | 0.224           | 5.7       | 32                       |
| 63051614  | 16                | 0.244           | 6.2       | 37                       |
| 63051814  | 18                | 0.256           | 6.5       | 41                       |
| 63052114  | 21                | 0.280           | 7.1       | 48                       |
| 63052414  | 24                | 0.295           | 7.5       | 54                       |
| 63052714  | 27                | 0.319           | 8.1       | 61                       |
| 63053014  | 30                | 0.327           | 8.3       | 65                       |
| 63053214  | 32                | 0.339           | 8.6       | 69                       |
| 63053614  | 36                | 0.350           | 8.9       | 76                       |
| 63054014  | 40                | 0.374           | 9.5       | 83                       |
| 63054414  | 44                | 0.390           | 9.9       | 89                       |
| 63055014  | 50                | 0.406           | 10.3      | 95                       |
| 63056114  | 61                | 0.429           | 10.9      | 111                      |

| item no.  | no. of conductors | nominal outer-ø |           | cable weight<br>≈lbs/mft |
|---|-------------------|-----------------|-----------|--------------------------|
|   |                   | inch<br>±5%     | mm<br>±5% |                          |
| <b>▶ 24 AWG (≈ 14/34) · 0.25 mm<sup>2</sup></b> |                   |                 |           |                          |
| 63050225  | 2                 | 0.142           | 3.6       | 13                       |
| 63050325  | 3                 | 0.150           | 3.8       | 15                       |
| 63050425  | 4                 | 0.161           | 4.1       | 17                       |
| 63050525  | 5                 | 0.173           | 4.4       | 21                       |
| 63050725  | 7                 | 0.189           | 4.8       | 26                       |
| 63050825  | 8                 | 0.213           | 5.4       | 30                       |
| 63051225  | 12                | 0.248           | 6.3       | 41                       |
| 63051425  | 14                | 0.260           | 6.6       | 46                       |
| 63051625  | 16                | 0.272           | 6.9       | 52                       |
| 63051825  | 18                | 0.287           | 7.3       | 57                       |
| 63052125  | 21                | 0.327           | 8.3       | 71                       |
| 63052425  | 24                | 0.331           | 8.4       | 74                       |
| 63052725  | 27                | 0.339           | 8.6       | 77                       |
| 63053025  | 30                | 0.350           | 8.9       | 84                       |
| 63053225  | 32                | 0.362           | 9.2       | 89                       |
| 63053625  | 36                | 0.394           | 10.0      | 105                      |
| 63054025  | 40                | 0.417           | 10.6      | 116                      |
| 63054425  | 44                | 0.437           | 11.1      | 124                      |
| 63055025  | 50                | 0.457           | 11.6      | 137                      |
| 63056125  | 61                | 0.484           | 12.3      | 162                      |

| item no.                                       | no. of conductors | nominal outer-ø |           | cable weight<br>≈lbs/mft |
|--|-------------------|-----------------|-----------|--------------------------|
|  |                   | inch<br>±5%     | mm<br>±5% |                          |
| <b>▶ 22 AWG (≈ 7/30) · 0.34 mm<sup>2</sup></b> |                   |                 |           |                          |
| 63050234                                       | 2                 | 0.165           | 4.2       | 17                       |
| 63050334                                       | 3                 | 0.173           | 4.4       | 20                       |
| 63050434                                       | 4                 | 0.181           | 4.6       | 24                       |
| 63050534                                       | 5                 | 0.205           | 5.2       | 29                       |
| 63050734                                       | 7                 | 0.224           | 5.7       | 36                       |
| 63050834                                       | 8                 | 0.264           | 6.7       | 44                       |
| 63051234                                       | 12                | 0.295           | 7.5       | 57                       |
| 63051434                                       | 14                | 0.327           | 8.3       | 70                       |
| 63051634                                       | 16                | 0.343           | 8.7       | 78                       |
| 63051834                                       | 18                | 0.362           | 9.2       | 86                       |
| 63052134                                       | 21                | 0.394           | 10.0      | 98                       |
| 63052434                                       | 24                | 0.417           | 10.6      | 105                      |
| 63052734                                       | 27                | 0.425           | 10.8      | 116                      |
| 63053034                                       | 30                | 0.441           | 11.2      | 126                      |
| 63053234                                       | 32                | 0.457           | 11.6      | 134                      |
| 63053634                                       | 36                | 0.476           | 12.1      | 148                      |
| 63054034                                       | 40                | 0.508           | 12.9      | 164                      |
| 63054434                                       | 44                | 0.531           | 13.5      | 175                      |
| 63055034                                       | 50                | 0.571           | 14.5      | 204                      |
| 63056134                                       | 61                | 0.606           | 15.4      | 241                      |

Continued on next page

#### DIN 47100 color code:

#1- white, #2- brown, #3- green, #4- yellow, #5- gray, #6- pink, #7- blue, #8- red, #9- black, #10- violet, #11- gray-pink, #12- red-blue, #13- white-green, #14- brown-green, #15- white-yellow, #16- yellow-brown, #17- white-gray, #18- gray-brown, #19- white-pink, #20- pink-brown, #21- white-blue, #22- brown-blue, #23- white-red, #24- brown-red, #25- white-black, #26- brown-black, #27- gray-green, #28- yellow-gray, #29- pink-green, #30- yellow-pink, #31- green-blue, #32- yellow-blue, #33- green-red, #34- yellow-red, #35- green-black, #36- yellow-black, #37- gray-blue, #38- pink-blue, #39- gray-red, #40- pink-red, #41- gray-black, #42- pink-black, #43- blue-black, #44- red-black, #45- white-brown-black, #46- yellow-green-black, #47- gray-pink-black, #48- red-blue-black, #49- white-green-black, #50- brown-green-black, #51- white-yellow-black, #52- yellow-brown-black, #53- white-gray-black, #54- gray-brown-black, #55- white-pink-black, #56- pink-brown-black, #57- white-blue-black, #58- brown-blue-black, #59- white-red-black, #60- brown-red-black, #61- black-white



# Halogen-free Cables

## SABIX® D 305 FRNC

Flexible data cable with improved fire performance and extended temperature range



D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm<sup>2</sup> CE



Marking for SABIX® D 305 FRNC 63053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® D 305 FRNC 32 x 0.5 mm<sup>2</sup> CE

| item no.  | no. of conductors | nominal outer-ø |        | cable weight ≈lbs/mft |
|---|-------------------|-----------------|--------|-----------------------|
|   |                   | inch ±5%        | mm ±5% |                       |
| <b>▶ 20 AWG (≈ 16/32) ▪ 0.50 mm<sup>2</sup></b> |                   |                 |        |                       |
| 63050250  | 2                 | 0.177           | 4.5    | 21                    |
| 63050350  | 3                 | 0.185           | 4.7    | 24                    |
| 63050450  | 4                 | 0.201           | 5.1    | 29                    |
| 63050550  | 5                 | 0.220           | 5.6    | 34                    |
| 63050750  | 7                 | 0.248           | 6.3    | 45                    |
| 63050850  | 8                 | 0.287           | 7.3    | 55                    |
| 63051250  | 12                | 0.335           | 8.5    | 76                    |
| 63051450  | 14                | 0.350           | 8.9    | 85                    |
| 63051650  | 16                | 0.370           | 9.4    | 95                    |
| 63051850  | 18                | 0.390           | 9.9    | 105                   |
| 63052150  | 21                | 0.429           | 10.9   | 121                   |
| 63052450  | 24                | 0.453           | 11.5   | 131                   |
| 63052750  | 27                | 0.461           | 11.7   | 143                   |
| 63053050  | 30                | 0.476           | 12.1   | 156                   |
| 63053250  | 32                | 0.496           | 12.6   | 167                   |
| 63053650  | 36                | 0.516           | 13.1   | 184                   |
| 63054450  | 44                | 0.594           | 15.1   | 229                   |
| 63055050  | 50                | 0.618           | 15.7   | 276                   |
| 63056150  | 61                | 0.657           | 16.7   | 301                   |

| item no.  | no. of conductors | nominal outer-ø |        | cable weight ≈lbs/mft |
|---|-------------------|-----------------|--------|-----------------------|
|   |                   | inch ±5%        | mm ±5% |                       |
| <b>▶ 19 AWG (≈ 23/32) ▪ 0.75 mm<sup>2</sup></b> |                   |                 |        |                       |
| 63050275  | 2                 | 0.201           | 5.1    | 28                    |
| 63050375  | 3                 | 0.213           | 5.4    | 33                    |
| 63050475  | 4                 | 0.240           | 6.1    | 42                    |
| 63050575  | 5                 | 0.260           | 6.6    | 49                    |
| 63050775  | 7                 | 0.283           | 7.2    | 61                    |
| 63050875  | 8                 | 0.343           | 8.7    | 80                    |
| 63051275  | 12                | 0.386           | 9.8    | 103                   |
| 63051475  | 14                | 0.406           | 10.3   | 114                   |
| 63051675  | 16                | 0.425           | 10.8   | 129                   |
| 63051875  | 18                | 0.449           | 11.4   | 143                   |
| 63052175  | 21                | 0.492           | 12.5   | 167                   |
| 63052475  | 24                | 0.524           | 13.3   | 181                   |
| 63052775  | 27                | 0.535           | 13.6   | 200                   |
| 63053075  | 30                | 0.571           | 14.5   | 228                   |
| 63053275  | 32                | 0.591           | 15.0   | 242                   |
| 63053675  | 36                | 0.614           | 15.6   | 268                   |
| 63054075  | 40                | 0.657           | 16.7   | 298                   |
| 63054475  | 44                | 0.689           | 17.5   | 319                   |
| 63055075  | 50                | 0.720           | 18.3   | 356                   |
| 63056175  | 61                | 0.780           | 19.8   | 435                   |

| item no.   | no. of conductors | nominal outer-ø |        | cable weight ≈lbs/mft |
|--|-------------------|-----------------|--------|-----------------------|
|  |                   | inch ±5%        | mm ±5% |                       |
| <b>▶ 18 AWG (≈ 30/32) ▪ 1.00 mm<sup>2</sup></b>    |                   |                 |        |                       |
| 63050280   | 2                 | 0.209           | 5.3    | 32                    |
| 63050380   | 3                 | 0.220           | 5.6    | 38                    |
| 63050480   | 4                 | 0.248           | 6.3    | 48                    |
| 63050580   | 5                 | 0.272           | 6.9    | 58                    |
| 63050680   | 6                 | 0.295           | 7.5    | 67                    |
| 63050780   | 7                 | 0.311           | 7.9    | 78                    |
| <b>▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm<sup>2</sup></b> |                   |                 |        |                       |
| 63050285   | 2                 | 0.240           | 6.1    | 43                    |
| 63050385   | 3                 | 0.252           | 6.4    | 52                    |
| 63050485   | 4                 | 0.276           | 7.0    | 63                    |
| 63050585   | 5                 | 0.319           | 8.1    | 82                    |
| 63050685   | 6                 | 0.346           | 8.8    | 95                    |
| 63050785   | 7                 | 0.346           | 8.8    | 103                   |

Other dimensions and colors are available on request

### DIN 47100 color code:

#1- white, #2- brown, #3- green, #4- yellow, #5- gray, #6- pink, #7- blue, #8- red, #9- black, #10- violet, #11- gray-pink, #12- red-blue, #13- white-green, #14- brown-green, #15- white-yellow, #16- yellow-brown, #17- white-gray, #18- gray-brown, #19- white-pink, #20- pink-brown, #21- white-blue, #22- brown-blue, #23- white-red, #24- brown-red, #25- white-black, #26- brown-black, #27- gray-green, #28- yellow-gray, #29- pink-green, #30- yellow-pink, #31- green-blue, #32- yellow-blue, #33- green-red, #34- yellow-red, #35- green-black, #36- yellow-black, #37- gray-blue, #38- pink-blue, #39- gray-red, #40- pink-red, #41- gray-black, #42- pink-black, #43- blue-black, #44- red-black, #45- white-brown-black, #46- yellow-green-black, #47- gray-pink-black, #48- red-blue-black, #49- white-green-black, #50- brown-green-black, #51- white-yellow-black, #52- yellow-brown-black, #53- white-gray-black, #54- gray-brown-black, #55- white-pink-black, #56- pink-brown-black, #57- white-blue-black, #58- brown-blue-black, #59- white-red-black, #60- brown-red-black, #61- black-white