

# Rubber insulated cable H07RN-F acc. to EN 50525-2-21



|                                                |                                                                    |
|------------------------------------------------|--------------------------------------------------------------------|
| <b>conductor material:</b>                     | bare copper                                                        |
| <b>conductor construction:</b>                 | fine stranded, class 5                                             |
| <b>insulation:</b>                             | rubber (EPR) EI4                                                   |
| <b>sheathing material:</b>                     | rubber (CR) EM2                                                    |
| <b>flame retardant:</b>                        | VDE 0482-332-1-2/IEC 60332-1                                       |
| <b>oil resistant:</b>                          | EN 60811-2-1                                                       |
| <b>ozone resistant:</b>                        | yes                                                                |
| <b>maximum temperature at conductor:</b>       | 80 °C                                                              |
| <b>max. operating temperature, fixed:</b>      | -25 - +80 °C                                                       |
| <b>temperature, moved/during installation:</b> | -25 - +80 °C                                                       |
| <b>nominal voltage U<sub>0</sub>:</b>          | 450 V                                                              |
| <b>nominal voltage U:</b>                      | 750 V                                                              |
| <b>test voltage:</b>                           | 2,5 kV                                                             |
| <b>core identification:</b>                    | colours acc. VDE 0293 (HD 308); more than 5 cores: gn-ye + numbers |

**Application:** For use at medium mechanical stress in dry, wet and damp locations, as well as in free air. Also for fixed installation on plaster or machines. The cable is resistant to oil, uv-radiation and ozon.

|                     |       |
|---------------------|-------|
| <b>Netherlands:</b> | RMCL2 |
| <b>Russia:</b>      | КГ    |



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

bending radii

| installation       | < 8 mm | 8-12 mm | 13-20 mm | > 20 mm |
|--------------------|--------|---------|----------|---------|
| fixed installation | 3D     | 3D      | 4D       | 4D      |
| free movement      | 3D     | 4D      | 5D       | 5D      |
| cable entry        | 3D     | 3D      | 4D       | 4D      |

Table: Technical characteristics H07RN-F

| p/n    | part name         | R <sub>I</sub><br>[Ω/km] | I <sub>bl</sub><br>[A] | D <sub>A</sub><br>[mm] | F <sub>zv</sub><br>[N] | Cu<br>[kg/km] | G<br>[kg] |
|--------|-------------------|--------------------------|------------------------|------------------------|------------------------|---------------|-----------|
| 050214 | H07RN-F 01X1,5 SW | 13,3                     | 18                     | 5,9                    | 23                     | 14,4          | 50        |
| 050358 | H07RN-F 01X2,5 SW | 7,98                     | 22                     | 6,6                    | 38                     | 24            | 80        |
| 050233 | H07RN-F 01X4 SW   | 4,95                     | 30                     | 7,4                    | 60                     | 38            | 100       |
| 050205 | H07RN-F 01X6 SW   | 3,3                      | 38                     | 8,1                    | 90                     | 58            | 130       |
| 050033 | H07RN-F 01X10 SW  | 1,91                     | 53                     | 9,7                    | 150                    | 96            | 220       |
| 050036 | H07RN-F 01X16 SW  | 1,21                     | 71                     | 11                     | 240                    | 154           | 280       |
| 050037 | H07RN-F 01X25 SW  | 0,78                     | 94                     | 12,9                   | 375                    | 240           | 400       |
| 050038 | H07RN-F 01X35 SW  | 0,554                    | 117                    | 14,6                   | 525                    | 336           | 520       |
| 050039 | H07RN-F 01X50 SW  | 0,386                    | 148                    | 16,8                   | 750                    | 480           | 720       |
| 050041 | H07RN-F 01X70 SW  | 0,272                    | 185                    | 18,9                   | 1050                   | 672           | 940       |
| 050042 | H07RN-F 01X95 SW  | 0,206                    | 222                    | 21,1                   | 1425                   | 912           | 1220      |

| p/n    | part name         | R <sub>l</sub><br>[Ω/km] | I <sub>bl</sub><br>[A] | D <sub>A</sub><br>[mm] | F <sub>zv</sub><br>[N] | Cu<br>[kg/km] | G<br>[kg] |
|--------|-------------------|--------------------------|------------------------|------------------------|------------------------|---------------|-----------|
| 050034 | H07RN-F 01X120 SW | 0,161                    | 260                    | 23,1                   | 1800                   | 1152          | 1510      |
| 050035 | H07RN-F 01X150 SW | 0,129                    | 300                    | 25,6                   | 2250                   | 1440          | 1900      |
| 050111 | H07RN-F 01X185 SW | 0,106                    | 341                    | 27,9                   | 2775                   | 1776          | 2300      |
| 050113 | H07RN-F 01X240 SW | 0,0801                   | 407                    | 31                     | 3600                   | 2304          | 2900      |
| 050195 | H07RN-F 01X300 SW | 0,0641                   | 468                    | 34,1                   | 4500                   | 2880          | 3600      |
| 050408 | H07RN-F 01X400 SW | 0,0486                   | 553                    | 38,5                   | 60                     | 3840          | 4800      |
| 050983 | H07RN-F 01X630 SW | 0,0287                   | 742                    | 48,5                   | 9450                   | 6048          | 6849      |
| 050170 | H07RN-F 02X1 SW   | 19,5                     | 15                     | 7,8                    | 30                     | 19            | 100       |
| 050043 | H07RN-F 02X1,5 SW | 13,3                     | 18                     | 8,7                    | 45                     | 29            | 130       |
| 050044 | H07RN-F 02X2,5 SW | 7,98                     | 26                     | 10,4                   | 75                     | 48            | 195       |
| 050228 | H07RN-F 02X4 SW   | 4,95                     | 34                     | 12                     | 120                    | 77            | 280       |
| 050229 | H07RN-F 02X6 SW   | 3,3                      | 43                     | 13,3                   | 180                    | 115           | 400       |
| 050880 | H07RN-F 03X1 SW   | 19,5                     | 15                     | 8,4                    | 45                     | 29            | 90        |
| 050045 | H07RN-F 03G1 SW   | 19,5                     | 15                     | 8,4                    | 45                     | 29            | 125       |
| 050881 | H07RN-F 03X1,5 SW | 13,3                     | 16                     | 9,4                    | 68                     | 43            | 155       |
| 050046 | H07RN-F 03G1,5 SW | 13,3                     | 16                     | 9,4                    | 68                     | 43            | 155       |
| 050882 | H07RN-F 03X2,5 SW | 7,98                     | 21                     | 11,1                   | 113                    | 72            | 235       |
| 050048 | H07RN-F 03G2,5 SW | 7,98                     | 21                     | 11,1                   | 113                    | 72            | 235       |
| 050114 | H07RN-F 03G4 SW   | 4,95                     | 29                     | 12,9                   | 180                    | 115           | 310       |
| 050883 | H07RN-F 03X6 SW   | 3,3                      | 36                     | 14,3                   | 270                    | 173           | 495       |
| 050115 | H07RN-F 03G6 SW   | 3,3                      | 36                     | 14,3                   | 270                    | 173           | 400       |
| 050884 | H07RN-F 03X10 SW  | 1,9                      | 51                     | 19,3                   | 450                    | 288           | 730       |
| 050101 | H07RN-F 03G10 SW  | 1,91                     | 51                     | 19,3                   | 450                    | 288           | 810       |
| 050885 | H07RN-F 03X16 SW  | 1,21                     | 67                     | 22,1                   | 720                    | 461           | 1020      |
| 050102 | H07RN-F 03G16 SW  | 1,21                     | 67                     | 22,1                   | 720                    | 461           | 1000      |
| 050886 | H07RN-F 03X25 SW  | 0,78                     | 89                     | 27                     | 1125                   | 720           | 1250      |
| 050240 | H07RN-F 03G25 SW  | 0,78                     | 89                     | 27                     | 1125                   | 720           | 1250      |
| 050887 | H07RN-F 03X35 SW  | 0,554                    | 110                    | 29,6                   | 1575                   | 1008          | 1733      |
| 050309 | H07RN-F 03G35 SW  | 0,554                    | 110                    | 29,6                   | 1575                   | 1008          | 1850      |
| 050185 | H07RN-F 03G50 SW  | 0,386                    | 138                    | 36                     | 2250                   | 1440          | 3790      |
| 050375 | H07RN-F 04G1 SW   | 19,5                     | 15                     | 9,5                    | 60                     | 38            | 129       |
| 050050 | H07RN-F 04G1,5 SW | 13,3                     | 16                     | 10,4                   | 90                     | 58            | 190       |
| 050054 | H07RN-F 04G2,5 SW | 7,98                     | 21                     | 12,3                   | 150                    | 96            | 280       |
| 050057 | H07RN-F 04G4 SW   | 4,95                     | 29                     | 14,2                   | 240                    | 154           | 380       |
| 050059 | H07RN-F 04G6 SW   | 3,3                      | 36                     | 15,9                   | 360                    | 230           | 510       |
| 050888 | H07RN-F 04X10 SW  | 1,91                     | 51                     | 21,3                   | 600                    | 384           | 940       |
| 050051 | H07RN-F 04G10 SW  | 1,91                     | 51                     | 21,3                   | 600                    | 384           | 940       |
| 050889 | H07RN-F 04X16 SW  | 1,21                     | 67                     | 24,2                   | 960                    | 614,4         | 1250      |
| 050053 | H07RN-F 04G16 SW  | 1,21                     | 67                     | 24,2                   | 960                    | 614           | 1250      |
| 050890 | H07RN-F 04X25 SW  | 0,78                     | 89                     | 29,3                   | 1500                   | 960           | 1850      |
| 050055 | H07RN-F 04G25 SW  | 0,78                     | 89                     | 29,3                   | 1500                   | 960           | 1850      |
| 050056 | H07RN-F 04G35 SW  | 0,554                    | 110                    | 33                     | 2100                   | 1344          | 2310      |
| 050058 | H07RN-F 04G50 SW  | 0,386                    | 138                    | 38,2                   | 3000                   | 1920          | 3160      |
| 050060 | H07RN-F 04G70 SW  | 0,272                    | 172                    | 43,2                   | 4200                   | 2688          | 4250      |
| 050061 | H07RN-F 04G95 SW  | 0,206                    | 222                    | 49                     | 5700                   | 3648          | 5590      |
| 050052 | H07RN-F 04G120 SW | 0,161                    | 238                    | 53,6                   | 7200                   | 4608          | 6790      |
| 050187 | H07RN-F 04G150 SW | 0,129                    | 273                    | 58,7                   | 9000                   | 5760          | 8230      |
| 050196 | H07RN-F 04G185 SW | 0,106                    | 309                    | 65                     | 11100                  | 7104          | 9700      |
| 050837 | H07RN-F 04G240 SW | 0,0801                   | 365                    | 74                     | 14400                  | 9216          | 13120     |
| 050062 | H07RN-F 05G1,5 SW | 13,3                     | 16                     | 11,5                   | 113                    | 72            | 230       |
| 050065 | H07RN-F 05G2,5 SW | 7,98                     | 21                     | 13,5                   | 188                    | 120           | 340       |
| 051099 | H07RN-F 05X2,5 SW |                          |                        | 11,1                   |                        | 120           | 340       |
| 050067 | H07RN-F 05G4 SW   | 4,95                     | 29                     | 15,9                   | 300                    | 192           | 470       |
| 050068 | H07RN-F 05G6 SW   | 3,3                      | 36                     | 17,9                   | 450                    | 288           | 630       |
| 050063 | H07RN-F 05G10 SW  | 1,91                     | 51                     | 22,3                   | 750                    | 480           | 1150      |
| 050064 | H07RN-F 05G16 SW  | 1,21                     | 67                     | 26,9                   | 1200                   | 768           | 1540      |
| 050066 | H07RN-F 05G25 SW  | 0,78                     | 89                     | 32,5                   | 1875                   | 1200          | 2200      |
| 050160 | H07RN-F 05G35 SW  | 0,554                    | 110                    | 38                     | 2625                   | 1680          | 2700      |
| 050217 | H07RN-F 05G50 SW  | 0,386                    | 138                    | 44,5                   | 3750                   | 2400          | 3950      |

| p/n    | part name         | R <sub>l</sub><br>[Ω/km] | I <sub>bl</sub><br>[A] | D <sub>A</sub><br>[mm] | F <sub>zv</sub><br>[N] | Cu<br>[kg/km] | G<br>[kg] |
|--------|-------------------|--------------------------|------------------------|------------------------|------------------------|---------------|-----------|
| 050319 | H07RN-F 05G70 SW  | 0,272                    | 172                    | 47                     | 5250                   | 3360          | 4893      |
| 050352 | H07RN-F 05G95 SW  | 0,206                    | 204                    | 58                     | 7125                   | 4560          | 6600      |
| 050858 | 07RN-F 05G120 SW  | 0,161                    | 238                    | 61                     | 9000                   | 5760          | 8051      |
| 051080 | 07RN-F 05G150 SW  | 0,129                    | 273                    | 73                     | 11250                  | 7200          | 10500     |
| 050216 | H07RN-F 07G1,5 SW | 13,3                     | 16                     | 14,5                   | 158                    | 101           | 370       |
| 050219 | H07RN-F 07G2,5 SW | 7,98                     | 21                     | 17                     | 263                    | 168           | 520       |
| 051140 | H07RN-F 07G4 SW   | 4,95                     | 29                     | 25,8                   | 420                    | 269           | 697       |
| 050215 | H07RN-F 12G1,5 SW | 13,3                     | 16                     | 18,3                   | 270                    | 175           | 450       |
| 050204 | H07RN-F 12G2,5 SW | 7,98                     | 21                     | 19                     | 450                    | 288           | 750       |
| 050218 | H07RN-F 18G2,5 SW | 7,98                     | 21                     | 26                     | 675                    | 432           | 1032      |
| 050220 | H07RN-F 19G1,5 SW | 13,3                     | 16                     | 23,5                   | 428                    | 274           | 800       |
| 050242 | H07RN-F 19G2,5 SW | 7,98                     | 21                     | 26,6                   | 713                    | 456           | 1068      |
| 050243 | H07RN-F 24G1,5 SW | 13,3                     | 16                     | 25,5                   | 540                    | 346           | 1000      |
| 050202 | H07RN-F 24G2,5 SW | 7,98                     | 21                     | 31,5                   | 900                    | 576           | 1380      |
| 050750 | H07RN-F 25G1,5 SW | 13,3                     | 16                     | 26                     | 563                    | 360           | 889       |
| 050861 | H07RN-F 27G1,5 SW | 13,3                     | 16                     |                        | 607                    | 390           | 973       |
| 050862 | H07RN-F 27G2,5 SW | 7,98                     | 21                     |                        | 1012                   | 648           | 1365      |

|                 |                                        |
|-----------------|----------------------------------------|
| RI              | conductor resistance                   |
| I <sub>bl</sub> | ampacity (in air)                      |
| D <sub>A</sub>  | outer diameter                         |
| F <sub>zv</sub> | tensile strength (during installation) |
| Cu              | copper                                 |
| G               | weight                                 |