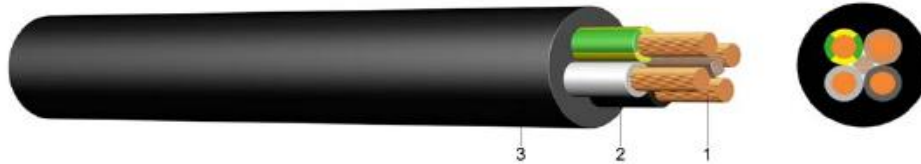


H07RN-F -- Heavy Duty Rubber Sheathed Cable

APPLICATION: H07RN-F flexible rubber cables are suitable for use in domestic appliances, such as kitchens, portable or mobile equipment, electrical tools, transformers, pumps, welders, grinders etc. Also for use in drainage and water treatment, cold environments and severe industrial environments. H07RN-F cable may be rated 0.6/1KV where the installation has been built in protection.



1---conductor 2---insulation 3---outer sheath

CONSTRUCTION

| | | | |
|-------------------------------|---|--|---------------------------------|
| Conductors | Annealed flexible stranded bare copper or tinned copper, class 5 to EN 60228 | | |
| Insulation | Ethylene-propylene rubber (EPR) type EI4 in according to EN 50363-1 | | |
| Circuit Identification | No. of Core | G (earth core) | X (without earth core) |
| | 2 | Blue, brown | Blue, brown |
| | 3 | Green/yellow, blue, brown | Brown, black, grey |
| | 4 | Green/yellow, brown, black, grey | Blue, brown, black, grey |
| | 5 | Green/yellow, blue, brown, black, grey | Blue, brown, black, grey, black |
| | 6 & above | Green/yellow, other cores are black with white numbering | Black with white numbering |
| Filler | Rubber Strip with Cotton Rope as a filler will be applied between insulated conductors for sizes $\geq 10\text{mm}^2$ | | |
| Separator | A non-woven separator will be applied between insulated conductor & jacket for size $\geq 10\text{mm}^2$ | | |
| Jacket | Black, Chlorinated Polyethylene rubber (CPE) EM2 in according to EN 50363-2-1 | | |
| Flammability | EN 60332-1-2: 2004, IEC 60332-1-2: 2004 | | |
| Reference standards | EN 60228, EN 50363-1, EN 50363-2-1, EN 60332-1-2, IEC 60332-1-2, DIN VDE 0282-4 | | |
| Approval | VDE, BS 6195 21150 0.6/1 KV IEC 60092-353 | | |

| Minimum bending radius | For cable diameter D (mm) | | | |
|---|----------------------------------|----------------------|-----------------------|------------------|
| | D ≤ 8 | 8 < D ≤ 12 | 12 < D ≤ 20 | D > 12 |
| Fixed installation | 3 D | 3 D | 4 D | 4 D |
| At inlet of portable appliance or mobile equipment, no mechanical load on cable | 4 D | 4 D | 5 D | 6 D |
| Under mechanical load | 6 D | 6 D | 6 D | 8 D |

FEATURES

- ★ Maximum conductor operating temperature: +90°C *
 - ★ Maximum conductor temperature during short circuit: +250°C
 - ★ Lowest ambient temperature for fixed installation: -40°C
 - ★ Lowest ambient temperature for mobile installation: -25°C
 - ★ UV, sunlight, water, oil, abrasion resistant
 - ★ -25 meter submersible under water
- * Max continuous operating conductor temperature in normal use:
 +90°C (fixed protected installation)

| Size | Nominal Insulation Thickness | Minimum Insulation Thickness | Nominal Jacket Thickness | Minimum Jacket thickness | Nominal Overall Diameter ±8% | Approx. Cable Weight | Filler Material | Separator Material | Nominal Current at air temp. 30°C | |
|-----------------|------------------------------|------------------------------|--------------------------|--------------------------|------------------------------|----------------------|-----------------|--------------------|-----------------------------------|-------|
| | | | | | | | | | Mobile | Fixed |
| mm ² | mm | mm | mm | mm | mm | KG/KM | / | / | Mobile | Fixed |
| 1 x 1.5 | 0.8 | 0.7 | 1.4 | 1.1 | 5.8 | 52 | NA | NA | 16.5 | 23 |
| 1 x 2.5 | 0.9 | 0.7 | 1.4 | 1.1 | 6.3 | 66 | NA | NA | 22 | 32 |
| 1 x 4 | 1.0 | 0.7 | 1.5 | 1.2 | 7.2 | 89 | NA | NA | 30 | 43 |
| 1 x 6 | 1.0 | 0.7 | 1.6 | 1.3 | 7.9 | 113 | NA | NA | 38 | 56 |
| 1 x 10 | 1.2 | 1.0 | 1.8 | 1.4 | 9.5 | 170 | NA | NA | 53 | 77 |
| 1 x 16 | 1.2 | 1.0 | 1.9 | 1.5 | 10.6 | 229 | NA | NA | 71 | 102 |
| 1 x 25 | 1.4 | 1.2 | 2.0 | 1.6 | 12.4 | 327 | NA | NA | 94 | 136 |
| 1 x 35 | 1.4 | 1.2 | 2.2 | 1.8 | 13.8 | 422 | NA | NA | 117 | 168 |
| 1 x 50 | 1.6 | 1.3 | 2.4 | 1.9 | 16.0 | 583 | NA | NA | 148 | 203 |
| 1 x 70 | 1.6 | 1.3 | 2.6 | 2.1 | 17.8 | 763 | NA | NA | 185 | 254 |
| 1 x 95 | 1.8 | 1.5 | 2.8 | 2.3 | 20.2 | 1003 | NA | NA | 222 | 299 |
| 1 x 120 | 1.8 | 1.5 | 3.0 | 2.5 | 22.1 | 1222 | NA | NA | 260 | 363 |
| 1 x 150 | 2.0 | 1.7 | 3.2 | 2.6 | 24.3 | 1497 | NA | NA | 300 | 416 |
| 1 x 185 | 2.2 | 1.9 | 3.4 | 2.8 | 26.6 | 1822 | NA | NA | 341 | 475 |
| 1 x 240 | 2.4 | 2.1 | 3.5 | 2.9 | 29.4 | 2298 | NA | NA | 407 | 559 |
| 1 x 300 | 2.6 | 2.2 | 3.6 | 3.0 | 32.2 | 2816 | NA | NA | 468 | 637 |
| 1 x 400 | 2.8 | 2.4 | 3.8 | 3.1 | 35.9 | 3615 | NA | NA | 468 | 637 |
| 2 x 1.0 | 0.8 | 0.6 | 1.3 | 1.0 | 8.0 | 96 | NA | NA | 10 | 18 |
| 2 x 1.5 | 0.8 | 0.6 | 1.5 | 1.2 | 8.9 | 122 | NA | NA | 16 | 23 |
| 2 x 2.5 | 0.9 | 0.7 | 1.7 | 1.3 | 10.5 | 172 | NA | NA | 25 | 32 |
| 2 x 4 | 1.0 | 0.8 | 1.8 | 1.4 | 12.0 | 233 | NA | NA | 34 | 43 |
| 2 x 6 | 1.0 | 0.8 | 2.0 | 1.6 | 13.4 | 299 | NA | NA | 43 | 56 |
| 2 x 10 | 1.2 | 1.0 | 3.1 | 2.5 | 18.2 | 538 | strip | paper | 60 | 77 |
| 2 x 16 | 1.2 | 1.0 | 3.3 | 2.7 | 20.4 | 709 | strip | paper | 79 | 102 |
| 2 x 25 | 1.4 | 1.2 | 3.6 | 3.0 | 24.3 | 1021 | strip | paper | 105 | 136 |
| 2 x 35 | 1.4 | 1.2 | 3.8 | 3.1 | 26.7 | 1275 | strip | paper | 130 | 168 |
| 2 x 50 | 1.6 | 1.3 | 4.2 | 3.5 | 31.1 | 1758 | strip | paper | 160 | 203 |
| 2 x 70 | 1.6 | 1.3 | 4.6 | 3.8 | 34.7 | 2269 | strip | paper | 196 | 254 |
| 2 x 95 | 1.8 | 1.5 | 5.0 | 4.2 | 39.5 | 2978 | strip | paper | 238 | 299 |
| 3G1.0 | 0.8 | 0.6 | 1.4 | 1.1 | 8.6 | 115 | NA | NA | 10 | 18 |
| 3 G 1.5 | 0.8 | 0.6 | 1.6 | 1.3 | 9.6 | 146 | NA | NA | 16 | 23 |
| 3 G 2.5 | 0.9 | 0.7 | 1.8 | 1.4 | 11.2 | 206 | NA | NA | 25 | 32 |
| 3 G 4 | 1.0 | 0.8 | 1.9 | 1.5 | 12.8 | 282 | NA | NA | 35 | 43 |
| 3 G 6 | 1.0 | 0.8 | 2.1 | 1.7 | 14.3 | 363 | NA | NA | 44 | 56 |
| 3 G 10 | 1.2 | 1.0 | 3.3 | 2.7 | 19.5 | 654 | strip | paper | 60 | 77 |
| 3 G 16 | 1.2 | 1.0 | 3.5 | 2.9 | 21.9 | 870 | strip | paper | 82 | 102 |
| 3 G 25 | 1.4 | 1.2 | 3.8 | 3.1 | 26.0 | 1257 | strip | paper | 109 | 136 |
| 3 G 35 | 1.4 | 1.2 | 4.1 | 3.4 | 28.8 | 1593 | strip | paper | 135 | 168 |
| 3 G 50 | 1.6 | 1.3 | 4.5 | 3.7 | 33.4 | 2198 | strip | paper | 169 | 203 |
| 3 G 70 | 1.6 | 1.3 | 4.8 | 4.0 | 37.1 | 2832 | strip | paper | 211 | 254 |
| 3 G 95 | 1.8 | 1.5 | 5.3 | 4.4 | 42.4 | 3747 | strip | paper | 250 | 299 |
| 3 G 120 | 1.8 | 1.5 | 5.6 | 4.7 | 46.2 | 4528 | strip | paper | 290 | 263 |
| 3 G 150 | 2.0 | 1.7 | 6.0 | 5.0 | 50.9 | 5549 | strip | paper | 332 | 416 |

(Table Continued on Next Page)

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(Table Continued)

| Size | Nominal Insulation Thickness | Minimum Insulation Thickness | Nominal Jacket Thickness | Minimum Jacket thickness | Nominal Overall Diameter ±8% | Approx. Cable Weight | Filler Material | Separator Material | Nominal Current at air temp. 30°C | |
|-----------------|------------------------------|------------------------------|--------------------------|--------------------------|------------------------------|----------------------|-----------------|--------------------|-----------------------------------|-------|
| | | | | | | | | | Mobile | Fixed |
| mm ² | mm | mm | mm | mm | mm | KG/KM | / | / | Mobile | Fixed |
| 4 G 1.0 | 0.8 | 0.6 | 1.5 | 1.2 | 9.5 | 141 | NA | NA | 10 | 16 |
| 4 G 1.5 | 0.8 | 0.6 | 1.7 | 1.3 | 10.5 | 179 | NA | NA | 16 | 21 |
| 4 G 2.5 | 0.9 | 0.7 | 1.9 | 1.5 | 12.3 | 253 | NA | NA | 20 | 29 |
| 4 G 4 | 1.0 | 0.8 | 2.0 | 1.6 | 14.1 | 348 | NA | NA | 30 | 38 |
| 4 G 6 | 1.0 | 0.8 | 2.3 | 1.9 | 15.9 | 457 | NA | NA | 37 | 50 |
| 4 G 10 | 1.2 | 1.0 | 3.4 | 2.8 | 21.2 | 797 | strip | paper | 52 | 68 |
| 4 G 16 | 1.2 | 1.0 | 3.6 | 3.0 | 23.8 | 1068 | strip | paper | 69 | 92 |
| 4 G 25 | 1.4 | 1.2 | 4.1 | 3.4 | 28.8 | 1580 | strip | paper | 92 | 122 |
| 4 G 35 | 1.4 | 1.2 | 4.4 | 3.6 | 31.8 | 2004 | strip | paper | 114 | 150 |
| 4 G 50 | 1.6 | 1.3 | 4.8 | 4.0 | 36.9 | 2766 | strip | paper | 143 | 182 |
| 4 G 70 | 1.6 | 1.3 | 5.2 | 4.3 | 41.1 | 3592 | strip | paper | 178 | 232 |
| 4 G 95 | 1.8 | 1.5 | 5.9 | 4.9 | 47.3 | 4799 | strip | paper | 210 | 281 |
| 4 G 120 | 1.8 | 1.5 | 6.0 | 5.0 | 51.2 | 5739 | strip | paper | 246 | 325 |
| 4 G 150 | 2.0 | 1.7 | 6.5 | 5.4 | 56.5 | 7060 | strip | paper | 280 | 373 |
| 4 G 185 | 2.2 | 1.9 | 7.0 | 5.9 | 62.1 | 8613 | strip | paper | 330 | 424 |
| 4 G 240 | 2.4 | 2.1 | 7.7 | 6.4 | 69.8 | 11025 | strip | paper | 408 | 480 |
| 5 G 1.0 | 0.8 | 0.6 | 1.6 | 1.3 | 10.5 | 173 | NA | NA | 10 | 16 |
| 5 G 1.5 | 0.8 | 0.6 | 1.8 | 1.4 | 11.6 | 218 | NA | NA | 16 | 21 |
| 5 G 2.5 | 0.9 | 0.7 | 2.0 | 1.6 | 13.5 | 308 | NA | NA | 20 | 29 |
| 5 G 4 | 1.0 | 0.8 | 2.2 | 1.8 | 15.7 | 432 | NA | NA | 30 | 38 |
| 5 G 6 | 1.0 | 0.8 | 2.5 | 2.0 | 17.6 | 566 | NA | NA | 38 | 50 |
| 5 G 10 | 1.2 | 1.0 | 3.6 | 3.0 | 23.3 | 970 | strip | paper | 54 | 68 |
| 5 G 16 | 1.2 | 1.0 | 3.9 | 3.2 | 26.4 | 1316 | strip | paper | 71 | 92 |
| 5 G 25 | 1.4 | 1.2 | 4.4 | 3.6 | 31.8 | 1943 | strip | paper | 94 | 122 |
| 5 G 35 | 1.4 | 1.2 | 4.6 | 3.8 | 34.9 | 2444 | strip | paper | 114 | 150 |
| 5 G 50 | 1.6 | 1.3 | 5.2 | 4.3 | 40.9 | 3420 | strip | paper | 143 | 182 |
| 5 G 70 | 1.6 | 1.3 | 5.7 | 4.7 | 45.7 | 4462 | strip | paper | 178 | 232 |
| 5 G 95 | 1.8 | 1.5 | 6.3 | 5.3 | 52.3 | 5914 | strip | paper | 210 | 281 |
| 5 G 120 | 1.8 | 1.5 | 6.3 | 5.3 | 56.4 | 7050 | strip | paper | 246 | 325 |
| 5 G 150 | 2.0 | 1.7 | 6.8 | 5.7 | 62.2 | 8668 | strip | paper | 280 | 373 |