

NAYY 0,6/1KV CPR E

Low voltage cables with PVC sheath





Low voltage cables for AC and DC network, industrial installation, switching equipment, local pipelines where mechanical protection is not required during installation and operation, and where the PVC sheat is not attacked by corrosive agents. Can be used as connection cables inside wind power stations. These cables can be layed: in gound, in tube, free in air, in concrete and indoors.

Conductor shape round or sector, class 1=solid or class 2 = stranded; black outer sheath

STANDARDS AND CERTIFICATIONS

RoHS



HD 603 EN 13501-6 Distribution cables of rated voltage 0,6/1 kV

Fire classification of construction products and building

elements

CABLE DESIGN

Conductor material

Core identification (acc. HD 308 S2)

Core insulation material Material outer sheath

Cable shape

Aluminium

Yes

Polyvinyl chloride (PVC) Polyvinyl chloride (PVC)

Round

ELECTRICAL & THERMAL PARAMETERS

 Nominal voltage U0 [V]
 600

 Nominal voltage U [V]
 1,000

 Nominal voltage DC U [V]
 1,500

 Max. voltage DC Um [V]
 1,800

 Test voltage [kV]
 4

Rated voltage U0/U (Um) 0.6/1 (1.2) kV

Max. conductor temperature [°C] 70

Max. conductor temperature at short circuit [°C] 160

Laying temperature (min) [°C] -5

Laying temperature (max) [°C] 50

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CHEMICAL PROPERTIES

Flame retardant In accordance with EN/IEC 60332-1-2

CPR reaction to fire Eca
Resistant to UV Yes
UV resistant Yes
Silicon free Yes
Lead free Yes

CHARACTERISTICS

With rodent protectionNoOutdoor installationYesUnderground installationYesSuitable as installation cableYes

Bending radius (rule) During installing: 15 x D single-core cables; 12 x D multi-cores

cables

SUSTAINABILITY COMMITMENT

Our commitment to a low-carbon future remains unwavering as we strive to create sustainable solutions while upholding quality standards. We prioritize sustainability and environmental protection in our daily operations, collaborating with local communities to ensure workplace safety and safeguard the areas we operate in.

Sustainability and environmental responsibility is evident also in our **packaging** solutions across the CEE region. We use fully recyclable drum cover foils to minimize environmental impact. Our packaging for rings is made from 30% recycled materials, supporting a circular economy. Additionally, our boxes are made from recyclable, environment-friendly cardboard, promoting eco-conscious choices. By choosing Prysmian, you are not only selecting high-quality products but also contributing to a greener future.

Check for more details about our sustainability commitment here: Sustainability: report and responsibility.











CABLE PROPERTIES

| Basic construction | Туре | SAP code | Variant | Nominal outer diameter [mm] | Cable weight [kg/km] | Bending radius, during laying (min) [mm] | Conductor resistance at 20° C [Ohm/km] | Short circuit current conductor (Isec) [kA] | DOP number |
|-----------------------|------|--------------|----------|--------------------------------------|----------------------------|--|---|--|----------------|
| 1x70RM | -0 | 20224751 | Talc | 16.9 | 413 | 254 | 0.443 | 5.4 | 1005203 |
| 1x95RM | -0 | 20224752 | Talc | 18.7 | 526 | 281 | 0.32 | 7.4 | 1005203 |
| 1x120RM | -0 | 20224742 | Talc | 20.1 | 611 | 302 | 0.253 | 9.3 | 1005203 |
| 1x150RM | -0 | 20224743 | Talc | 22 | 726 | 330 | 0.206 | 11.6 | 1005203 |
| 1x185RM | -J | 133010100072 | Extruded | 23.3 | 885 | 350 | 0.164 | 14.3 | 1005203 |
| 1x185RM | -O | 20224747 | Talc | 24 | 878 | 360 | 0.164 | 14.3 | 1005203 |
| 1x240RM | -J | 20217215 | Extruded | 26.8 | 1,093 | 402 | 0.125 | 18.5 | NAYY- SC-RP |
| 1x240RM | -O | 20224748 | Talc | 26.8 | 1,096 | 402 | 0.125 | 18.5 | 1005203 |
| 1x300RM | -J | 20217216 | Extruded | 29.6 | 1,356 | 443 | 0.1 | 23.1 | NAYY- SC-RP |
| 1x300RM | -0 | 20224749 | Talc | 29.6 | 1,359 | 443 | 0.1 | 23.1 | 1005203 |
| 1x400RM | -0 | 20224750 | Talc | 33.1 | 1,698 | 497 | 0.0778 | 38.3 | 1005203 |
| 1x500RM | -0 | 33010100069 | Talc | 36.7 | 2,116 | 440 | 0.0605 | 47.8 | 1005203 |
| 1x630RM | -0 | 133010100066 | Talc | 40.3 | 2,608 | 605 | 0.0469 | 60.2 | 1005203 |
| 2x16RE | -J | 20224676 | Extruded | 18.8 | 527 | 225 | 1.91 | 1.3 | 1005202 |
| 2x25RE | -J | 20224677 | Extruded | 21.8 | 724 | 262 | 1.2 | 2 | 1005202 |
| 3x16RM | -0 | 20224753 | Extruded | 20.6 | 621 | 247 | 1.91 | 1.3 | 1005202 |
| 3x25RM/16RE | -J | 133010101001 | Extruded | 25.4 | 768 | 305 | 1.2 | 2 | 1005202 |
| 3x25RM | -0 | 20224754 | Extruded | 24.3 | 871 | 291 | 1.2 | 2 | 1005202 |
| 3x35RM/16RE | -J | 133010101002 | Extruded | 27.3 | 892 | 328 | 0.868 | 2.7 | 1005202 |
| 3x50SM/25RM | -J | 133010101025 | Extruded | 30.3 | 0 | 364 | 0.641 | 3.9 | 1005202 |
| 3x70SM/35SM | -0 | 20224756 | Extruded | 32.8 | 1,522 | 394 | 0.443 | 5.4 | 1005205 |
| 3x70SM/35RM | -J | 20224682 | Extruded | 32.8 | 1,651 | 394 | 0.443 | 5.4 | 1005205 |
| 3x95SM/50RM | -J | 20224683 | Extruded | 39.1 | 2,225 | 469 | 0.32 | 7.4 | 1005205 |
| 3x120SM/70RM | -J | 20224678 | Extruded | 42.8 | 2,722 | 513 | 0.253 | 9.3 | 1005205 |
| 3x150SM/70RM | -J | 20224679 | Extruded | 46.8 | 3,236 | 562 | 0.206 | 11.6 | 1005205 |
| 3x185SM | -0 | 133030000010 | Extruded | 45.7 | 3,091 | 548 | 0.164 | 14.3 | 1005205 |
| 3x185SM/95RM | -J | 20224680 | Extruded | 51.5 | 3,940 | 618 | 0.164 | 14.3 | 1005205 |
| 3x240SM | -0 | 133030000011 | Extruded | 51.1 | 3,900 | 613 | 0.125 | 18.5 | 1005205 |
| 3x240SM/120RM | -J | 20224681 | Extruded | 58 | 5,038 | 696 | 0.125 | 18.5 | 1005205 |
| 3x300SM | -0 | 133030000013 | Extruded | 56.3 | 4,666 | 676 | 0.1 | 28.8 | 1005205 |
| 4x16RE | -J | 20224697 | Extruded | 21.5 | 688 | 258 | 1.91 | 1.3 | 1005202 |
| 4x16RM+1,5 | -J | 20224698 | Extruded | 22.4 | 736 | 268 | 1.91 | 1.3 | 1005202 |
| 4x16RM+2,5 | -J | 20224699 | Extruded | 22.4 | 746 | 268 | 1.91 | 1.3 | 1005202 |
| 4x25RE | -J | 20224711 | Extruded | 25.2 | 959 | 302 | 1.2 | 2 | 1005202 |
| 4x25RM+2,5 | -J | 20224714 | Extruded | 26.5 | 1,039 | 318 | 1.2 | 2 | 1005202 |

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CABLE PROPERTIES

| Basic construction | Туре | SAP code | Variant | Nominal outer diameter [mm] | Cable weight [kg/km] | Bending radius, during laying (min) [mm] | Conductor resistance at 20° C [Ohm/km] | Short circuit current conductor (1sec) [kA] | DOP number |
|-----------------------|------|-------------|----------|--------------------------------------|----------------------------|---|---|--|---------------|
| 4x35RE | -J | 20224715 | Extruded | 27.5 | 1,164 | 330 | 0.868 | 2.7 | 1005202 |
| 4x35RM+1,5 | -J | 20224717 | Extruded | 28.9 | 1,241 | 346 | 0.868 | 2.7 | 1005202 |
| 4x50SE | -J | 20224719 | Extruded | 29.1 | 1,278 | 349 | 0.641 | 3.9 | 1005204 |
| 4x50RM | -J | 20224718 | Extruded | 32.9 | 1,627 | 395 | 0.641 | 3.9 | 1005202 |
| 4x70SM | -J | 20224731 | Extruded | 33 | 1,670 | 396 | 0.443 | 5.4 | 1005204 |
| 4x70SM+1,5 | -J | 20224732 | Extruded | 33 | 1,676 | 396 | 0.443 | 5.4 | 1005204 |
| 4x95SE | -J | 20224733 | Extruded | 37.5 | 2,165 | 450 | 0.32 | 7.4 | 1005204 |
| 4x120SM | -J | 20224685 | Extruded | 43 | 2,718 | 516 | 0.253 | 9.3 | 1005204 |
| 4x150SM | -J | 20314302 | Extruded | 47 | 3,208 | 564 | 0.206 | 11.6 | 1005204 |
| 4x150SM+1,5 | -J | 20224692 | Extruded | 47 | 3,207 | 564 | 0.206 | 11.6 | 1005204 |
| 4x185SM | -J | 20224700 | Extruded | 51.9 | 3,927 | 623 | 0.164 | 14.3 | 1005204 |
| 4x240SM | -J | 20224703 | Extruded | 58.2 | 4,971 | 699 | 0.125 | 18.5 | 1005204 |

CURRENT CARRYING CAPACITY

| Cross- section (mm²) | Direct in ground single-core DC (A) | Direct in ground multi-cores (A) | Direct in ground single-core trefoil (A) | Air single- core DC (A) | Air multi- cores (A) | Air single- core trefoil (A) |
|----------------------------|--|-------------------------------------|---|----------------------------|-------------------------|---------------------------------|
| 16 | - | - | - | - | - | - |
| 25 | 160 | 102 | 106 | 110 | 82 | 87 |
| 35 | 193 | 23 | 127 | 135 | 100 | 107 |
| 50 | 230 | 144 | 151 | 166 | 119 | 131 |
| 70 | 283 | 179 | 185 | 210 | 152 | 166 |
| 95 | 340 | 215 | 222 | 259 | 186 | 205 |
| 120 | 389 | 245 | 253 | 302 | 216 | 239 |
| 150 | 436 | 275 | 284 | 345 | 246 | 273 |
| 185 | 496 | 313 | 322 | 401 | 285 | 317 |
| 240 | 578 | 364 | 375 | 479 | 338 | 378 |
| 300 | 656 | 419 | 425 | 555 | 400 | 437 |
| 400 | 756 | 484 | 487 | 653 | 472 | 513 |
| 500 | 873 | 553 | 558 | 772 | 539 | 600 |
| 630 | 1011 | - | 635 | 915 | - | 701 |
| 800 | 1166 | - | 716 | 1080 | - | 809 |
| 1000 | 1332 | - | 796 | 1258 | - | 916 |

Ground temperature: 20°C; Air temperature: 30°C Depth of laying: 0,7 m; Soil resistivity, moist: 1 K.m/W

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