

Fire resistant and halogen free power cables

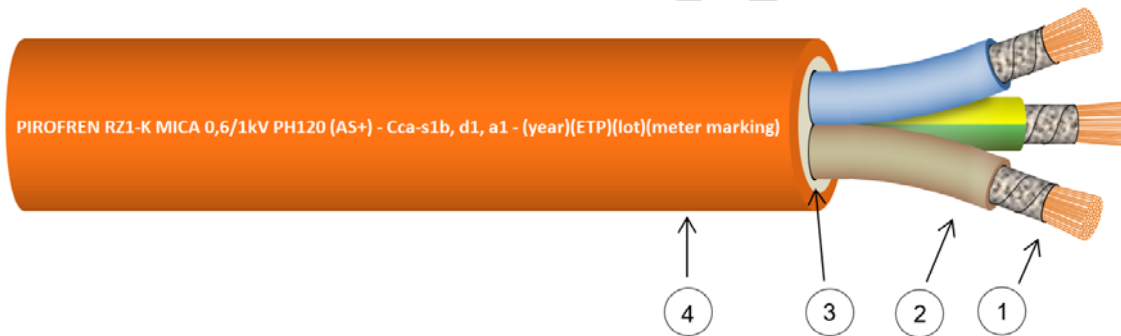
DESCRIPTION

Power cables with cross linked polyethylene insulation and halogen free polyolefin outer sheath. These cables have intrinsic resistance to fire and are intended for use in emergency circuits where the cable should be kept in service for a while even in the middle of fire. These cables are suitable for transport and distribution of electric power for indoor or outdoor fixed installations and for industrial use. These cables are suitable for air, buried or in conduit installations.

Construction is according to IEC-60502-1 and UNE 211025.

CONSTRUCTION

| | | |
|-------------------|---|------------|
| 1 - Conductor: | Flexible bare copper, class 5 Mica insulating tape, fire resistant | a/EN 60228 |
| 3 - Insulation: | Cross linked polyethylene, type XLPE · Identification 1x: natural (uncoloured) · " (up to 5c): blue, brown, black, grey, green/yellow · Assembly of cores: concentric stranded | a/HD 308 |
| 4 – Outer sheath: | Halogen free compound, type ST8 · Standard colour: Orange Other colors are possible upon request | a/RAL 2003 |



TECHNICAL CHARACTERISTICS

| | | |
|------------------------------------|------------------|-----------------|
| Rated voltage: | 0.6 / 1 kVac | |
| Test voltage: | 3500 Vac | |
| Operating temperature: | -15 °C to +90 °C | |
| Maximum short-circuit temperature: | 250 °C (max 5 s) | a/IEC 60724 |
| Bending radius: | 5 Ø | |
| Water resistant: | AD7 | a/IEC-60364-3 |
| Hydrocarbon resistant: | O.K. | a/ICEA S-73-532 |
| UV resistant: | O.K. | a/UNE 211605 |
| CPR classification (class) | Cca-s1b, d1, a1 | a/EN 50575 |

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FIRE BEHAVIOUR SPECIFICATIONS

| TEST | STANDARDS | VALUES |
|---|--|---|
| Fire Resistant PH120 | IEC 60331-1 and -2 EN 50200, EN 50362 | Complies 120' at 840 °C with impacts |
| Fire Resistant | NF C-32-070 | Category CR1-C1 |
| Resistance 2 h at 400 °C | EN 12101-3 | Complies, class F400 |
| Flame retardant | EN 60332-1-2, IEC 60332-1-2 | Complies |
| Fire retardant | IEC 60332-3-24 | Complies |
| Low Smoke emission: | EN 61034-2, IEC 61034-2 | Complies, transmittance > 60% |
| Halogen free (HCl) | EN 50267-2-1, IEC 60754-1 | Complies |
| Determination of degree of acidity of gases | EN 50267-2-3, IEC 60754-2 | pH ≥ 4,3 / Conductivity ≤ 10 µS/mm |

DATA AND DIMENSIONS

Dimensions and weights are approximates, subject to small variations due to process.

| Cross Section mm ² | Resistance Ω/km at 20°C | Insulation thickness, mm | Sheath mm | Outer Ø mm | Weight Kg/km |
|-------------------------------|-------------------------|--------------------------|-----------|------------|--------------|
| 1x1,5 | 13,3 | 0,7 | 1,4 | 7,8 | 82 |
| 1x2,5 | 7,98 | 0,7 | 1,4 | 8 | 91 |
| 1x4 | 4,95 | 0,7 | 1,4 | 8,9 | 122 |
| 1x6 | 3,30 | 0,7 | 1,4 | 9,6 | 149 |
| 1x10 | 1,91 | 0,7 | 1,4 | 10,5 | 195 |
| 1x16 | 1,21 | 0,7 | 1,4 | 11,7 | 265 |
| 1x25 | 0,780 | 0,9 | 1,4 | 13,4 | 367 |
| 1x35 | 0,554 | 0,9 | 1,4 | 14,7 | 478 |
| 1x50 | 0,386 | 1,0 | 1,4 | 16,4 | 624 |
| 1x70 | 0,272 | 1,1 | 1,5 | 18,7 | 866 |
| 1x95 | 0,206 | 1,1 | 1,6 | 20,6 | 1090 |
| 1x120 | 0,161 | 1,2 | 1,6 | 22,9 | 1368 |
| 1x150 | 0,129 | 1,4 | 1,7 | 24,8 | 1652 |
| 1x185 | 0,106 | 1,6 | 1,7 | 27,2 | 1996 |
| 1x240 | 0,0801 | 1,7 | 1,8 | 31,4 | 2625 |
| 1x300 | 0,0641 | 1,8 | 1,9 | 34,4 | 3262 |
| 1x400 | 0,0486 | 2,0 | 2,0 | 39,5 | 4250 |
| 2x1,5 | 13,3 | 0,7 | 1,25 | 10,9 | 165 |
| 2x2,5 | 7,98 | 0,7 | 1,25 | 11,9 | 204 |
| 2x4 | 4,95 | 0,7 | 1,25 | 12,7 | 255 |
| 2x6 | 3,30 | 0,7 | 1,25 | 14,1 | 327 |
| 2x10 | 1,91 | 0,7 | 1,25 | 15,9 | 446 |
| 2x95 | 0,206 | 1,1 | 2,0 | 36,4 | 2879 |
| 3x1,5 | 13,3 | 0,7 | 1,25 | 11,4 | 181 |
| 3x2,5 | 7,98 | 0,7 | 1,25 | 12,5 | 227 |
| 3x4 | 4,95 | 0,7 | 1,25 | 13,4 | 295 |
| 3x6 | 3,30 | 0,7 | 1,25 | 14,9 | 382 |
| 3x10 | 1,91 | 0,7 | 1,25 | 16,8 | 530 |
| 3x16 | 1,21 | 0,7 | 1,5 | 19,7 | 775 |
| 3x25 | 0,780 | 0,9 | 1,6 | 24 | 1165 |

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| Cross Section mm ² | Resistance Ω/km at 20°C | Insulation thickness, mm | Sheath mm | Outer Ø mm | Weight Kg/km |
|----------------------------------|----------------------------|-----------------------------|--------------|---------------|-----------------|
| 3x35 | 0,554 | 0,9 | 1,7 | 26,8 | 1546 |
| 3x50 | 0,386 | 1,0 | 1,8 | 30,6 | 2066 |
| 3x70 | 0,272 | 1,1 | 1,9 | 36 | 2962 |
| 3x95 | 0,206 | 1,1 | 2,0 | 39,4 | 3681 |
| 4x1,5 | 13,3 | 0,7 | 1,25 | 12,3 | 208 |
| 4x2,5 | 7,98 | 0,7 | 1,25 | 13,5 | 262 |
| 4x4 | 4,95 | 0,7 | 1,25 | 14,5 | 347 |
| 4x6 | 3,30 | 0,7 | 1,4 | 16,5 | 467 |
| 4x10 | 1,91 | 0,7 | 1,4 | 18,7 | 658 |
| 4x16 | 1,21 | 0,7 | 1,5 | 21,9 | 1030 |
| 4x25 | 0,780 | 0,9 | 1,7 | 26,4 | 1517 |
| 4x35 | 0,554 | 0,9 | 1,7 | 29,3 | 1983 |
| 4x50 | 0,386 | 1,0 | 1,9 | 34 | 2697 |
| 4x70 | 0,272 | 1,1 | 2,0 | 39,7 | 3805 |
| 5x1,5 | 13,3 | 0,7 | 1,25 | 13,3 | 237 |
| 5x2,5 | 7,98 | 0,7 | 1,25 | 14,6 | 301 |
| 5x4 | 4,95 | 0,7 | 1,4 | 16 | 415 |
| 5x6 | 3,30 | 0,7 | 1,4 | 18,1 | 555 |
| 5x10 | 1,91 | 0,7 | 1,4 | 20,5 | 783 |
| 5x16 | 1,21 | 0,7 | 1,6 | 24 | 1229 |
| 5x25 | 0,780 | 0,9 | 1,7 | 29 | 1806 |
| 5x35 | 0,554 | 0,9 | 1,8 | 32,2 | 2377 |
| 5x50 | 0,386 | 1,0 | 2,0 | 37,8 | 3279 |