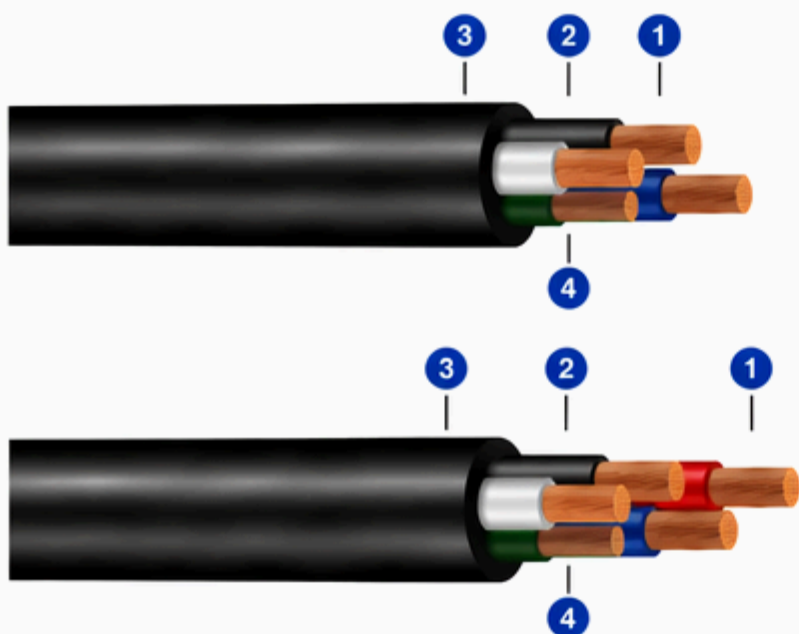


EPROFLEX 90 CABLE

with reduced earth conductor
(0.6/1kV)



CONSTRUCTION

- 1 Conductor:** Bare electrolytic copper, soft annealed, flexible stranded.
- 2 Insulation:** Thermosetting compound of EPR rubber – High Modulus HEPR 90°C.
- 3 Inner Sheath:** Flame-retardant thermoplastic polyvinyl chloride compound (PVC), lead-free, for multi-core cables up to 10 mm².
- 4 Sheath:** Flame-retardant thermoplastic polyvinyl chloride compound PVC ST2, lead-free.

IDENTIFICATION

3 conductors with reduced earth: insulation in light blue, black, white and green, black sheath.

4 conductors with reduced earth: insulation in light blue, black, white, red and green, black sheath.

Multi-core cables with cross-section of 50 mm² or larger are supplied with black numbered cores. Other colors upon request.

When technically feasible, the use of Eproflex 90 cable with reduced earth conductor presents advantages such as:

- Smaller external diameter
- Lower weight
- Smaller bending radius
- Easier installation
- Greater project cost savings

APPLICATION

EPROFLEX 90 cables are used in power supply and electrical energy distribution circuits for voltages up to 1 kV. They are designed for fixed installations and may be installed outdoors, embedded in ducts formed in building structures, in trays, ladders, shelves or directly buried, in dry and wet environments.

PACKAGING

Usually supplied on wooden reels.

STANDARDS

ABNT NBR 7286 – Power cables with extruded ethylene propylene rubber insulation (EPR, HEPR or EPR 105) for voltages from 1 kV to 35 kV – performance requirements.

The earth conductor cross-section can be determined according to the calculation method of item 6.4.3.1.2 of the ABNT NBT 5410 standard – Low Voltage Electrical Installations or, alternatively, according to the table below:

| MINIMUM EARTH CONDUCTOR CROSS-SECTION | |
|--|--|
| PHASE CONDUCTOR CROSS-SECTION S (mm ²) | MINIMUM PROTECTIVE CONDUCTOR CROSS-SECTION |
| S ≤ 16 | S |
| 16 < S ≤ 35 | 16 |
| S > 35 | S / 2 |

When the application of the table results in non-standard cross-sections, conductors with the closest standard cross-section shall be selected.

EPROFLEX 90 CABLE – 4 conductors with reduced earth (0.6/1kV)

| Reference | Conductor | | Insulation | Reduced Earth Conductor | | | Insulation | Sheath | Total Weight (kg/km) |
|-------------|--|-----------------------|------------------------|--|-------------------------------------|------------------------|------------------------|-------------------------------|----------------------|
| | Nominal Cross-section (mm ²) | Nominal Diameter (mm) | Nominal Thickness (mm) | Nominal Cross-section (mm ²) | Nominal Diameter (mm ²) | Nominal Thickness (mm) | Nominal Thickness (mm) | Nominal Overall Diameter (mm) | |
| 1499.01.114 | 3x25 | 6,2 | 0,9 | 1x16 | 5,00 | 0,7 | 1,5 | 22,6 | 1.078 |
| 1499.01.215 | 3x35 | 7,35 | 0,9 | 1x16 | 5,00 | 0,7 | 1,6 | 25,5 | 1.400 |
| 1499.01.216 | 3x50 | 8,80 | 1,0 | 1x25 | 6,20 | 0,9 | 1,7 | 29,7 | 1.975 |
| 1499.04.217 | 3x70 | 10,3 | 1,1 | 1x35 | 7,35 | 0,9 | 1,9 | 34,3 | 2.714 |
| 1499.04.218 | 3x95 | 12,1 | 1,1 | 1x50 | 8x80 | 1,0 | 2,0 | 38,8 | 3.592 |

EPROFLEX 90 CABLE – 4 conductors with reduced earth (0.6/1kV)

| Reference | Conductor | | Insulation | Reduced Earth Conductor | | | Insulation | Sheath | Total Weight (kg/km) |
|-------------|--|-----------------------|------------------------|--|-------------------------------------|------------------------|------------------------|-------------------------------|----------------------|
| | Nominal Cross-section (mm ²) | Nominal Diameter (mm) | Nominal Thickness (mm) | Nominal Cross-section (mm ²) | Nominal Diameter (mm ²) | Nominal Thickness (mm) | Nominal Thickness (mm) | Nominal Overall Diameter (mm) | |
| 1499.05.114 | 4x25 | 6,2 | 0,9 | 1x16 | 5,00 | 0,7 | 1,6 | 25,2 | 1.398 |
| 1499.05.215 | 4x35 | 7,35 | 0,9 | 1x16 | 5,00 | 0,7 | 1,7 | 28,5 | 1.840 |
| 1499.05.216 | 4x50 | 8,80 | 1,0 | 1x25 | 6,20 | 0,9 | 1,8 | 33,2 | 2.587 |
| 1499.05.217 | 4x70 | 10,3 | 1,1 | 1x35 | 7,35 | 0,9 | 2,0 | 38,2 | 3.542 |
| 1499.05.218 | 4x95 | 12,1 | 1,1 | 1x50 | 8x80 | 1,0 | 2,2 | 43,5 | 4.173 |