



Fixed installation, direct burial; PVC cable with solid aluminium conductors

- 1. re = round conductor, single-wire; 2. rm = round conductor, multi-wire; 3. sm = sector-shaped conductor



Product description

Application range

- Power and control cable for fixed installation in the following applications:
- For indoor and outdoor use
- Burial without additional, suitable underground protection according to VDE standard HD 603/VDE 0276-603 - Part 3-G (point 4) governing PVC cables for direct burial: normal minimum installation depth 0.6 m, but at least 0.8 m under roads
- In concrete with a temperature below the maximum cable operating temperature of +70 °C according to the VDE standard HD 603/VDE 0276-603 - Part 3-G (point 4) governing PVC cables for direct burial
- In water: no longer than 2 weeks at a time, maximum submersion depth 10 metres, only in static water/bodies of water without shipping traffic

Product Make-up

- Aluminium conductor
- Abbreviations “re”, “rm”, “se”, “sm”: r = round conductor form; s = sectorial conductor form; e = single-wire conductor (wire = conductor)/braided conductor class 1 according to IEC 60228/VDE 0295 for fixed, static applications; m = multi-wire conductor/braided conductor class 2 according to IEC 60228/VDE 0295 for fixed, static applications, but with a slightly lower minimum bending factor

- Core insulation: Based on PVC
- Filling compound over the core assembly
- PVC-based outer sheath

Norm references / Approvals

- HD 603/VDE 0276-603

Product features

- Flame-retardant according IEC 60332-1-2
- Maximum tensile strain for aluminium conductors during installation is 30 N/mm² according to HD 603/VDE 0276-603: Part 1 Appendix A.4.12 and Part 3-G point 4
- Current rating according to HD 603/VDE 0276-603, Part 3-G, Table 14 (buried at +20 °C ground temperature according to HD 603/VDE 0276-603, Part 3-G, point 5) for routing underground and Table 15 (in the air at an air temperature of +30 °C according to HD 603/VDE 0276-603, Part 3-G, point 5) when used outdoors; but always taking into consideration corrections/reductions to the current rating that may be necessary according to VDE 0298-4, and VDE 0298-4 (also refer to the catalogue appendix T12) for installation in and on buildings

Technical Data

Core identification code
Classification

According to VDE 0293-308 (table T9)

ETIM 5.0 Class-ID: EC000057

ETIM 5.0 Class-Description: Low voltage power cable

Conductor stranding

Single-wire

Minimum bending radius

Fixed installation: 12 x outer diameter

Nominal voltage

U₀/U: 0.6/1.0 kV

Test voltage

4000 V

Temperature range

During installation: -5°C to +50°C

Fixed installation: -30°C to +70°C