



**Fixed installation, direct burial; PVC cable with concentric, helical copper conductor and cross-conductive spiral**

Concentric conductor above all as PE

- 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

### Benefits

- Concentric conductor above all as PE

## Product Make-up

- Bare copper wire 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
- Concentric, helical, outer conductor made of bare copper strands with inductance-reducing, cross-conductive copper bond counter spiral
- PVC-based outer sheath

## Norm references / Approvals

- HD 603/VDE 0276-603 for NYCY with 3 or 4 cores and the relevant additional concentric protective conductor
- HD 627/VDE 0276-627 for NYCY as from 7 cores and with the additional, concentric protective conductor

## Product features

- Flame-retardant according IEC 60332-1-2
- 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	Up to 5 cores: colour-coded according to VDE 0293-308, refer to Appendix T9
Classification	From 6 cores: black with white numbers ETIM 5.0 Class-ID: EC000057 ETIM 5.0 Class-Description: Low voltage power cable
Conductor stranding	Single or multi-wire
Minimum bending radius	Fixed installation: 12 x outer diameter
Nominal voltage	U <sub>0</sub> /U: 0.6/1.0 kV
Test voltage	4000 V
Temperature range	During installation: -5°C to +50°C Fixed installation: -40°C to +70°C