



Technical data

- Power and control cable to DIN VDE 0276 part 603, HD 603 S1 and IEC 60502
- **Temperature range**
Flexing -5 °C to +50 °C
Fixed installation -40 °C to +70 °C
- **Permissible operating temperature**
At conductor +70 °C
- **Permissible short circuit temperature**
+160 °C (short circuit duration 5 sec.)
- **Nominal voltage** U_0/U 0,6/1 kV
- **Test voltage** 4 kV
- Max. permissible tensile load with cable grip = 30 N/mm²
- **Minimum bending radius**
Approx. 12x cable ø

Cable structure

- Aluminium conductor according to DIN VDE 0295 cl. 1, IEC 60228, BS 6360 cl. 1 or HD 383
- 16-25 mm² round conductor
- single wire (re) or 35-240 mm²
- sector shaped conductor, multi-wire (sm)
- PVC core insulation, DIV4 to HD 603.1
- Colour coded to DIN VDE 0293-308 and HD 186
- Cores stranded concentrically
- Filling compound
- Concentric conductor (Ceander), inner layer of corrugated copper wires, outer layer with copper tape
- PVC outer sheath, DMV5 to HD 603.1
- Sheath colour black

Properties

- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Highest permissible voltage

- Direct current systems 1,8 kV
- Alternating current systems
single-phase systems
Both conductors insulated 1,4 kV
single-phase systems
One conductor earthed 0,7 kV
- Three-phase systems 1,2 kV
With concentric conductor and a cross-section from 240 mm² 3,6 kV

Note

- re = round conductor, single-wire;
sm = sector-shaped conductor, multi-wire.

Application

Power distribution cables, preferably used for underground installation, primarily in local networks, for industrial applications and switching systems, power stations. Wherever increased electrical and mechanical protection are required. Installation in water, outdoors, in concrete, indoors and in cable ducts. The concentric conductor (C) can be used as a PE or PEN conductor or as a screen. The corrugated design (Ceander) of the concentric conductor permits any number of cable junctions during assembly, without any conductors having to be cut. This guarantees optimised reliability.

CE The product conforms to the EG Low-Voltage Directive 2006/95/EG.

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Alu weight kg / km	Weight approx. kg / km	AWG-No.
32840	4 x 16 re / 16	21,5	182,0	186,0	1250,0	6
32841	4 x 25 re / 16	25,5	182,0	290,0	1800,0	4
32842	4 x 35 sm / 16	27,1	182,0	406,0	2050,0	2
32843	4 x 50 sm / 25	28,2	283,0	580,0	2700,0	1
32844	4 x 70 sm / 35	32,3	394,0	814,0	3750,0	2/0
32845	4 x 95 sm / 50	35,8	560,0	1102,0	5000,0	3/0
32846	4 x 120 sm / 70	39,2	780,0	1392,0	6350,0	4/0
32847	4 x 150 sm / 70	43,2	780,0	1740,0	7650,0	300 kcmil
32848	4 x 185 sm / 95	48,4	1056,0	2146,0	9350,0	350 kcmil
32849	4 x 240 sm / 120	56,0	1130,0	2784,0	11600,0	500 kcmil

Dimensions and specifications may be changed without prior notice. (RQ01)