



## Technical data

- Rubber sheathed cable A07 RN-F to DIN VDE 0282 part 4
- **Temperature range**  
-30°C to +60°C
- Permissible **operating temperature** at conductor +60°C
- **Nominal voltage**  $U_0/U$  450/750 V in case of protected and fixed installation  $U_0/U$  600/1000 V
- max. permissible **operating voltage** in three phase and one phase a.c. system  $U_0/U$  476/825 V direct current-system  $U_0/U$  619/1238 V
- **Test voltage** 2500 V
- **Permanent tensile load**  
max. 15 N/mm<sup>2</sup> under consideration of total copper cross-sections
- **Minimum bending radius**  
for fixed installation 4x cable Ø  
for guiding over roller 7,5x cable Ø  
during winding on drums 5-7x cable Ø

## Cable construction

- Copper conductor fine wire stranded, bare or tinned to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Rubber core insulation EI4 to DIN VDE 0281 part 1
- Insulation thickness to DIN VDE 0282 part 4
- Core identification to DIN VDE 0293-308
- Core colours:  
6 and more cores green-yellow and the other cores black with numbering
- Cores stranded in layers in optimal lay-length
- Outer jacket of rubber black, rubber compound to DIN VDE 0281 part 1
- Sheath thickness to DIN VDE 0282 part 4

## Properties

- **Resistant to**  
Ozone  
Weather
- **Test of behaviour compared to environmental influences**  
Behaviour in fire to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)  
Ozone resistant of the insulation to DIN VDE 0472 part 805, test method A or part 805 A1, test method C
- The core identification of a single core jacketed, of an insulated wire is black. For application as a protective core, the ends are to be identified with green-yellow and the middle conductor with light blue.

## Note

- G = with green-yellow earth core;  
x = without green-yellow earth core.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- A07 RN-F = Authorized national rubber-sheathed cable, nominal voltage 750 V, fine wire stranded.
- Valid for design with central core + 7 cores.

## Application

Heavy duty rubber-sheathed flexible cables are suited for use for medium mechanical stress in dry, damp and wet areas as well as in open air and in agriculture plants.

They are used for equipment in industry works such as boilers, heating plates, hand lamps, electric tools such as drills, circular saws and homework tools as well as for transportable motors or machines at site.

These cables are also suitable for fixed installation on plaster, in temporary buildings and residential barracks. They are suitable for direct laying on components and mechanical parts of machines, for example lifts and cranes.

They can be used in case of protected and fixed installation in tubes or in equipment as well as rotor connecting cable of motors with a working voltage up to 1000 V alternating voltage or a direct voltage up to 750 V against ground. The operating direct voltage is permitted up to 900 V against ground when they are used in rail-coaches. Installation in hazardous areas according to DIN VDE 0165 is allowed.

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

### A07 RN-F (with green-yellow protective conductor)

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
37069	7 G 1,5	14,0 - 17,5	101,0	370,0	16
37070	7 G 2,5	16,5 - 20,0	168,0	500,0	14
37071	12 G 1,5	17,6 - 22,4	173,0	520,0	16
37072	12 G 2,5	20,6 - 26,2	288,0	720,0	14
37073	19 G 1,5	21,5 - 25,5	274,0	800,0	16
37078	19 G 2,5	25,0 - 29,5	456,0	1100,0	14
37074	24 G 2,5	28,8 - 36,4	576,0	1350,0	14
37075	27 G 1,5	25,5 - 31,5	385,0	1100,0	16
37076	27 G 2,5	30,0 - 37,0	640,0	1521,0	14
37077	37 G 2,5	34,0 - 37,5	720,0	1940,0	14

### A07 RN-F (without green-yellow protective conductor)

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
37080	3 x 1,5	9,2 - 11,9	43,0	165,0	16
37081	3 x 2,5	10,9 - 14,0	72,0	235,0	14
37082	3 x 4,0	12,7 - 16,2	115,0	320,0	12
37083	3 x 6,0	14,1 - 18,0	173,0	495,0	10
37084	3 x 10,0	19,1 - 24,2	288,0	880,0	8
37085	3 x 16,0	21,8 - 27,6	461,0	1095,0	6
37086	3 x 25,0	26,1 - 33,0	720,0	1450,0	4
37087	3 x 35,0	29,3 - 37,1	1008,0	1900,0	2
37088	3 x 50,0	34,1 - 42,9	1440,0	2600,0	1
37089	4 x 10,0	20,9 - 26,5	384,0	1065,0	8
37090	4 x 25,0	28,9 - 36,6	960,0	1995,0	4

Dimensions and specifications may be changed without prior notice.