



Technical data

- Power and control cable according to DIN VDE 0276 part 604, HD 604 S1 part 1 and part 5G
- **Conductor resistance** (at 20°C) according to VDE 0295 cl. 1 or 2 and IEC 60228 cl. 1 or 2 and HD 383 cl. 1 and cl. 2
- **Temperature range** during installation -5°C to +50°C fixed installation -30°C to +90°C
- Permissible **operating temperature** at conductor 90°C
- **Nominal voltage** U_0/U 0,6/1 kV
- **Test voltage** 4 kV
- **Minimum bending radius** single-core approx. 15x cable Ø multi-core approx. 12x cable Ø
- **Radiation resistance** up to 100×10^6 cJ/kg (up to 100 Mrad)
- **Caloric load values** see Technical Informations

Cable construction

- Plain Cu wire conductor, single or multiple-wire, according to DIN VDE 0295 cl. 1 or 2, BS 6360 cl. 1 or 2 and IEC 60228 cl. 1 or 2, HD 383
- Halogen-free core insulation, cross-linked polyethylene compound 2X11, to HD 604 S1
- Colour coding of cores according to DIN VDE 0293-308 and HD 186
- Green-yellow earth-core, 3 cores and above
- Cores stranded in layers (for multi-core cables)
- Overall filled inner sheath, covered by filling compound or wrapped tape
- Outer sheath of thermoplastic polyolefine compound HM4, to HD 604 S1
- Sheath colour black
- **LSOH** = Low Smoke Zero Halogen-free.

Properties

- Halogen-free, no separation of corrosive or toxic gases
- Limited propagation of fire
- Low smoke development
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Tests

- Flame test to DIN VDE 0482 part 266-2/ HD 405.3, BS 4066 part 3/ EN 50266-2/ IEC 60332-3 (equivalent DIN VDE 0472 part 804 test method C)
- Corrosiveness of combustion gases according to DIN VDE 0482 part 267/ EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Smoke density according to DIN VDE 0482 part 268, HD 606, EN 50268-1+2/ IEC 61034-1+2, BS 7622 part 1+2 (equivalent DIN VDE 0472 part 816)

Note

- rm = round conductor, multiple-wire; re = round conductor, single-wire.

Application

Halogen-free power cables with enhanced characteristics in case of fire are used for applications where harm to human life and damage to property must be prevented in the event of fire, e.g. in industrial installations, communal establishments, hotels, airports, underground stations, railway stations, hospitals department stores, banks, schools theaters, multi-storey buildings, process control centres etc. Suitable for fixed installation in dry, damp or wet environments, in, above, on and beneath plaster as well as in masonry walls and in concrete. These cables are suitable for outdoor applications and in underground by using in conduits or tubes.

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

Part No.	No. cores x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
53100	1 x 4 re	8,0	59,0	68,0	12
53101	1 x 6 re	9,0	58,0	90,0	10
53102	1 x 10 re	9,0	96,0	140,0	8
53103	1 x 16 re	10,0	154,0	190,0	6
53104	1 x 25 rm	11,0	240,0	290,0	4
53105	1 x 35 rm	12,0	336,0	390,0	2
53106	1 x 50 rm	15,0	480,0	510,0	1
53107	1 x 70 rm	17,0	672,0	710,0	2/0
53108	1 x 95 rm	19,0	912,0	960,0	3/0
53109	1 x 120 rm	21,0	1152,0	1200,0	4/0
53110	1 x 150 rm	23,0	1440,0	1480,0	300 kcmil
53111	1 x 185 rm	25,0	1776,0	1910,0	350 kcmil
53112	1 x 240 rm	28,0	2304,0	2370,0	500 kcmil
53113	1 x 300 rm	30,0	2880,0	2970,0	600 kcmil
53114	2 x 1,5 re	12,0	29,0	185,0	16
53115	2 x 2,5 re	12,2	48,0	220,0	14
53116	2 x 4 re	13,2	77,0	275,0	12
53117	2 x 6 re	14,1	115,0	335,0	10
53118	2 x 10 re	16,2	192,0	450,0	8
53119	2 x 16 re	17,8	307,0	620,0	6
53120	2 x 25 rm	21,0	480,0	950,0	4

Part No.	No. cores x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
53121	3 G 1,5 re	13,0	43,0	220,0	16
53122	3 G 2,5 re	14,0	72,0	280,0	14
53123	3 G 4 re	15,0	115,0	350,0	12
53124	3 G 6 re	16,0	173,0	420,0	10
53125	3 G 10 re	18,0	288,0	600,0	8
53126	3 G 16 re	20,0	461,0	770,0	6
53127	3 G 25 rm	21,8	720,0	1120,0	4
53128	3 G 35 rm	24,9	1008,0	1550,0	2
53129	3 G 50 rm	25,2	1440,0	1750,0	1
53130	3 G 70 rm	29,2	2016,0	2450,0	2/0
53131	3 G 95 rm	32,0	2736,0	3250,0	3/0
53132	3 G 120 rm	34,9	3456,0	4000,0	4/0
53133	3 G 150 rm	39,2	4320,0	5000,0	300 kcmil
53134	3 G 185 rm	44,1	5328,0	6150,0	350 kcmil
53135	3 G 240 rm	49,2	6912,0	8000,0	500 kcmil
53143	4 G 1,5 re	13,0	58,0	235,0	16
53144	4 G 2,5 re	14,0	96,0	290,0	14
53145	4 G 4 re	15,0	154,0	370,0	12
53146	4 G 6 re	16,0	230,0	470,0	10
53147	4 G 10 re	18,0	384,0	670,0	8
53148	4 G 16 re	20,0	614,0	930,0	6
53149	4 G 25 rm	25,0	960,0	1440,0	4

Dimensions and specifications may be changed without prior notice.

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