

Approved silicone cables for North America (AWM)

Product Description

Approved for the USA and Canada for export-oriented appliance and apparatus builders; Thicker cable design meets the requirements of the FT-1 flame test and is thus also approved for installation in accordance with UL outside of apparatus and appliances; Good flexibility ease the installation where space is limited; Possess still insulating properties after combustion due to remaining SiO₂ ash on the conductor



Application range

- Areas with high ambient temperatures where insulating and sheath materials of conventional cables will embrittle after a short while
- Typical fields of application - Steel-, cement-, ceramic and iron works - Bakery equipment and industrial furnaces - Electric motor industry - Sauna/solarium construction - Thermal and heating elements - Lighting technology - Ventilator engineering - Air conditioning technology - Galvanization technology - Polymer processing - Generator and transformer building - Wind turbine engineering

Benefits

- Approved for the USA and Canada for export-oriented appliance and apparatus builders
- Thicker cable design meets the requirements of the FT-1 flame test and is thus also approved for installation in accordance with UL outside of apparatus and appliances
- Good flexibility ease the installation where space is limited
- Possess still insulating properties after combustion due to remaining SiO₂ ash on the conductor

Design

- Fine strands of tinned copper wires
- Silicone based core insulation
- Cores twisted together
- Silicone based outer sheath, colour black (RAL 9005)



Approvals (Norm references)

- UL AWM 4476 and cUL AWM II A/B
- Also available on request as special product with AWM rating 200°C/600 V
- Multi-conductor Type AWM cables (Appliance Wiring Material) shall be permitted for industrial machinery (US) when part of a listed assembly suitable for the intended use only. NFPA 79 Edition 2007 §12.2.7.3

Product features

- Metric flexible conductor design
- Halogen-free and flame retardant (IEC 60332-1-2)
- Reduced smoke density
- Good hydrolysis and UV resistance
- Resistant against a multitude of oils, alcohols, vegetable and animal fats and chemical media

Technical Data

Core identification code

Colour coded according to VDE 0293-308, see Appendix T9

Starting at 6 cores: Black with white numbers

Approvals

UL AWM Style 4476 (Construction B)

cUL AWM II A/B (Canada)

Specific insulation resistance

>200 GOhm x cm

Conductor stranding

Fine wire in accordance to VDE 0295 Class 5 / IEC 60228 Class 5

(For matching US conductor sizes according AWG please see technical table T16)

Minimum bending radius

Occasional flexing: 15 x cable diameter

Fixed installation: 4 x cable diameter

Rated voltage

VDE U0/U: 300/500 V Working voltage UL: 600 V

Test voltage

2000 V

Protective conductor

G = with protective conductor GN/YE

X = without protective conductor

Range of temperature

According VDE: -50 °C up to +180 °C

According to UL-Style: up to +150 °C (adequate ventilation provided)

Article List

Part number	Number of cores and mm ² per conductor	Outer diameter in mm	Copper index kg/km	Weight kg/km
ÖLFLEX® HEAT 180 MS				
0046600	2 X 0,5	7,4	9.8	72
0046601	3 G 0,5	7,8	14.7	83
00466023	4 G 0,5	8,5	19.6	99
00466033	5 G 0,5	9,2	24.5	119
0046604	7 G 0,5	9,9	34.3	142
0046612	2 X 1	8,2	19.2	93
0046613	3 G 1	8,7	28.8	110
00466143	4 G 1	9,4	38.4	133
00466153	5 G 1	10,3	48.0	160
0046616	7 G 1	11,1	67.2	195
0046617	12 G 1	14,9	115.2	345
0046618	2 X 1,5	8,8	28.8	113
0046619	3 G 1,5	9,3	43.2	135
00466203	4 G 1,5	10,1	57.6	165
00466213	5 G 1,5	11,1	72.0	200
0046622	7 G 1,5	12,0	100.8	246
0046623	12 G 1,5	16,1	172.8	437
0046625	18 G 1,5	18,8	259.2	613
0046626	25 G 1,5	22,9	360.0	904
0046628	2 X 2,5	9,6	48.0	146
0046629	3 G 2,5	10,2	72.0	178
00466303	4 G 2,5	11,1	96.0	220
00466313	5 G 2,5	12,2	120.0	269
0046633	3 G 4	11,5	115.2	246
00466343	4 G 4	12,6	153.6	307
00466353	5 G 4	14,2	192.0	389
0046636	3 G 6	14,9	172.8	396
00466373	4 G 6	16,4	230.4	495
00466383	5 G 6	18,0	288.0	608

Footnote:

All product related values as shown are nominal values unless specified differently. Further values, e.g. tolerances we submit on request - if available and released for publication.

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17



Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil \leq 30 kg and \leq 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

Photographs are not to scale and do not represent detailed images of the respective products.