

Silicone cables with increased mechanical characteristics

### Product Description

Longer durability in harsh applications than conventional silicone cables; Notch and tear resistant silicone compounds reducing damages due to mechanical stress; Due to special additives in EWKF silicone steel wire armoured cable versions partly can become unnecessary; Good flexibility ease the installation where space is limited; Possess still insulating properties after combustion due to remaining SiO<sub>2</sub> ash on the conductor



### Application range

- Areas with high ambient temperatures and additionally high mechanical stress
- 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

- Longer durability in harsh applications than conventional silicone cables
- Notch and tear resistant silicone compounds reducing damages due to mechanical stress
- Due to special additives in EWKF silicone steel wire armoured cable versions partly can become unnecessary
- Good flexibility ease the installation where space is limited
- Possess still insulating properties after combustion due to remaining SiO<sub>2</sub> ash on the conductor

### Design

- Fine strands of tinned copper wires
- Core insulation based on EWKF silicone
- Cores twisted together
- Notch resistant silicone based EWKF outer sheath, colour black (RAL 9005)

### Product features

- 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
- EWKF Formula: Increased initial tear propagation and notch resistance

**Technical Data**

**Core identification code**

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

Starting at 6 cores: Black with white numbers

**Specific insulation resistance**

>200 GOhm x cm

**Conductor stranding**

Fine wire according to VDE 0295 Class 5/ IEC 60228 Class 5

**Minimum bending radius**

Occasional flexing: 15 x cable diameter  
Fixed installation: 4 x cable diameter

**Rated voltage**

U0/U 300/500 V

**Test voltage**

2000 V

**Protective conductor**

G = with protective conductor GN/YE  
X = without protective conductor

**Range of temperature**

-50 °C up to +180 °C (adequate ventilation provided)

**Article List**

Part number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter in mm	Copper index kg/km	Weight kg/km
ÖLFLEX® HEAT 180 EWKF				
0046500	2 X 0,75	6,4	15.0	49
0046501	3 G 0,75	6,9	22.0	60
00465023	4 G 0,75	7,6	29.0	76
00465033	5 G 0,75	8,5	36.0	96
0046506	2 X 1	6,8	20.0	56
0046507	3 G 1	7,1	29.0	68
00465083	4 G 1	7,9	39.0	88
00465093	5 G 1	8,8	48.0	110
0046110	7 G 1	9,5	67.2	137
0046511	2 X 1,5	8.0	29.0	77
0046512	3 G 1,5	8,4	43.0	94
00465133	4 G 1,5	9,5	58.0	117



00465143	5 G 1,5	10,4	72.0	143
0046115	7 G 1,5	11.0	101.0	180
0046116	12 G 1,5	14,9	173.0	319
0046117	16 G 1,5	17,1	230.4	424
0046119	24 G 1,5	21.0	345.6	637
0046520	2 X 2,5	9,4	48.0	110
0046521	3 G 2,5	9,8	72.0	146
00465223	4 G 2,5	11,1	96.0	181
00465233	5 G 2,5	12,4	120.0	222
0046131	3 G 4	11,5	114.0	213
00461323	4 G 4	12,5	152.0	267
00461333	5 G 4	13,9	190.0	334
0046141	3 G 6	13,2	174.0	297
00461423	4 G 6	14,7	232.0	381
00461433	5 G 6	16,5	290.0	481

**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](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 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.