THERMFLEX 180 EWKF* (N2GMH2G) halogen-free
Silicone Multicore Cable +180° C

Technical data

- Heat-resistant silicone-insulated flexible cable in adapted to DIN VDE 0250 part 816
- **Temperature range**
  flexing −25° C to +180° C
  fixed installation −60° C to +180° C
  short time operation +220° C
- **Nominal voltage**
  U_0/U 300/500 V
- **Test voltage** 2000 V
- **Insulation resistance**
  min. 200 MOhm x km
- **Minimum bending radius**
  min. 7,5 x cable ∅
- **Radiation resistance**
  up to 20×10^6 cJ/kg (up to 20 Mrad)
- **Insulation integrity**
  continuance of insulation effects under fire condition according to IEC 60331 and DIN VDE 0472 part 814.
- **Freedom from halogen**
  (corrosiveness of combustion gases) according to DIN VDE 0482 part 267/ EN 50267-2-2/IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- **Behaviour in fire**
  no flame propagation, test according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- **Smoke density**
  low

Cable structure

- Tinned copper conductor, stranded to DIN VDE 0295, cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Silicone core insulation, 2GI1 to DIN VDE 0207 part 20
- Core identification to DIN VDE 0293
  - up to 5 cores one-coloured
  - 6 and more cores black with white numbering
- Green-yellow earth core (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Silicone outer jacket, 2GM1 to DIN VDE 0207 part 21, jacket colour black (RAL 9005)

Advantages

- Due to the special abrasive and notch resistance outer jacket, these cables are suitable for heavy loading of mechanical stresses than the usual standard silicone cables.
- Hardly changes of dielectric strength and the insulation resistance also at high temperatures
- High ignition or flash point
- In case of fire, forms an insulating layer of SiO_2

EWKF*

Improved values to
E = tearing resistance
W = breaking strength propagation
K = notch strength
F = flexibility

Application

These cables are ideal for use everywhere, where increased mechanical stresses for the installation and operation are required.
Silicone-rubber-insulated cables are used for all applications where the cable insulation is subjected to high temperature fluctuations.
Suitable for installation at high temperature influence in dry, damp and in the open air. As flexible connecting cable for low mechanical stress i.e. sauna, solar installations, foundries and steel plants.
This cable can be used for fixed installation only in open and ventilated cable tubes and cable ducts.

Resistant to

- High molecular oils
- Fats from vegetables and animals
- Alcohols
- Plasticizers and clophenes
- Diluted acids
- Lyes and salt dissolution
- Oxidation substances
- Tropical influences and weather
- Lake water
- Oxygen, ozone

Note

FRNC = Flame Retardant Non Corrosive
All silicon cables are available also in FRNC versions. The jacket designed with special-compound conform flame test method C to DIN VDE 0472 part 804 and IEC 60332-3 as well as HD 405.3. This special compound is self-extinguishing. Because of that these cables can be installed as security cable with functionality as for example in communal buildings, power stations, hotels, airports etc.

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. mm²	Outer ∅ ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
74992	2 x 0,75	6,4	15	53	18
74993	3 G 0,75	6,8	22	64	18
74994	4 G 0,75	7,8	29	84	18
74995	5 G 0,75	8,5	36	101	18
74996	2 x 1,0	6,6	20	60	17
74997	3 G 1,0	7,4	29	78	17
74998	4 G 1,0	8,0	39	95	17
74999	5 G 1,0	8,8	48	116	17
75000	2 x 1,5	8,0	29	82	16
75001	3 G 1,5	8,5	43	98	16
75002	4 G 1,5	9,5	58	122	16
75003	5 G 1,5	10,4	72	148	16
75004	7 G 1,5	11,2	101	187	16
75005	12 G 1,5	14,9	173	315	16
75006	16 G 1,5	17,1	231	446	16
75007	20 G 1,5	18,5	288	566	16
75008	2 x 2,5	9,4	48	135	14
75009	3 G 2,5	9,8	72	152	14
75010	4 G 2,5	11,1	96	189	14
75011	5 G 2,5	12,4	120	229	14
75012	2 x 4,0	11,2	77	180	12
75013	3 G 4,0	11,4	115	230	12
75014	4 G 4,0	13,1	154	300	12
75015	5 G 4,0	14,4	192	380	12
75016	2 x 6,0	14,2	115	321	10
75017	3 G 6,0	16,2	173	330	10
75018	4 G 6,0	17,7	230	430	10
75019	5 G 6,0	17,7	288	550	10

G = with green-yellow earth core
X = without green-yellow earth core

Further sizes and dimensions available on request.